a school of visual arts

American University of Beirut
Faculty of Engineering and Architecture
Department of Architecture, Course A130

Final project program and references

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A school of visual arts

At Jounieh.

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Fall semester 1987

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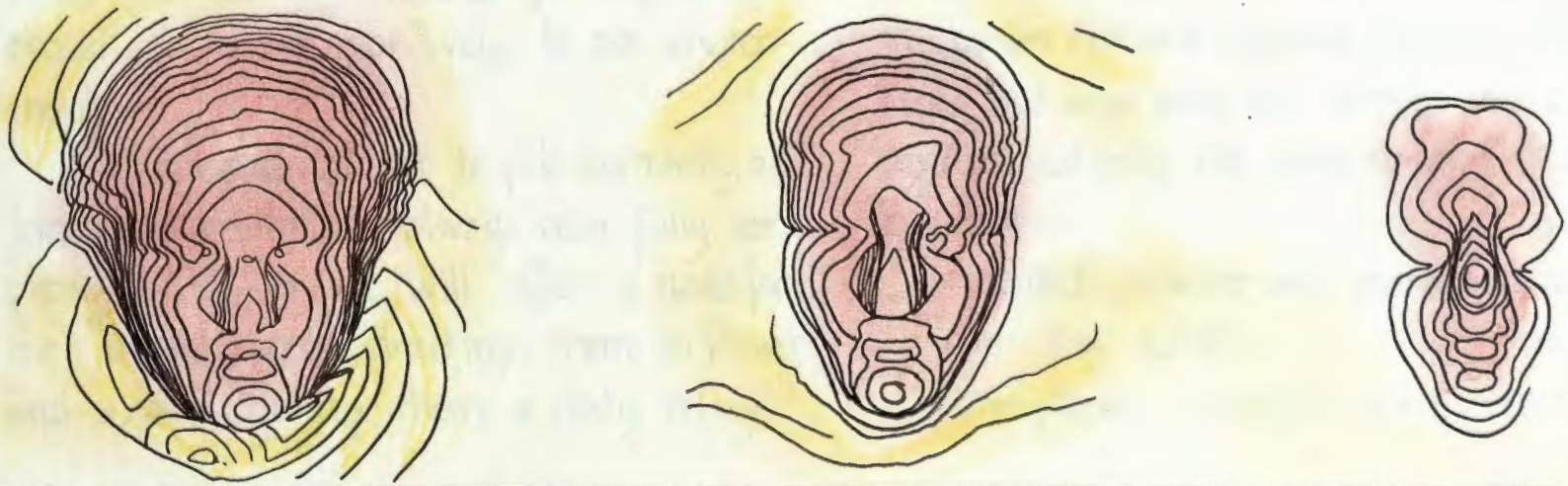
INTRODUCTION

PERSONNAL VIEW OF THE PROBLEM



PERSONAL VIEW OF THE PROBLEM

The creative act, the artistic action form an integral part of the civilisation of every country in the world.

The cultural role of Beirut today is at its lowest level; the existing potentials are unexploited.

I propose a school of visual arts. This will be but an infinitesimal element in restoring the quality of life around us.

It is a type of educationnal facility which does not exist here as yet, but which should contribute positively to our environment.

The relevance of art to full humanity and inner equilibrium has always been fully emphasized. This project will offer a haven for the talented youth, directing them to flower and expand, giving them a daily refuge from surrounding chaos.

The students will live in this school. It is most important that this should be an agreable place for them to work in. They will spend their days there, and will often have to work late through the night.

Together with curriculum activities, the school will be bubbling with cultural events, sports and social activities, all of which will add a positive outlook for life in Jounieh. Festivals, lectures, concerts, exhibitions, but also balls or parties will bring together not only the students and faculty, but also:

* architects, scholars and painters connected with the school.
* townpeople interested in the school.

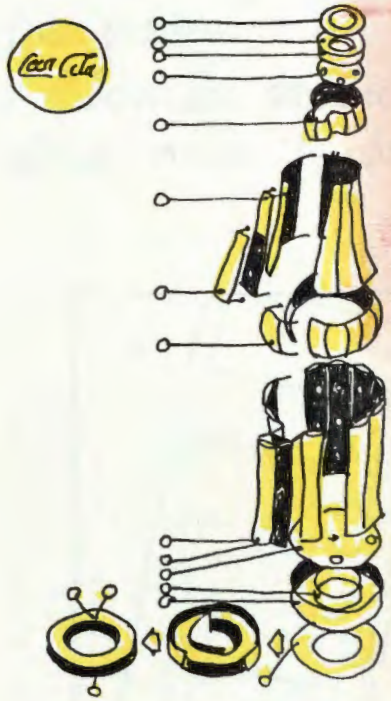
PERSONNAL VIEW OF THE PROBLEM

The student body should cooperate with the faculty. As the years pass, the educational system and its organisation will be frequently revised as a result of these discussions. The process of learning should imperceptibly merge into a communal task; the students will be asked to give practical suggestions for improvment.

This will give each student a feeling of responsability for the work as a whole.

INTRODUCTION

STATEMENT OF THE PROBLEM



STATEMENT OF THE PROBLEM

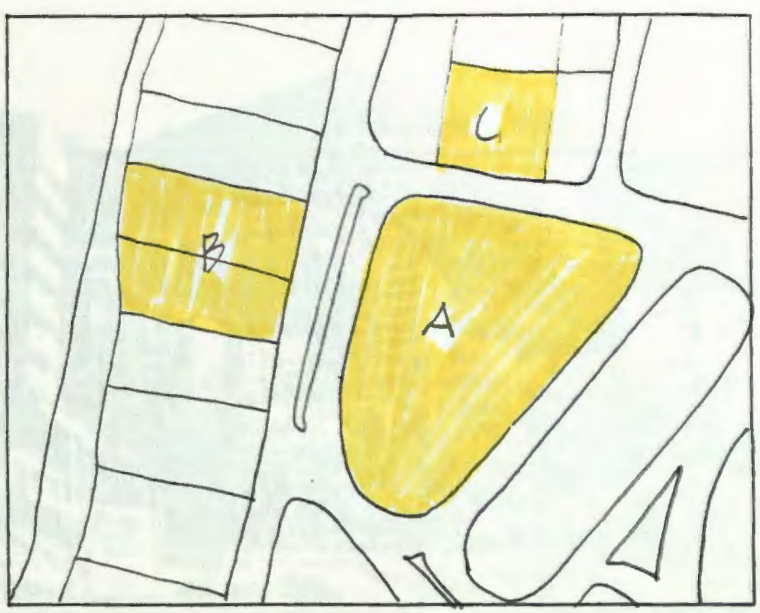
Dedicated to the concept that their own accomplishments in one or more of the visual arts could bring a new sense of self-worth in today's youth: a school of visual arts.

This project proposes a school of visual arts located in Jounieh.

The site is currently composed of three lots separated by streets; lot A belongs to the municipality. Lot B faces directly the sea while A and C are from the other side of the street. Once these lots are functionnally assembled together, the project will acheive more interaction with its context.

Since the rehabilitation of the setting is one of the goals of this project, a recognition of the potential assets of the setting is necessary in defining the depth of the problem.

Jounieh possesses a variety of assets which mark its uniqueness:



STATEMENT OF THE PROBLEM

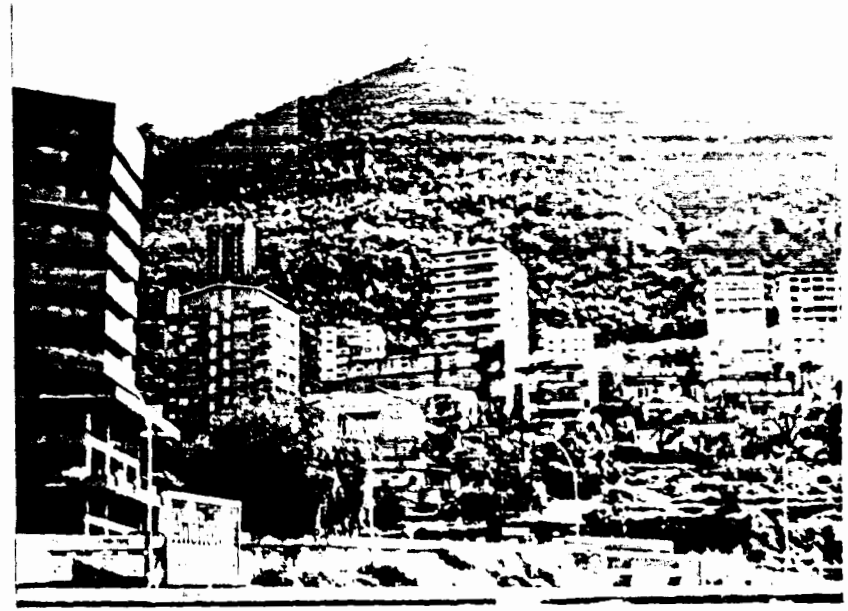
Potentially, the site which has been chosen has four significant assets, namely:

+ its setting between the mountain and the sea
+ its commercial value
+ its cultural-educationnal potential
+ its architectural character.

Its commercial value is due to its location next to the main street of Jounieh (the old Khan.) It is almost entirely a shopping street.

Its cultural-educationnal potential is due to its proximity to OCP, 5T Esprit Kaslik, and many important secondary schools. It is also next to large centers which witness cultural activities (exhibitions, music recitals theatres, cinemas.)

The architectural character of Jounieh is expressed through the survival of the old stone traditionnal houses along the old Jounieh street, but also through the lebanese houses leassed on the facing mountains. These houses are juxtaposed with modern blocks. The combination of old and new sometimes provide an urban town vitality provocking disturbing clashes in other cases.(1)



1

STATEMENT OF THE PROBLEM

Based on these potential assets, the following points are emphasized:

+any project planned at the end of Jounieh main street should be economically sound. In the actual project, the school will be a generator of movements, and it will upgrade the activities in the whole area. Furthermore, within the school, the concept of efficiency of spaces will be applied whenever possible.

+the project should allow for a certain extroverted character, to provide vitality and a sense of belonging to the street.

+the project should enhance the character of the street, since it is one of the few remaining cultural links in the district.

It is assumed that the municipality, along with some cultural association, will be the client.

They will set out to buy the lands from the owners, and a board of administrators will be set to overlook the realisation of the project.

INTRODUCTION

PROJECT GOALS

PROJECT GOALS

The goals of my project are two-sided; some are related to the city of Jounieh in particular while others have a broader scope, and concern Lebanon's image and economy.

1. BROAD AIMS:

The project aims at contributing to the cultural and artistic growth of Lebanon; at reshaping its reputation as the cultural leader of the Middle East. It will exhibit the works of new talents as well as those of well-known artists; it will gather people interested in the same field, induce productive social interaction and awaken new talents. The project has also an economical scope, mainly the generation of foreign income by attracting foreign students and investors. It will substitute the foreign skilled artists by equally qualified local ones, thus reducing the drainage of badly needed hard currencies. Finally, it will increase the number of lebanese needed abroad, and this would induce the transfer of hard currencies back to their home country.

2. CONTEXTUAL AIMS

The basic context of my proposal was developed from three off-hand observations of my setting, namely:

a. the vital vein of Jounieh within the network of commercial and business activities emanating from Beirut

b. the absence of animation facilities and movement in Jounieh, people being attra-

PROJECT GOALS

-ted by near-by large centers.

c-the persistence of some structures close to the selected site which still exhibit traditionnal local features.

My school will be shaped with the aim of culturally revitalising the setting. Furthermore, within this realm of rehabilitation, the project attempts to enhance the contextual character of the setting as part of the preservation, enhancement, and animation of the street character as a whole.

This interest in contextualism comes from experiencing an orderless rapidly developing urban area in which any notion of cultural hold-on has been totally disregarded.

The school should be an integral part of Jounieh both physically and contextually and should interpret a new language of city street architecture that would bring to passers-by memories and a sense of belonging, at the same time reflecting the vitality of a modern metropolitan setting.

PROJECT GOALS

3. COOPERATION WITH INDUSTRIES AND DESIGN AGENCIES.

The practical objective of the workshops is to evolve designs satisfactory from formal and technical points of view which should then be submitted to industries for production.

Designs will be exhibited and seen by manufacturers. the factories and agencies will be often visited by the students who will study the processes used and cooperate with technicians to improve the designs.

Conversely the factories will send their technicians to the school to keep it informed about the development of the new designs of the students

The same process of cooperation should be applicable between the studios and all kinds of design agencies.

INTRODUCTION

SCOPE

SCOPE

GENERAL AREAS:

the school groups the following activities:

*teaching facilities	6167 m²
* support teaching facilities	1280 m²
* activities	745 m²
* administration	560 m²
* dormitories	1830 m²
* Infirmary + maintenance + guards	420 m²

Total built-up area : 10982 m²

Parking assumed for 70 cars: 2100 m²

hence the total built-up area will be approximately 13000 m²

SCOPE

The school is planned for an ultimum capacity of 480 students who will mainly be in the 18/22 age group.

Students will be enrolled after the completion of their secondary studies. They will enroll 4 years in the school in order to get a degree of bachelor in the visual arts.

The freshman year is a preparatory general year which introduces to the study of the visual arts in general. It is followed by 3 years of specialisation in the chosen field.

However the form of education shouldn't be rigid. It must allow for some leeway because it touches on the personnal artistic gifts of man, and there are many differing qualities between one human being and the other.

An example of special case is to admit auditors into the program for a short-term project, or to exchange students with other universities for semester workshop

The majors offered in my school are:

1. Bachelor degree in graphic design (graphism, illustration.)
2. Bachelor degree in products design (furniture, jewelry, textiles, products)
3. Bachelor degree in fashion design (fashion, accessories and shoes.)
4. Bachelor degree in photography
5. Bachelor degree in cinematography

SCOPE

NUMBER OF STUDENTS:

the number of students in each major is sorted out in the following way:

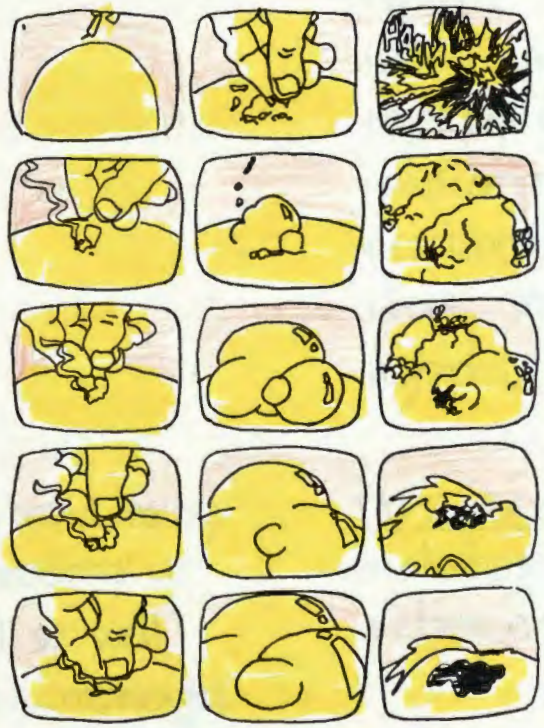
number of students / department =
number of students / section
x number of years
x number of branches.

the number of years is a fixed value of 4.
the number of branches is variable.

the number of students / section varies between 9 and 15.
for ease of calculation however, I will always consider the ultimum average of 12. this number has been advised by Mrs Mousfy, director of the department of fine arts at B.U.C., as fitted for the lebanese conditions.
I should also point out that lower classes will probably have more students than upper classes.

INTRODUCTION

PROGRAM



PROGRAM

DEPARTMENT: communication design and illustration

TEACHING BRANCHES:

1. Graphic design
2. illustration

NUMBER OF STUDENTS: 96

PURPOSES: this department should mainly help each student find a personnal visual language. Representational as well as abstracted problems are emphasized; all areas of visual expression are explored. The students will be provided with the necessary intellectual, creative and professional skills necessary to cope effectively with a rapidly changing world.

SUBJECTS:

+ graphic design studios
+ advertising - publication design
+ typography
+ illustration concepts and methods
+ cartoons design
+ book structures
+ graphic production processes

TYPE OF SPACES:

+ studios
+ classrooms

PROGRAM

DEPARTMENT : clothes design

TEACHING BRANCHES:

1. fashion design and illustration
2. shoes design and accessories

NUMBER OF STUDENTS : 96

PURPOSES :

It communicates personnal, cultural and historical values which are reflected daily in the clothes we wear.
It interacts closely with the fashion industry and the curriculum corresponds with the fashion seasons.

SUBJECTS:

+ fashion illustration (croquis)
+ model drawing : movement and proportions
+ pattern drafting : paper muslin, working patterns.
+ fashion construction
+ modelling
+ textiles : dying, printing and finishing.

TYPE OF SPACES:

+ fashion studios
+ textile workshop
+ classrooms

PROGRAM

DEPARTMENT: photography

TEACHING BRANCHES:

1-photography

NUMBER OF STUDENTS : 48

PURPOSES:

it is a mean of individual expression as well as a critical tool
students have all the freedom to explore their own visual direction, while learning the skills of photographic seing, producing and presenting.

SUBJECTS:

+Basic, intermediate and advanced processes ; non-silver processes.
+black and white printing.
+photo- chemistry.
+lighting techniques.
+studio photography.
+lighting.
+printing slides.
+moving image.
+commercial photography.
+dye transfer process.
+professional photography.

TYPE OF SPACES:

+photography studios.
+photography laboratories.
+dark rooms.
+classrooms.

PROGRAM

DEPARTMENT: cinematography

TEACHING BRANCHES:

1. cinematography

NUMBER OF STUDENTS: 48

PURPOSES:

it teaches the students the technical skills and concepts necessary to produce artistic and professional work in photographic, electronic and animated motion picture.
it places primary emphasis on the form, content, context and structure of images moving in time

SUBJECTS:

+ introductory film
+ film graphics
+ special effects sound / figure
+ video tape making
+ film scenarios
+ courses in flat animation techniques
+ sound techniques
+ commercial sound procedures
+ film video degree project

TYPE OF SPACES:

+ cine studios
+ classrooms

PROGRAM

DEPARTMENT: product design

TEACHING BRANCHES:

1_jewelry and metals
2_textiles
3_general products
4-furniture design

NUMBER OF STUDENTS: 172

PURPOSES: it develops awareness of physical, emotional and oesthetic relationships that exist in all objects produced by an industrialised society; students gain in-depth understanding of visual and three-dimensionnal vocabulary; courses progress from developmental drawings into manufecturing plans ready for execution

SUBJECTS:

+metals forming and enameling
+jewelry design
+history of jewelry
+metallurgy
+textiles (dying, printing, weaving and finishing.)
+textiles design
+textiles production
+products rendering, molding, working drawings, model making and slip casting.
+commercial design
+marketing and business

TYPE OF SPACES:

+studios
+workshops
+classrooms

SITE ANALYSIS

SITE ANALYSIS

Site documentation:

Site location ____ page 27
land use pattern ____ page 28
Site A ____ page 29
Site B ____ page 30
Site C ____ page 31
Ecology ____ page 32
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Site analysis

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History of Jounieh ____ page 36
Socio-economic profile ____ page 37
land use pattern ____ page 37
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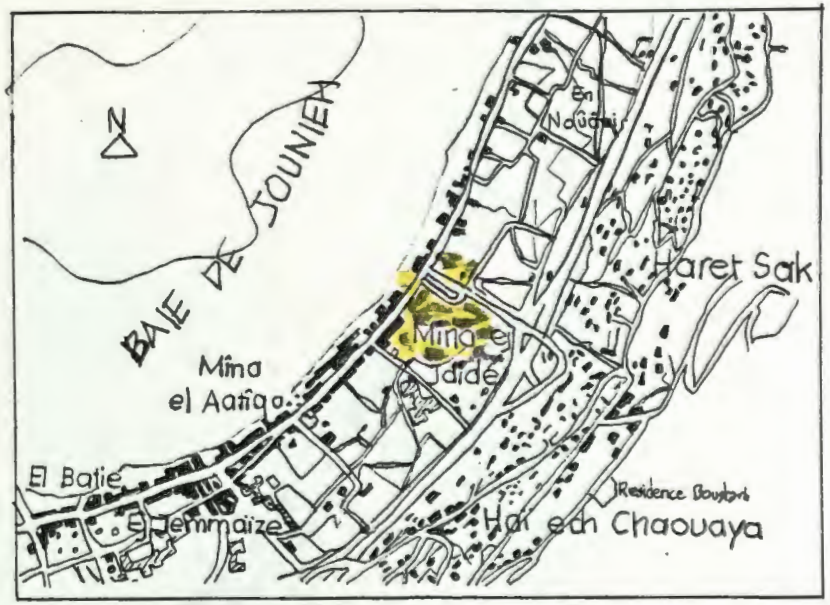
SITE DOCUMENTATION

SITE LOCATION :
the site is located in Jounieh



Jounieh 1960 scale 1/20 000

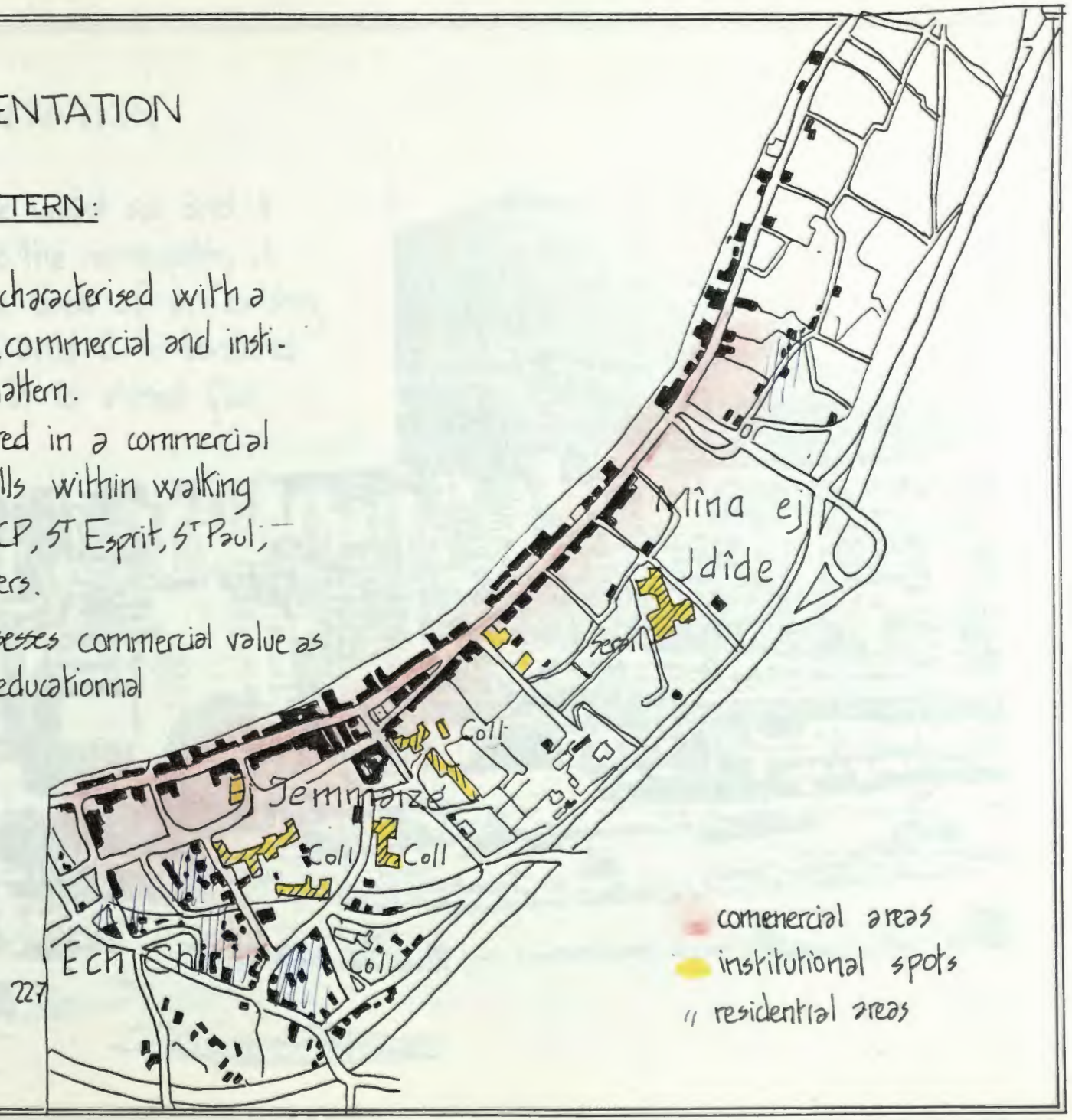
Jounieh sea front 1960

SITE DOCUMENTATION

LAND USE PATTERN:

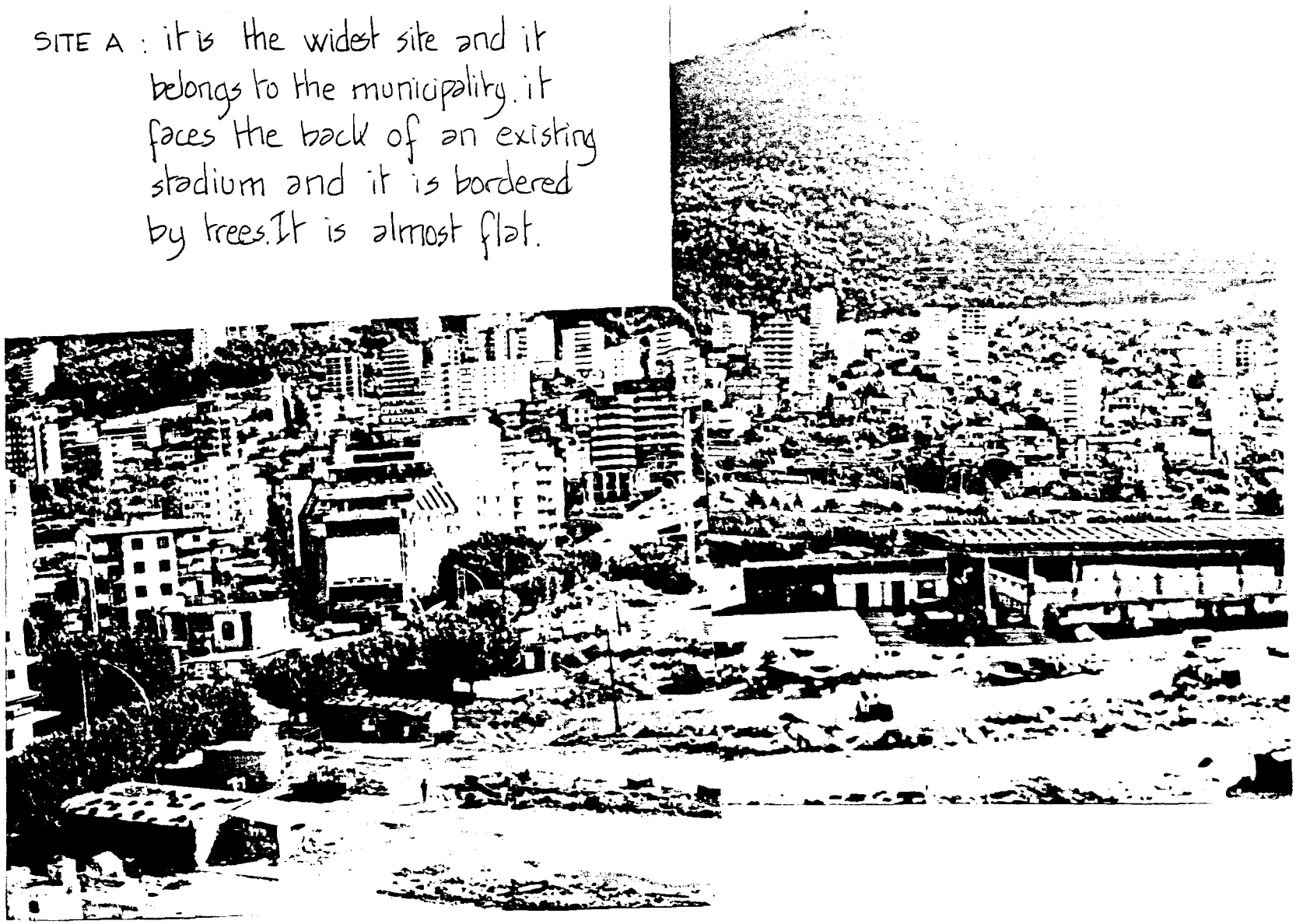
The district is characterised with a mixed residential, commercial and institutional land pattern.
The site is located in a commercial district. It also falls within walking distance from OCP, 5T Esprit, 5T Paul, La Cité, and others.

Therefore, it possesses commercial value as well as cultural-educationnal potential.



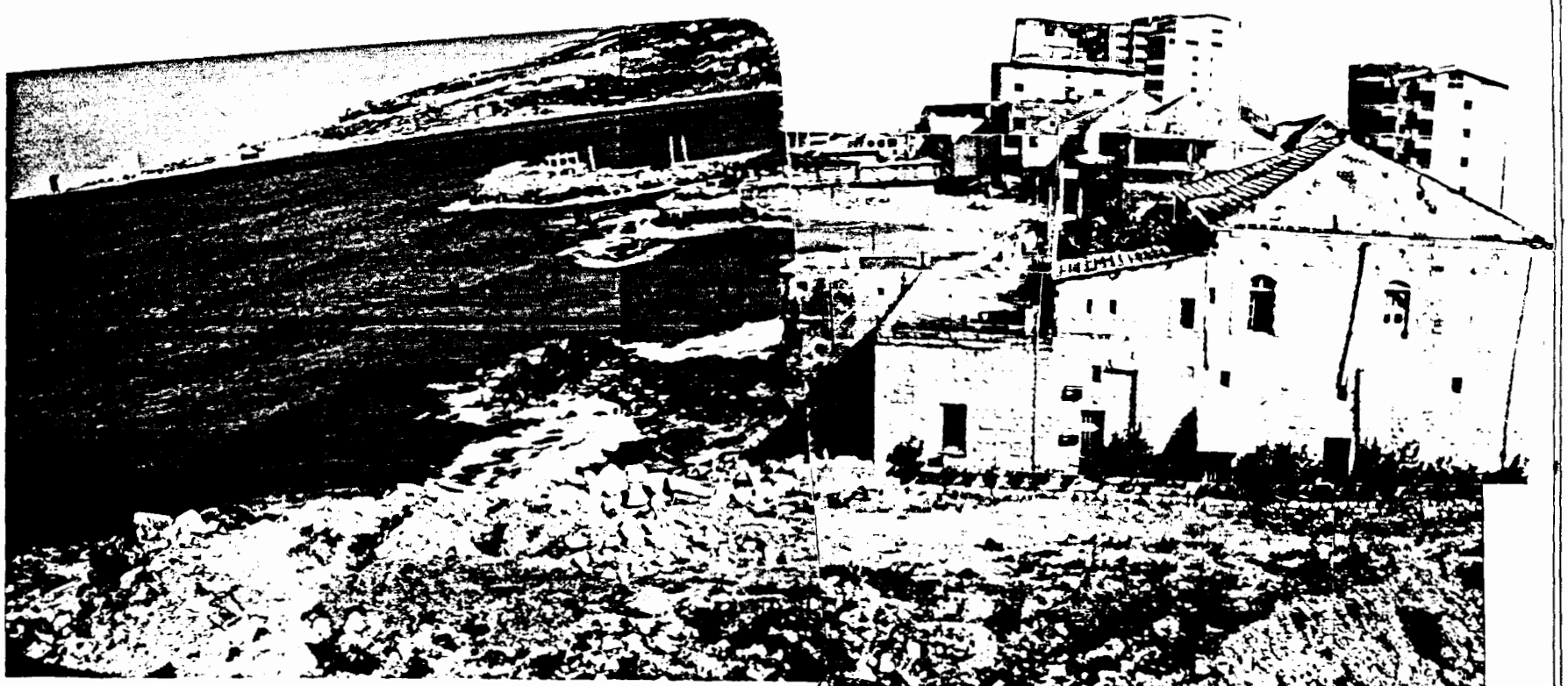
SITE DOCUMENTATION

SITE A : it is the widest site and it belongs to the municipality. it faces the back of an existing stadium and it is bordered by trees. It is almost flat.



SITE DOCUMENTATION

SITE B : this site faces directly the sea. It is surrounded by a stone house from one side, (as shown in the photograph) and by 2 concrete houses from the other side. its exploitable surface is around 600 m².



SITE DOCUMENTATION

SITE C: this site may be used for the dormitories. it is surrounded by common-looking residential housing. its area is flexible, according to the needs required.

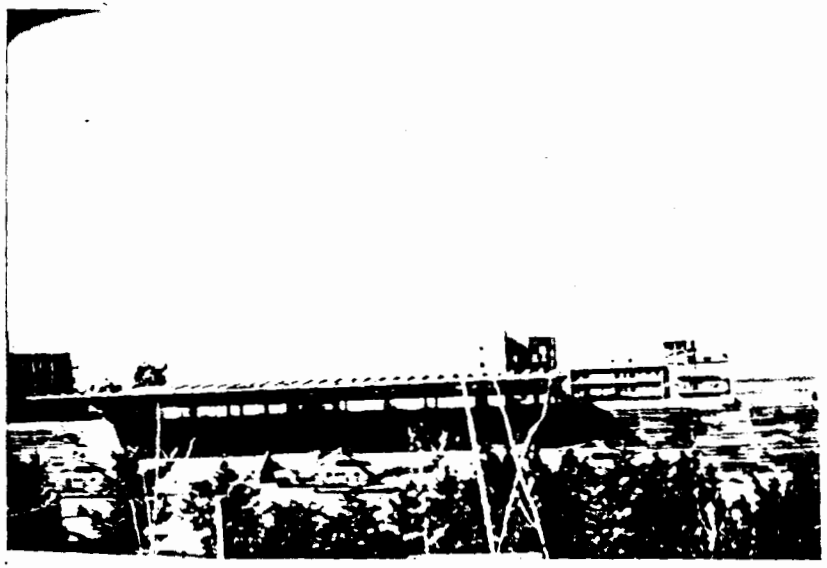
SITE DOCUMENTATION

ECOLOGY :

the green land marks of the area should be preserved; they consist of ficus trees(1) bordering the site on 2 sides; they show also on the aerial photographs.

NEAR-BY STRUCTURE :

a stadium(2) erected in 1960 exists on the site; it is the property of the municipality and it was originally intended for sports events; it is used today for military purposes - helicopters airport.



2

SITE DOCUMENTATION

VEHICULAR TRAFFIC :

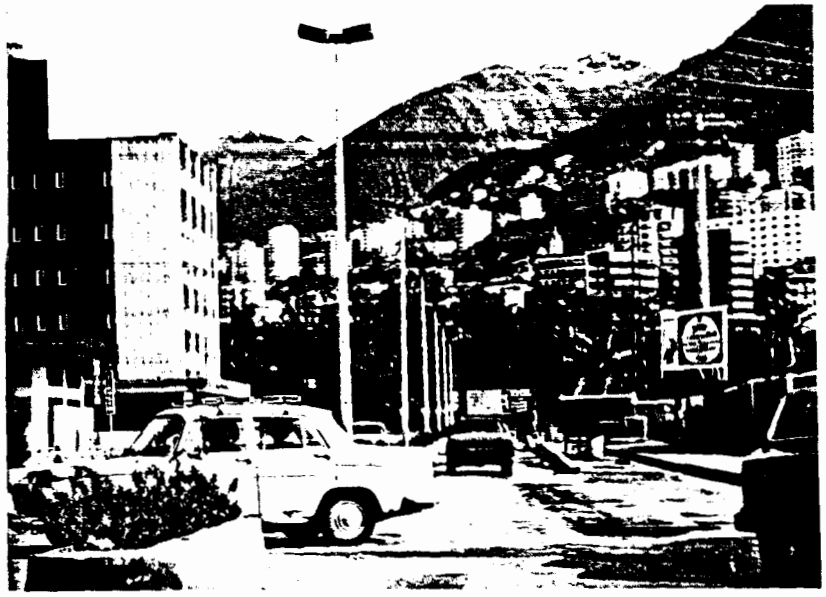
The roads interesting my site are:

1. The sea street, main Jounieh old street
2. The road leading to the highway
3. The new Serail street

These roads witness, around my site, the end of the urban Jounieh. They reflect the dual character of Jounieh, between old & new.

1

2



3

SITE ANALYSIS

GEOLOGY AND SOIL:

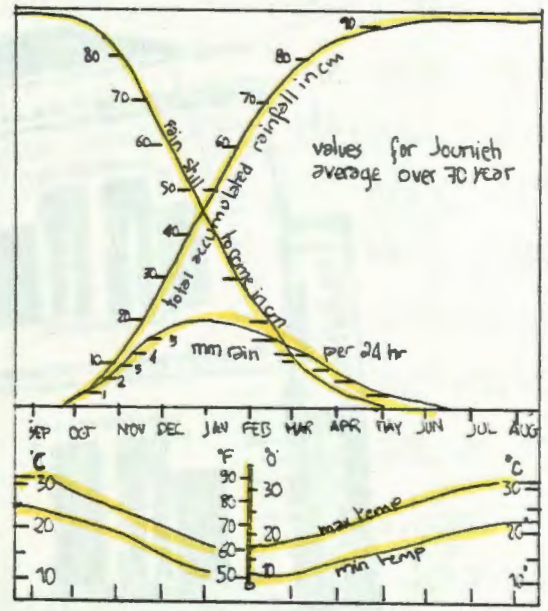
the soil is argilous.
the water table is 2.5m deep

SOURCES OF POLLUTION:

noise pollution due to cars and busy pedestrians must be accounted for.

CLIMATE:

dominant winds are SW, due to the sea proximity. due to high humidity, cross ventilation is desirable and is best acheived by opening the bldg to the summer breeze from the south west.
SW is also the best direction for maximum solar heat in winter and least in summer.



Jounieh weather the year round

SITE ANALYSIS

HISTORY OF JOUNIEH:

"la baie de Jounieh;
to the south, the triple port, yahting, fishing, and the beautiful site of Kaslik,
to the north, the Casino and its beautiful rocky site. a typical lebanese city-village with its stone houses, its small souks, its khan, and its pittoresque atmosphere. The whole setting bordered by magnificent mountains and dominated by the site of Harissa, a pilgrimage center. Very few places in the world are as priviliged as Jounieh"

le vieux serail de jounieh

etude generale de la baie de jounieh by simon Moussalli_1969

SITE ANALYSIS

HISTORY OF JOUNIEH :

In less than 20 years, Jounieh has been transformed from "a typical lebanese village" into a dense urban area due to acquired cultural and commercial facilities.
In some parts of Jounieh, it has been almost impossible to maintain or develop any culturally rooted characteristic architectural feature.
Instead, monotonous, undifferenciated spaces covered with stereotypical concrete blocks are typical.
Only a few streets of which the half-pedestrian is one have maintained their unique character

the new Serail de Jounieh

Under pressure, ground stories of residential buildings were converted into shops

SITE ANALYSIS

HISTORY OF JOUNIEH:

Today, Jounieh is loosing vertiginously its communal village atmosphere due to endless materialistic speculation.
The near-by mountains are slowly shrinking under hundreds of similar concrete blocks.

SITE ANALYSIS

SOCIO-ECONOMIC PROFILE:

social composition: the area can be considered a predominantly middle class active society. Jounieh attracts a transient population of businessmen, executives, college students and staff, but mainly people on holiday and tourists in the summer months.

Despite the fact that the society in Jounieh is almost an urban one, there still exists a strong remnant of traditionnal values and an appreciable degree of intimacy, integration, and survival of communal attachments.

There still persists a strong sense of community and of neighborhoodliness (which is the right atmosphere for the development of my project)

LAND USE PATTERN:

The Jounieh sea street is characterised by a dense and mixed land use pattern based on vertical sorting rather than area functionnal specialisation with the lower stories offering retail business and leisure facilities, and the upper floors serving either residential or office needs.

the retail activities are extremely diversified. It misses however activities that make people remain there. (as a school of visual arts would be)

SITE ANALYSIS

ARCHITECTURAL CHARACTER:

Visual analysis of the two parallel streets: this analysis is concerned with determining general aspects relating to massing, composition contrasts, imagery and other underlying visual assets which account for the special character of the area.

1

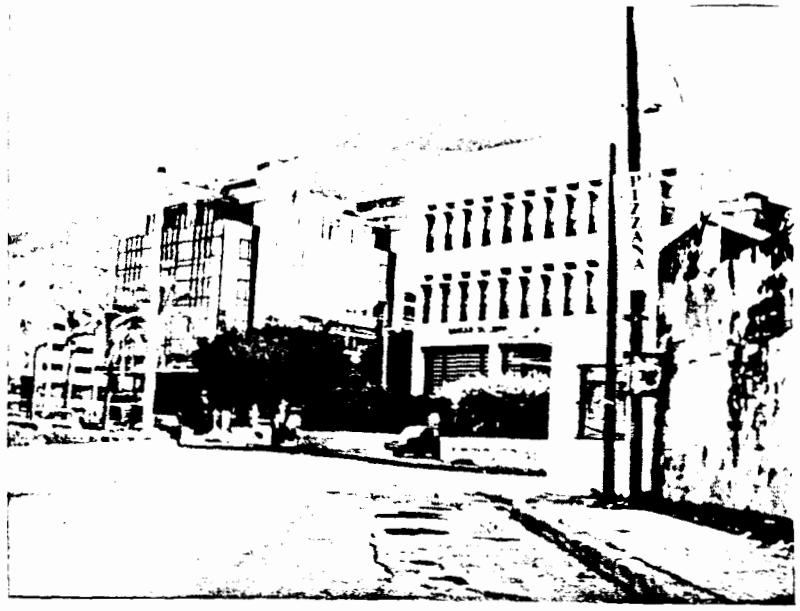
2

the two streets offer a strong contrast as one moves along; in the old one-way street, one seems to move in a narrow corridor(1) until he notices the intermittent tunnels with views of the sea and unexpected inner spaces (2)

SITE ANALYSIS

ARCHITECTURAL CHARACTER:

The new street is a two-way wide boulevard with intermittent bulky masses from one side and a seemingly uninterrupted wall like facade from the other side.



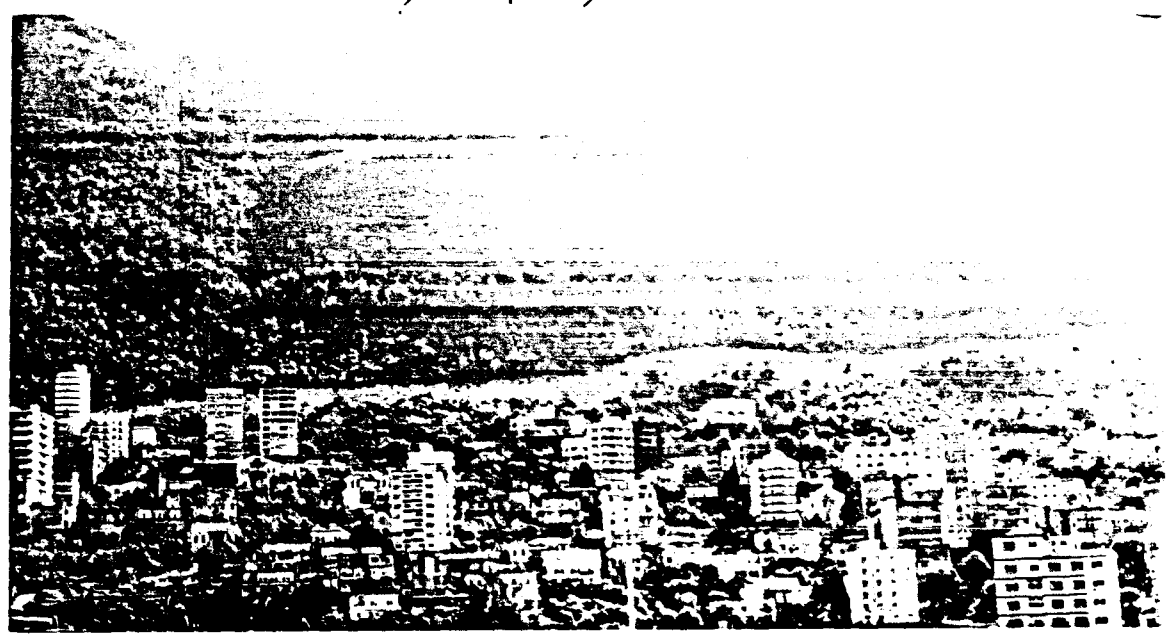
the bulky masses

uninterrupted wall facade

SITE ANALYSIS

ARCHITECTURAL CHARACTER:

A relationship is formed between the passerby and the built structure through this variety in composition. The contrast and duality of the old traditionnal building forms and the new modern structures adds to the vitality of the composition. The existence of the traditionnal building forms give the street a sense of rootedness and belonging. They initiate in the passer-by feelings of nostalgia and cultural belongings. He is able to relate to his environment in terms of signs and symbols which demonstrate his identity. The facing mountains offer another interesting composition, displaying terrassed lebanese housing surrounded by green foliage and contrasted with concrete blocks



1

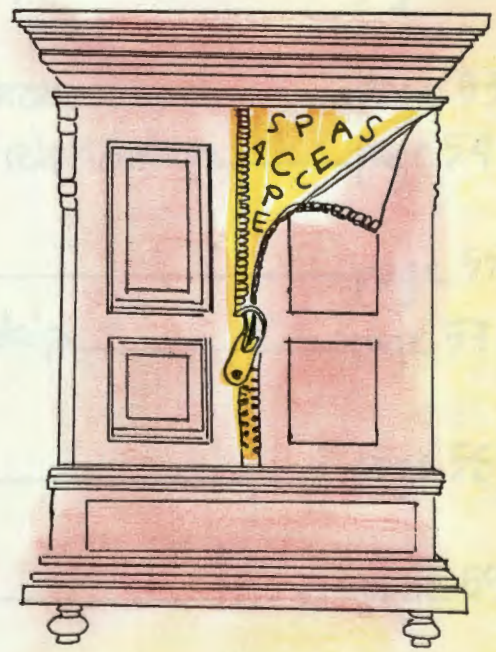
SITE ANALYSIS

BUILDING LAWS.

Some laws are specifically applied to my site and its surrounding, and they concern the following points:

* setback from main street = 3m.
* setback from secondary streets = 4m.
* coefficient of exploitation = 1.5
* percentage of exploitation = 50%.
* maximum height = 26m.
* minimum 20% red tiles of roof cover.

SPACE REQUIREMENTS



SPACE REQUIREMENTS

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Support teaching facilities areas ——— page 53
Support teaching facilities relationships ——— page 54

Students activities areas ——— page 55
Students activities relationships ——— page 57

Administration areas ——— page 58

Dormitories areas ——— page 59

Infirmary, guards, Maintenance areas ——— page 60

Total areas ——— page 61

TEACHING FACILITIES

space name	staff n°	students n°	area in m²	units n°	Total area m²
theoretical teaching					
+ classrooms	1x6	24	45	6	270
+ lecture hall	2	150	183	1	183
sub-total					453
balance area 40%					180
Total area					633

TEACHING FACILITIES

space name	staff n.°	students n.°	area in m²	units n.°	Total area m²
Practical teaching +studios					
• product design	2 x 6	24	125	6	750
• fashion design	2 x 3	24	125	3	375
• graphic art	2 x 4	24	125	4	500
• painting	2	24	125	1	125
Sub-total					1750
Balance area 30%					525
Total area					2275

TEACHING FACILITIES

space name	staff n°	students n°	area - m^2	units n°	total area m^2
Practical teaching + Workshops					
• metal and jewelry	2	36	150	1	150
• foundry	1	12	50	1	50
• wood	2	24	250	1	250
• textile	2	24	175	1	175
• 3D - glass, ceramic, clay	2	24	150	1	150
• plastic	2	24	175	1	175
• printing	3	24	325	1	325
• sculpture	2	24	150	1	150
Sub-total					1425
Balance area					350
Total area					1775

TEACHING FACILITIES

space name	staff nº	students nº	area - m²	units nº	Total area m²
Practical teaching + photography laboratories					
• studio	1	12x3	50	1	50
• chemical mixing	1	2	6	1	6
• contact printing	1	2	12	1	12
• film developing	/	2x1	3	2	6
• enlarging	1	6	20	1	20
• finishing + graphics	/	6	40	1	40
• equipment room	1	/	12	1	12
Sub-total					146
Balance area 30%					45
Total area					190

TEACHING FACILITIES

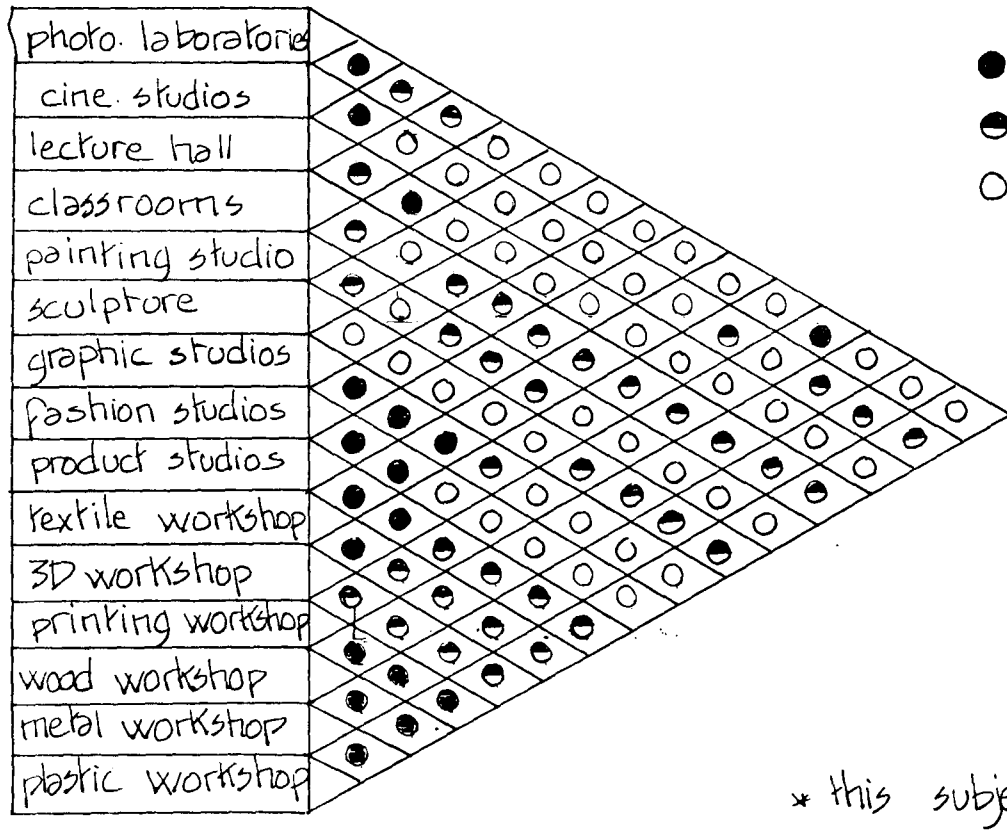
space name	staff	students	area in m²	unit's n°	Total area in m²
Practical teaching + cinema studios					
• studio	2	2x6	150	1	150
• control room	2	6	40	1	40
• VTR	1	2	20	1	20
• telecine	1	2	20	1	20
• editing	1	6	25	1	25
• equipment room	1	/	15	1	15
• sound buffer	/	/	10	1	10
• preparation	1	3	35	1	35
• mechanical room	/	/	50	1	50
Sub-total	9	30	365	/	365
Balance area 30%	/	/	/	/	109
Total area	/	/	/	/	474

TEACHING FACILITIES

space names	staff	students	area in m²	units no	total area m²
Faculty spaces					
• teachers offices	2x13	/	10	13	130
• studios offices	37	/	7	37	260
• workshop offices	18	/	7	18	126
• teacher's lounges					
+ large lounge	30	/	50	1	50
• small lounge	10	/	20	1	20
sub-total	81	/	/	/	590
Balance area 40%	/	/	/	/	240
Total area	/	/	/	/	820

RELATIONSHIPS

TEACHING FACILITIES*



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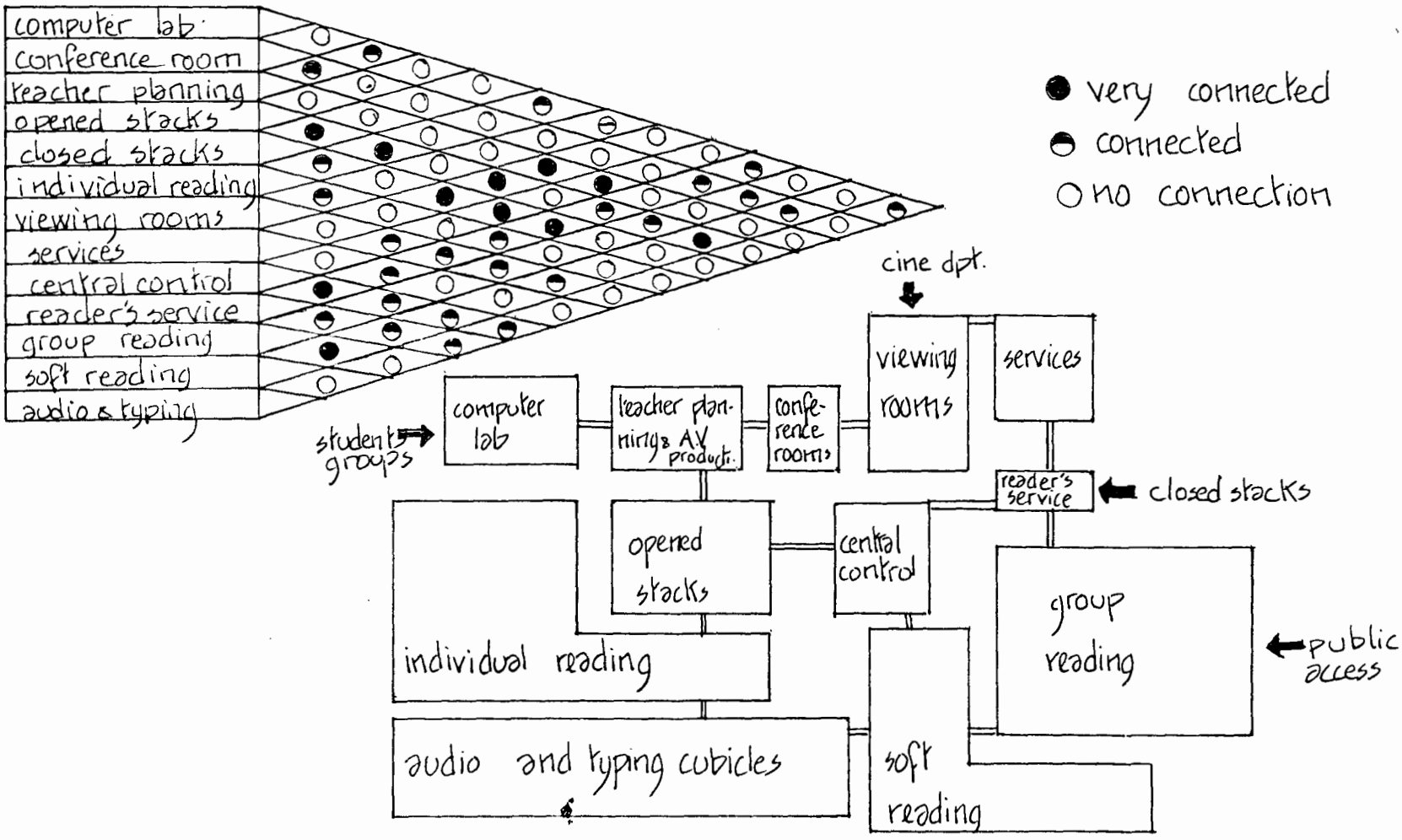
* this subject is more developed in the last chapter "Design objectives"

SUPPORT TEACHING FACILITIES

space names	staff	students	area in m²	units nº	total area m²
Resources center					
+stack space (48000 vol.)	/	/	480	1	480
+work areas	3	/	60	1	60
+administration	5	/	80	1	80
+reading spaces	-	75	135	1	175
+audio & typing cubicles	/	1x12	6	12	72
+groups viewing room	/	25	50	1	50
+tycomputer lab	1	12	50	1	50
+conferences room	/	2x10	15	2	30
Computer centre	2	/	70	1	70
sub-total					1027
Balance area 25%					257
Total					1280

RELATIONSHIPS

RESOURCES CENTER



STUDENTS ACTIVITIES

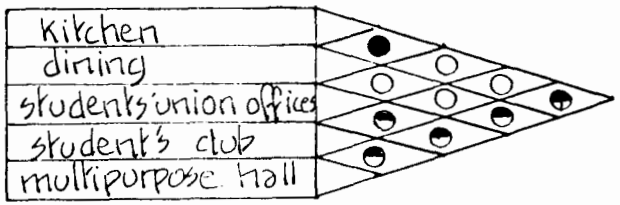
space name	staff	students	area in m²	units n°	total area m²
Catering facilities					
+Kitchen	12	/	90	1	90
+ serving counters	3	/	55	1	55
+ dining	20	100	150	1	150
sub- total					300
Balance area 25%					75
Total					375

STUDENTS ACTIVITIES

space names	staff	students	area in m²	units nº	total area m²
Student's union					
+ student's affairs office	'	2	16	1	16
+ students advising office	'	2	16	1	16
+ publication office	'	2	16	1	16
+ students council	'	20	40	1	40
+ students club-music.	'	15	50	1	50
+ multipurpose hall	'	100(varies)	150(varies)	1	150
Subtotal					280
Balance area 25%					70
Total area					350

RELATIONSHIPS

STUDENTS ACTIVITIES: * Catering activities
* students union



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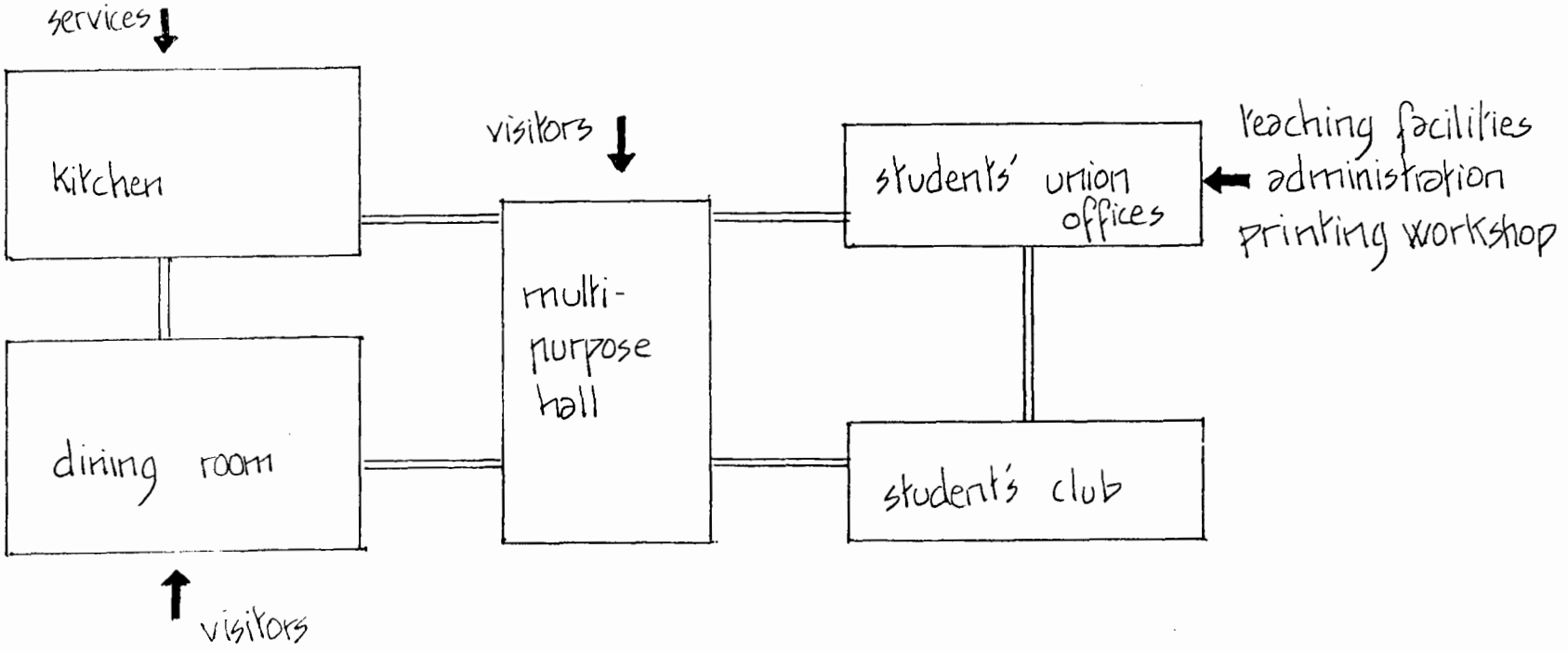


ADMINISTRATION

space name	staff nº	students nº	area in m²	units nº	total area m²
• reception			40	1	40
• president	1	/	28	1	28
• director	1	/	20	1	20
• secretaries	2	/	15	1	15
• conference room	30	/	45	1	45
• personnel dpt (director+sec)	2	/	25	1	25
• public relations (dir + sec)	2	/	25	1	25
• financial dpt (dir + sec)	2	/	25	1	25
• research and dev. (dir.+ sec)	2	/	25	1	25
• registration & admissions					
+registrar &counter	2	/	30	1	30
+director of records	1	/	12	1	12
+director of admissions	1	/	12	1	12
• heads of depts (dir + sec)	5	/	20	5	5x20
subtotal					400
balance area 40%					160
Total					560

DORMITORIES

space names	staff	students	area in m^2	units nº	total area m^2
Dormitories					
+students apartments	/	8x10	95	10	950
+ staff's apartments	1/2	/	65	8	520
+ concierge	/	/	40	1	40
+ retail activities	/	/	20	1	20
Sub-total					1530
Balance area 20%					300
Total					1830

INFIRMARY - GUARDS - MAINTENANCE

space name	staff	students	area in m^2	units nº	total area m^2
infirmary			50	1	50
guards spaces					
. control booth			4	1	4
. restroom			20	1	20
. changing room			12	1	12
maintenance					
. warehouse			50	1	50
. electrical room			100	1	100
. mechanical room			100	1	100
Sub total					336
balance area = 25%					84
Total					420

TOTAL AREAS

Type of spaces	net area. m^2	balance %	balance . m^2	Gross area. m^2	m^2/student
*Teaching facilities					
+theoretical	453	40%	180	633	1.3
+practical	3683	30%	1029	4714	9.8
+faculty spaces	590	40%	240	820	1.7
	4726		1449	6167	12.8
*Support teaching facilities	1027	25%	257	1280	2.6
*Activities					
+catering facilities	300	25%	75	375	0.8
+student's union	280	25%	70	350	0.7
	580		145	745	1.5
*Administration	400	40%	160	560	1.1
*Dormitories	1530	20%	300	1830	3.8
*Infirmary + Maintenance + guards	336	25%	84	420	1
Total	8602	29%	2395	10982	22

SPACE ANALYSIS

SPACE ANALYSIS

Teaching facilities: ____ page 64
- General considerations ____ page 65
- Theoretical teaching ____ page 68
- Practical teaching ____ page 71
- Faculty spaces ____ page 98

Support teaching facilities ____ page 100

Activities spaces ____ page 106
- Catering spaces ____ page 107
- Students' union ____ page 109

Administration ____ page 111

Dormitories ____ page 114

SPACE ANALYSIS

TEACHING FACILITIES

TEACHING FACILITIES

GENERAL CONSIDERATIONS:

Space allocation is based on an overall concept of complementarity of functions distributed for their optimum usability:

+ the classrooms will accomodate for 24 students; the utulization factor for classrooms will be considered 80% (31 hours per week)

+ the lecture hall will accomodate for 150 students; it will be used as a dubbing studio and will be provided with projection facilities; the utulization factor for the lecture hall will be considered 20%

+ studios and workshops will accomodate for multiple of 12 working places. The utulization factor will be considered 61% in this case (24 hours per week.

+ teacher's rooms; they are inside or annexed to laboratory and workshop and studio, where provision is made for two lecturers per office. Visiting lecturers will be accomodated in teachers lounges.

The balance areas include: circulation spaces, vertical and horizontal, but also entrance lobbies, storages, locker spaces, janitor's rooms, wall thicknesses, service rooms and ducts.

TEACHING FACILITIES

GENERAL CONSIDERATIONS

Type of spaces	Type of hours	number of units	utilization factor	used hours/w.	Total capacity s/h/w	Total s./h./w	number of students
classrooms	theoretical	6	80%	31	5664	5232	24
lecture hall	theoretical	1	20%	8	1200		150
studios	practical	15	61%	24	8640	8016	24
labs	practical	4	61%	24	1440	1392	15
workshops	practical	8	61%	24	4608	4224	24
Total	–	–	56%	–	20352	18864	–

TEACHING FACILITIES

GENERAL CONSIDERATIONS

	equivalent full-time	required theoretical hours		required practical studio hours		required practical shop hours		required practical lab hours	
Department	n° of stu.	h./s./w	Total h./s./w	h./s./w.	Total h./s./w	h./s./w.	Total h./s./w.	h./s./w.	Total h./s./w
Product design	192	9.5	1824	15	2880	15	2880	0.5	96
Cinematography	48	11	528	25	1200	2	96	1	48
Photography	48	12	576	2	96	2	96	23	1104
Fashion design	96	10	960	20	1920	8	768	0.5	48
Graphic art	96	14	1344	20	1920	4	384	1	96
Total	480	11	5232	17	8016	9	4224	2.9	1392

h.s./w. = hours/per student/per week

THEORETICAL TEACHING

CLASSROOMS :

Design requirements:

+ ceilings should be about 3m height, and they should be acoustically treated.

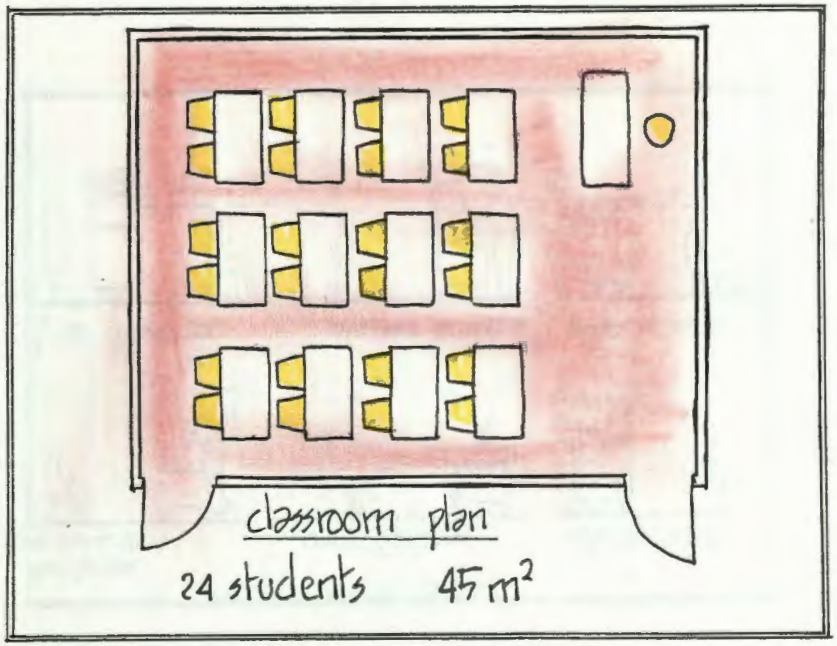
+ doors should be placed at the front of the classroom and should be recessed to clear the corridor

+ darkening facilities should be provided for color films, television and slides - which make glazed facades problematic.

Environmental requirements:

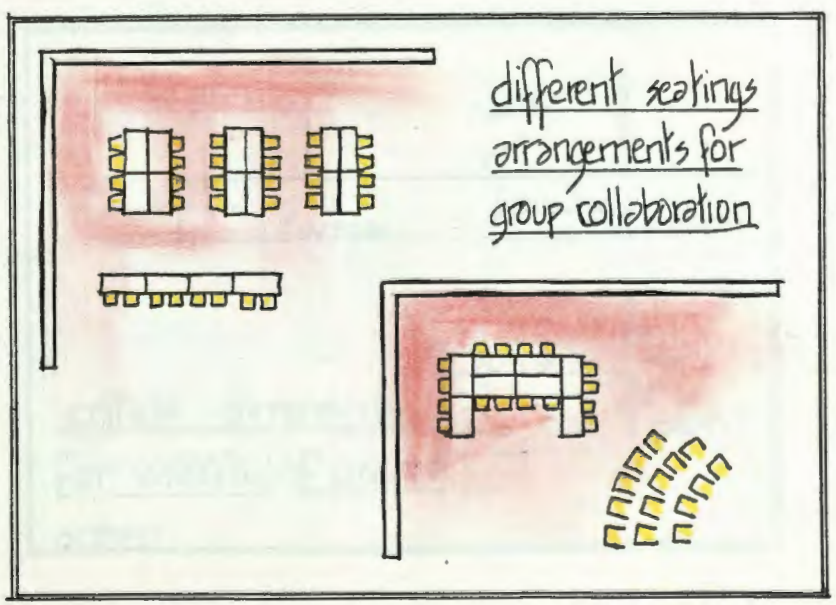
+ classrooms should have a quiet location, away from noisy area.

+ the best orientation is to the north, to provide uniform lighting - light should come over a pupil's left shoulder.



classroom plan

24 students 45 m²



different seatings arrangements for group collaboration

THEORETICAL TEACHING

LECTURE HALL:

The utilization of the lecture hall is often very low, being used for a few hours a day

Design requirements:

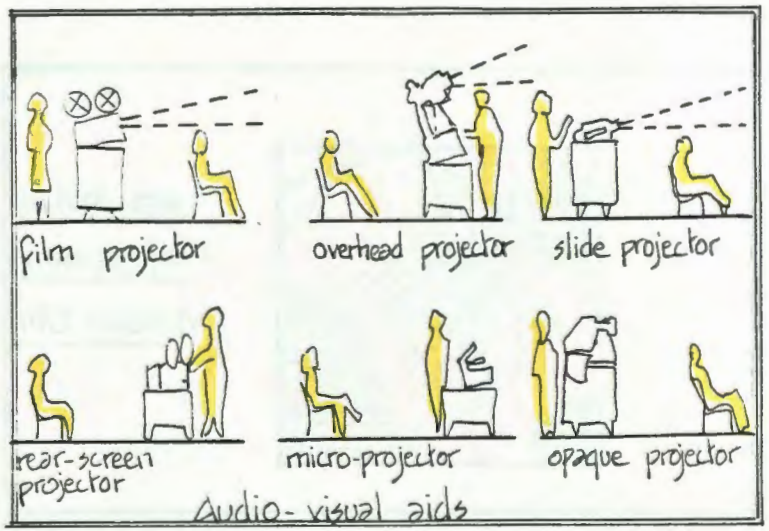
+ it should be flexible enough to perform different functions.

+ it should be shared and central and not the property of one department.

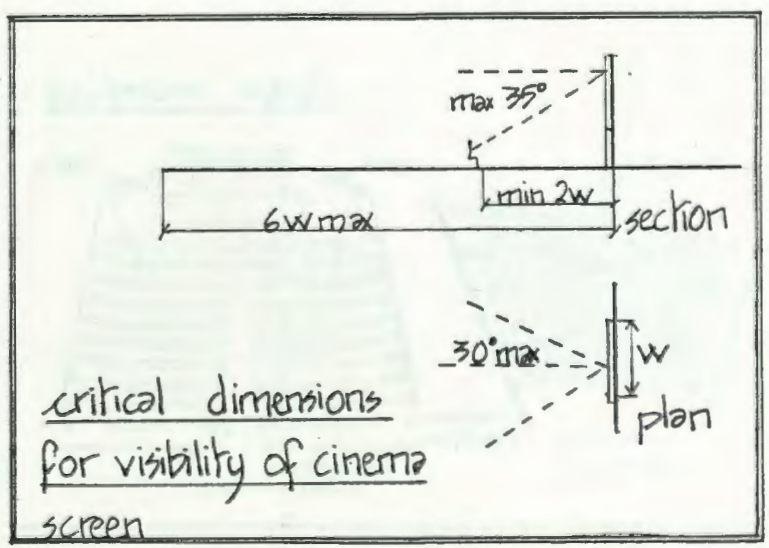
+ it should be accessible for visitors for a few hours a day for extra-curricular activities.

Functions requirements:

+ lecturing: requires audio-visual devices, chalkboards and visible screens.



Audio-visual aids



critical dimensions for visibility of cinema screen

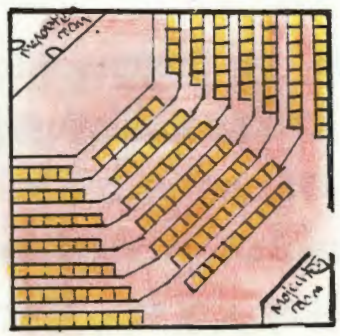
THEORETICAL TEACHING

LECTURE HALL

+cinema: requires a well visible screen with good viewing angle and distance.

+dubbing: requires a closed room for sound dubbing + a narrator and a vocal booth

lecture hall example for 150 students



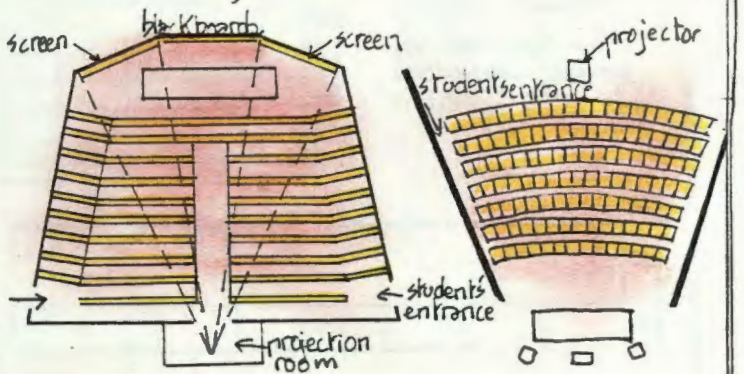
Environmental requirements:

+the room should be acoustically treated

+windowless and curtainless environment is easier to handle

+entrances and exit should be obvious, quiet, with provision for movement after beginning of the lecture. The doors should be wide and double-leave.

auditorium layouts



PRACTICAL TEACHING

WORKSHOPS: Metal

It is divided into three main parts:

1. machines area
2. welding area
3. bench area

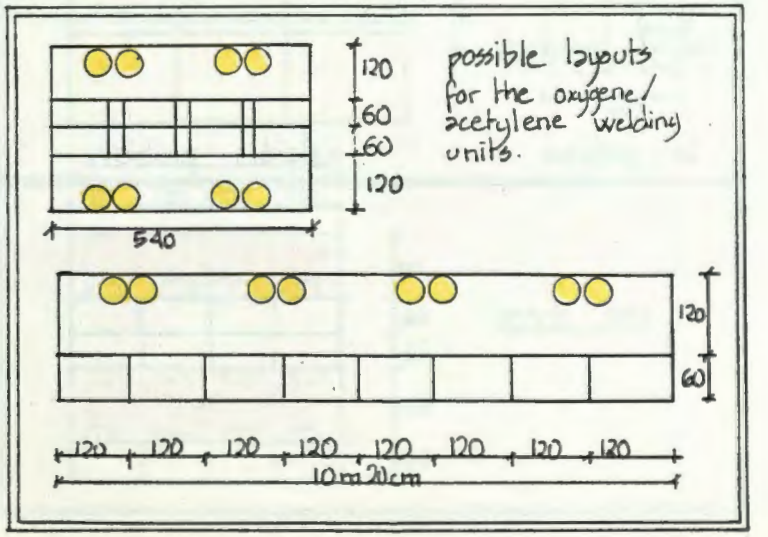
Design requirements

1. Machine area: the machines needed are

- bending machine	9 m²
- rolling machine	4.5
- folding machine	7.2
- shear cutter	9
- small shear cutter	2
- electrical shear cutter	9
- table	12.25 ≃ 53 m²

2. Welding area: a. oxygene/acetylene welding

There will be 8 oxygere/acetylene welding units. Each 2 units will be fed by one bottle of oxygen and one bottle of acetylene; it is possible to isolate the 2 gases in a special storage room and feed all the units by ducts; the 1 unit is a 60x60 cm table covered with bricks



possible layouts for the oxygene/acetylene welding units.

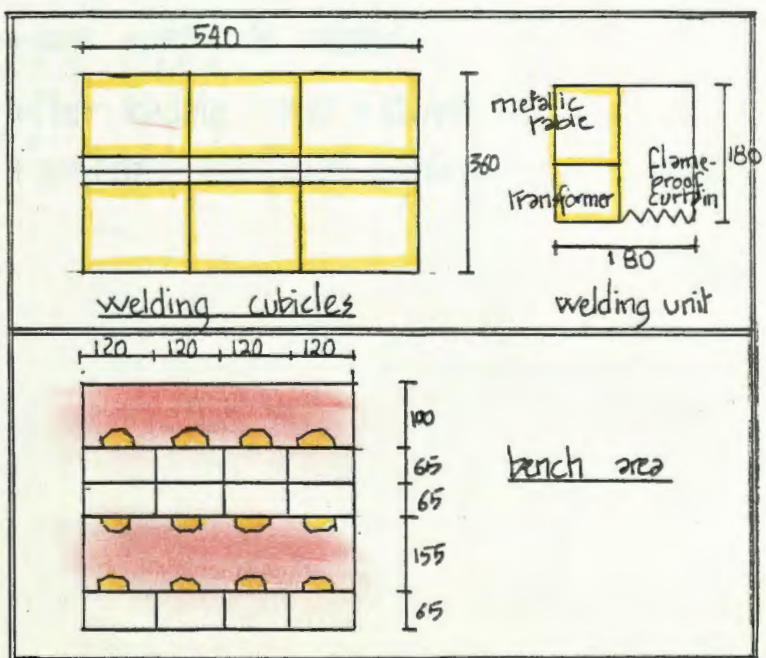
PRACTICAL TEACHING

WORKSHOPS : Metal

2. welding area: a) oxygene/acetylene welding:
area : 2.4 m² / student
≃ 20 m²

b) arc welding: it has specific requirements, which are: + dangerous process harmful to the eye;
+ special sheild for eye protection; + provided in concrete cubicles
Each cubicle contains a transformer 60x60 cm and a metal table; the cubicle entrance will have a flame-proof curtain; there will be 10 units of arc welding. The area of each unit is 1.8 x 1.8 = 3.24 m²
total area = 32 m²

3. Bench area: each student will have his own bench, a 120 x 65 wooden table with drawers for the storage of the tools. the benches are mainly used for fine jewelry work.
area of each unit: 120 x 165
total area = 22 m²



PRACTICAL TEACHING

WORKSHOPS : Metal

Total areas :

1_machine area	53 m²
2_welding area	
a_gas welding	20 m²
b_arc welding	32 m²
3_bench area	22 m²
	127 m²
balance area 15%	19 m²
Total	150 m²

Environmental requirements :

+ noisy
+ corridor width = 2.5 m_floor to ceiling 3.3 min.
+ waste disposal is required for industrial drain and solid material
+ gas supply is needed
+ floor loading over 5 KN/m²
+ preferred artificial lighting

PRACTICAL TEACHING

WORKSHOPS : Printing

space requirements :

1. typesetting
2. photography and montage (combined with the photography department.)
3. printing
4. finishing
5. cutting and storage

Design requirements:

1. typesetting : a.) punching keybords receives handwritten matter. 2 students will work on keyboard punching machines to translate the written information to the computer language

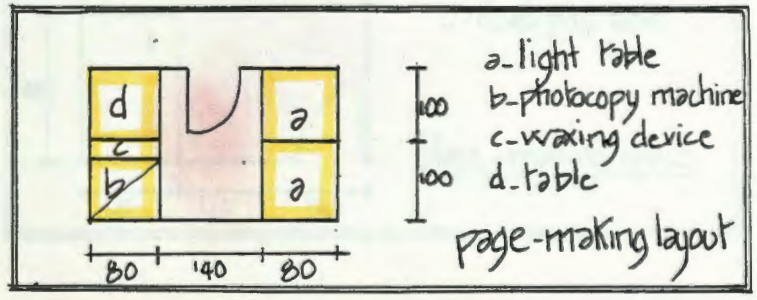
area : $4m^2$ worting + $4m^2$ storage = $8m^2$

b.) computer room where one student will feed the punched paper rolls to the computer to give us a roll with the matter to be printed typewritten

area : $14m^2$

c.) page-making layout where 2 students will perform layout works to design the different pages of the book to be printed the processed films will be cut into needed paragraphs and glued on papers of the same size of the pages of the book

area = $6m^2$



page-making layout

PRACTICAL TEACHING

WORKSHOPS : Printing

Design requirements:

2. photography and montage : a) needs 3 adjacent dark rooms where one student will photograph, process and finally shift from positive or negative

b) the montage where 4 students will assemble each 16 pages on one large unit sheet called signature

these 2 spaces can be included in the photography department

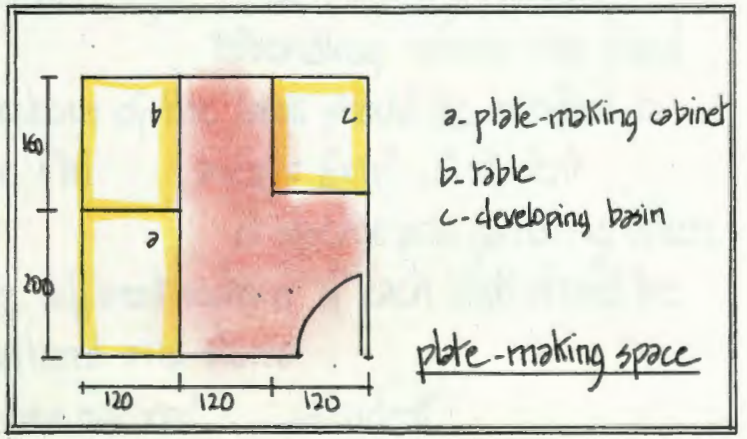
c) plate-making cabinet, or yellow light-room, where one student will use the signature to make print on a sensitive metal plate; the student will then place one signature and one plate with an emulsion coating in the plate-making machine, which exposes it to light; after various treatments the plate will be ready for use as a printing plate

area = 13 m² for one student

the environmental requirements in this case are :

+ventilation

+yellow lighting



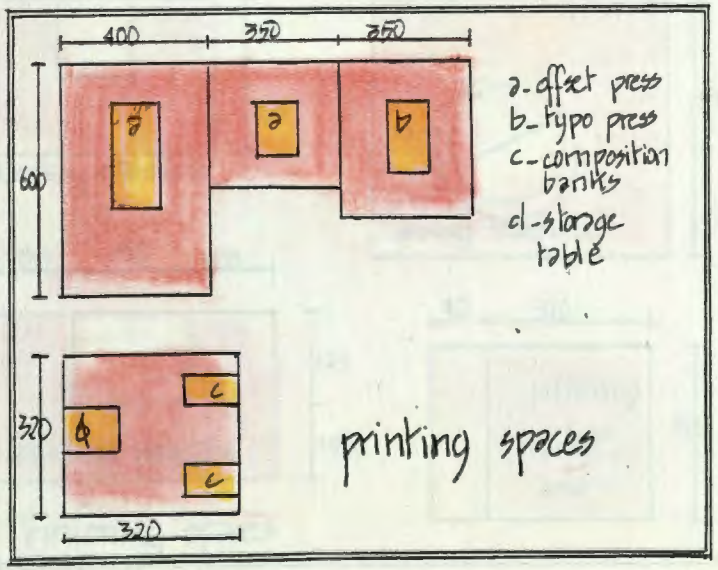
PRACTICAL TEACHING

WORKSHOPS: Printing

Design requirements:

3_Printing: the metal plates will be wrapped around the cylinder of a printing press and can thus be used for printing; paper sheets of the same size as the signatures will be printed.

area: 73 m²



the environmental needs in this case are:

+good lightning
+noisy activity
+mechanical ventilation
+floor to ceiling height ≥ 4.2m
+floor loading 5 kN/m²

4_Finishing: a) folding, where the printed unit should be folded in the folding machine. it will pass from the size of 16 pages to the size of a normal page. area = 14 m² _1 student

b) bundling where the folded sections of the book should be bundled to lie flat area = 6m² _1 student

c) storage and gathering where the different sections of each book should be gathered and stored.

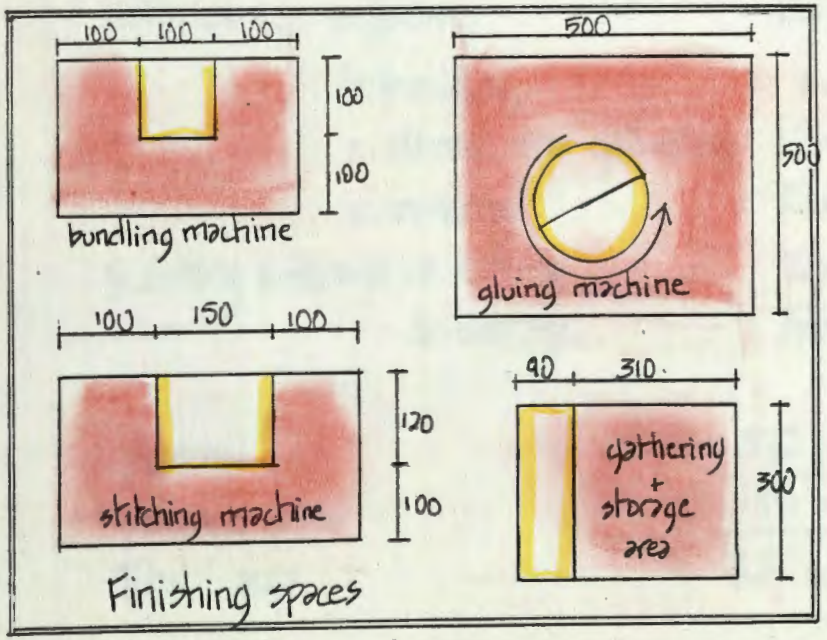
area = 12 m² _ 1 student

PRACTICAL TEACHING

WORKSHOPS : Printing

Design requirements:

4- Finishing: d) binding where the books can be bound either in the gluing machine or in the stitching machine
area = 32.7 m² 2 students



5- Cutting and storage: a) the edges of each book should then be cut
area = 12 m² - 1 student

b) storage should be provided for printed books. Another storage should be also provided for the raw materials - white papers, inks, glue.
area = 37 m²
of which 12 m² are for printed book while 25 m² are for raw materials.

PRACTICAL TEACHING

WORKSHOPS: Printing

Areas:

1. Typesetting:	a. printing room	8 m²
	b. computer room	14 m²
	c. pagemaking room	6 m²
2. Photography and montage		58 m²
3. Printing		73 m²
4. Finishing:	a. folding	13.7 m²
	b. bundling	6 m²
	c. storage and gathering	12 m²
	d. binding	32.7 m²
5. Cutting & storage:	a. cutting	12 m²
	b. storage	37 m²
Subtotal		272 m²
Balance area		53 m²
Total area		325 m²

Photography and montage have been included in the area calculations, although they are executed in the photography department. This is to give an idea about the areas required by the printing activity as a whole

PRACTICAL TEACHING

WORKSHOPS : wood

Spaces requirements :
it is subdivided into the following :

1- Bench area
2- Machines area
3- General work area
4- Painting area

Design requirements :

1- Bench area : in this area, the students work manually, each 2 at one bench ; there will be 12 benches.
area : 12 x 7 = 84 m²

2- Machines area : the disposition of the machines should allow the passage of the long boards of 4 m into these machines for treatment ; the seqence of use of the machines is the following :

a- band saw	15 m²
b- circular saw	19 m²
c- surface planer	13 m²
d- thicknesser	14 m²
e- jointer	2 m²
f- drill spaces	3 m²
g- woodshaper	5 m²
h- lathe	5 m²
i- belt sander	6 m²
j- grindstone	3 m²
k- sharpener	4 m² = 86 m²

3- general work area : it is a large open space where students can do assembling, gluing, polishing and finishing works
area = 40 m²

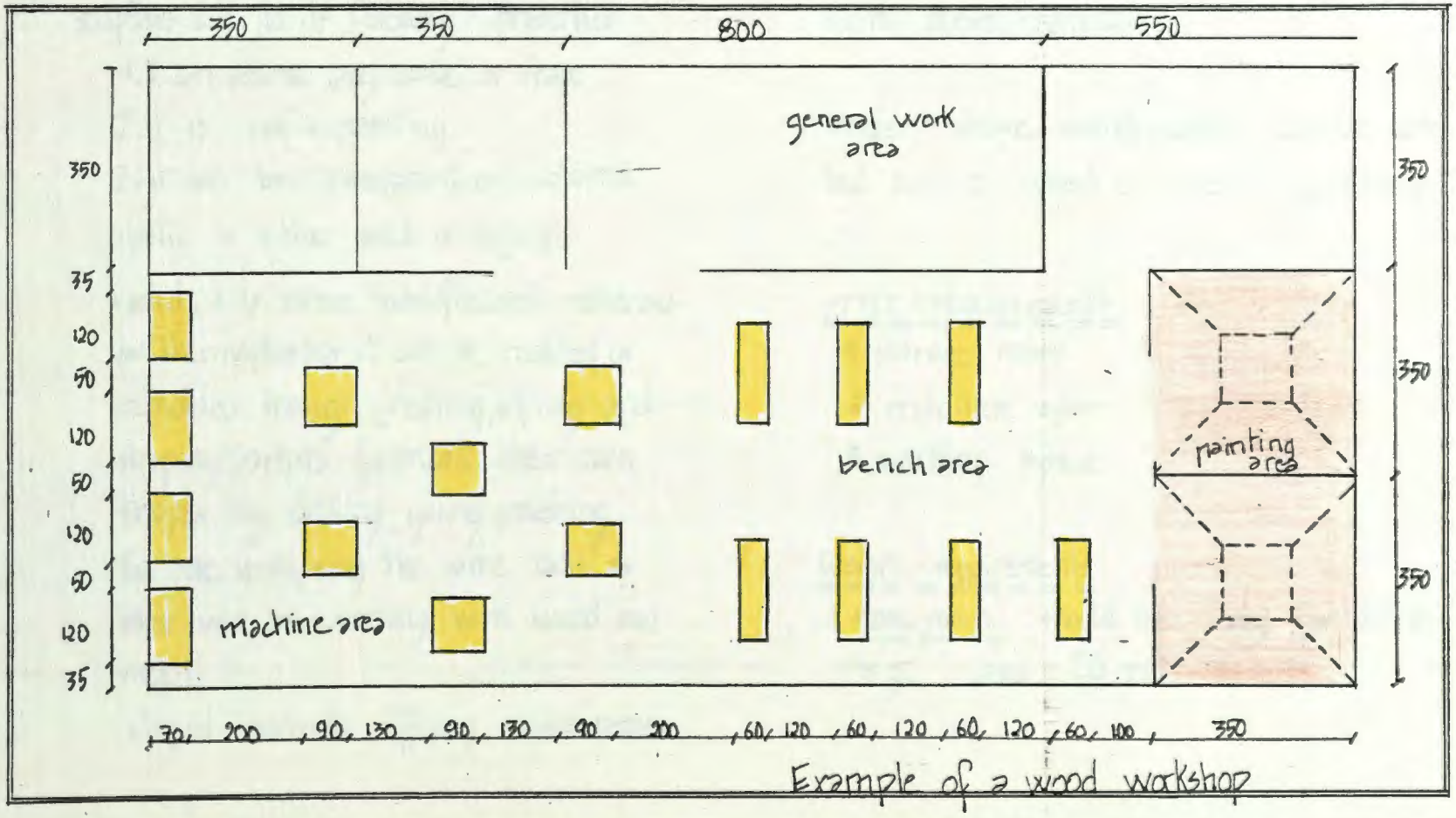
4- Painting area : it should be isolated from the rest of the workshops by large doors with double leaves
area = 12 m²

PRACTICAL TEACHING

WORKSHOPS : Wood

total area : 222 + 15% circulation = 250 m²

environmental requirements :
+noisy - dusty ⇒ enclosed plan
+corridor width 2m min.; floor loading 5KgN/m²
+service access



Example of a wood workshop

PRACTICAL TEACHING

WORKSHOPS: Plastic

Properties:

Newly emerging on the market, plastic attracts sculptors due to its following properties:

1. it can assume any curve or shape
2. it is self-supporting
3. it can be transparent or colored

plastic is either solid or liquid:

+solid, it is either manufactured materials or thermoplastics; it can be molded or remolded through heating, softing and shaping; artists fabricate their own shapes by drilling, gluing, polishing. In one word, using the same tools as those used in working with wood and metal

+liquid materials offering various processes like foaming, buttering, molding. Examples of liquid plastics are the polyesters, the epoxy resins and the foam plastics. Artists need special equipment to work with these materials.

Under shape solid, plastic can be worked out in wood or metal workshop

space requirements:

1. storage room
2. machine space
3. working space

Design requirements:

1. store room: should be easy for delivering. area = 20 m^2

PRACTICAL TEACHING

WORKSHOPS : Plastic

Design requirements:

2_machine space : for heating and liquifying plastics. Its elements are:

a_strip heater

b_heat gun

c_circulated hot-air oven

d_hydrogen torch

e_vacuum former

area = 50 m^2

3_laboratory space : it requires bvatories, working benches and storage shelves _ used for casting and curing;

area = 80 m^2

Total area : 150 +15% circulation ≃ 175m^2

Environmental requirements:

+ intoxicating fumes → need good ventilation

+ service access

+

PRACTICAL TEACHING

WORKSHOPS : Textile

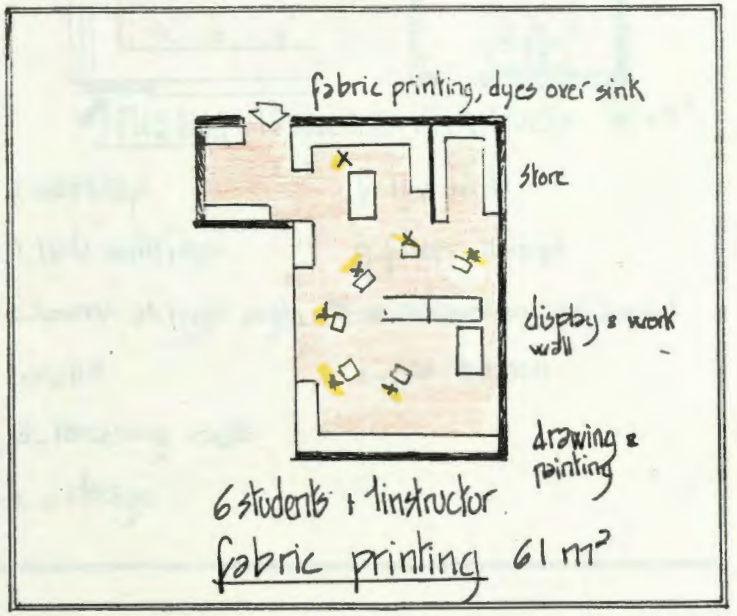
Spaces requirements:
1. fabric printing
2. weaving
3. spinning
4. finishing

Design requirements:

1. fabric printing: a.) requires strong tables 1.5 m² for 2 persons, & also storages, drawers, cupboards for tools, inks, paints ...

b.) washing, drying, ironing, requires: a large sink for washing and draining boards on both sides;
+ drying racks and lines
+ large trestle tables for ironing
+ 2 m² table for setting out the fabric
+ dye mixing, preparation of screens → 1.2 x 0.6 m benches.

2. weaving: it requires the following;
+ looms 0.72 m²/table
+ warping frames, warping mills
+ shelvings
+ cupboards

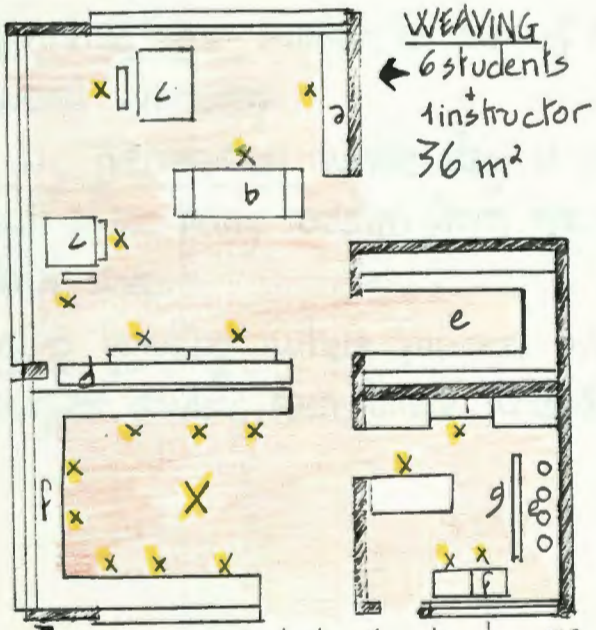


PRACTICAL TEACHING

WORKSHOPS : Textile

Design requirements :

3. spinning: it requires spinning wheels (needing 0.5 m² f. space), carders, spindles, skein holders, a yarn trolley and shelving



WEAVING
6 students + 1 instructor
36 m²

SPINNING : 12 students + 1 instructor 50 m²

a - worktop
b - table with flops
c - looms at right angle to windows on adjacent walls
d - threading racks
e - storage
f - low sink
g - floor channel
e - gas burners

PRACTICAL TEACHING

WORKSHOPS : three- dimensionnal.
- glass, ceramic, pottery -

Spaces requirements:
1. bench area.
2. firing area.
3. painting area.
4. clay preparation.
5. glass bowling.

Design requirements :
1. bench area : where modelling and glazing of glass and pottery, but also glass decoration and refining take place; it requires sitting benches.
2. firing area : it is where clay work is put into an electric kiln after being removed from an electric kiln.
3. painting area : similar to that of the wood workshop.
4. clay preparation : where clay is prepared after being removed from the material store.
5. glass bowling : where furnaces are used for glass bowling. Each furnace serves 5 students.

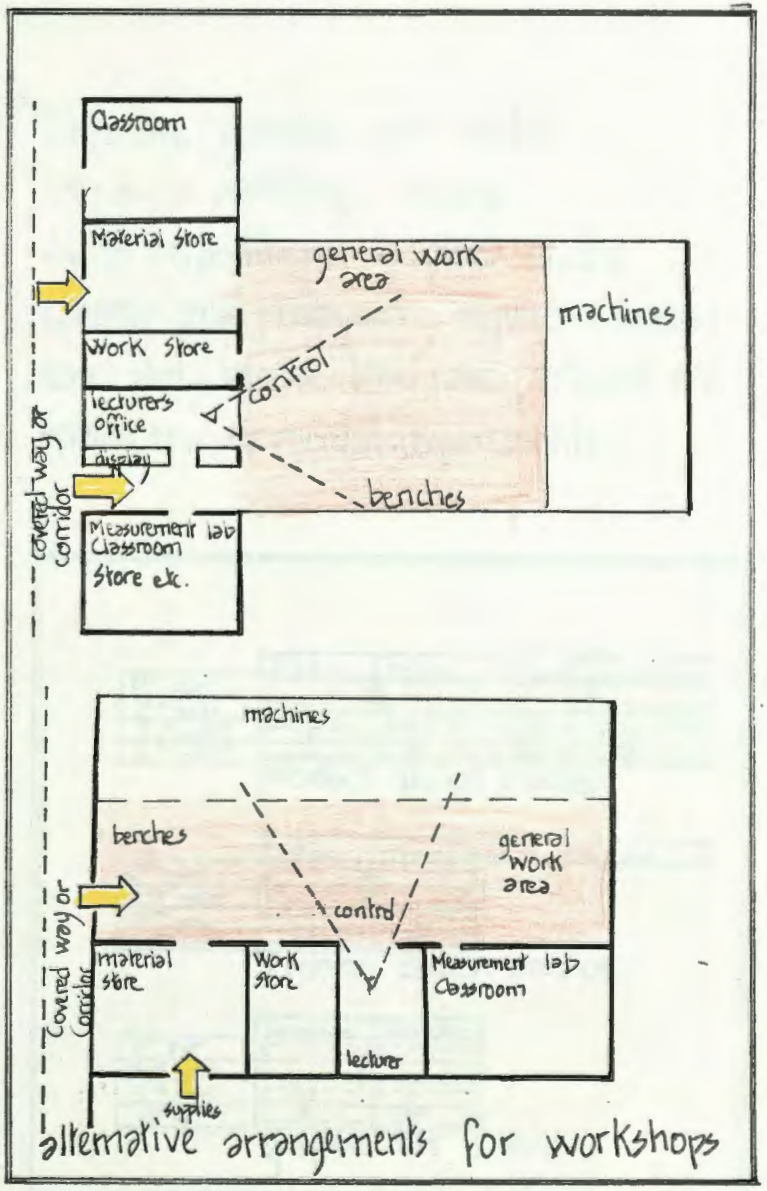
PRACTICAL TEACHING

WORKSHOPS : General

Design considerations:

Workshops are best sited on the lowest floors The workshop area is divided between benches, machines, assembly, storage, desk and circulation area

1. empty working spaces should always be provided.
2. ample spaces around machines should allow for necessary movements
3. workshops should have an interconnected efficient and solid material disposal system
4. two kinds of accesses must be provided. One is for street and vehicular delivery, another is for pedestrian internal students access



alternative arrangements for workshops

PRACTICAL TEACHING

STUDIOS : General

Spaces requirements:

Each rectangle represents a class; a class is a standard unit ranging from 9 to 15 students; the ultimum capacity of a class will be considered equal to 12 students throughout my study; each table represents the equivalent full-timer in each major. The superposed dashed rectangles represent the studios space proper. They are stretched to illustrate how many classes will use them. Generally third and fourth yearers will share private studios while first and second yearers will share their studios according to schedule

A, B, C, D, E, F are product design studios

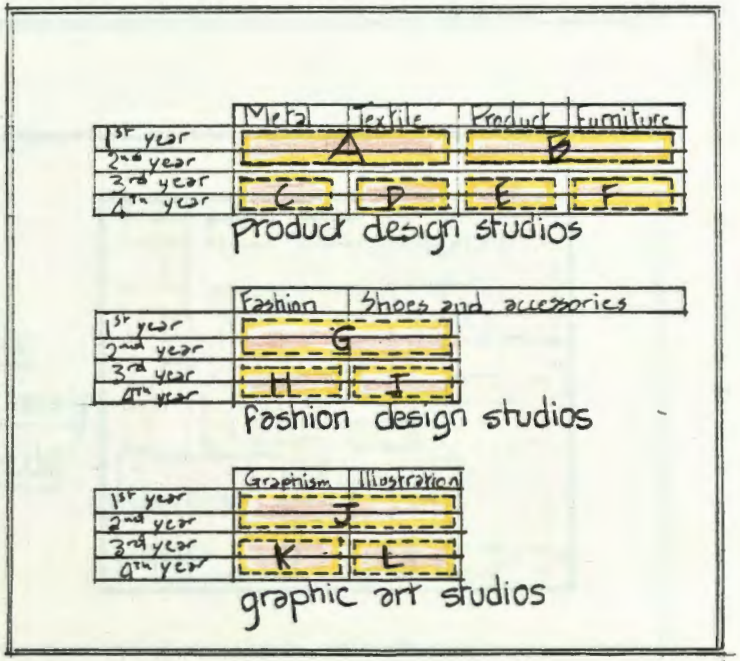
G, H, I are fashion design studios

J, K, L are graphic art studios

M is a painting studio

N is an additional graphic studio

cinema and photography require a special case study because they have particular and spatial environmental requirements.



PRACTICAL TEACHING

STUDIOS : General

Design requirements:

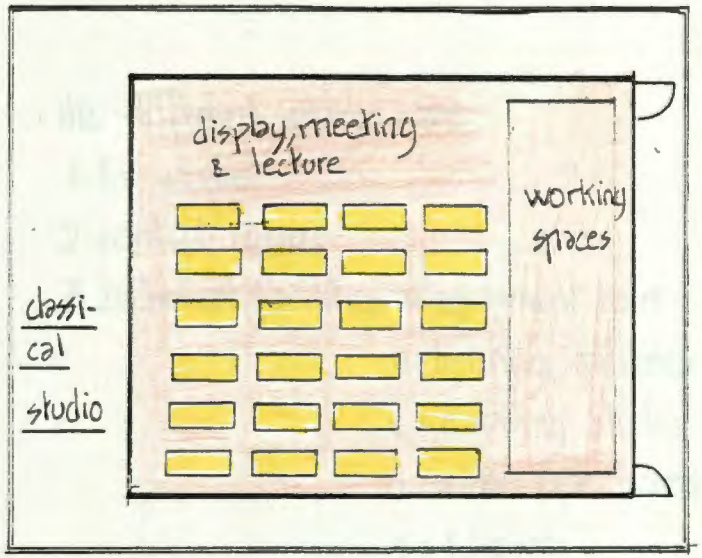
The studios of the following majors have spatial and environmental requirements which are more or less similar: Product, Fashion, Graphics, painting.

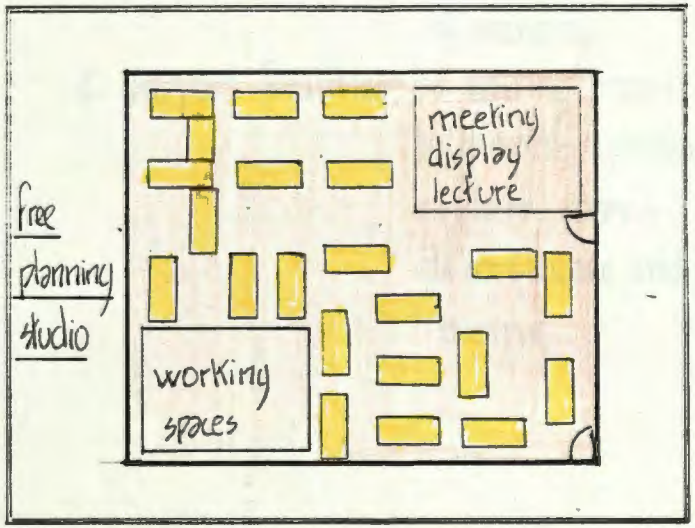
The spatial needs are: + working space
+ drafting boards or easles
+ display and meeting
+ blackboards
+ instructor's room

The studios could be planned in a classical way when they are used part-time; however, when each student has his own private space, they prefer to dispose of the planning.

Environmental requirements:

+ flowing light
+ quiet area
+ min 4m high ceiling
+ easy access to workshop





PRACTICAL TEACHING

STUDIOS: Cinematography

Purposes:

This facility will serve not only the school but also will be used as a production center for educationnal and commercial special programs.
The multi-use studio can be affected to different functions: live and recorded television production, film production, still photography, and possibly audio recording.

Spaces requirements:

Control of all these activities will come from the central control and distribution room.
Additional to the studio and its control room, there will also be provision for support and technical facilities.

the different spaces are:

1. T.V studio
2. control room
3. technical facilities: a+ equipment room
   b+ lighting galleries
   c+ dubbing studio
   d+ video-tape recording
   e+ telecine
   f+ construction & painting of scenery
4. support facilities; a+ editing room
   b+ graphic production
   c+ dark rooms
   d+ conference and previews rooms

PRACTICAL TEACHING

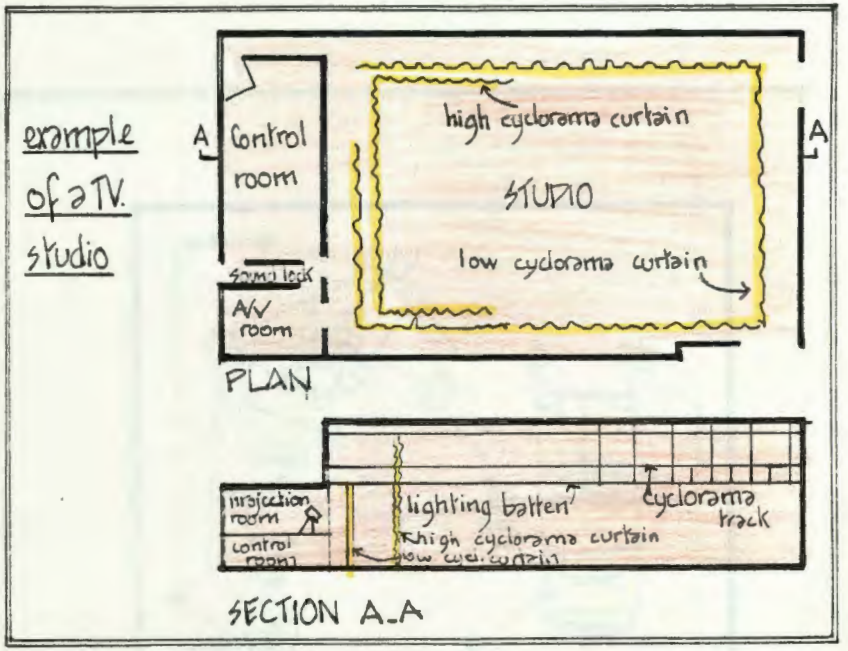
STUDIOS : Cinematography

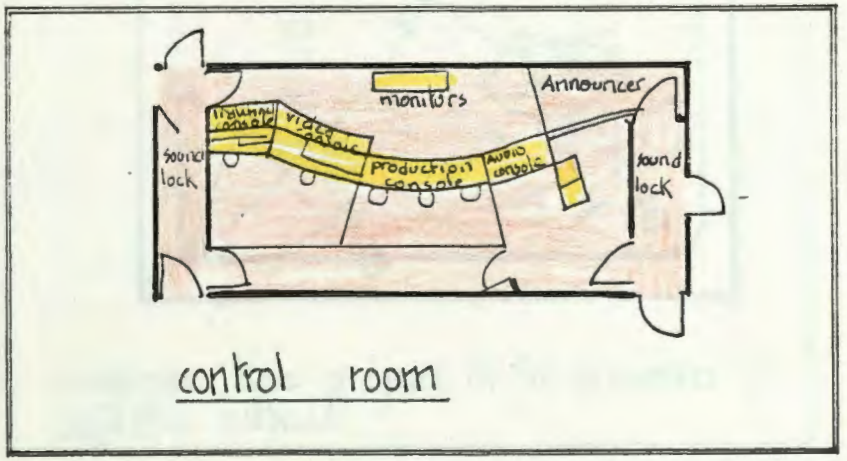
Design requirements:

1. T.V. studio : the convenient commercial TV studio should have a clear floor area of 560 m². The scope of my school however doesn't require more than 150 m² net. The prescribed height varies from 9 to 11 m. This height is due to lighting needs and increasing zoom techniques.

2. control room : it should be directly to the studio, through a sound lock, with a minimum area of 30 m²; it contains electronic equipment for monitoring and controlling the studio output; they may have separate compartments or consoles for sound picture (video) and lighting controle. the consoles dimensions are 1.5m x 2m x 0.85m.

example of a TV. studio





control room

PRACTICAL TEACHING

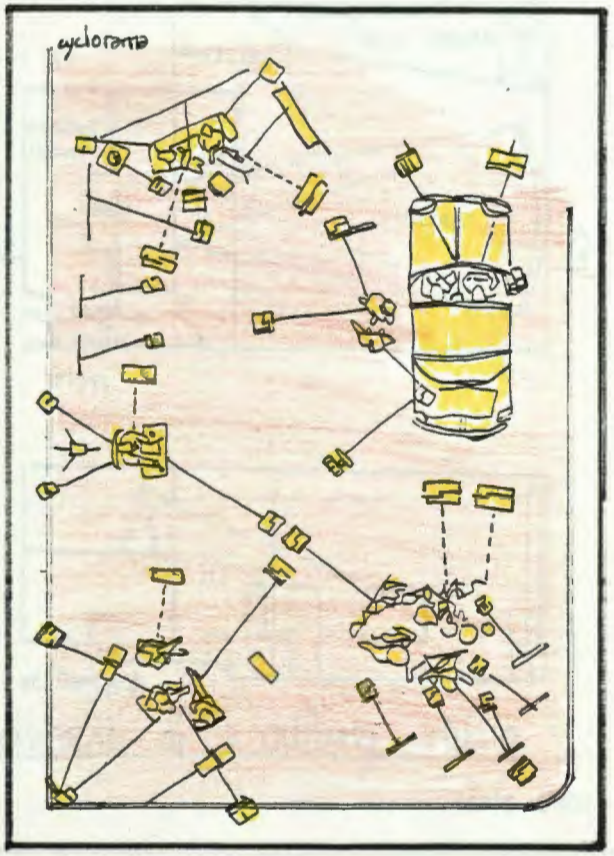
STUDIOS : Cinematography

Design requirements:

3. Technical facilities: a. equipment room, where is stored the sensitive and expensive equipment used in the studios.

b. lighting galleries: they are required on the 4 walls of the studio with a minimum catwalk of at least 1.25m Their levels can be varied locally to avoid obstruction of doorways and observation window.

c. cyclorama track: within the area defined by the lighting galleries, a cyclorama track is required; it is an opaque curtain which provides a backdrop to scenery and conceals the walls outside the projection area.



magazine type program lit for a number of different subjects

PRACTICAL TEACHING

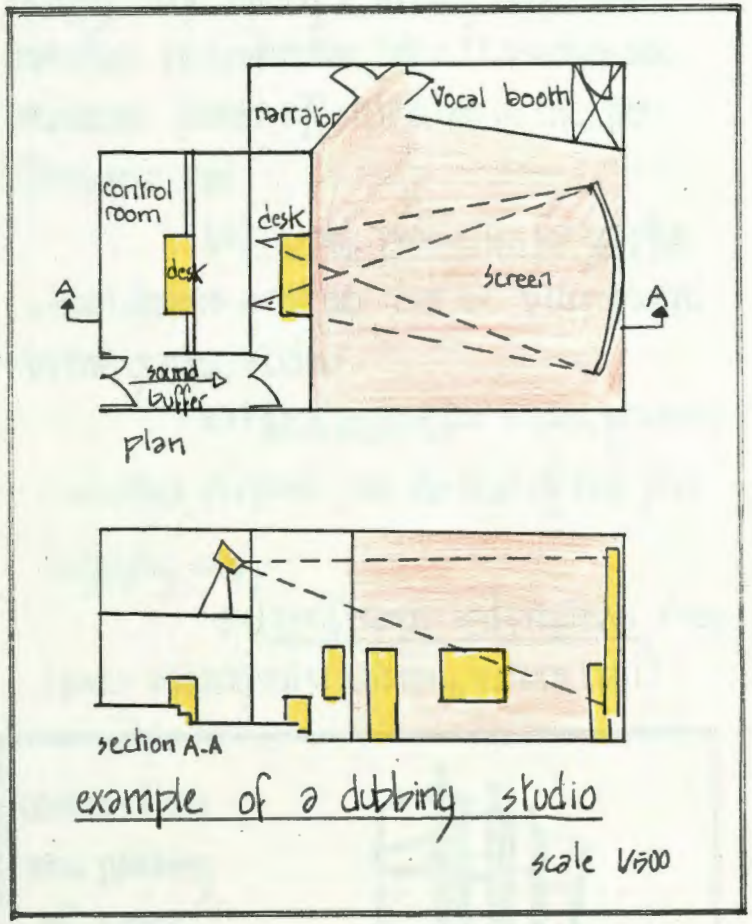
STUDIOS: Cinematography

Design requirements:

3. Technical facilities: d+) dubbing studio: this space is used for making of audio-tapes, dubbing of sound on films and possibly radio broadcasting. The lecture hall could be used for dubbing to improve the efficiency of spaces utulisation.

d+) video-tape recording, or VTR; it is used for TV recording; the TV recorder is a very elaborate magnetic sound tape recorder. The VTR area may need more than 6 machines for reproduction of recorded programs ranging from professional tapes to home used tapes.

e+) telecine: despite the advantages of magnetic tapes, much TV



example of a dubbing studio

scale 1:500

PRACTICAL TEACHING

STUDIOS: Cinematography

Design requirements:

3. Technical facilities: c+) telecine: (..) programming will continue to originate as motion picture film. Telecine room contains assemblies that combine motion picture with a TV camera, each 1.2 x 1.2 x 2 m; it is advisable to house VTR or telecine machines in cubicles separated with acoustically treated walls.

f+) construction and painting of scenery: flats are used, constructed of frames covered with stretched canvas. Simple pieces of furniture are built in the workshops; maintenance and repair are also executed in the workshops.

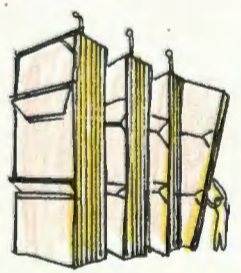
4. Support facilities: a+) editing room is an area for film montage. If editing is not directly done during a shooting session, this operation is undertaken later. It involves also materials filmed off station or in the performance hall

b+) graphic production for graphs, visual charts or other can be accomplished in the graphic studios

c+) dark rooms for slides, processing and other purposes can be that of the photography labs

d+) conference and previews: these spaces already exist (library, lecture hall.)

construction and painting of sceneries



PRACTICAL TEACHING

STUDIOS : Cinematography

Environmental requirements:

+ dark area, no natural light but controlled artificial lighting
+ sound insulation and anti-vibration structure
+ studio doors must be large enough to accomodate the largest TV sceneries; openings should have an average of 4.3 x 3m
+ TV sceneries present delivery problems and require storage spaces
+ it would be advisable to locate the TV studio in a quiet area in order to minimise sound insulation problems
+ in the control room, there should be about 8 machines; the operator of each machine should be able to hear cues from a small average quality loud speaker above the noises of other cues nearby and the ambiant noise in the room. Each machine will be housed in cubicles separated with heavily acoustically treated walls and ceilings.

PRACTICAL TEACHING

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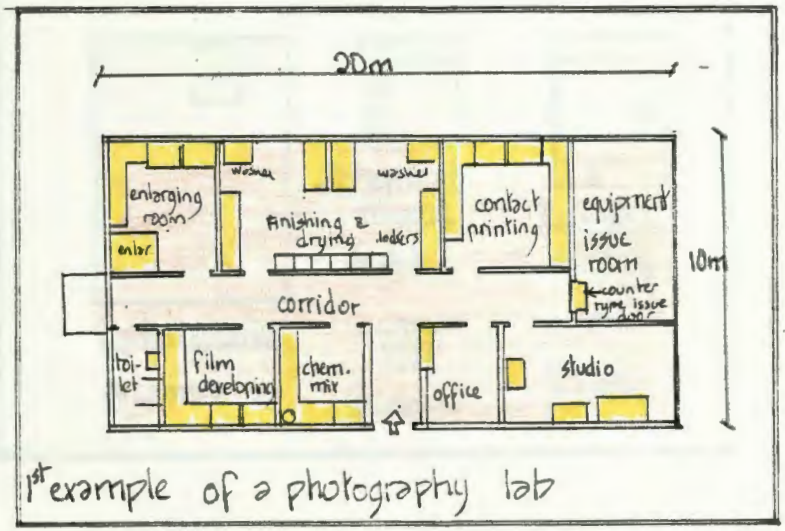
PRACTICAL TEACHING

PHOTOGRAPHY LABORATORIES

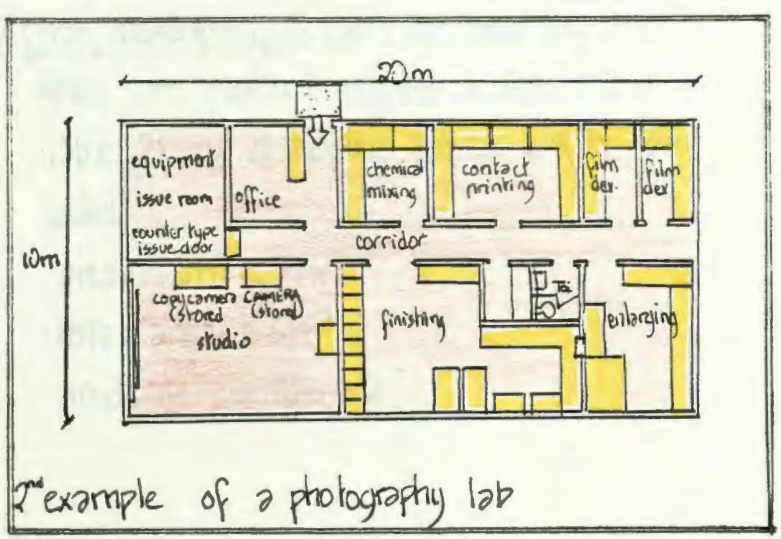
Spaces requirements:

1. equipment issue room
2. photography studio
3. chemical mixing area
4. contact printing area
5. film developing area
6. finishing and drying area
7. enlarging area

A general space will be provided for, film finishing and graphics, which also could be the general distribution area; every other activity will be provided with a specific area.



1st example of a photography lab



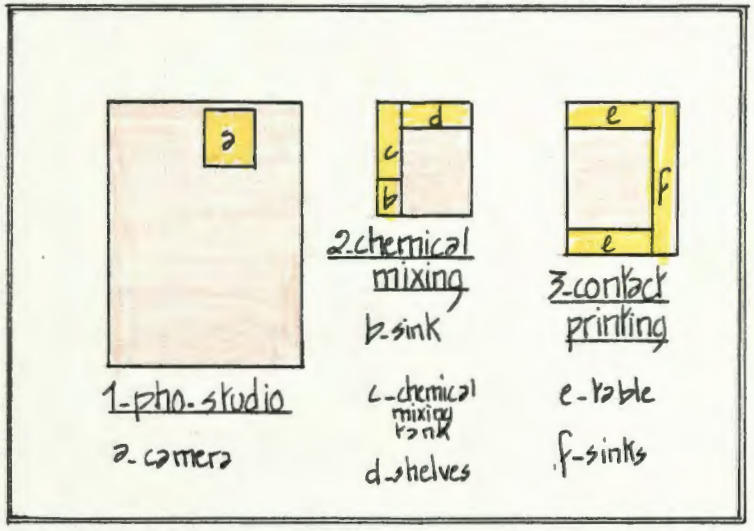
2nd example of a photography lab

PRACTICAL TEACHING

PHOTOGRAPHY LABORATORIES:

Design requirements:

1. equipment issue room: it is an office selling or distributing photographic equipment.
   area = 12 m²
2. photography studio: it will be programmed for 30 students, which are 5 groups of 6 students. It requires a display area, a lecture area and a work space. area = 1.2 m²/student = 36m² + 14m²
3. chemical mixing: it requires shelves, a mixing tank and a sink.
   area = 6m² for 2 students
4. contact printing: it requires 2 sinks and 2 working tables for 2 students.
   area = 12 m²



5. film developing: it can't be used by more than one person. It requires a sink and a table. 2 film developing rooms will be provided
   area/room = 3m²
   total area = 6m²
   students number = 2

PRACTICAL TEACHING

PHOTOGRAPHY LABORATORIES

Design requirements:

6- finishing and drying: it requires tables, washers and dryers, and also drafting boards for graphics. It may act as a distribution space for the other photography rooms
area = min 40 m²

7- enlarging: it requires tables, sinks and enlargers, at least 6 of them. area = 20m²

Environmental requirements:

1. it requires dark areas for most functions.
2. quiet area
3. expensive and sensitive equipment should be well controlled in the studio and the equipment issue room

FACULTY SPACES

Spaces requirements:

1. classrooms and lecture halls:

5232 theoretical hours/student/week

$\frac{5232}{24} = 218$ theoretical hours/classroom/week

required: 12 hours/week/class teacher

$\frac{218}{12} = 18$ theoretical teachers

Each two teachers will be provided with an office → 9 offices

2. photography labs:

1392 practical hours/student/week

$\frac{1392}{12} = 116$ practical hours/section/week

required: 12 hours/week/teacher

$\frac{116}{12} = 8$ lab instructors

Each two lab instructors will be provided with an office → 4 offices

the private offices are attaining to the place of work of the instructors.

3. studios:

8016 practical hours/student/week

$\frac{8016}{12} = 668$ practical hours/section/week

required: 18 hours/week/studio instructor

$\frac{668}{18} = 37$ studio instructors

studio instructors will be provided with individual private offices → 37 offices

4. workshops:

4224 practical hours/student/week

$\frac{4224}{12} = 352$ practical hours/section/week

required: 20 hours/week/workshop instructor

$\frac{352}{20} = 18$ workshops instructors

workshop instructors will be provided with individual private offices → 18 offices

FACULTY SPACES

Design requirements:

Total load of faculty members is:

+18 classrooms teachers
+37 studio instructors
+18 shop instructors
+8 lab instructors
+14 administration members
+5 heads of departments + 5 secretaries

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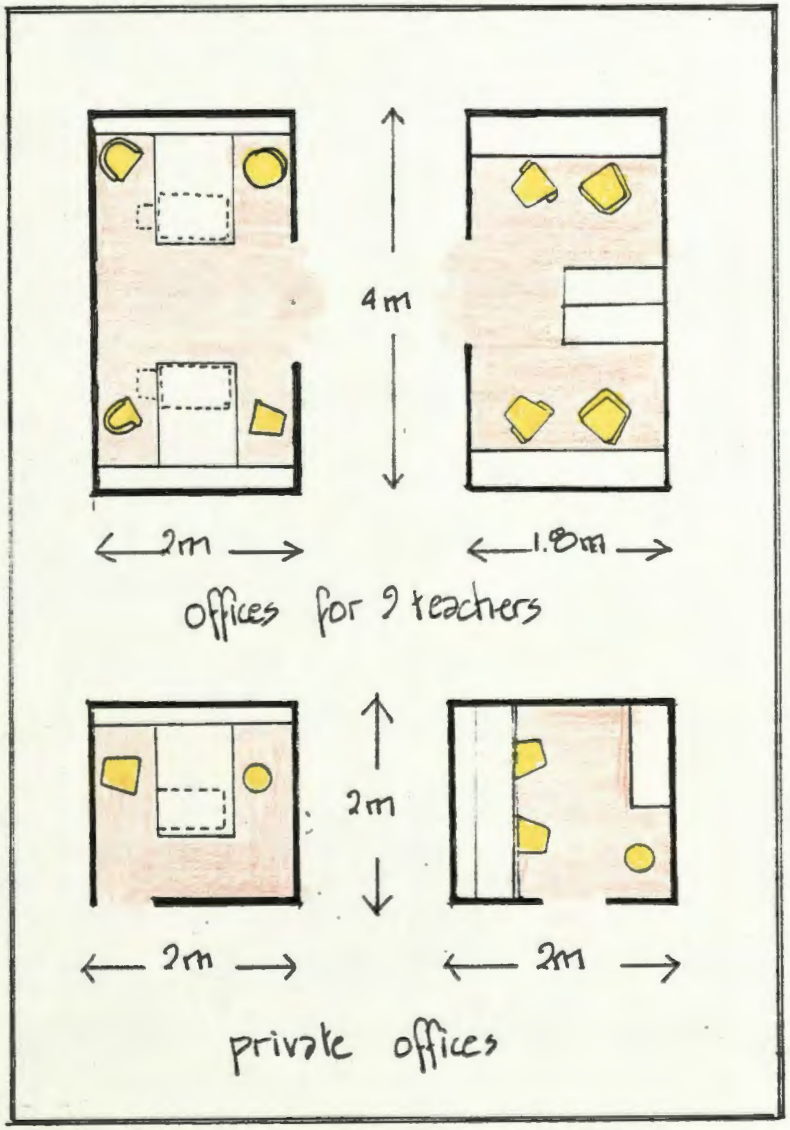
101 faculty members



SPACE ANALYSIS

SUPPORT TEACHING FACILITIES

SUPPORT SPACES

RESOURCES CENTER

Purposes:

Today's libraries are "more than a repository for books and printed material available for use by students at long drab tables with stiff chairs".

The functionnal characteristics of the library are still present – acquiring, catalogoing, indexing, storing, retreiving, use and restoring of informations. However the information has taken on many new forms.

Like before, it is in the form of books, periodicals and standard references but also films and slides, audio-tapes and computer programs, and even videotapes, kineoscopes and film strips.

It is why today's libraries are more of a resources center. Furthermore, in the present case, dealing with a visual art school there will be a pronounced stress on all kinds of visual techniques; viewing rooms will be provided with projection facilities; there will also be provision for microfilms, audio-visual carrels, computer-aided design and a teacher's office organising audio-visual production.

Whatever the stress in bringing a resource center to physical reality, the main components are the same, namely those listed below under spaces requirements.

SUPPORT SPACES

RESOURCES CENTER

Spaces requirements:

1_administrative and work areas
2_media storage
3_books and periodical storage
4_soft reading area
5_independant study area
6_conferences and seminar facilities
7_small groups viewing rooms
8_typing and recording rooms
9_computer-aided design

Scope:

The resources center is based on a total student population of 480; it will provide study spaces for 75 students (15% of total number)

The stack capacity is of 48000 volumes; it is based on a ratio of 100 volumes/student.

Design requirements:

1_administrative and work areas: a) administrative and controls areas consist of an office for the librarian and his assistant, another one for teacher planning and audio-visual production, and a check-out desk

b) work areas consist of offices for acquisition, binding and cataloguing. The required area is an average office of 20 m² with one staff member for each function → 60 m² of total area

2_3_stacks storage: designed for 48000 volumes with 1 m²/100 volumes → 480 m² of area media will be opened stack in the soft

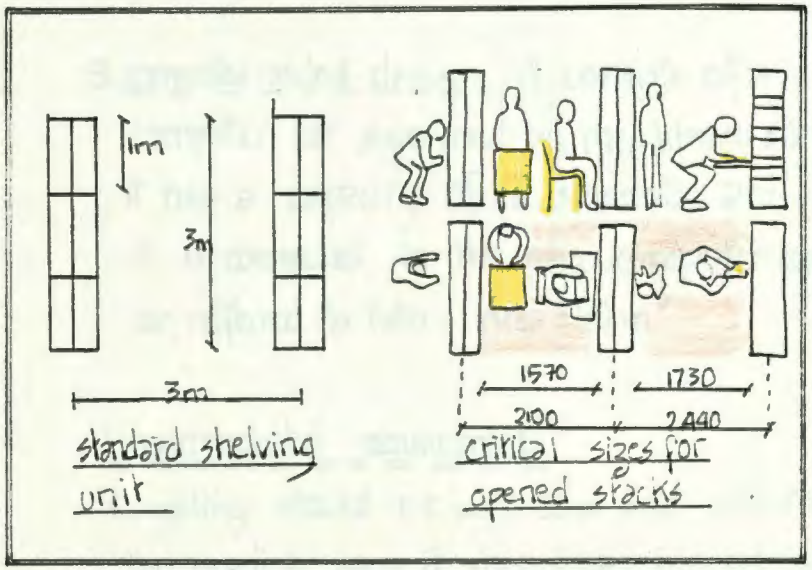
SUPPORT SPACES

RESOURCES CENTER

Design requirements:

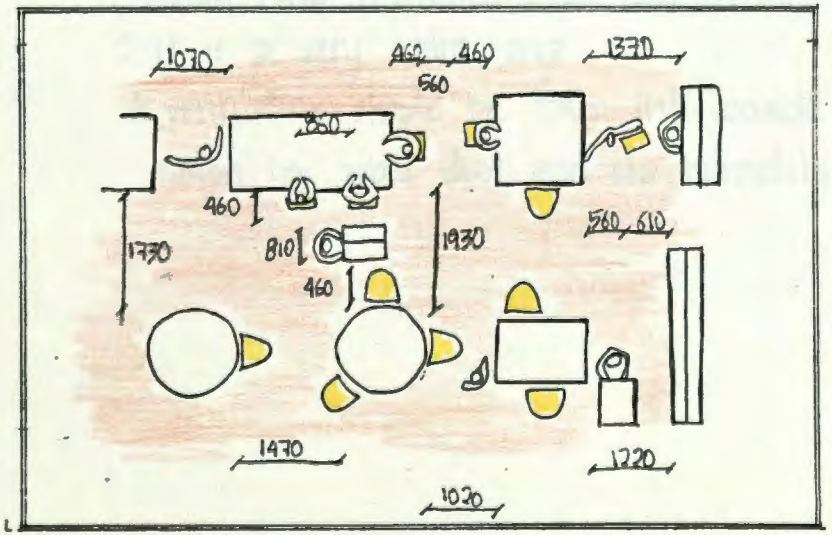
2.3 - stacks storage: (...) reading areas.
The other stacks will vary between opened and closed stack.

4-5 - reading areas: they are divided into a lounge for soft reading, a quiet area for individual studies and an area for group studies.
Considering an average 1.8m²/student, the total reading spaces will be 75x1.8=135 m²
The recommended planning for individual carrels is a partial segregation, or a total enclosure by a low partition and small door, with desks to be provided along with shelves.
The recommended planning for group arrangements is a grouping of 4 persons tables.



standard shelving unit

critical sizes for opened stacks



SUPPORT SPACES

RESOURCES CENTER

Design requirements:

6. conferences and seminars: the conference rooms will consist of 2 rooms with possibility of opening them on each other
7. small groups previewing rooms: they will consist of two rooms of 20 m^2 and one room of 30 m^2. These facilities are used in conjunction with the cinematography department
8. typing, recording and audio-visual carrels: the recommended planning for individual carrels varies; carrels may be placed along walls with views, or on stacks perimetre; they may also create alcoves by clearing bays of stacks. In audio-visual section, carrels are to be provided with AV. sets
9. computer-aided design: it consists of a computer lab supervised by the library staff; it has a capacity of 12 students and it is connected to the main computer center, refferred to later. Area = 50 m^2

Environmental requirements:

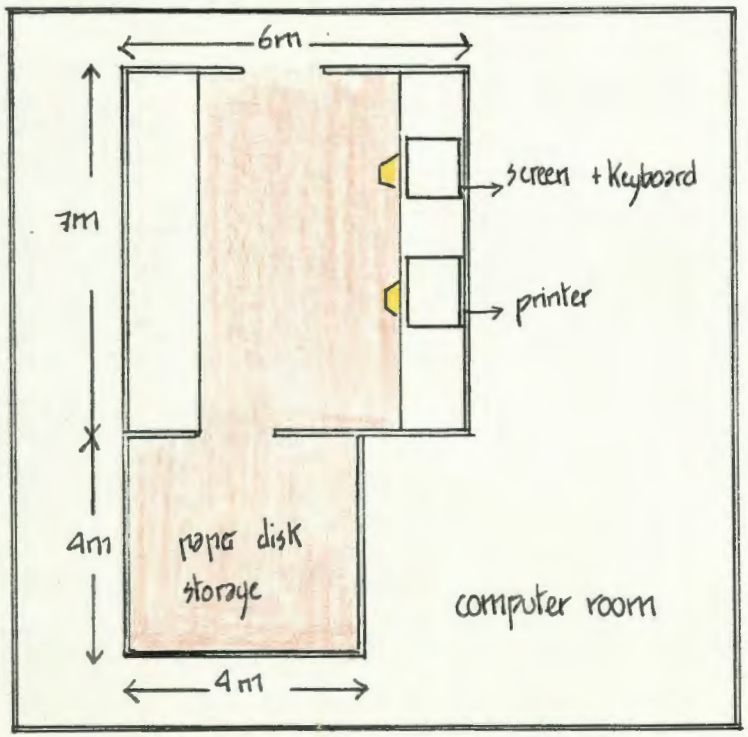
1. lighting should be soft, cool and uniform for reading areas; it should be indirect for stacks; some restricted areas need darkness.
2. it is a very calm area
3. ventilation should be taken into consideration to avoid dust and sea humidity.

SUPPORT CENTER

COMPUTER CENTER

Purposes:

It is a facility that serves the whole center; it is an extension of the main administration and resources center; the administration relies on it for records, financial documentation and processing statistics, while the resources center relies on it for indexing and storing books.



design requirements:

The computer area should be located in a centralised manner, accessible to both the administration and the resources center, located away from the public zones in private staff zones. All technical activity on machines is performed in the main computer room where machines are found. There is a computer terminal wherever needed.

SPACE ANALYSIS

ACTIVITIES SPACES

ACTIVITIES SPACES

CATERING FACILITIES

spaces requirements:

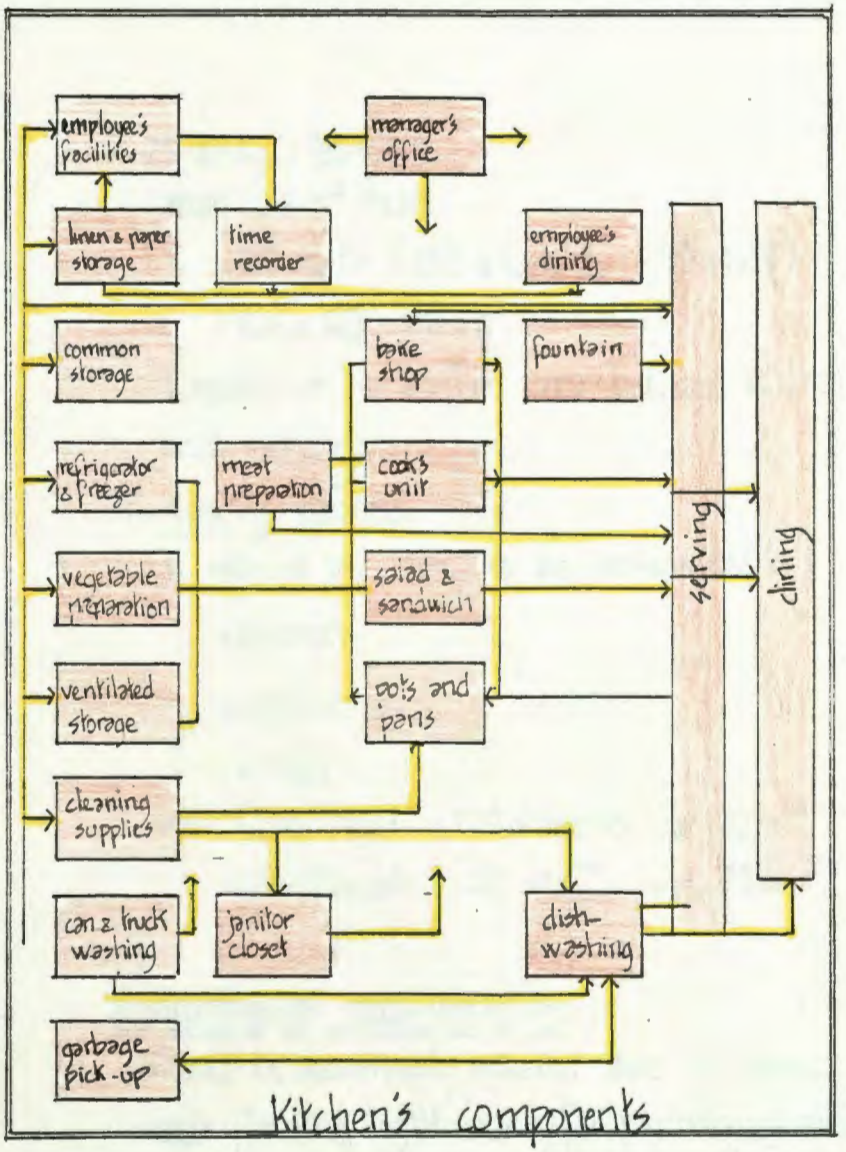
The catering spaces consist of:

- kitchen and service yard
- serving counters
- dining room

scope:

Catering spaces will be provided for 50% of the students and the faculty while the remaining will be provided in near-by Jounieh. It is assumed that most dormitories students will use the cafeteria.

The main dining hall capacity will be of 100 students and 20 staff. It is based on the assumption of



Kitchen's components

ACTIVITIES SPACES

CATERING FACILITIES

Scope:

(...) space use in 2.5 shifts at peak lunch hours.

Dining hall services will be through a self-service counter.

Design requirements:

1. Kitchen space:

area: $0.32\ m^2$/meal

250 students + 50 staff = 300 meals

$300 \times 0.32 = 90\ m^2$

it requires: . receiving and delivery area
. garbage pick-up
. noise and odor control through exhaust dust and acoustical treatment.

2. serving counters:

area: $0.4\ m^2$/seat

120 seats (100 students + 50 staff)

$0.4 \times 120 = 55\ m^2$

it serves as a buffer area between kitchen and dining.

3. dining rooms:

it should be able to be subdivided in 3:

- dinner.
- cafeteria.
- staff.

area: $1.2\ m^2$/seat 100 students $\Rightarrow 120\ m^2$

$1.5\ m^2$/seat 20 staff $\Rightarrow 30\ m^2$

Environmental requirements:

+ should be acoustically isolated due to noise.
+ needs flowing light mainly for psychological reasons.
+ requires efficient ventilation of food odors.

ACTIVITIES SPACES

STUDENT'S ACTIVITIES

Design requirements:

The basic spaces needed for student's activities are:

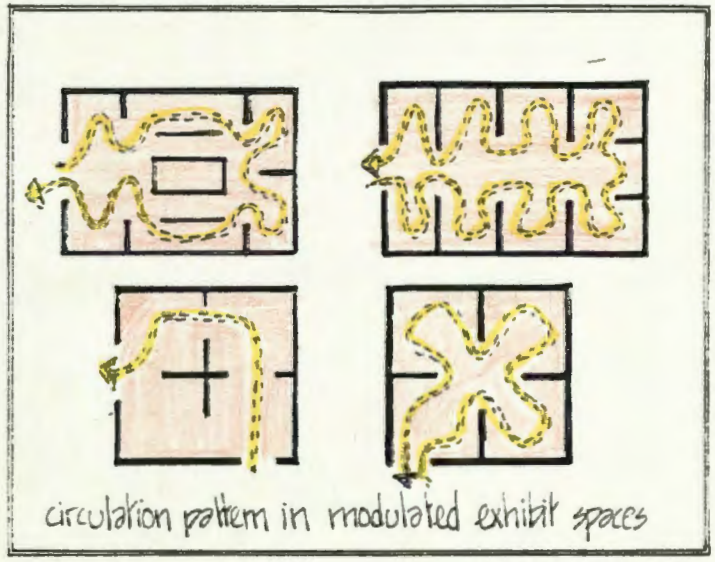
+ student's affairs: an office space with provision for 2 visitors
+ students advising: mainly for educational purposes; it requires also an office space with provision for 2 visitors.
+ students council: meeting room for 20 persons
+ publication office: a school periodical will be issued with the collaboration of all members of the school. The head office of this periodical should be related to the printing workshop and should allow for the meeting of 5 students at least.
+ music club: it requires an insulated practice room and a meeting room.
+ multipurpose hall; it will cater for different activities and has the following requirements:
  - it should be flexible, spacious and unobstructed
  - it should have a ceiling of at least 4m height to add spaciousness
  - it should be easily accessible to the public
  - a storage space for seats, recorders, speakers, and lighting equipment should be provided.
  - it should have access to the WC.
  - it should have an entrance lobby or orientation space, with provision for an information desk and a notice board.
  - it should be adjacent to a kitchen, to serve for receptions

ACTIVITIES SPACES

STUDENTS ACTIVITIES

Design requirements:

+ multipurpose hall: (...)
  - it shouldn't be disturbed by structural walls. It can be divided by low movable panels, either suspended or free standing, and arranged to meet the varying demands of different exhibitions.
  - it may function as:
    + celebration and reception hall
    + exhibition space
    + students resting and socialising space.



circulation pattern in modulated exhibit spaces

SPACE ANALYSIS

ADMINISTRATION - DORMITORIES

ADMINISTRATION

Purposes:

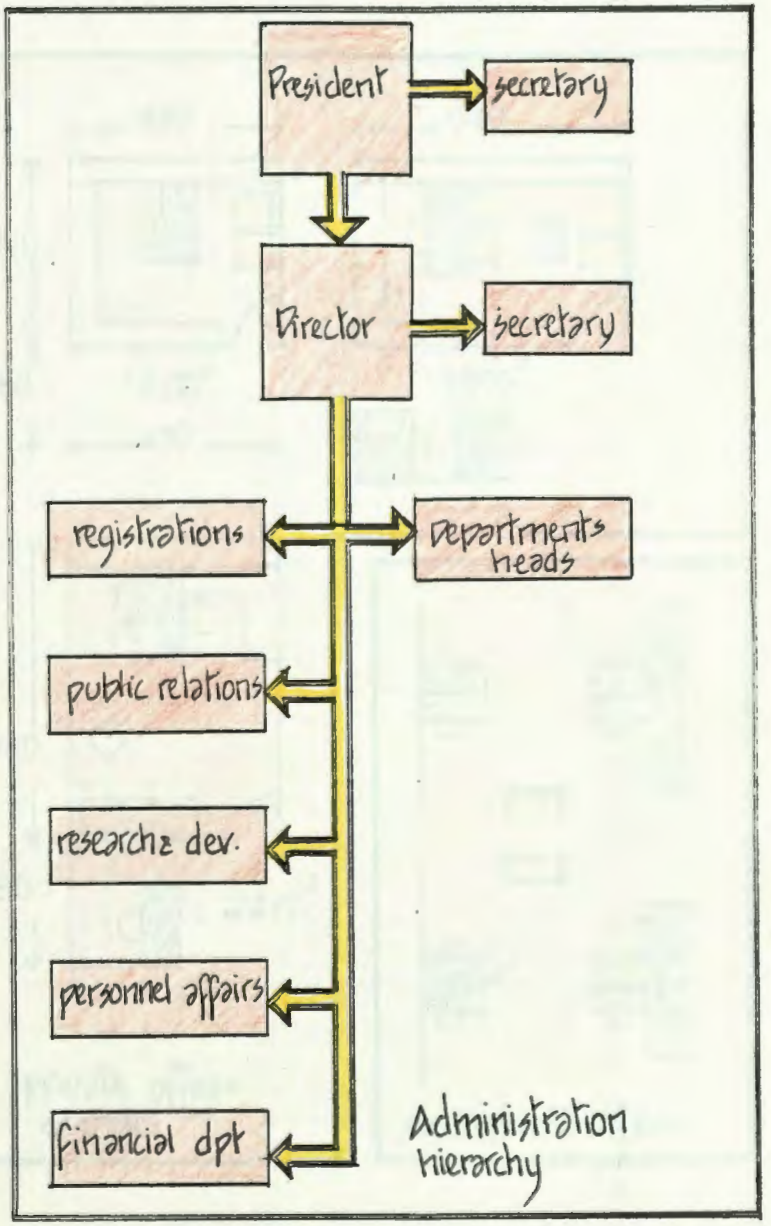
The administration is responsible for:

+ running the school
+ organising activities for and with the students
+ establishing contact with the interested firms, industries or agencies

Spaces requirements:

The administration will consist of:

a. private offices for president and directors
b. semi-private offices such as public relations financial department, registrations and admissions.
c. heads of departments located in each department
d. general spaces such as meeting and reception areas, secretaries, waiting, archives, photocopy and lavatories.



Administration hierarchy

ADMINISTRATION

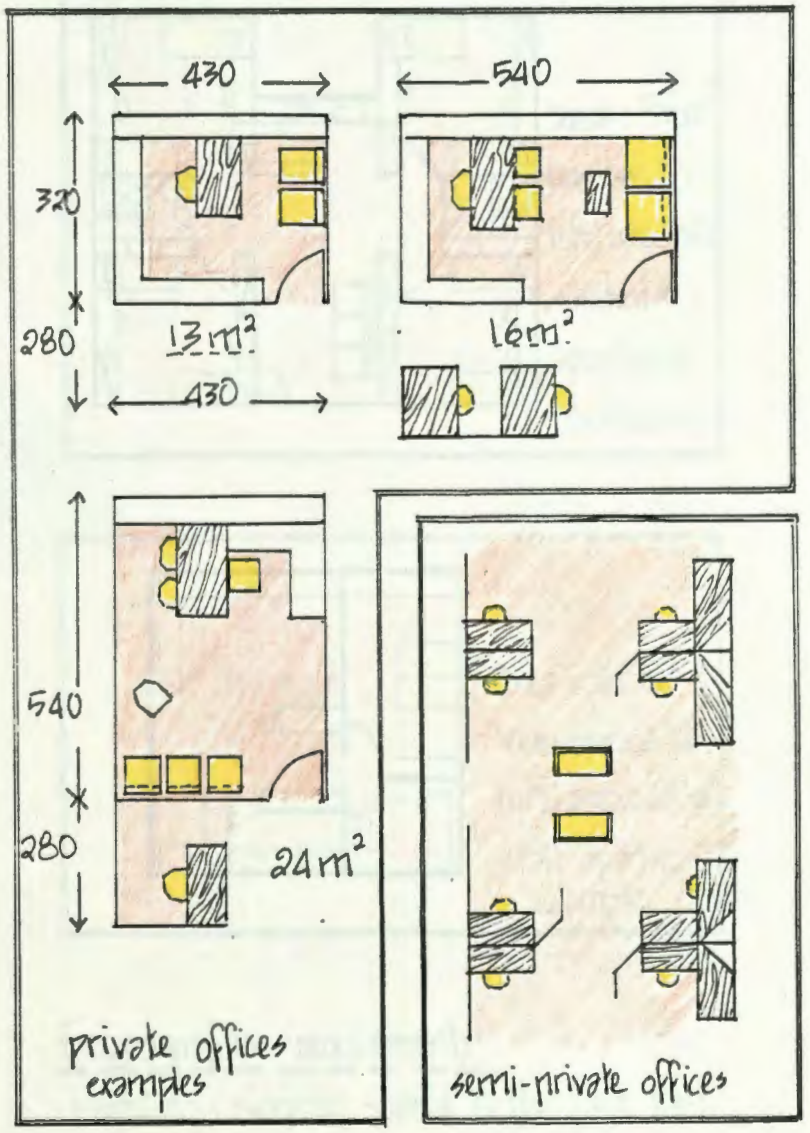
Design requirements:

a- The private office accomodates one person + one visitor seating + outside space for private secretaries. The president should have a private toilet and direct access to a conference room.

b- The finance, public relations, registrations and admissions departments need team work, so semi-private offices type is needed. The receptionnist space should lounge with seatings for visitors and staff break; it should give access to a small kitchinette + WC.

Environmental requirements:

The administration is a quiet area which requires good natural lighting, privacy but also easy access for visitors.



DORMITORIES

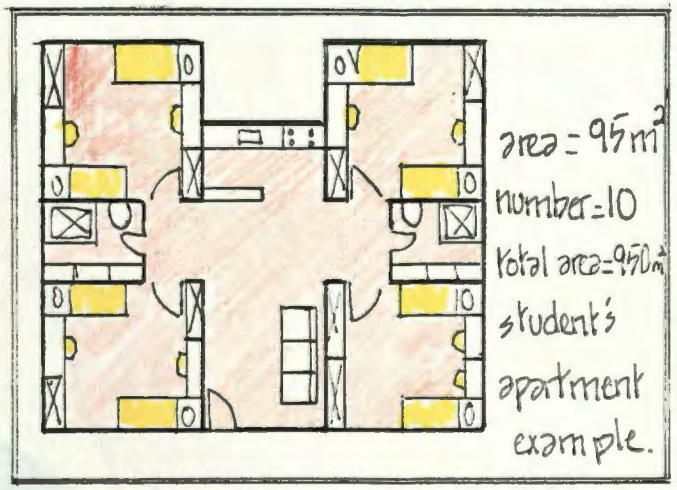
Scope:

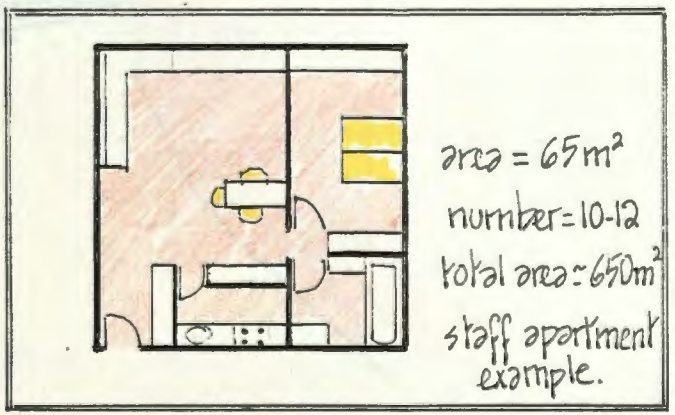
Dormitories will be provided for 15% of the students. 15% of the students is an above average number (10% is an average) This is due to the wide catchment area of my school, few school of visual arts existing in lebanon or even in the Middle east.

Design requirements:

The dorms will have the character of housing apartments; they will follow a systematic grouping of 8 students in an apartment with 2 bathrooms, one kitchinette and a small lounge.

The staff will be provided with some studios, which will be mainly used by visiting instructors. These studios will also follow a single system based on an area of 65 m².





Environmental requirements:

+ lighting: sleeping should better face east.
+ acoustic: a quiet environment is desired.

PREVIOUS EXAMPLES

PREVIOUS EXAMPLES

Birzeit university _____ page 117

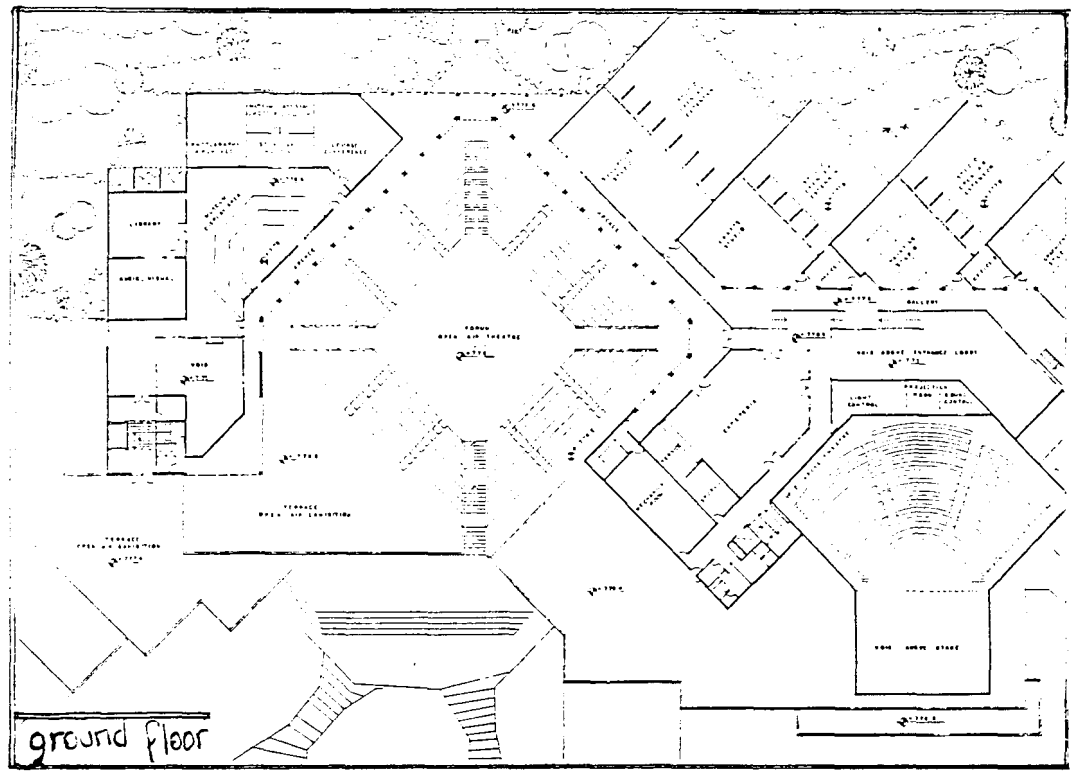
Birzeit students' union _____ page 120

Bauhaus building _____ page 121

PREVIOUS EXAMPLES

BIRZEIT UNIVERSITY
SCHOOL OF FINE ARTS
AND PALESTINE CENTRE

The school was executed in the 80's, by "consolidated engineering company". I found it interesting to analyse due to its similarity with my project regarding both time and space.



It is constituted of a fine arts school, a museum and a forum, which are all grouped following a longitudinal scheme.

Plans:

The sloping site helps repartition of functions:

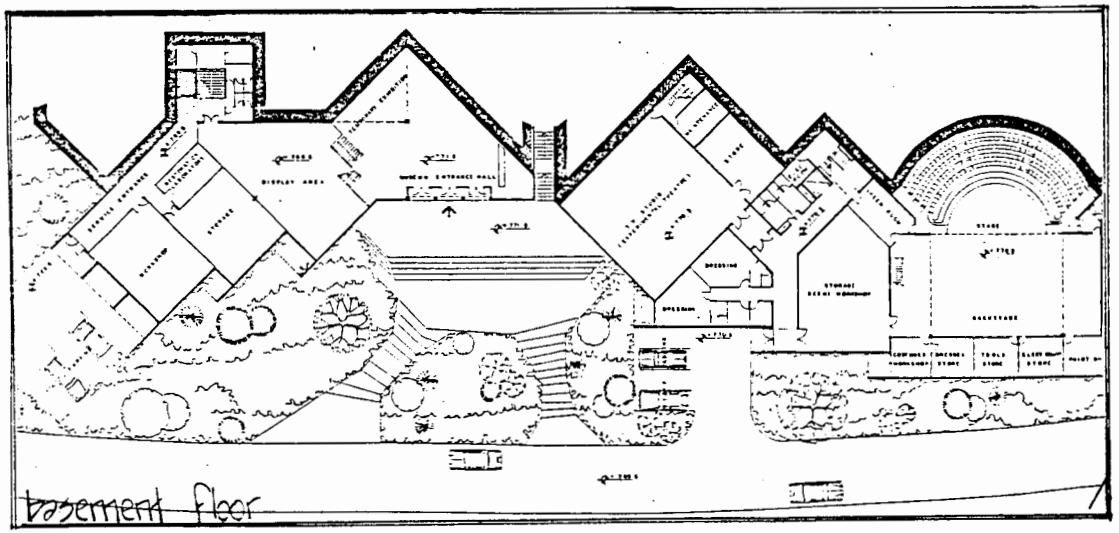
+ basement: TV studio, workshops, theatre stage
+ ground floor: theatre, TV rooms, photography dpt.
+ 1st floor: studios with outdoor extension, cafeteria and theatre entrance
+ 2nd floor: classrooms for all departments and administration

PREVIOUS EXAMPLES

BIRZEIT UNIVERSITY

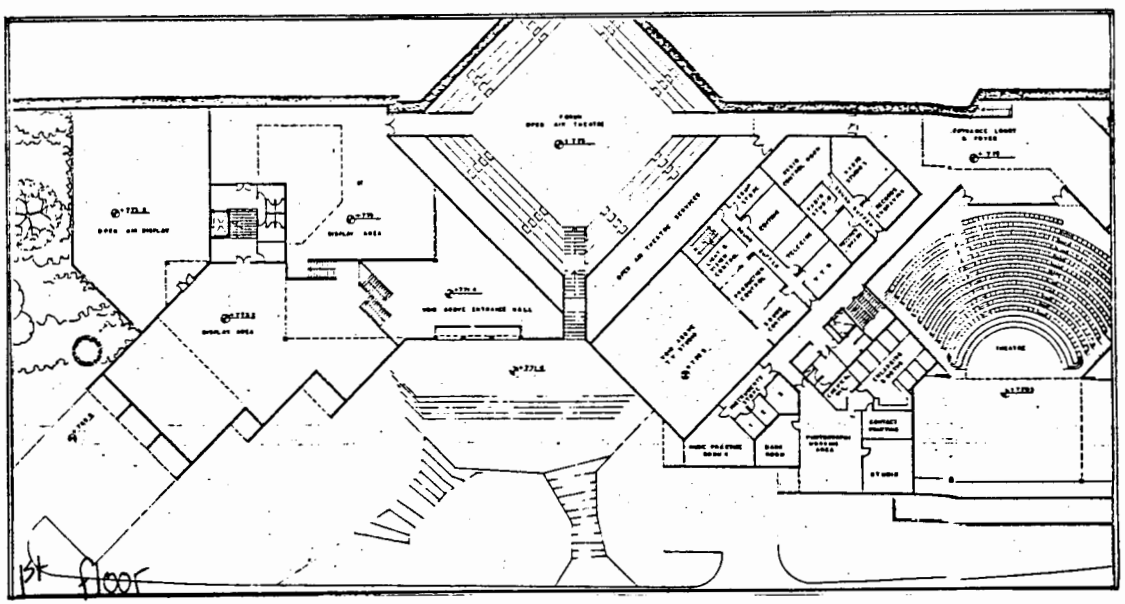
Plan:

All the functions rotate around the node of the entrance lobby, which stretches either horizontally or vertically to the main spaces.



Volumes:

They are a direct expression of the functions. The bulky volumes of the theatre and the TV studio, for example, are sunked in the basement, so as not to overdominate other volumes.



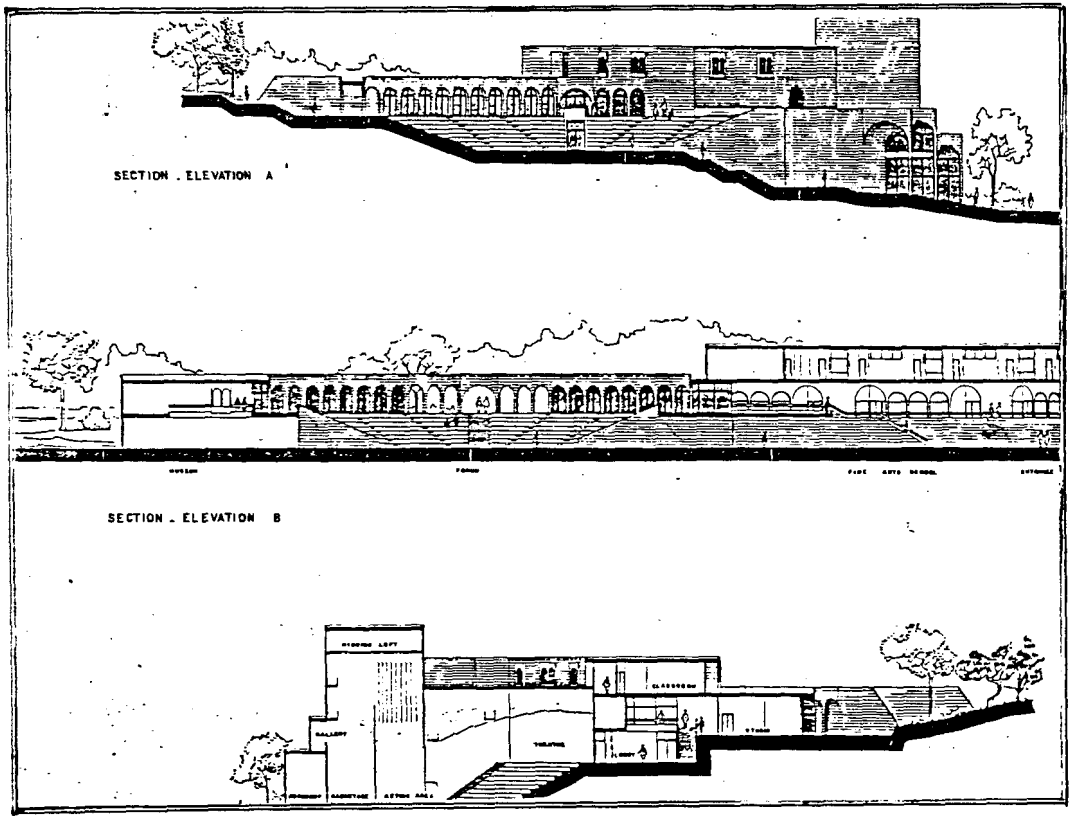
PREVIOUS EXAMPLES

BIRZEIT UNIVERSITY

Expression:

The materials used are natural stones and concrete.

Inside and outside are flowing into each other through forum and museum.

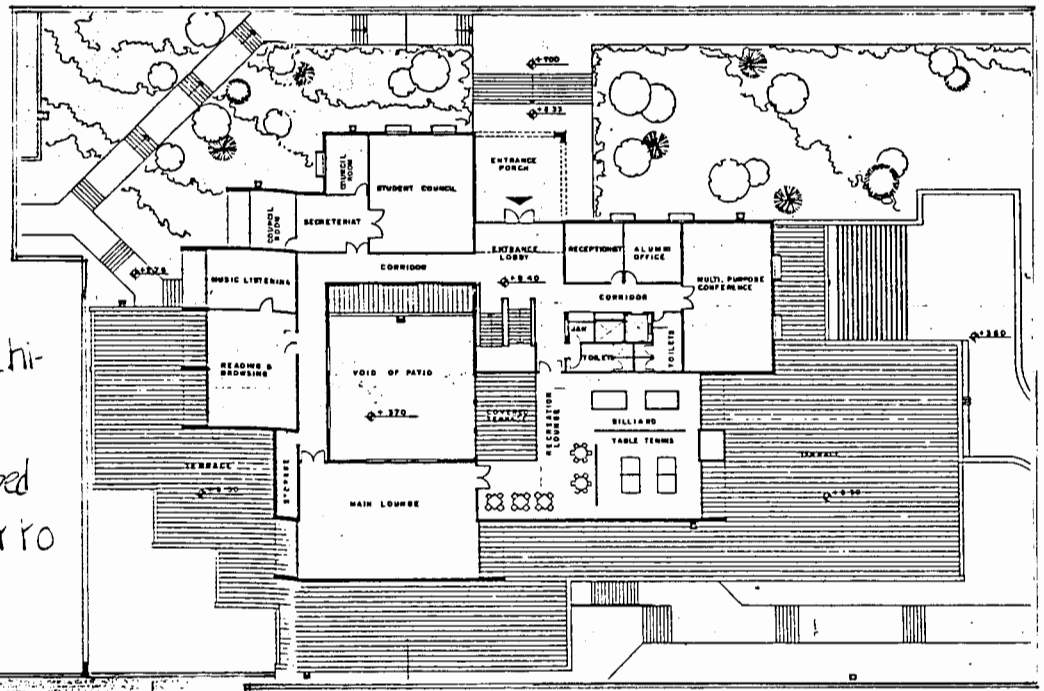


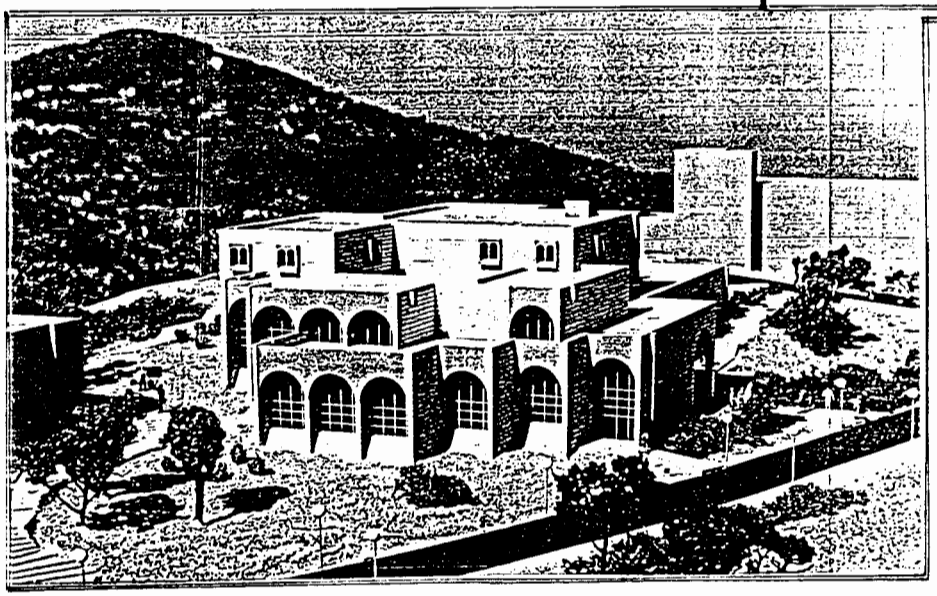
PREVIOUS EXAMPLES

BIRZEIT UNIVERSITY

STUDENT'S UNION

It groups a cafeteria at the first floor, offices and club rooms at the highest floor, and group rooms in-between. The whole volume is grouped around a vertical patio which is next to the vertical circulation.



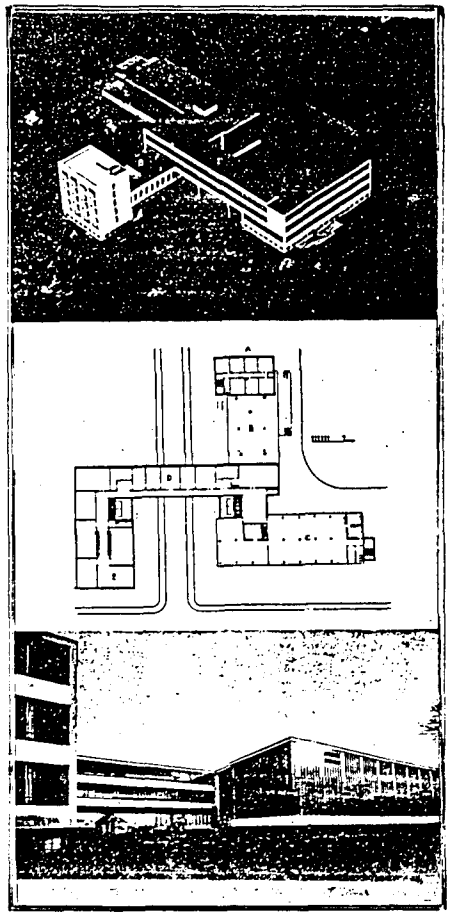


PREVIOUS EXAMPLES

BAUHAUS BUILDING

It was designed by Walter Gropius and erected in 1925 in Dessau, Germany. I consider it the classical example of a school of fine arts, and this is why I decided to include it in my study

"A building expressing the modern spirit rejects symmetry and the frontispiece facade. One must walk around this structure in order to understand the 3-Dim. character of its form and the functions of its part"



Plan:

The building consist of:

* Studio wing, which contains scolarship students' quarters
* Auditorium, stage and dining hall
* the laboratory workshops and the classrooms
* bridge, which contains the administration
* technical school

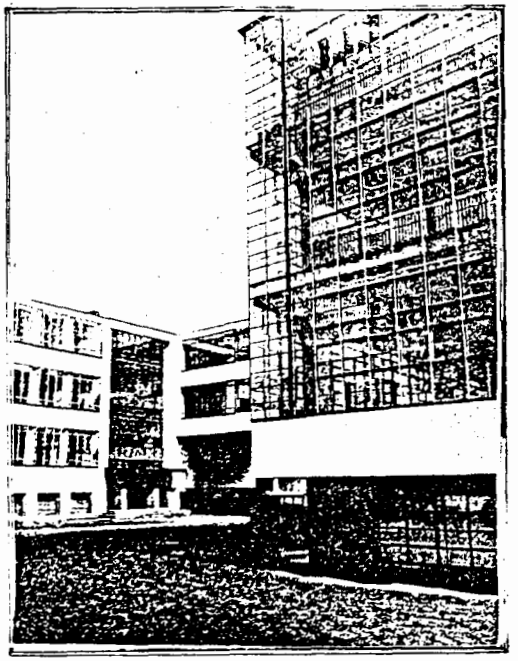
PREVIOUS EXAMPLES

BAUHAUS BUILDING

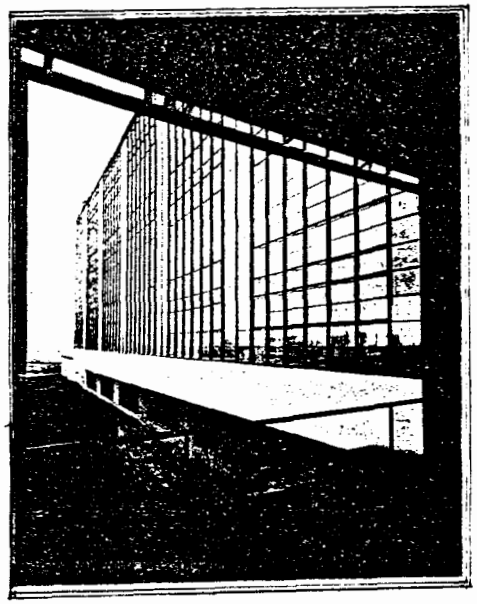
Expression:

Reinforced concrete skeleton with mushroom columns, and brick masonry. Exterior finish is of cement stucco.

The flat roofs are designed to be walked on, and covered with asphalt tiles.



Corner of the workshops wing, bridge and technical school beyond.



view from the staircase toward the workshops

DESIGN OBJECTIVES

DESIGN OBJECTIVES

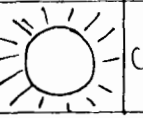
Relationships and Analysis _____ page 125

Design conceptions _____ page 130

Main concepts _____ page 132

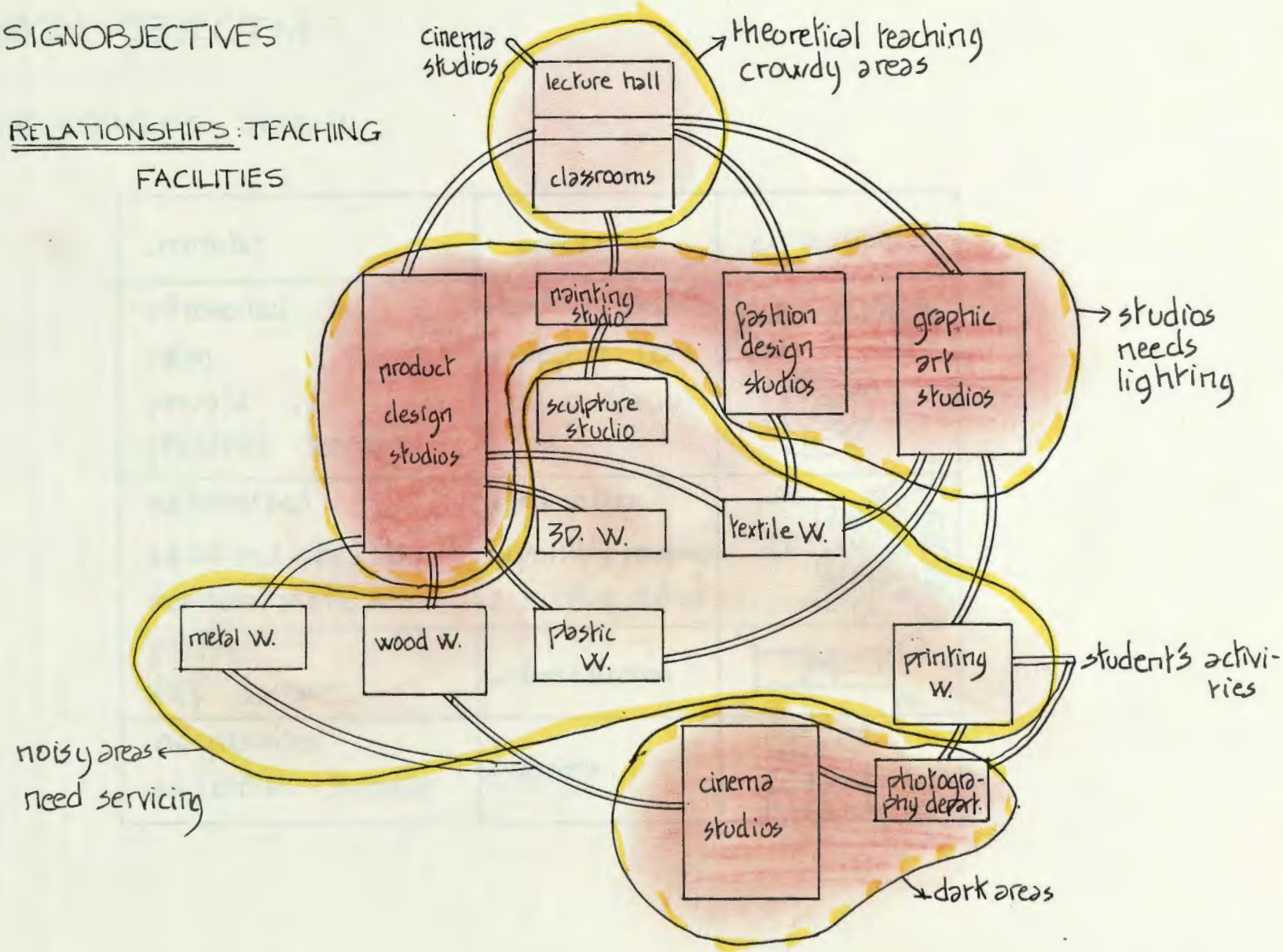
DESIGN OBJECTIVES

RELATIONSHIPS : TEACHING FACILITIES

	equipment control	theoretical teaching		elective courses	studios	workshops
quiet areas 	photo labs cine studios	lecture hall	class-rooms	painting	graphic studios fashion studios product studios	textile workshop 3D workshop
service access noisy 				sculpture		printing w wood works metal works plastic work
	private	semi-public	semi-private	semi-public	very private	private
	dark areas 			natural lighting 		controlled light 

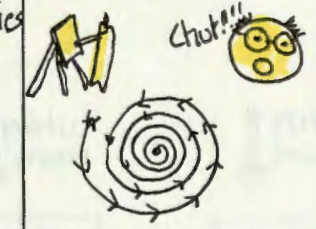
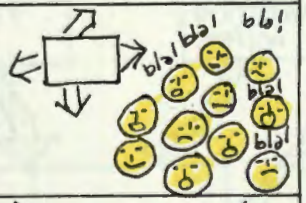
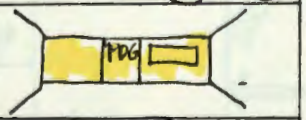
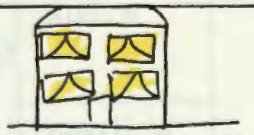
DESIGNOBJECTIVES

RELATIONSHIPS: TEACHING FACILITIES



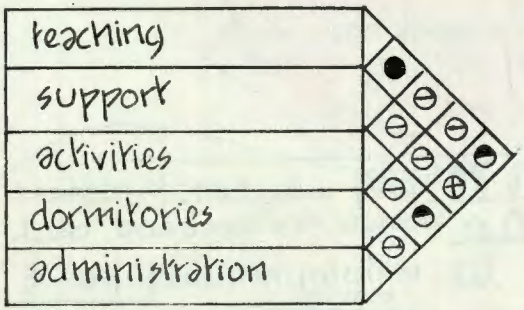
DESIGN OBJECTIVES

RELATIONSHIPS : GENERAL

character	spaces	expression
introverted calm private students domain	*teaching facilities *support teaching facilities	
extroverted social and interaction domain - public access	* activities (*possibly painting & sculpture studios)	
private staff domain	*administration	
independant residential character	*dorms	

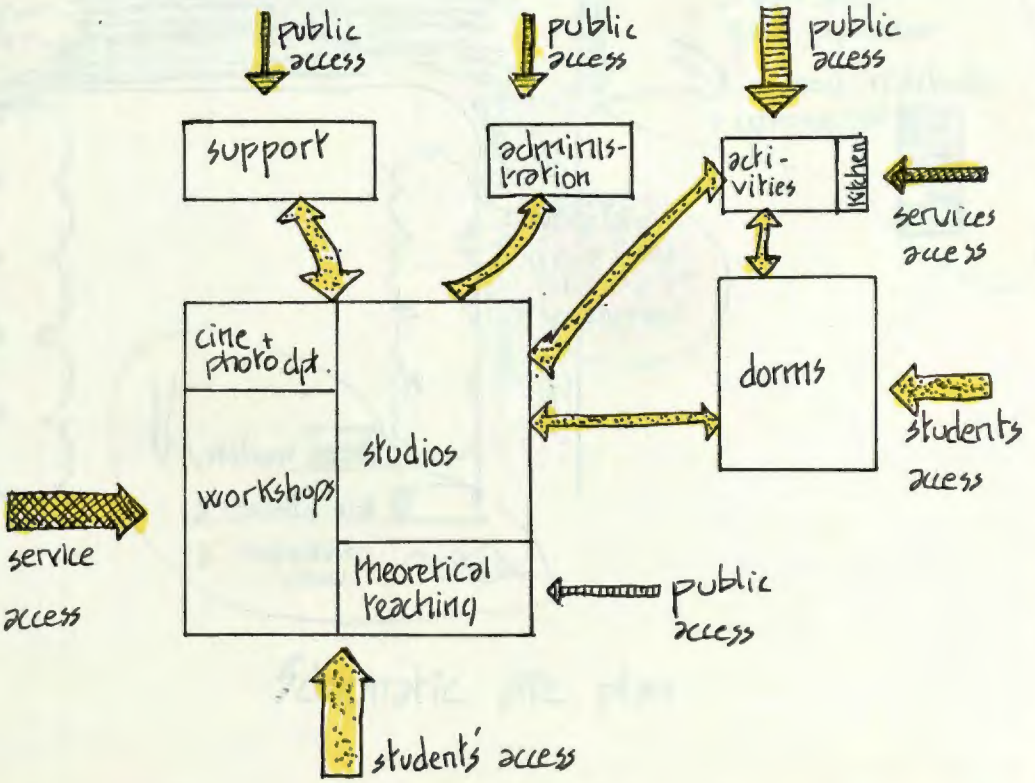
DESIGN OBJECTIVES

RELATIONSHIPS : GENERAL

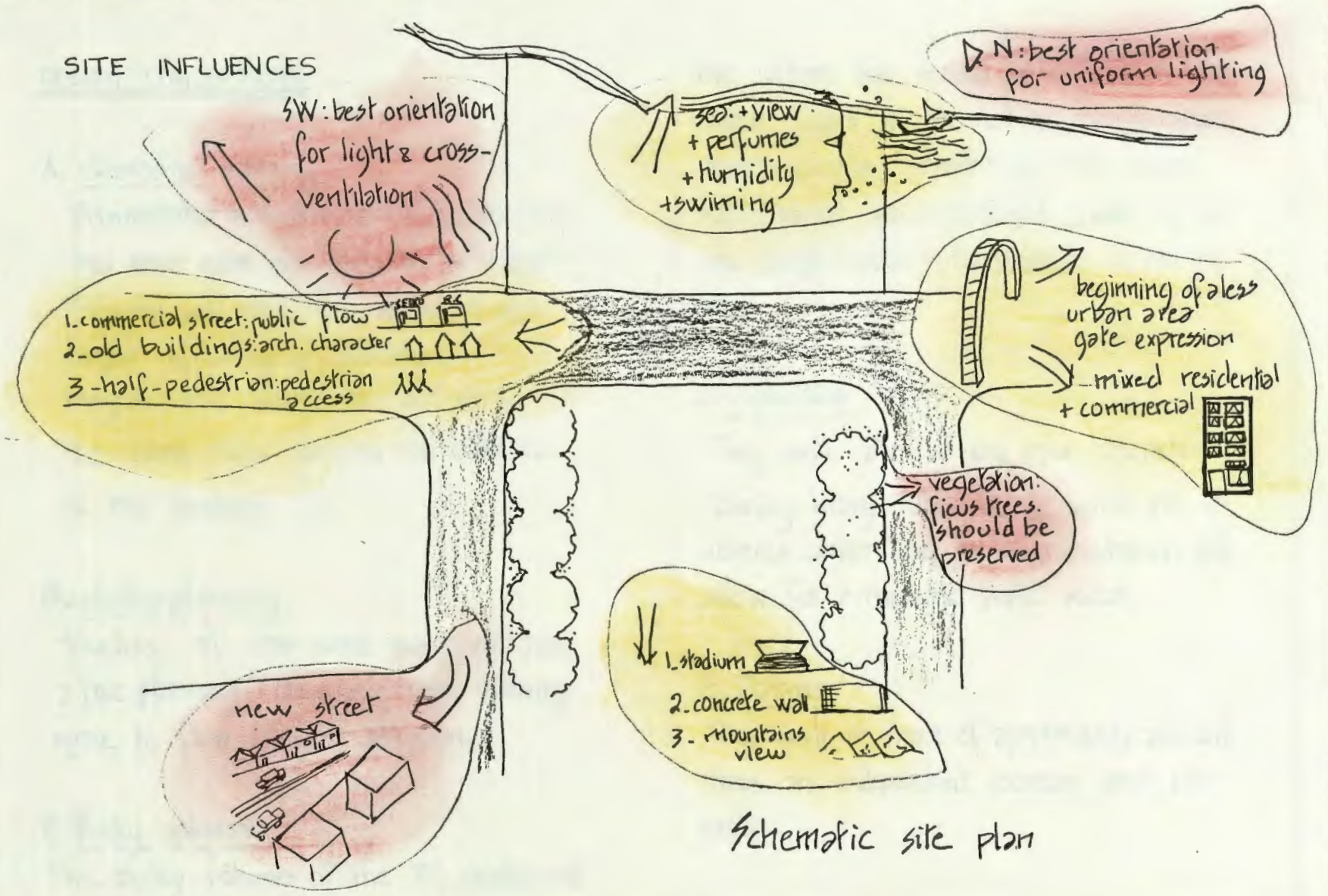


- ● very close connection
- ◒ close connection
- ⊕ no connection
- ⊖ separate

relationships to scale



DESIGN OBJECTIVES



Schematic site plan

DESIGN OBJECTIVES

DESIGN CONCEPTIONS

A- classrooms planning:
Dissiminated ⇒ distribution of student flow and easier access, but schedule problems
Grouped will have the advantage of a higher efficiency of utilisation
May be the classrooms will be at the same time grouped and close to all the functions.

B- studios planning:
studios of the same major will have a free planning connecting them allowing space to flow freely in between.

C- Bulky volumes:
The bulky volumes of the TV studios and the lecture hall should be located at the lowest floors so as not to overdominate other volumes. Furthermore, the lecture hall should be centralised, shared by all the departments and accessible to the public

D- Activities:
They will have a very open character allowing heavy public access, while the resources center and the administration will allow for a measured public access.

E- Forms:
They will be more of apartments and will have an independant location and character.

DESIGN OBJECTIVES

DESIGN CONCEPTIONS

F. Workshops:

They should be located at the lowest floors due to bulky equipment, restricted need of light and servicing needs.

DESIGN OBJECTIVES

MAIN CONCEPTS

The main design objective is the physical and contextual integration of the project with its setting.

As a whole, the complex should reflect an extroverted attitude toward the street, mixed with an attitude basically introverted required for concentration and creation.

Physical integration:

It involves a study in the negative positive relationships between the school and the setting, both in massing and in open pedestrian spaces. The massing could be seen as a continuity of the characteristic massing relationships along the street or as a contrast to these. The open spaces on the other hand should create a strong link with the setting so as to attract more people and reassert the communal quality of the street.

Contextual integration:

It deals with the manner in which the complex relates to its immediate context visually. This involves the selection of different architectural elements, clues, motifs and compositionnal concepts, but also other signs and symbols that possess architectural and cultural value, and could be used to visually tie the building to its local setting, moreover to evoke a sense of place, belonging and nostalgia to the passers-by.

DESIGN OBJECTIVES

MAIN CONCEPTS

contextual integration:

(...) Having a strong contrast could enhance the traditionnal buildings and create a powerful statement.

Design direction:

One way to recreate the atmosphere of the old city would be to group the activities around courtyards, either according to subject, to spaces quality or to functionnal relationships. These courtyards could be joined by narrow corridors, repeating the narrow streets of the old city. Furthermore, the project should reflect by some kind of gate expression its location at the entry of Jouliehsouk.

Hence, the project should emerge from the application of the essence and the spirit of the old city in the new design.

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REFERENCES

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