A PATTERN LANGUAGE WHICH GENERATES MULTI-SERVICE CENTERS

CHRISTOPHER ALEXANDER SARA ISHIKAWA MURRAY SILVERSTEIN

CENTER FOR ENVIRONMENTAL STRUCTURE
2701 SHASTA ROAD, BERKELEY, CALIFORNIA

ACKNOWLEDGEMENTS

We could never have written this report without help from many of our friends. Sim Van der Ryn and Sandy Hirshen collaborated with us on the design of the Hunts Point building, and many discussions, especially concerning Pattern 4, came out of that collaboration. Shlomo Angel made an early draft of Pattern 1; Christie Coffin conceived and drafted Pattern 22. Virginia Ayers and Gene Bernardi collected much of the material used to document the patterns. John Torrey made the drawings of the eight buildings in Chapter II, and helped to develop their designs. Marsha Shapiro made suggestions and read proofs, and fed us in the middle of many nights. Ken Simmons, Mike Baker, and Diane Lacey, working for the Hunts Point Community in the Bronx, reviewed and criticized our work at every stage. T'ing Pei and Barbara Norris, also at the Hunts Point field office, helped us with special problems. Mary Louise Rogers typed the whole report for us, at all times of day and night. The San Francisco MSC, one of the eight examples, was originally designed by Dave Burness, and then transformed according to the pattern language. We thank all of them, very gratefully. Most of all, we thank the members of the Hunts Point Community for their participation, and Ken Simmons for his confidence in our approach.

PRINTED BY bga BERKELEY GRAPHIC ARTS

TABLE OF CONTENTS

INTRODUCTION

In this report we present a prototype for multi-service center buildings.

A multi-service center is a community facility, which provides a variety of special services to citizens. It is intended especially to help solve some of the problems of low income communities. Experimental multi-service centers have been started in many cities throughout the United States. However, there is not yet any general agreement about the form which multi-service centers should take - either in their human organization, or in their spatial organization.

Our report deals chiefly with the spatial organization; but since human and spatial organization cannot properly be separated, many of the specifications given in this report, go deeply into questions of human organization as well.

We have not designed a prototype in quite the conventional sense, and must begin with a word of explanation about the nature and purpose of prototype buildings.

A prototype design is a generic scheme. It has no special site, no real client, no climate, no particular size. It is a kind of imaginary building, which is meant to convey certain essential ideas to designers of similar buildings. It is usually presented by means of loosely drawn schematic drawings, so that designers who are designing a building of this type, can mould it to fit whatever specific local conditions they are confronted with. It is meant to convey some essential, generic ideas, which can be applied many

times over to special cases. It defines a family of buildings; and it is meant to define this family of buildings in such a way that anyone who understands the prototype will be able to design specific members of this family.

The ultimate purpose of a prototype design, then, is to provide guidelines which will generate a large number of specific buildings.

Under close scrutiny, this idea does not stand up very well. The range of variation which will be required by the different members of any family of buildings, lie well outside the range which can be accurately conveyed by any single drawing - no matter how "prototypical" it is. This is true for the family of buildings called "multi-service centers". Some will be large, some small. Some will have many services, others will have fewer services. Some will be on main streets, others on side streets. Some will be in very dense neighborhoods, others in neighborhoods of lower density. Some will be multi-story, others will be single story. Some will be in warm climates, others in cold climates. No one prototype design can do justice to this range of variation. A prototype would tend to standardise the buildings, where standardisation is inappropriate; it would tend to overlook the uniqueness of each special case.

Our approach to prototypes is intended to overcome this difficulty. We have tried to reconcile the uniqueness of each community with the fact that certain organizational principles are valid from one community to another.

What we have devised then, is a system of generating principles, which can be richly transformed according to local circumstances but which never fail to convey their essentials. This is rather like a grammar. English grammar is a set of generating principles which generate all the possible sentences of English. It would be preposterous to suppose that one could convey the full richness of the English language by means of a few well chosen "prototypical" sentences.

Our system then, is more in the spirit of a grammar than the conventional prototype permits. We call our system of generating principles a pattern language for multi-service centers. It is a system of patterns - with rules for combining them - which generates multi-service center buildings.

The report has four chapters and an appendix.

In Chapter I, for the sake of concreteness, we present one-sentence summaries of the 64 patterns in the pattern language.

In Chapter II we discuss the nature of the individual patterns.

In Chapter III, we show how these patterns may be combined to form multi-service centers. We give eight examples of multi-service centers designed for different communities - all of them generated by the pattern language.

In Chapter IV, we discuss the nature of the pattern language more fully.

In the Appendix - the longest chapter - we present the 64 patterns in full.

INSERT

Throughout the report, and especially in the patterns, the reader will find terms he may not be familiar with. The following gives brief definitions of those most frequently used. The numbers in brackets refer to pages where the reader will find a more complete definition.

Target Area: The geographic area and the population served by a program (in this case a Multi-Service Center). (75) (59)

Service: A facility organized to give specialized aid to people in the community. A service might be educational counselling, or an employment service, or legal aid, etc. (89)

Community Project: Any program or project initiated by a community resident or a community group, and run by community people. Examples of community projects are: a community newspaper, a welfare rights group, a community owned and run laundromat. (80)

Board of Directors: The body of elected community residents which governs the Multi-Service Center. (85)

Subcommittee: Committees formed of community residents which govern specific services; for example, a health subcommittee which governs the health service. (81) (153)

Core Services: Staff hired by, and responsible to the Board of Directors, whose function it is to keep the Multi-Service Center running - specifically to perform outreach, intake, to refer people to proper services, to evaluate existing services and initiate new ones. (137)

Outreach: Contacting people in the community - to inform them of activities of the center. (170) (228)

Intake: Initial interview with community resident to determine which services he might benefit from. (169)

Blockworker: Part of core services, the blockworker performs outreach (and sometimes intake). (169) (228)

Service Backup: All service personnel excluding interviewers and receptionists. (185)

I: SUMMARIES OF 64 PATTERNS

The patterns themselves are presented, in full, in the Appendix. So that the reader can scan the patterns, and get a general sense of their content, we present a one-sentence summary of each pattern. In reading these summaries it is important to remember the following points:

Each pattern prescribes some feature of a multi-service center building. It describes a relationship which is required to solve a problem which will occur in that building. The summary does not describe this problem; it describes only the pattern. The full statement of the problem, and the empirical evidence for the problem, are to be found in the full pattern statements in the Appendix.

1. SMALL TARGET AREAS: The multi-service center serves a target area with population of 34,000 ± 20%.

2. LOCATION: Service centers are located within two blocks of a major intersection.

3. SIZE BASED ON POPULATION: The total size of an MSC which services a target area of population N, is .9N square feet.

4. COMMUNITY TERRITORY: The service center is divided into two zones, services and community territory; community territory includes space for community projects and a public arena.

5. SMALL SERVICES WITHOUT RED TAPE: No one service has a staff size greater than 12; each service is physically cohesive and autonomous; the services are loosely organized with respect to each other.

6. EXPANSION: The number of services can grow and the size of any one service can grow; but the relationship of all services to community territory does not change.

7. ENTRANCE LOCATIONS: The building's main entrances are immediately visible to a person approaching, on foot or by car, from any direction.

8. PARKING: Either parking is provided for everyone [this will require .5N square feet for a target population N], or there is emergency parking only; staff-only parking is never provided.

9. ARENA THOROUGHFARE: There is a natural pedestrian shortcut through the MSC's community territory.

10. OPEN TO STREET: Major community projects, services and arena activities are plainly visible to passers-by, in the street.

11. ARENA ENCLOSURE: The public arena is as open as possible to the world around it, while still maintaining the required Effective Temperature inside.

12. LOCKED AND UNLOCKED ZONES: The building is zoned according to three different time schedules: with one door closing each zone off from the next: 9am-5pm, 9am-11pm, and "always open".

13. ALL SERVICES OFF ARENA: All services open off the public arena; their frontages are roughly equal.

14. FREE WAITING: All services share a common waiting area, which contains a variety of activities; this waiting area is part of the public arena.

15. OVERVIEW OF SERVICES: All the services housed in the MSC are instantly visible to a person entering the center.

16. NECKLACE OF COMMUNITY PROJECTS: Small, store front type stalls, organized and run by members of the community, ring the multi-service center.

17. COMMUNITY PROJECTS TWO-SIDED: Like store fronts, each community project opens onto the street; wherever possible it opens onto the public arena as well.

18. WINDOWS OVERLOOKING LIFE: Windows near places where people spend more than a minute or two, all look out on areas of "life".

19. CORE SERVICE ADJACENCIES: Personnel in core services are placed according to frequency of interaction; this will typically lead to formation of three cohesive units: administration, community organization and program-evaluation.

20. ACTIVITY POCKETS: The entire edge of the arena is scallopped with pockets of activity, alternating with points of access.

21. SELF-SERVICE: The waiting area contains a self-service facility, where job listings, welfare rights information and other do-it-yourself services are open, without restriction, to the public.

22. PEDESTRIAN DENSITY IN PUBLIC PLACES: If the estimated mean number of people in the arena at any given moment, is P, the size of the arena should be 150P to 300P square feet.

23. ENTRANCE SHAPE: Major entrances are either deeply recessed or they stick out from the face of the building, for visibility.

24. SUBCOMMITTEE WATCHDOGS: Subcommittees of community residents have offices in the multi-service center; they are empowered to represent the communities interests in the center, and are set up to receive complaints and suggestions.

25. BUILDING STEPPED BACK FROM ARENA: Buildings around public courts should be raked back at an angle less than 40 degrees.

26. VERTICAL CIRCULATION IN SERVICES: Services requiring space beyond that allocated to them round the arena, are directly connected to upper stories by interior stairs.

27. SELF-SERVICE PROGRESSION: Self-service begins on the street, in front of the MSC, with a "menu", which leads directly to the self-service facility.

28. THE INTAKE PROCESS: Intake procedures are informally handled by field workers, in a lounge setting, near the major entrance.

29. OUTDOOR SEATS: Outdoor benches are arranged overlooking activity, in the sun, and protected from wind; and especially suited for old people.

30. CEILING HEIGHTS: Ceiling heights of all rooms and spaces are established according to the diameters of the "social bubbles" appropriate for those spaces.

31. SHORT CORRIDORS: Straight corridors are never longer than 40 or 50 feet.

32. CHILD CARE POSITION: The child care station is visible along the path from the entrance to the services.

33. SERVICE LAYOUT: Clients go directly from waiting areas to interview and other service spaces; they do not pass through the secretarial pools that back up the interview staff.

34. STREET NICHES: There are niches along the face of the building and at the entrances, where people can linger and "window-shop".

35. INFORMATION-CONVERSATION: There is an information station in the service center, dispensing coffee and talk.

36. DISH-SHAPED ARENA: The arena floor is dished at a slope of 7%.

37. DIRECTOR'S OVERVIEW: The MSC director's office is situated so as to have an inconspicuous overview of the public life of the center.

38. COMMUNITY WALL: Associated with the MSC there is a section of wall that is given over to the community; it may be used for registering complaints, posting petitions, painting murals, etc.

39. ARENA DIAMETER: To enhance social cohesion the maximum diameter of the arena is 70 - 80 feet.

40. OFFICE FLEXIBILITY: Office space in the service area is a continuous sheet of interconnecting rooms; the rooms are between 8' x 10' and 16' x 20'.

41. TOWN MEETING: The MSC contains a tiered wrap around meeting room, which is to be a hub for local political meetings.

42. SLEEPING OK: There is a section of the arena set aside, where people can rest and eventually doze off; if the demand exists, this section of the center may be left open all night.

43. WAITING DIVERSIONS: A number of activities like TV, checkers, pool, are part of the arena life, and they are woven through the waiting areas.

44. ELEVATOR-RAMP: There is a ramp and/or elevator connecting every change of level between public areas in the MSC.

45. BLOCKWORKER LAYOUT: There is a handful of open, informal booths near the entrance of the MSC, where field workers meet their clients when they come to the center; behind these booths each field worker has a small private work station.

46. RADIO/TV STATION: There is a local TV (or radio) station broadcasting out of a community project space just off the public arena; some part of each broadcasting day is spent transmitting "services" into people's homes (in-home job training, for example).

47. MEETING ROOMS CLUSTERED: Meeting rooms and class rooms are clustered near a kitchen, in that part of the building which remains open evenings.

48. BARBERSHOP POLITICS: There is at least one place where people naturally collect to talk politics and gossip, like a barbershop or a lunch-counter or a small grocery store or a laundromat, immediately adjacent to the multi-service center.

49. STAFF LOUNGE: There is a lounge, near a kitchen, where staff members can take breaks and have their lunch; the lounge is wide open to a heavily traveled staff circulation route.

50. INTERVIEW BOOTHS: Each interviewer has a private booth, much like the ones found in certain restaurants; the interviewer meets his clients in this booth on a less formal basis than the typical office permits.

51. STAIR SEATS: Wherever stairs spill into the arena, they are wide enough for people to use them as seats.

52. WINDOW SIGNS: Provision is made for posting signs and leaflets along the windows that front on the street, so that people who stop to read them can look in, beyond the sign, and get a glimpse of MSC life.

53. FORM-FILLING TABLES: There are tables and chairs in the waiting areas where people can sit down to fill out agency forms.

54. ACCESSIBLE BATHROOMS: There is at least one set of bathrooms off the arena and accessible to the public.

55. SECRETARY'S WORKSPACE: Each secretary has her own work station, surrounded on three sides by low partitions.

56. INFORMAL RECEPTION: The receptionist for each service sits on a dais at a combination counter-desk; she meets the client, approaching the reception counter, at his eye level.

57. CHILD-CARE CONTENTS: The MSC child-care station emphasizes those kinds of play experiences that are most missing from the surrounding community; e.g. plants, sand and water, climbing, "caves".

58. SEATS OUTSIDE MEETING ROOMS: There are small sitting alcoves outside the center's meeting rooms, so that people can linger after a meeting and turn over their thoughts.

59. SQUARE SEMINAR ROOMS: This is the best shape for seminars, where full and mutual participation is desired.

60. SELF-SERVICE CONTENTS: The self-service facility contains a library, job listings, welfare rights information, research findings on the illegal practices of local landlords, language labs, teaching machines, etc.

61. ARENA STORAGE: There are storage spaces off the arena, where arena furniture and equipment can be locked away; the storage area is 7% of the arena size.

62. WINDOW HEIGHTS IN MEETING ROOMS: Are 40" or higher; this means that people's faces are never silhoutted against windows.

63. POOLS OF LIGHT: Lighting is not uniform throughout the multi-service center; rather, it is in pools, each pool covering a special and delimited "social bubble".

64. WARM COLORS: The primary sources of illumination throughout the service center, in combination with the colors of floors, walls, ceilings and furnishings, should be chosen to give warm light.

We wish to draw the readers attention to three minor peculiarities in the patterns.

First: Some patterns have the context, "multi-service center" - but many have a wider context - community building, any building, etc. This is likely to confuse a reader, if he does not realize that the 64 patterns given here are part of a much larger language. It would be arbitrary to restrict the context statements of all the patterns to multi-service center.

Such patterns as "short corridors" - Pattern 31 - are very important, and need to be mentioned in this report - they have a reasonable influence on the shape of the multi-service center - but we cannot pretend, for the sake of this report, that these patterns apply only to MSC's.

Second: Although we believe that the more important patterns for multi-service centers are all here, when it comes to details we have given no more than a sprinkling. Thus, we have stated a pattern which describes the proper window height in meeting rooms (Pattern 62) - but we have not given the number of windows such a room requires; nor have we given the window height for other kinds of rooms; nor have we given a thousand other details.

The reasons for this, again, center on the fact that the fragment of language presented here is no more than part of a much larger language, and that many of the patterns in this larger language have very general context statements. It would be impossible to state all these patterns in a report which deals with multi-service centers.

Further, many of the patterns, and especially these smaller, rather general ones, are widely known by practicing architects - and there is no need to state them.

However, there is no hard and fast line between large, innovative multi-service center-only, patterns and these other small, familiar, general patterns. One or two patterns, (like 63, Pools of Light; and 64, Warm Colors) apply to almost any context: but they are very important, and not widely known, so we have included them. We have therefore drawn the line more or less where we wanted to. Most of the patterns deal specifically with multi-service centers, and are of large scale importance: but a few of them dwindle off into matters of great generality, a few into relatively unimportant details.

Third: We have defined 64 patterns. But we are by no means satisfied with all the patterns. Some are highly unreliable, and inelegantly argued; they have been included only for the sake of completeness. In one sense this doesn't matter. They are all open to criticism - and it is worth stating them, even if they are wrong or banal, so that they get improved by criticism. We ask that the reader accept the 64 patterns in this spirit.

But since some readers may use this report as a way of understanding the concept of a pattern, not as a source of patterns for multi-service centers, we have marked those patterns which we like best, and which best convey the concept of a pattern, with an asterisk in the preceding summaries.

The asterisked patterns are: 1, 2, 3, 4, 5, 9, 13, 14, 15, 16, 18, 20, 21, 22, 23, 25, 27, 28, 30, 31, 34, 36, 38, 40, 41, 42, 45, 50, 59, 63, 64.

II: THE IDEA OF A PATTERN

If we examine the patterns as they are presented in full, in the Appendix, we shall see that each pattern has two parts: the PATTERN statement itself, and a PROBLEM statement. The PATTERN statement is itself broken down into two further parts, an IF part, and a THEN part. In full the statement of each pattern reads like this:

IF:X THEN:Z / PROBLEM:Y

X defines a set of conditions. Y defines some problem which is always liable to occur under the conditions X. Z defines some abstract spatial relation which needs to be present under the conditions X, in order to solve the problem Y.

In short, IF the conditions X occur, THEN we should do Z, in order to solve the PROBLEM Y.

No one of the patterns is, in any sense, an absolute statement. Any one of the patterns may be wrong; all of them can be improved. Specifically, there are two ways in which the pattern statement might be wrong. First of all, the problem may not in fact occur as stated under the conditions X, or it may not be as serious as it is claimed to be, or it may only occur under special circumstances, which are far less general than those defined by X. Second, it may not be true that the relationships defined by Z solve the problem Y.

We expect both these kinds of criticism to be levelled at the patterns; indeed, it is essential for the life of the patterns that these criticisms be raised.

We have said, already, that the system of patterns is meant to define a prototype building. Obviously no one will accept this prototype, or the individual patterns, if he is not free to make up his own mind about the validity of the patterns. To make up his mind, he must be free to criticise the patterns.

We expect the patterns to grow and change under the impact of such criticism. In this sense the prototype which we defined is merely temporary; if we are successful, we hope that it will evolve, as criticisms and improvements accumulate - so that the patterns which define multi-service centers ten years from now, will look very different from the ones which are stated here.

The format of the patterns is designed to make criticism easy. As far as possible, all the tendencies and needs and difficulities in the problem statement are supported by empirical evidence. This evidence makes it easier to challenge the validity of the patterns. Often the form of the evidence which supports a conjecture, itself helps to define the kind of evidence which would be needed to refute the conjecture. Where we have not been able to find any relevant published evidence, and where we have been unable (for want of time or money) to make experiments or observations ourselves, we have tried to state our conjectures as openly and clearly as possible - so that even in these doubtful cases, empirical discussion and observation can begin.

III: EIGHT BUILDINGS GENERATED BY THE PATTERN LANGUAGE

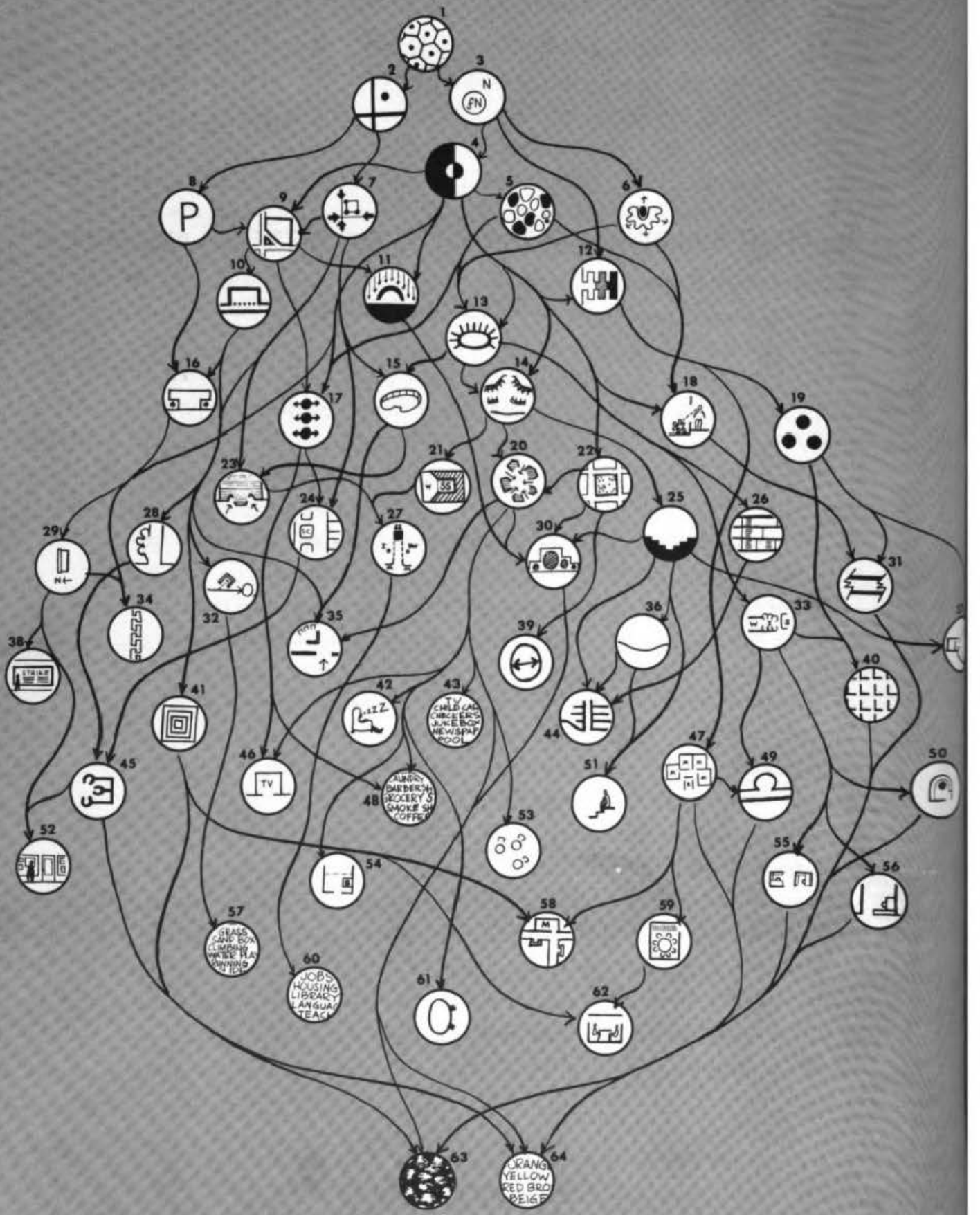
We now describe the way that a designer might use the patterns to design a building.

A quick look through the list of patterns, makes it clear that there are too many to grasp all at once. A designer who wants to make a building out of them, will not simply be able to read them through, and then design the building. They are too confusing.

To make a whole out of these many patterns, the designer needs to understand how they fit together. The pattern language, is a system which shows how the patterns fit together, and helps the designer make a whole of them. The cascade of drawings on the next page is a rudimentary picture of the language for the 64 multi-service center patterns.

The language is intended to give the designer three specific kinds of help:

1. It gives him the opportunity to use the patterns in a way which pays full respect to the unique features of each special building: the local peculiarities of the community, its special needs, the particular service programs the community intends to have, the particular administrative organization of the service center itself, local peculiarities of location, site, and climate.
2. It tells him which patterns to consider first, and which ones to consider later. Obviously he wants to consider the biggest ones, the ones which have the most profound influence on the building, before he considers the details.


1
2
3
N
4
8
P
9
7
5
6
10
11
12
13
16
15
14
17
18
19
21
20
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
JOBS
HOUSING
LIBRARY
YELLOW
RED BRO
BEIGE

3. It tells him which patterns "go together" - that is, which patterns refer to similar parts of the building, so that he knows which ones to think about at the same time, and which ones separately.

Before we try to explain exactly what this cascade of drawings means, we shall present eight worked examples which show it in use.

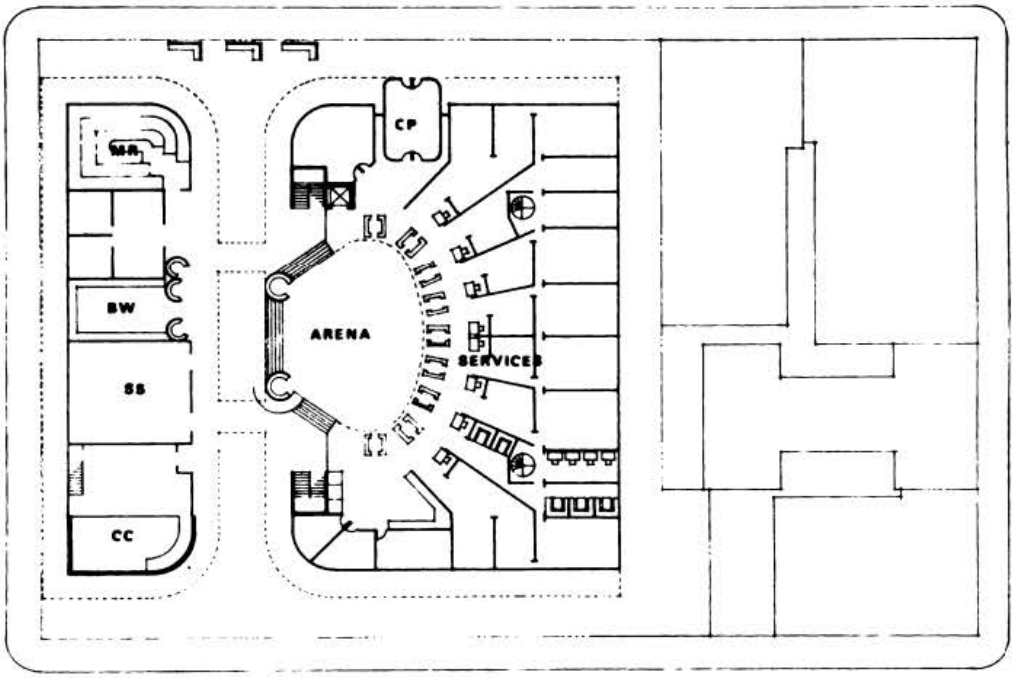
In each example we describe a hypothetical community, which needs a multi-service center. We show a design for a multi-service center building, appropriate for that community, which has been generated by the language. And we show, step by step, how the language helped to generate this design.

For each example, the steps are presented in sequence (A, B, C, D, ...). Each step introduces new patterns into the design. At every step we mention the new patterns which have come into play and their interaction with local conditions, in words; we show the form of the building, as it has been formed up to that step, diagrammatically; and we show a miniature drawing of the language cascade so that we can see which part of the cascade is responsible for this step, and where this part sits in the cascade as a whole.

[One point must be heavily underlined. Although the evolution of these designs is presented in a step-wise sequential manner, this is merely for convenience of presentation. It does not imply that the design process generated by the language, is, in any but the most general sense, itself sequential.]

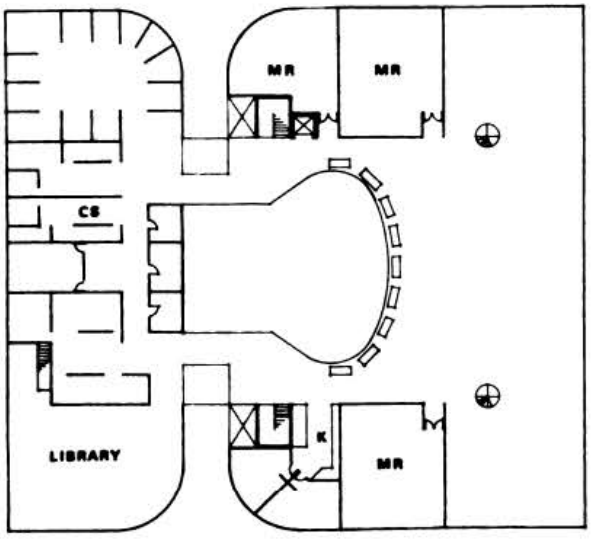
HUNTS POINT

40,000 PEOPLE - STRONG COMMUNITY CORPORATION - LARGE BLOCK WORKER PROGRAM - 9 TO 12 SERVICES - SITE OPEN TO THREE SIDES - NEAR MAJOR INTERSECTION AND TRANSIT STATION.

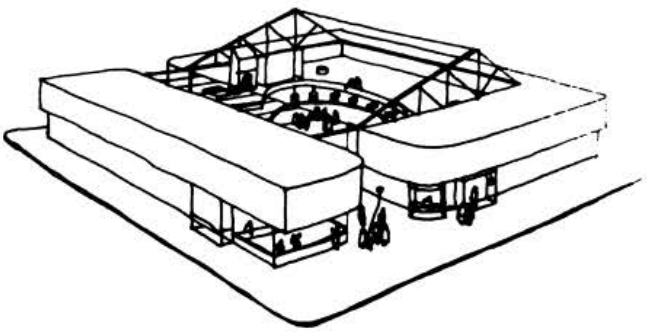


FL 1

1":60'



FL 2



A This multi-service center is to service 40,000 people. According to Pattern 1 (Small Target Areas), this population is too large, but for political reasons, the decision stands and is irrevocable.

First a triangle site was selected, right on a major intersection (Pattern 2: Location). However other requirements made it clear that this site was too small (Pattern 3), and a larger, rectangular site was chosen, one-half block from the original site (thus still conforming to Pattern 2).

On this site there was room only for emergency parking, and so Pattern 8 (Parking) does not play a major role. Nor does 5, which had not been formulated prior to the Hunts Point design.

B Pattern 16 (Necklace) calls for provisions for community projects around the "live" edge of the building; hence we confine services to the "dead" edge of the building, against other buildings.

C Climate considerations made it clear that the arena could not be open (11: Enclosure), and so it was developed as an interior street. Orientation of this "street" is given by local conditions in accordance with Pattern 7 (Entrance Location).

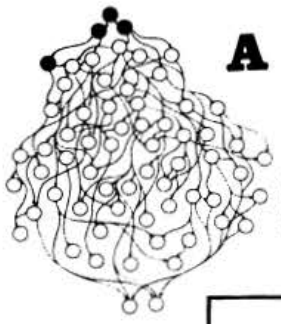
D The size of the arena and its relationship to waiting and services is established by Patterns 13 (Services Off Arena), 14 (Waiting) and 15 (Overview); and the arena is shaped accordingly.

E The arena is thus buried in the heart of the building, off the interior street. Since its ceiling had to be high (30), and since it was to be one of the things visible from outside (10), we gave it a huge, high truss. To further enhance visibility, and in accord with Patterns 23 (Entrance Shape) and 34 (Street Niche), the entrances were cut back, deep into the building.

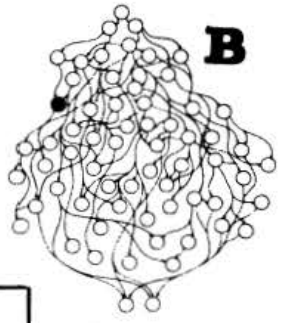
F With services taking up the north half of the building, the south was given over to core services and those things that need to be placed along the line of entry (Patterns 21: Self-service, 27: Self-service Progression, 28: Block Workers, 32: Child-Care).

Next, service layout is established (33 and 40); and the arena is raked back with a gallery at the second floor (25).

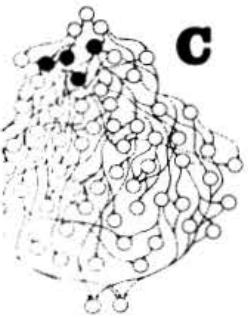
G Finally "pockets" in the arena are shaped and filled according to Patterns 20 (Activity Pockets), 35 (Information-Conversation), 43 (Waiting Diversions), and 42 (Sleeping).



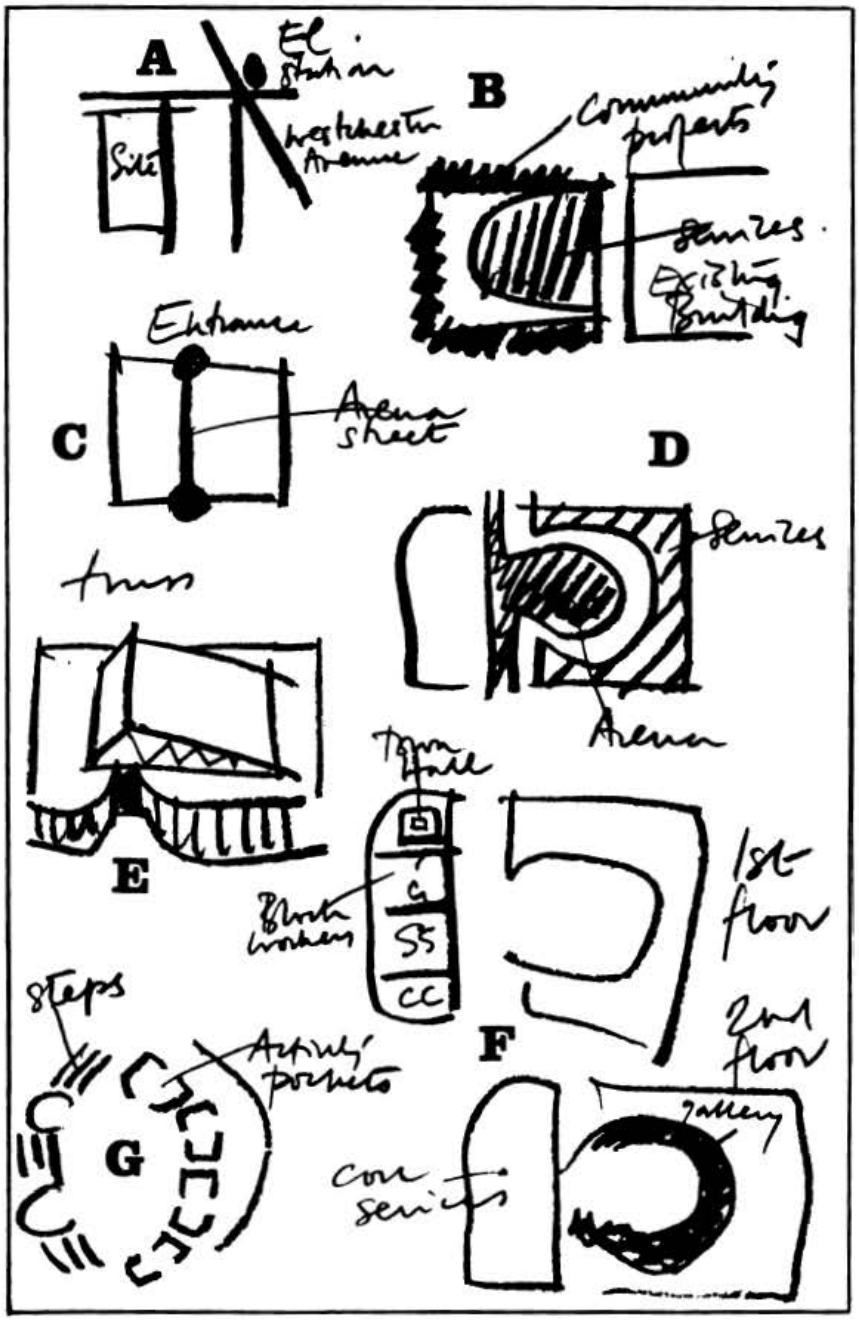
1. Small Target Areas
2. Location
3. Size Based on Population

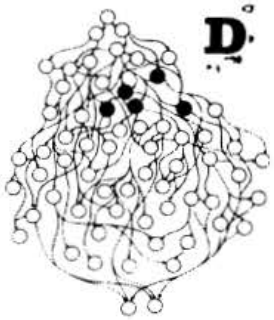


16. Necklace

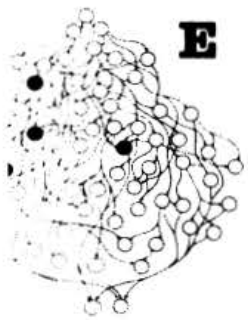


Community Territory
Entrance Location
Arena Thoroughfare
Arena Enclosure

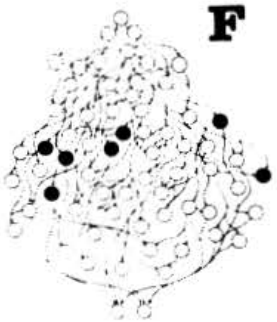




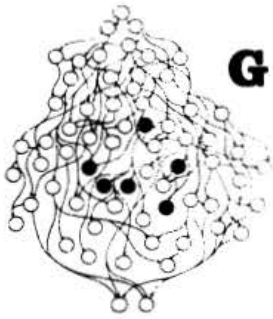
12. Locked and Unlocked
13. All Services off Arena
14. Free Waiting
15. Overview of Services
18. Windows Overlooking



Open to Street
Entrance Shape
Ceiling Heights
Street Niches



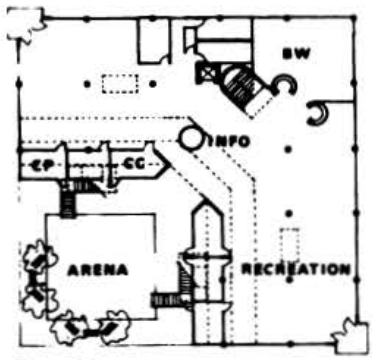
19. Core Service Adjacencies
21. Self-Service
27. Self-Service Progression
28. The Intake Process
32. Child-Care Position
37. Director's Overview



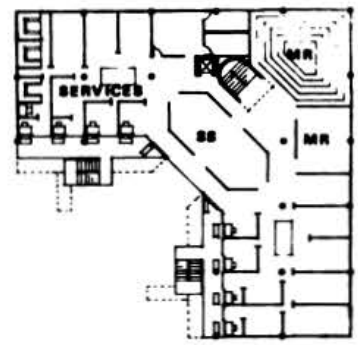
30. Activity Pockets
33. Information-Conversation
36. Dish-Shaped Arena
42. Sleeping Off
43. Waiting Diversions
51. Stair Seats

SAN FRANCISCO

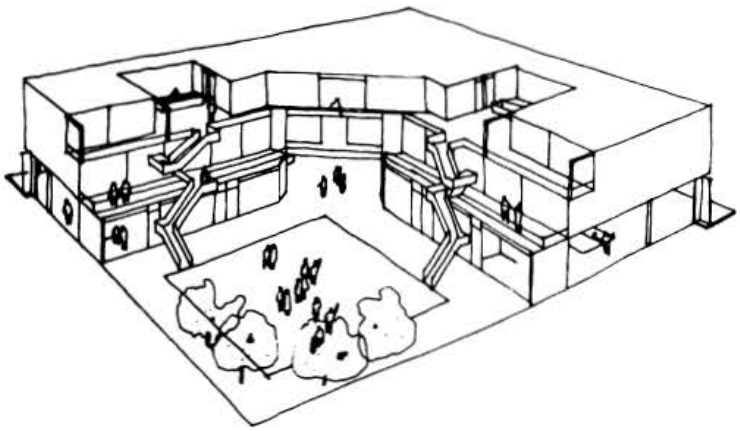
COMBINATION SERVICE AND RECREATION CENTER - MILD CLIMATE - OUTDOOR ARENA - STRONG COMMUNITY ORGANIZATION - CORNER SITE - OFF SITE PARKING PROVIDED.



FL 1



FL 2



FL 3

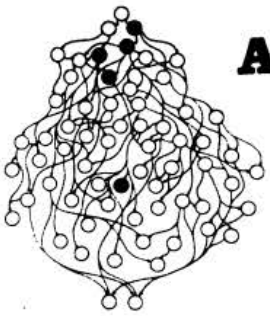
A To make the recreation part of the building highly accessible, the whole ground floor is devoted to recreation activity - this area will be open late, according to Pattern 12; also it is highly visible from the street (10), and provides a thoroughfare (Pattern 9). In this climate, the arena, which can be open to the sky (11) takes on an unusual character - it becomes a park. The whole ground floor becomes community territory (4).

B The recreation area, which will become a hang-out for many members of the community, gives the building a natural base for community organization. It is therefore essential to put information, and community organizers and community projects at ground level. Patterns 17 (Community Projects Two-sided), 28 (Intake), 35 (Information-Conversation), and 16 (Necklace of Community Projects) put them in the positions shown.

C If the recreation area is to occupy about one-third of the building and is to be at ground level, there will be two other stories for services. Since the services are not at ground floor, they cannot open directly off the arena. The next best thing, feasible in a mild climate, is to have them opening off a gallery which surrounds the arena. Self-service is placed in the center of this gallery (21). The gallery steps back from the arena (Pattern 25). There are no corridors.

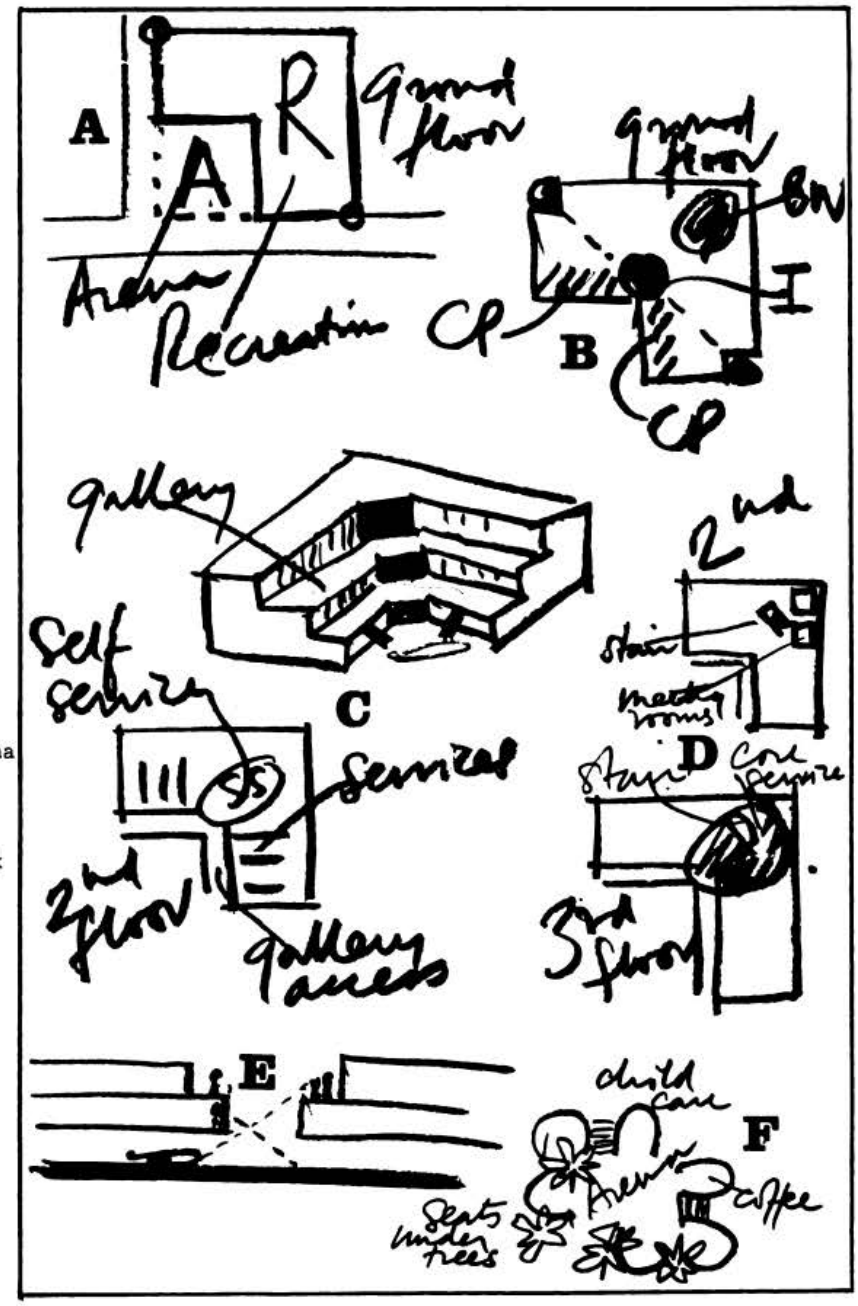
D Since core service adjacencies (19) requires that community organizers be reasonably accessible to the rest of core services, there must be a stair inside the building; core services naturally go to the third floor, giving the director an overview (37). Since this stair opens from a "late zone" downstairs, it is a natural path to meeting rooms; these rooms, clustered round a kitchen, are near the staff lounge, itself on the path to core services, and in easy reach of other services (Patterns 47 and 49).

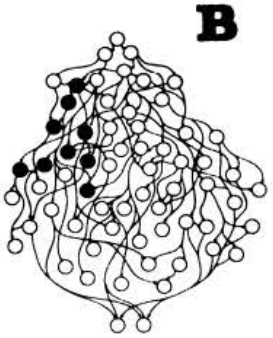
E To get windows overlooking life (18) for the interior spaces, there are holes from the second and third story, looking down into the recreation floor.



A

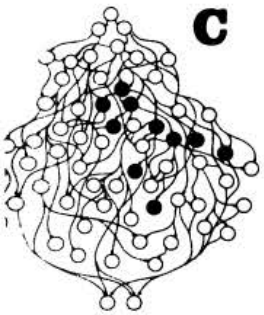
3. Size Based on Population
4. Community Territory
7. Entrance Location
11. Arena Enclosure
43. Waiting Diversions





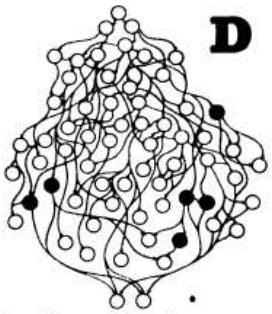
B

9. Arena Thoroughfare
10. Open to Street
16. Necklace
17. Community Projects
23. Entrance Shape
24. Subcommittee Watchdogs
28. The Intake Process
29. Outdoor Seats
35. Information



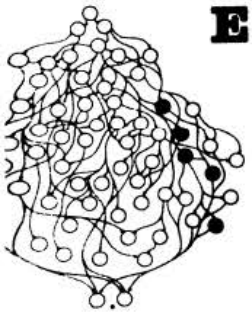
C

11 Services off Arena
Free Waiting
Overview of Services
Self-Service
Pedestrian Density
Building Stepped Back
Vertical Circulation
Short Corridors
Arena Diameter
Stair Seats



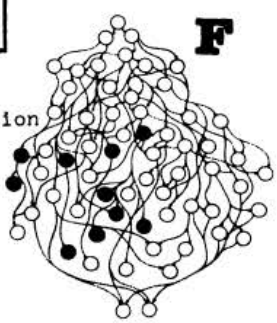
D

19. Core Service
41. Town Meeting
45. Block Worker Layout
47. Meeting Rooms
49. Staff Lounge
59. Square Seminar Rooms



E

Windows Overlooking Life
Vertical Circulation in Services
Service Layout
Office Flexibility
Informal Reception

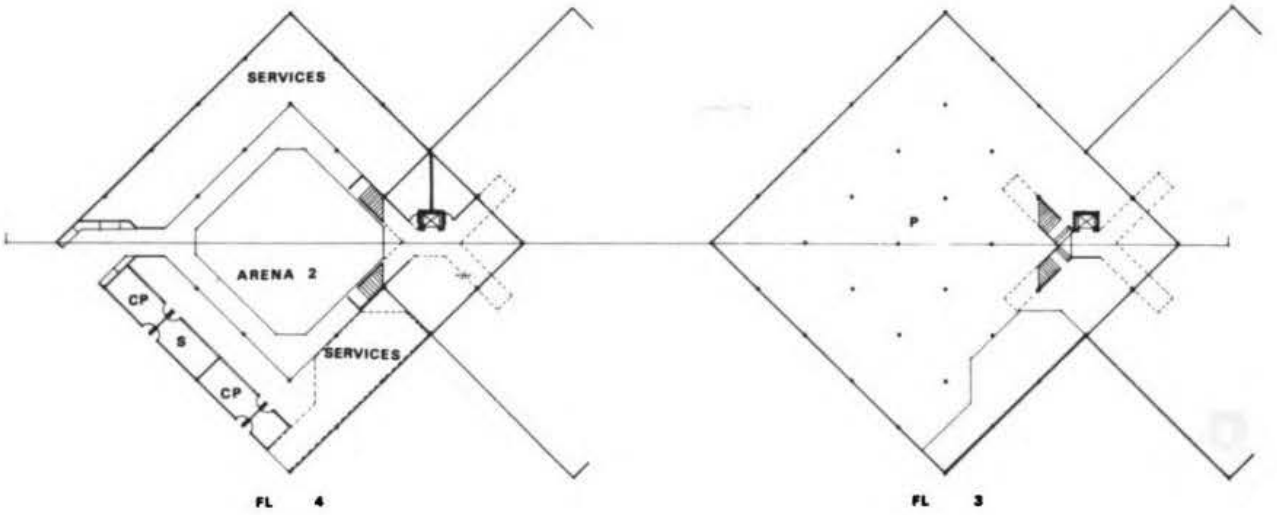


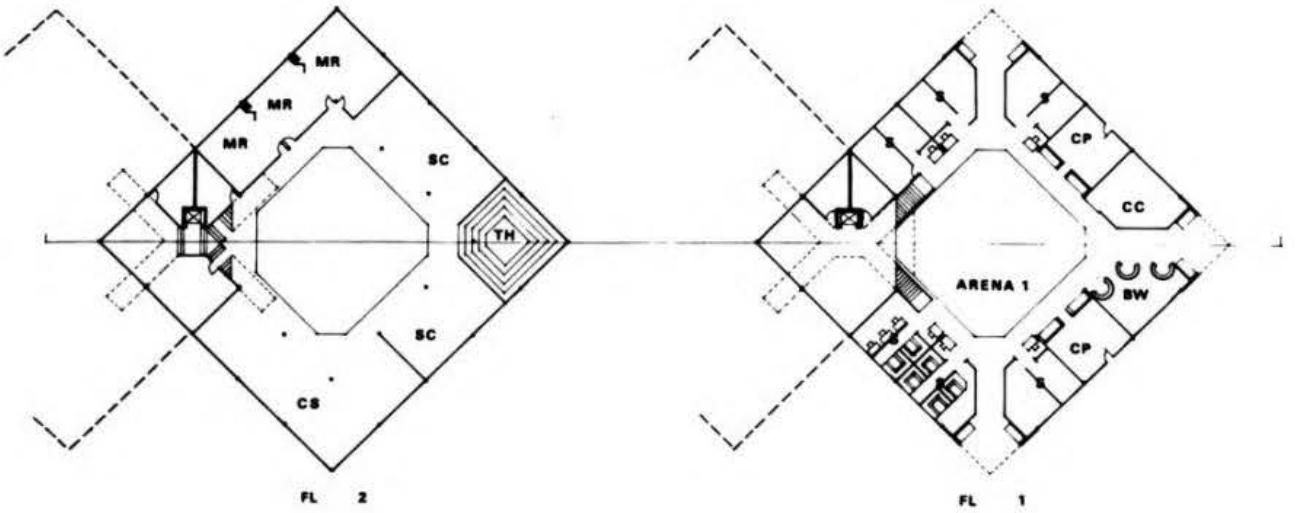
F

20. Activity Pockets
27. Self-Service Progression
29. Outdoor Seats
32. Child-Care Position
38. Community Wall
42. Sleeping OK
48. Barbershop Politics
53. Form-Filling Tables
54. Accessible Bathrooms
57. Child-Care Contents

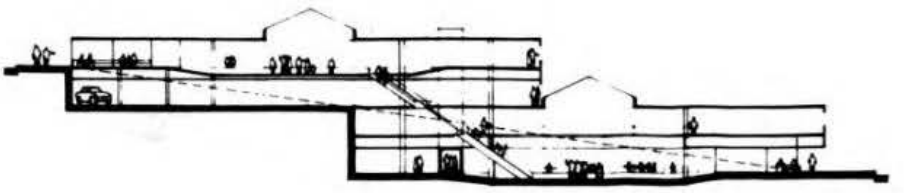
BROOKLYN

12,000 PERSONS - EXPANSION KEY ISSUE - STEEP SITE - PARKING MUST BE PROVIDED - LAUNDROMAT AND NEWS STAND ON SITE TO BE SAVED.





1":60'



A The community has acquired a corner lot, 12,000 square feet, at a major intersection (Pattern 2). In anticipation of expansion, the community has also purchased the lot in back (6: Expansion).

[The most striking feature of this building is that it has two arenas on two different levels. The need for expansion and the steep site, together with the square shapes of the lots and their relative positions, are the conditions which suggest this solution. The drawings show the entire development after expansion. At the first stage, only the lower lot is developed and the upper lot is used for parking.]

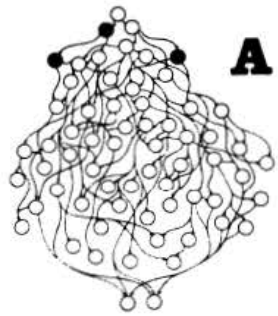
B The most natural short-cut across the site (Pattern 9) cuts across the corner of the lower lot; another shortcut goes from the NE corner of the upper lot to the SW corner of the lower lot (in the first stage, this would be through the parking lot, into the building, down some stairs, through the first arena, out the main corner door).

C The change of level from the NE corner of the upper lot to the SW corner of the lower lot, is approximately 40 feet. This suggests that the building when fully developed, should be stepped down four stories: the lower lot having two stories and the upper lot one story, with a basement for parking, and a core of four stories. In order to keep the shortcut through the two lots, the stairs connecting the two arenas will have to be very direct, with no backtracking. Thus, the stairs are in one long line.

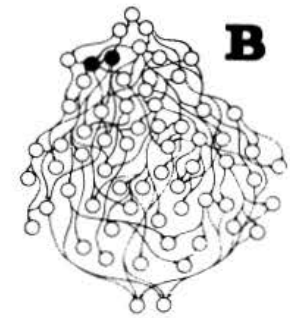
D Working toward the center, from the two extreme entrances, first comes community projects, then the two arenas, and then the services; all functions which serve both arenas - the stair and elevator (44), core services (19), Director's Overview (37), and Self Service (20) - are at the junction of the two arenas.

E In order to keep the MSC as open to the street as possible (10), and still protect it from New York weather (11: Arena Enclosure), the necklace of community projects (15) is broken at intervals with glass doors which can be demounted during the summer. An existing laundromat and newspaper stand are left intact on the site, but made "two-sided" (17). In addition, some of the "store-front" spaces are services, some are community projects (5). Finally, block workers (28 and 45), and child-care (32) are arranged with respect to the shortcut path and the main entrance.

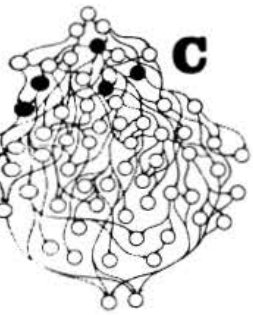
BROOKLYN



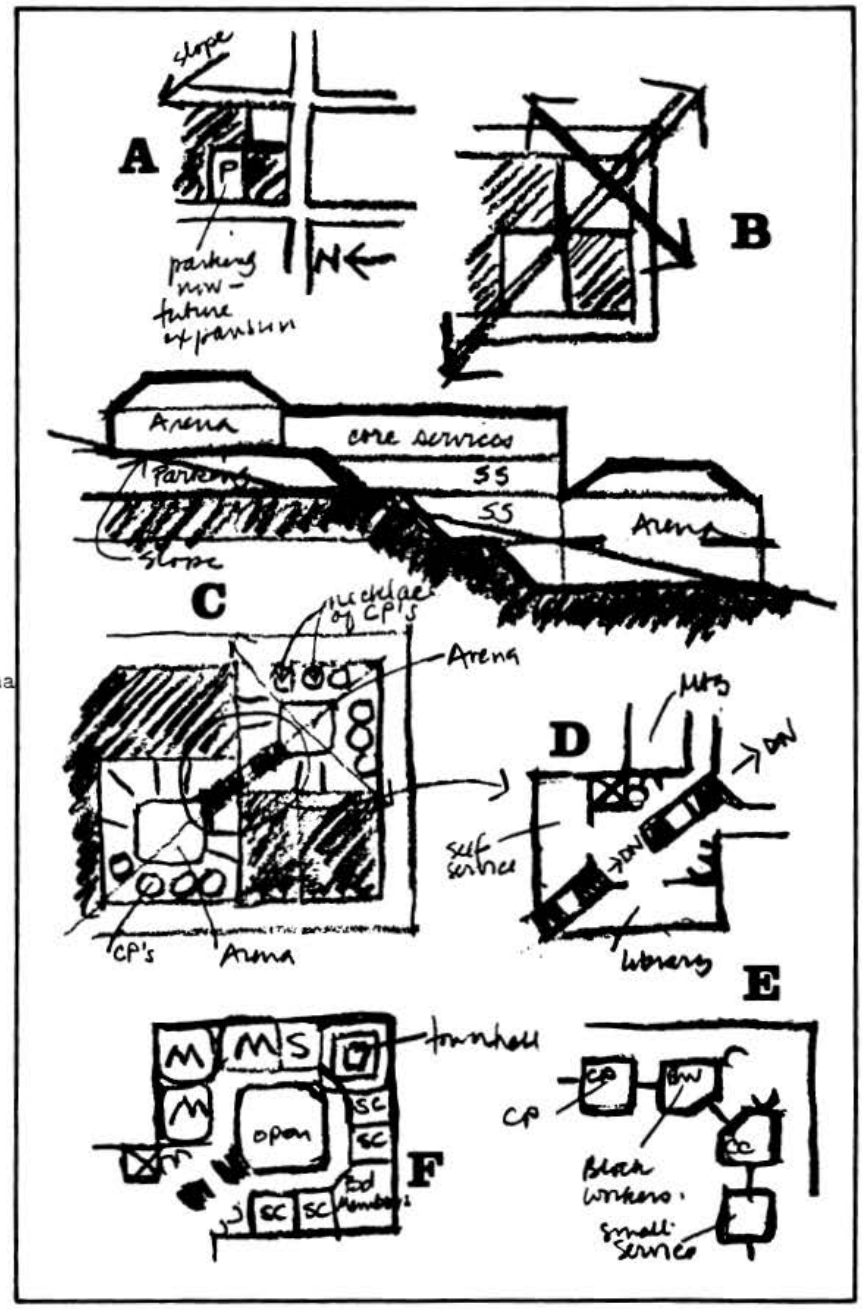
2. Location
6. Expansion
8. Parking

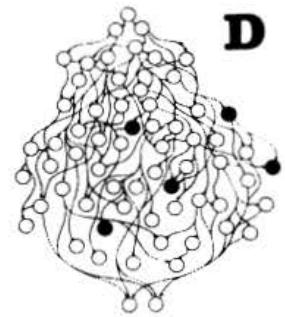


7. Entrance Location
9. Arena Thoroughfare

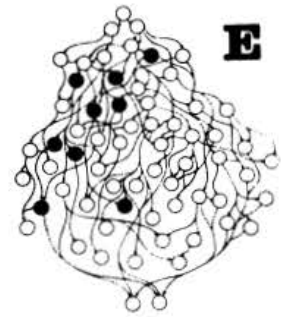


Community Territory
Open to Street
Locked and Unlocked
All Services off Arena
Necklace

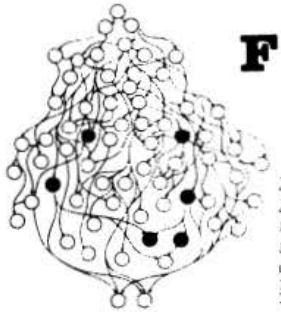




19. Core Service
21. Self-Service
37. Director's Overview
44. Elevator-Ramp
54. Accessible Bathrooms



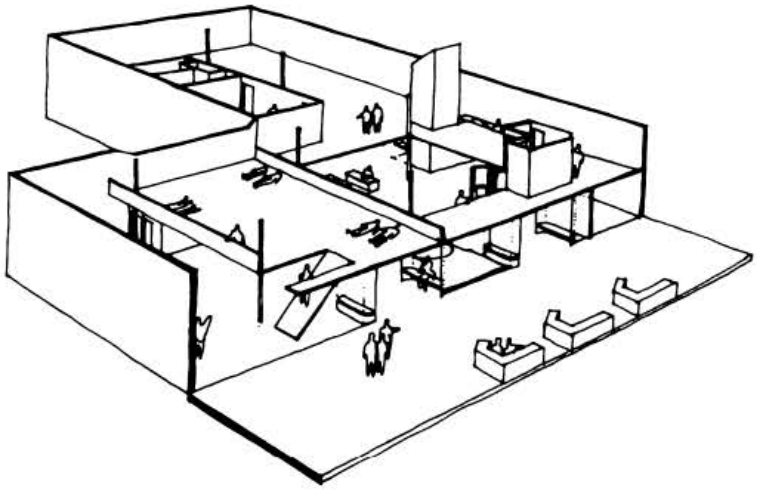
5. Small Services
10. Open to Street
11. Arena Enclosure
15. Overview of Services
17. Community Projects
28. The Intake Process
32. Child-Care Position
45. Block Worker Layout
48. Barbershop Politics

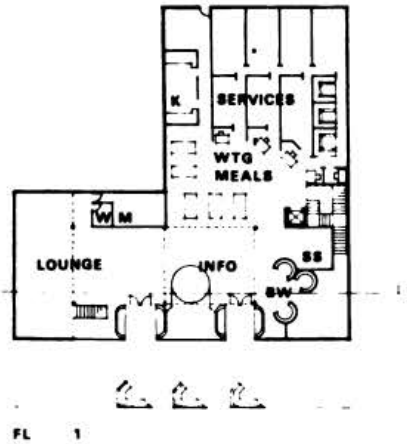


24. Subcommittee Watchdogs
25. Building Stepped Back
41. Town Meeting
47. Meeting Rooms Clustered
58. Seats Outside Meeting Rooms
59. Square Seminar Rooms

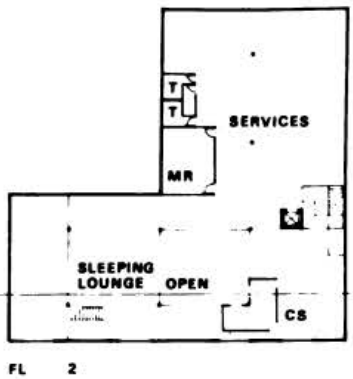
BOWERY

20,000 PERSONS - SERVICE PRIMARILY FOR ELDERLY - SITE SURROUNDED BY OLD TENEMENTS ON THREE SIDES - CENTER TO SERVE HOT MEALS DAILY.





FL 1



FL 2

1":60'

A The Bowery MSC is to serve a population of 20,000. It will contain 16,500 square feet, wedged in, between two old, walk-up tenements. The building is located on a side street, 1-1/2 blocks from a major intersection (thus conforming to Patterns 1: Small Target Areas, 2: Location and 3: Size).

B Only one side of the building faces the street; entrance and zoning relationships follow immediately from this fact (Patterns 7, 4 and 12).

The Center is to serve primarily the poor and the old; the vast majority of the population is over 60 years old. There is no interest in political action or community projects, and therefore all patterns dealing with these issues are irrelevant here. The most important services the center can offer are meals, a place to rest and talk and sleep, and a medicare clinic or the like.

C As a consequence the community territory and unlocked zones are developed in a rather unusual way. Patterns 14 (Waiting), 35 (Inforomation-Conversation), 42 (Sleeping) and 43 (Waiting Diversions) - normally "second-rate" patterns - all play the major role in shaping the community zone. Furthermore, a soup kitchen and eating lounge are included in the center, and are considered, for the sake of the patterns, as services.

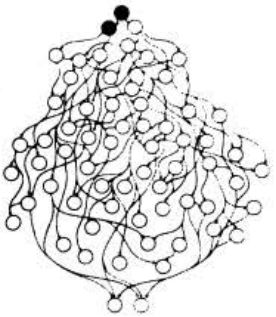
Thus the arena unfolds with a large conversation-coffee-information station, a meal lounge and a sleeping and "diversion" lounge that winds up to a secluded and quiet mezzanine.

D The face of the building is developed according to patterns 9 (Thoroughfare - the thoroughfare is a short detour around the coffee station), 10 (Open to Street), 23 (Entrance Shape), 29 (Outdoor Seats), and 34 (Street Niches).

E Next, the relationship of the more typical services to this community zone is generated by Patterns 5 (No Red Tape), 13 (Services off Arena) and 15 (Overview). The services are in the back of the building, with back-up functions on the second floor (Pattern 26: Vertical Circulation and Pattern 44: Elevator-Ramp). Core services are also on the second floor, pushed up towards the front of the building by the service back-up (Pattern 19).

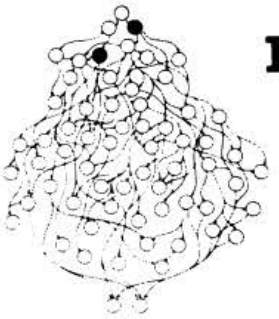
F Finally, minimal self-service and block worker installations are set according to 21 (Self-Service), 27 (Self-Service Progression) and 28 (Intake).

A

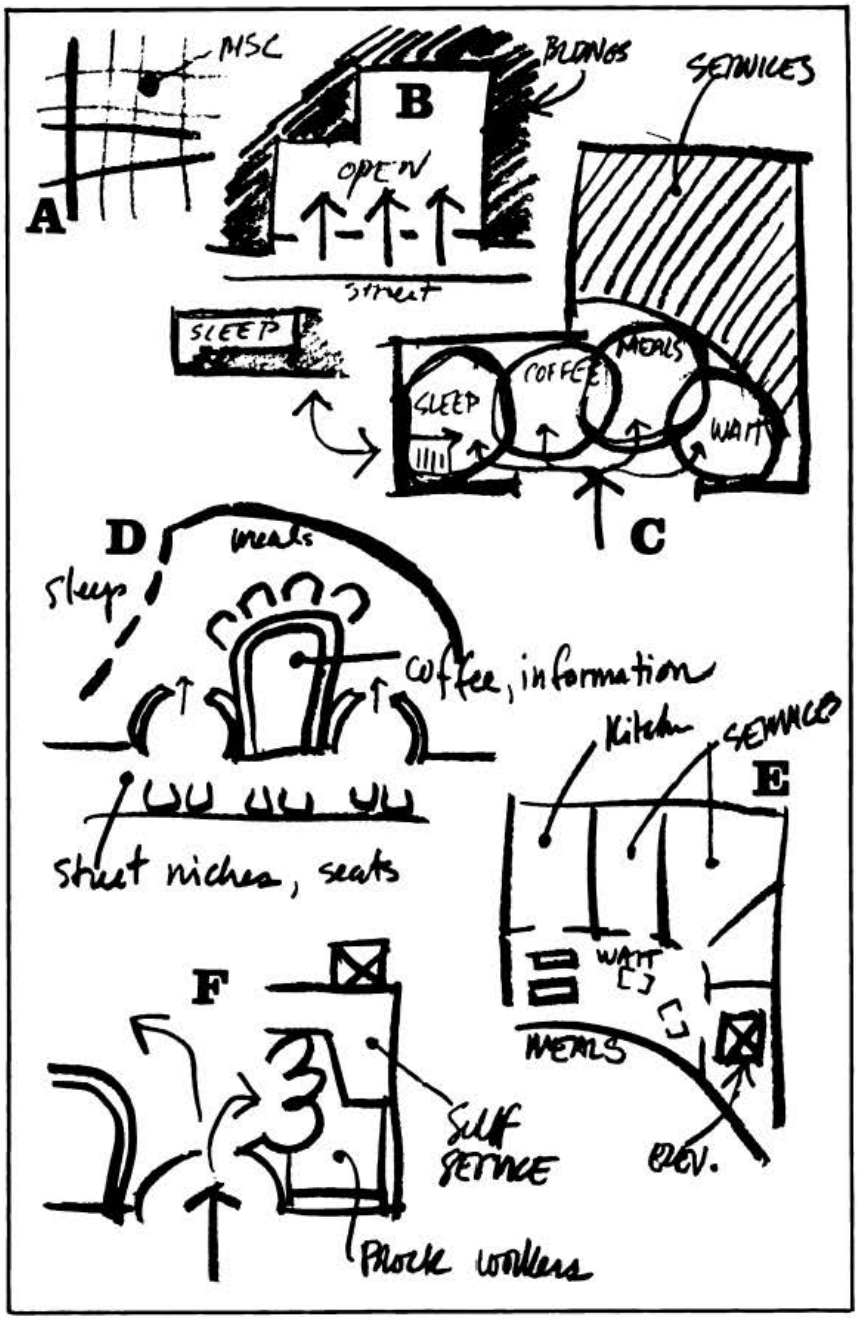


1. Small Target Areas
2. Location

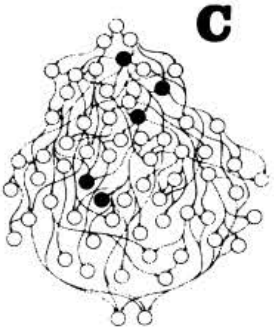
B



3. Size Based on Population
7. Entrance Location

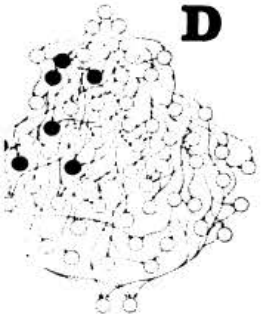


C



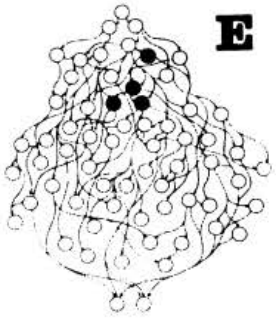
4. Community Territory
12. Locked and Unlocked
14. Free Waiting
35. Information
42. Sleeping Ok

D



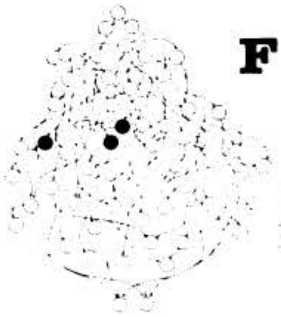
Arena Thoroughfare
Open to Street
Arena Enclosure
Entrance Shape
Outdoor Seats
Street Niches
Information

E



5. Small Services
13. All Services off Arena
14. Free Waiting
15. Overview of Services

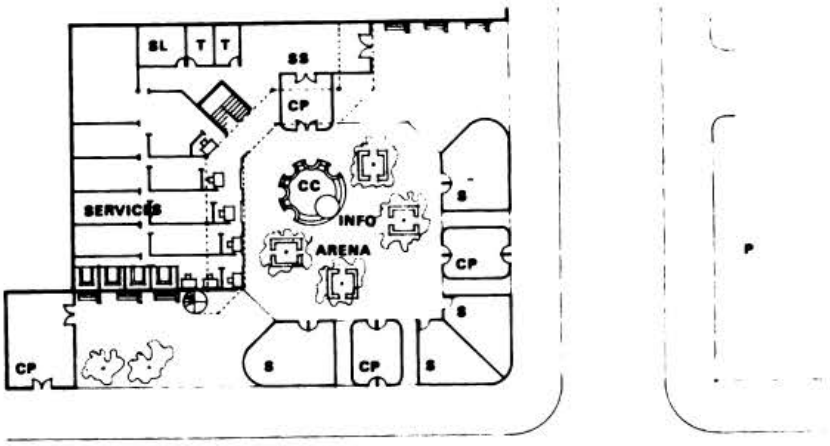
F



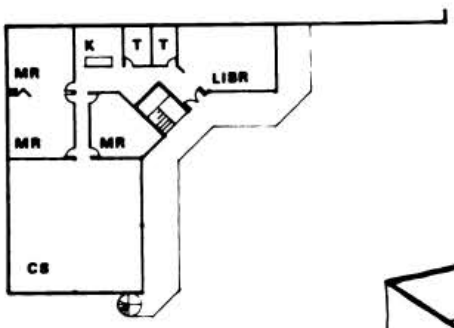
Self-Service
Self-Service Progression
The Intake Process

PHOENIX

25,000 PERSONS - OPEN PARK ARENA - INTENSE COMMUNITY ORGANIZATION PROGRAM - POSSIBLE EXPANSION OVER THE YEARS - CORNER SITE - LARGE CHILDCARE STATION.

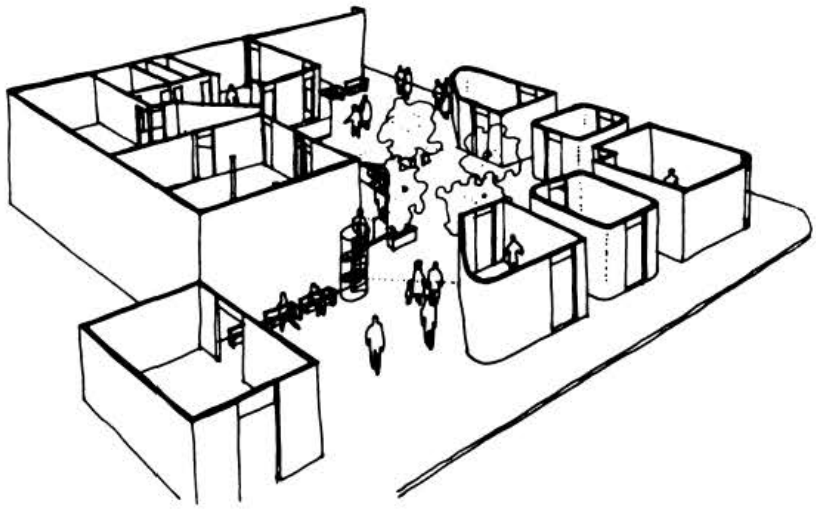


FL 1



FL 2

1":60'



A The Phoenix MSC is being built to serve 25,000 people. The program is considered experimental, and so the Center is being kept small, with the potential to expand. In the first phase the Center will contain 18,000 square feet. The program calls for parking, although this is not included in the 18,000 figure (there is a lot across the street from the site that the city is hoping to acquire).

The site is at the intersection of a main avenue and a slow residential street. Therefore the size, location and parking patterns (1, 2, 3, 8) are all appropriate.

B First, the site is zoned according to Pattern 4 (Community Territory) and a thoroughfare is cut across the corner, the most natural shortcut (9: Arena Thoroughfare). Since this thoroughfare is meant to cut across community territory, the services are allocated to the back corner section of the site. The climate allows community territory to be almost totally open (11: Arena Enclosure).

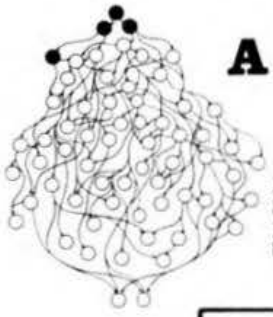
C The community is unorganized; there are no subcommittees. However, the Center intends to launch a community organization effort. Consequently Patterns 16 (Necklace of Community Projects) and 24 (Subcommittee Watchdogs), while they will not be used immediately, will eventually come into play. Thus we surround the open arena with small spaces, for services and as a home base for organizers; and over time these spaces are turned into various community projects. (Pattern 5, No Red Tape, is thus partially solved.)

Expansion, if the program is successful, will be toward the Northeast; Pattern 6 (Expansion) thus controls immediate considerations on the Northeast edge of the site: Arena and services must expand together.

D Service-arena relationships are now generated by 13 (Services off Arena), 14 (Waiting), 15 (Overview) and 22 (Arena Density): The services get equal frontage on the arena, and the arena dips down a few feet, upon entry, to facilitate overview.

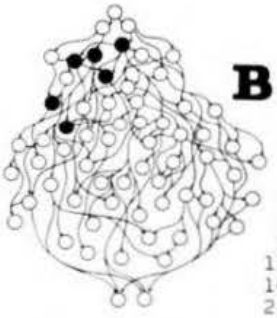
E In the absence of Block Workers, intake is taken up by an enlarged information station (28 and 35), and is placed as shown. Child care (32) and Self-Service (21) are then placed near the information-intake hub.

F An adjacent barbershop is open to the side of the arena, forming a natural alcove for outdoor seats and the community wall (29, 38, 48).



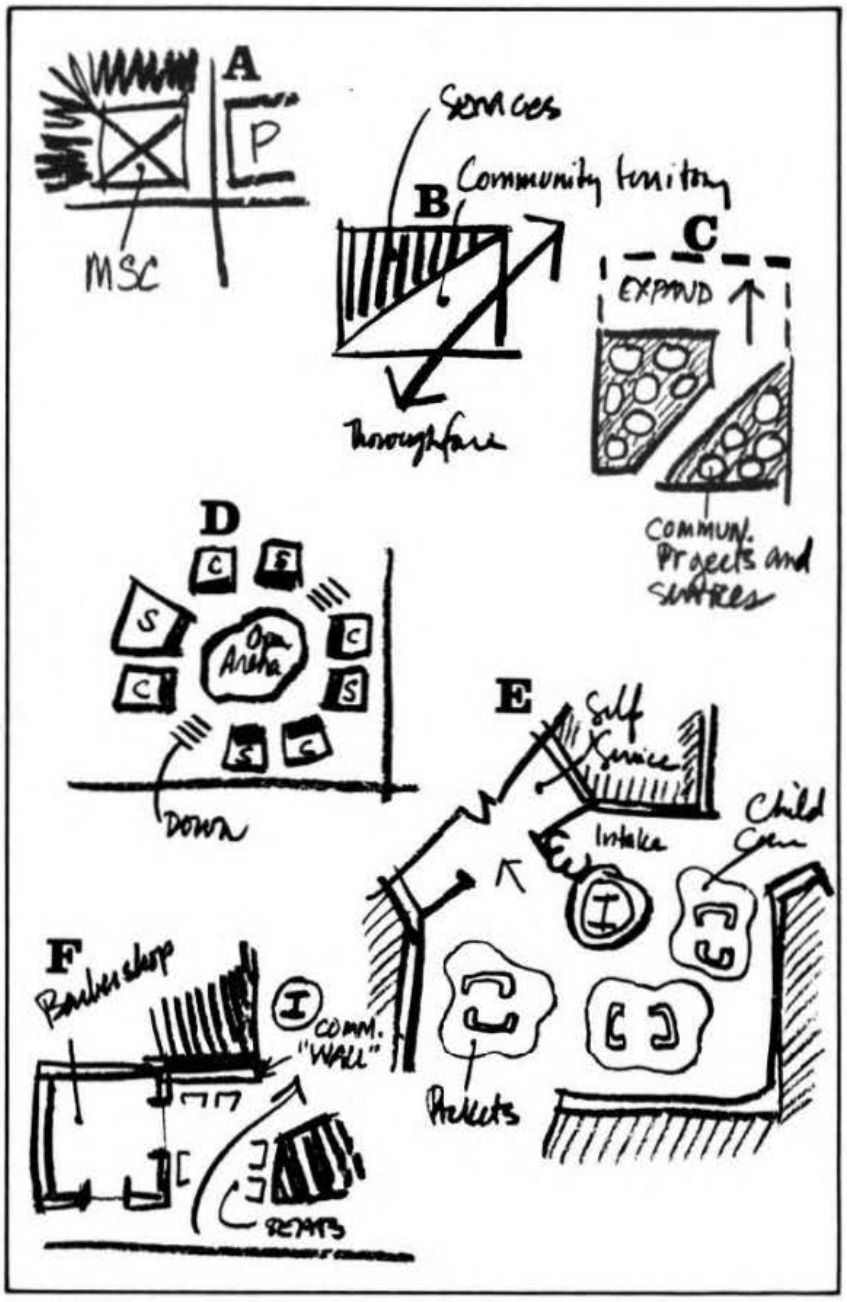
A

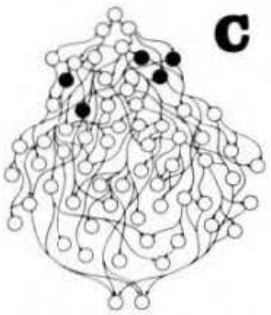
1. Small Target Areas
2. Location
3. Size Based on Population
8. Parking



B

4. Community Territory
7. Entrance Location
9. Arena Thoroughfare
11. Arena Enclosure
16. Necklace
23. Entrance Shape



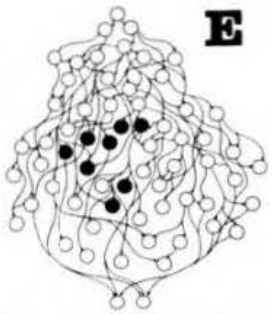


C

5. Small Services
6. Expansion
10. Open to Street
12. Locked and Unlocke
17. Community Projects

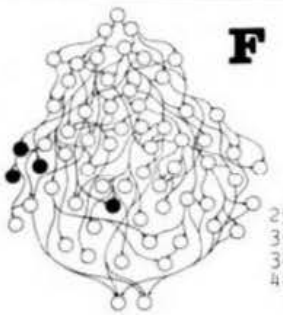
D

. Services off Arena
e Waiting
rview of Services
estrian Density



E

20. Activity Pockets
21. Self-Service
24. Subcommittee
27. Self-Service
32. Child-Care Positior
35. Information
43. Waiting Diversions
48. Barbershop Politics

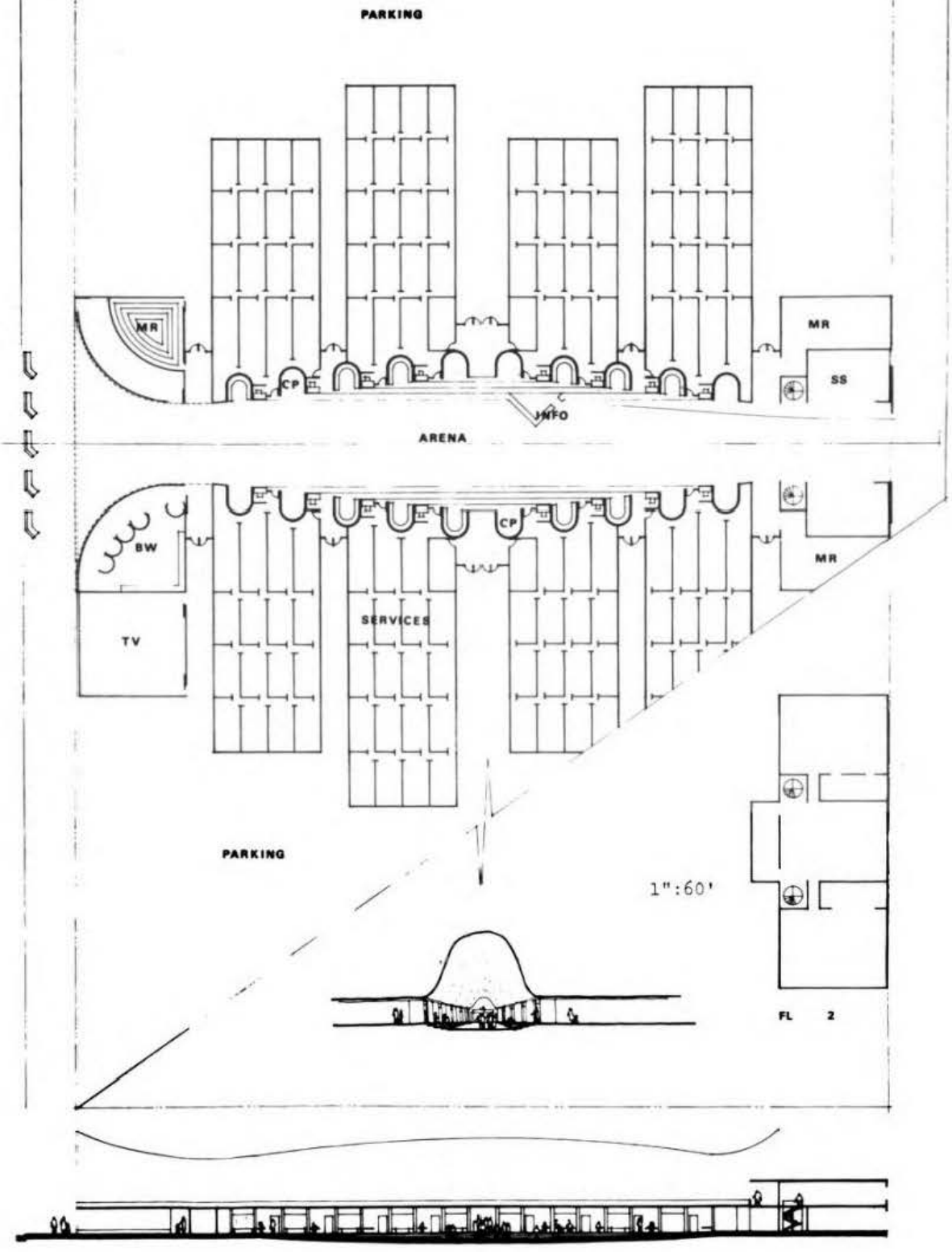


F

29. Outdoor Seats
34. Street Niches
38. Community Wall
48. Barbershop Politics

NEWARK

70,000PERSONS - LOW DENSITY OUTLYING AREA - LARGE SITE - TWO BLOCKS FROM NEAREST ARTERY - EXPANSION OVER YEARS A MAJOR PROBLEM - CARS IMPORTANT - 15 SERVICES - ONE CENTER IN SPITE OF SIZE



A Small target areas (Pattern 1) is violated. To serve 70,000 people, the building will need 63,000 square feet (Pattern 3); since cars are a problem here, parking must be provided requiring another 35,000 square feet (Pattern 8). Land and construction costs dictate a one story building. For a one story building, the site needs to be 98,000 square feet - the chosen site is ample.

The form of this building is governed largely by the extreme importance of expansion (Pattern 6), and by the very large number of services required, calling for extra frontage in the arena (13: Services off Arena).

These patterns combine to give a spine-like arena, with services branching off it. Small services (Pattern 5) and windows overlooking life (Pattern 18) split the services into a series of branches, with paths from the parking lot coming in between them (Pattern 8).

B Since parking is clearly on the outer part of the site, necklace of community projects (Pattern 16) suggests that the community projects grow round the edge of the site, in the direction shown by the arrows. As the community projects grow, the parking lot becomes internal and hidden. Access to parking lot is in the corners; the main entrance is placed centrally as shown (7).

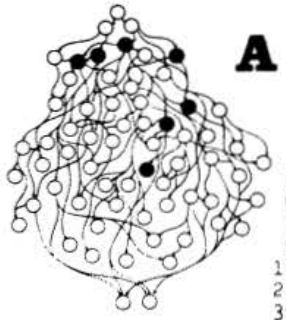
C In order to interrelate community projects and services (5), the community projects continue round the entrance (23) as shown, so they line the arena. Access to the services, is through the community projects, which alternate with services along the frontage.

D To make the inside visible, the mouth of the arena is very wide and high, and the arena itself is high, to make it thoroughly accessible. There are no doors. It is an internal street. The close proximity of community projects and services, makes Pattern 24 (Subcommittee Watchdogs) easy to do.

E Since waiting needs warmth, it cannot be out in the middle of the arena. Waiting must therefore be recessed in pockets (as defined by 20) - these can be formed naturally by the relation between community projects and services already indicated.

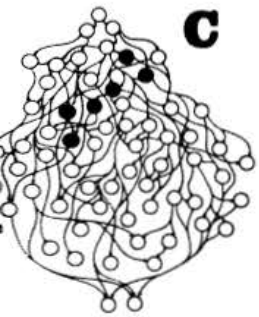
F According to Pattern 36 (Dish-Shaped Arena) the arena has a gentle slope towards the center giving at least a partial overview of services. If arena is deeper in the middle, steps from the parking lot will be longer - thus giving the arena elliptical form.

G The self-service area must be placed smack bang in the middle of the street-arena - this puts it in the middle of waiting (21), and dead center for people entering. The entrance (23) is the obvious place for the self-service menu. As a result, block workers and information get placed to either side.



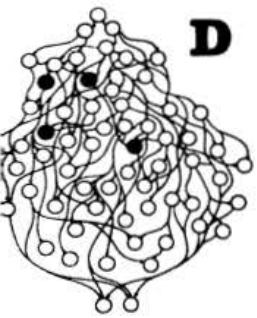
A

4. Community Territory
6. Expansion
7. Entrance Location
9. Arena Thoroughfare
18. Windows Overlooking Life
22. Pedestrian Density
39. Arena Diameter



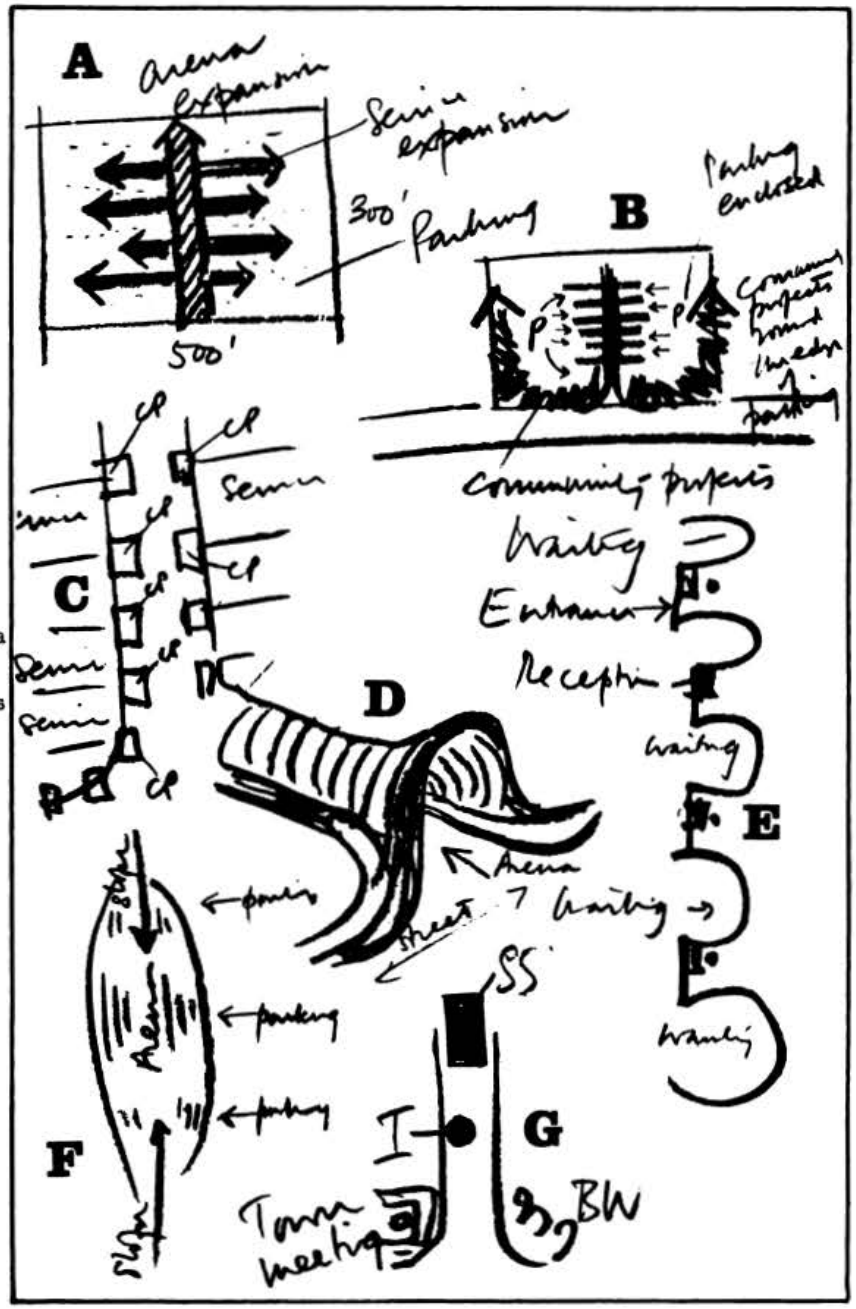
C

Small Services
Locked and Unlocked
All Services off Arena
Overview of Services
Community Projects
Subcommittee Watchdogs



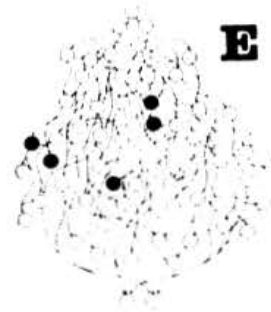
D

1. Open to Street
2. Arena Enclosure
3. Entrance Shape
4. Ceiling Heights



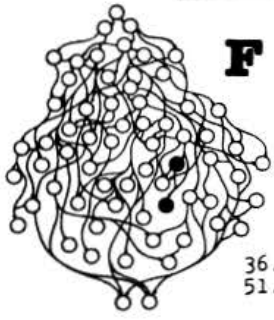
B

1. Expansion
5. Parking
10. Welcome



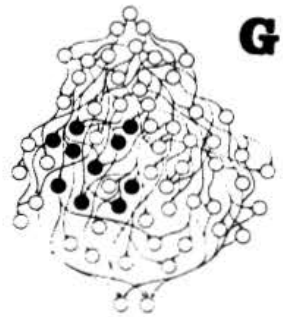
E

1. From Waiting
20. Activity Baskets
25. Outdoor Seats
34. Street Niches
41. Sleeping Pit



F

36. Dish-Shaped Arena
51. Stair Seats

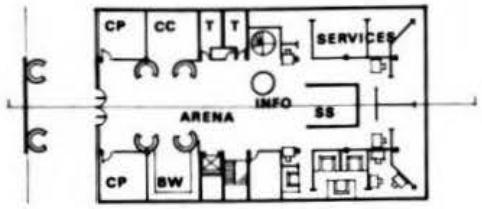


G

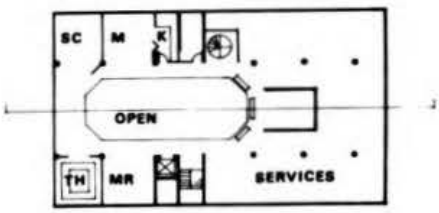
21. Self-Service
23. Entrance Shape
27. Self-Service Impression
28. The Intake Process
32. Child-Care Position
35. Information-Conversation
41. Town Meeting
43. Waiting Diversions
46. Radio/TV Station
48. Barbershop Politics

HARLEM 1

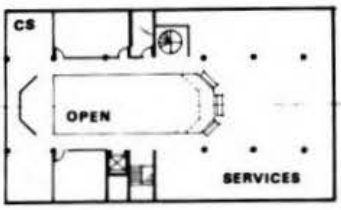
45,000 PERSONS - HIGH RISE - 12 SERVICES -
A "MOTHER" CENTER FOR TWO SMALL SATELLITES
(SEE HARLEM 2) - MULTI-LEVEL ARENA.



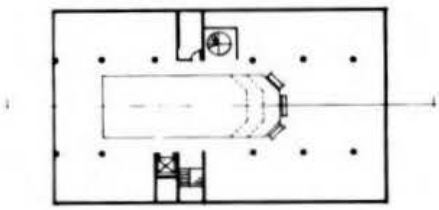
FL 1



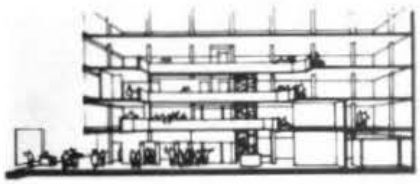
FL 2

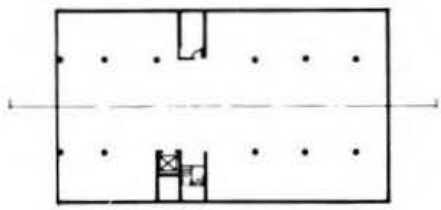


FL 3



FL 4





FL 5-8

1":60'

A High cost of land and high density indicate a high rise structure on a small lot. The site is two buildings away from a major intersection (2). Because of high land cost and lack of space, no parking can be provided.

B All the activities which make up the community territory zone (Pattern 4), are placed near the street and on the ground floor (Pattern 12).

C Ground floor space is thus scarce, and in order to meet Pattern 13 (Services off Arena), the arena is multi-level.

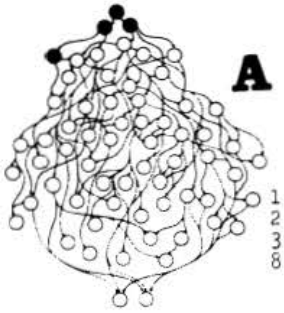
To make services visible from the entrance, and to meet the step back requirement (25), the services are raked back on the upper floors. Furthermore the entire height of the arena is glazed toward the street (10).

D Waiting (4) therefore occurs at various levels of the arena, with an overview onto the ground floor of the arena.

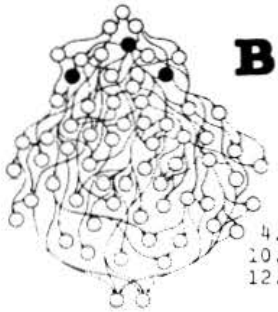
E When the ground floor is arranged (16: Community Projects, 21: Self-Service, 32: Child-Care Position, 28: Intake, 54: Accessible Bathrooms, 44: Elevator-Ramp), there is enough arena frontage for four services. Twelve services are to be accommodated; thus the arena must be three stories high.

F The shapes of the main entrance and the community project entrances are generated by the Patterns 23 (Entrance Shape) and 17 (Community Projects Two-Sided).

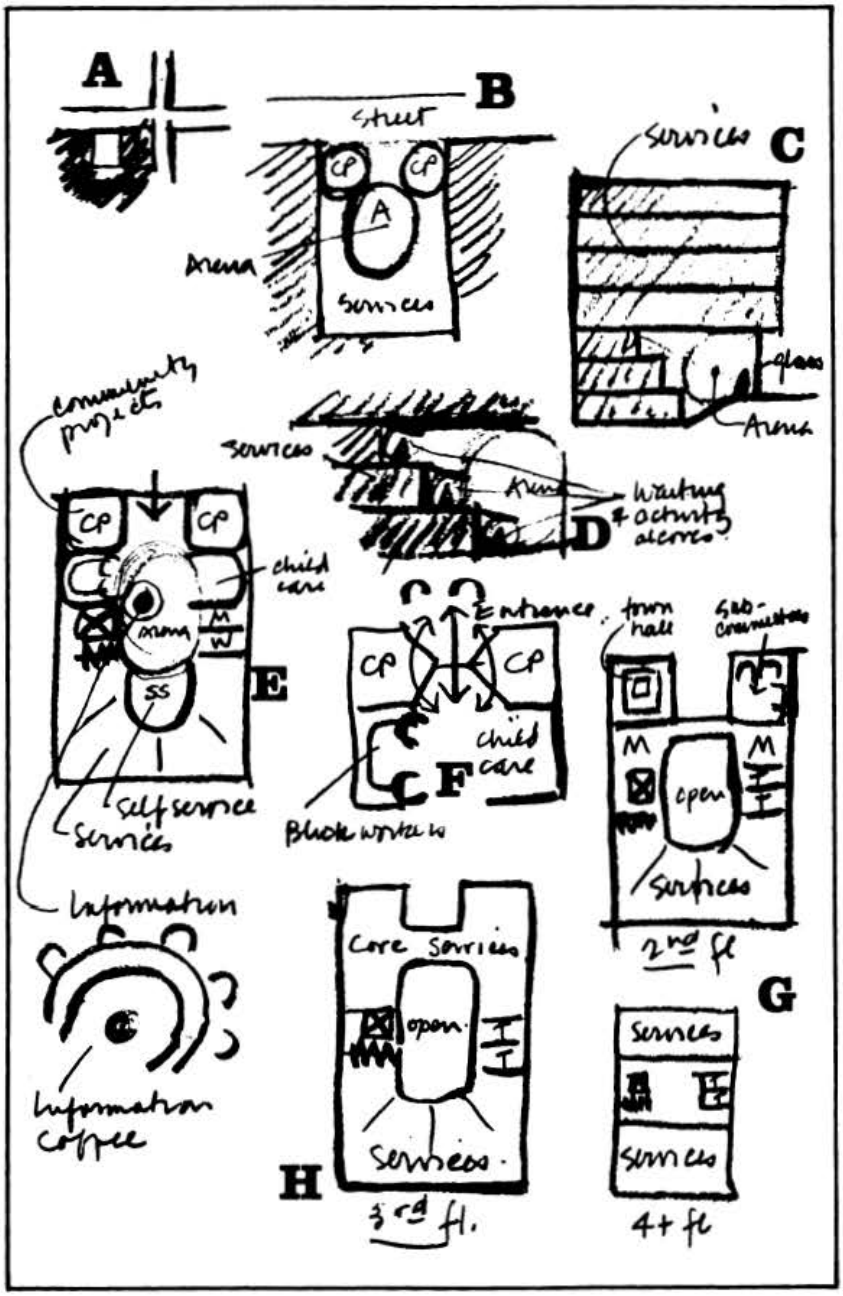
G Subcommittees and board member offices are on the second floor above the entrance, so people can see them as they leave the building (24: Subcommittee Watchdogs). Also town hall and meeting rooms are on the second floor (41: Town Hall, 47: Meeting Rooms Clustered) just within the "open late zone".



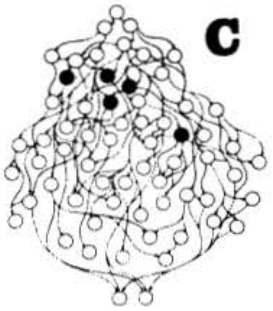
1. Small Target Areas
2. Location
3. Size Based on Population
8. Parking



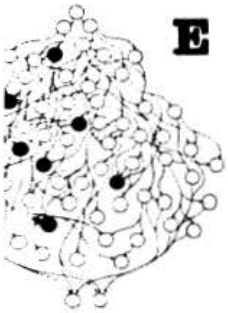
4. Community Territory
10. Open to Street
12. Locked and Unlocked



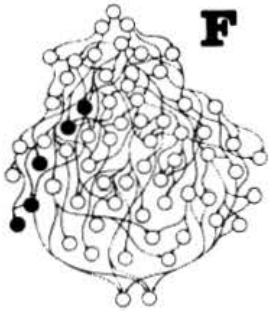
Free Waiting
Activity Pockets
Pedestrian Density
Ceiling Heights



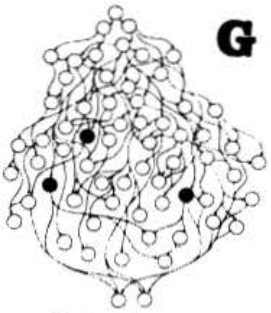
10. Open to Street
11. Arena Enclosure
13. All Services off Arena
15. Overview of Services
25. Building Stepped Back



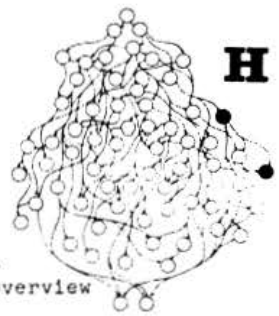
Entrance Location
Necklace
Self-Service
The Intake Process
Child-Care Position
Information
Elevator-Ramp
Accessible Bathrooms



17. Community Projects
23. Entrance Shape
34. Street Niches
45. Block Worker Layout
52. Window Signs



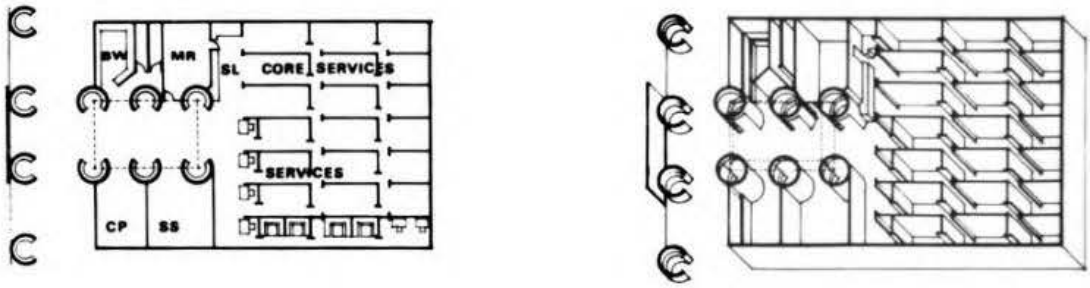
24. Subcommittee Watchdogs
41. Town Meeting
47. Meeting Rooms Clustered



19. Core Service
37. Director's Overview

HARLEM 2

SMALL SATELLITE CENTER OF HARLEM 1 - ON MAIN STREET - SIDEWALK THOROUGHFARE - 7,000 SQUARE FEET SERVING 8,000 PEOPLE.



1":60'

A Since this building is in the middle of the block, the most difficult problem is that posed by the arena thoroughfare. The arena is made to include the sidewalk, and thus becomes T-shaped. Size (3) tells us that at any given moment, there might be .0005N equals 4 interviews going on, and about the same number of people waiting. Pattern 22 then tells us that the arena should be on the order of 1200 square feet. The sidewalk must be open to through pedestrians. To shield it from the cold as much as possible, it can be roofed, and given a wall on the street side (10) - thus forming the community wall (38).

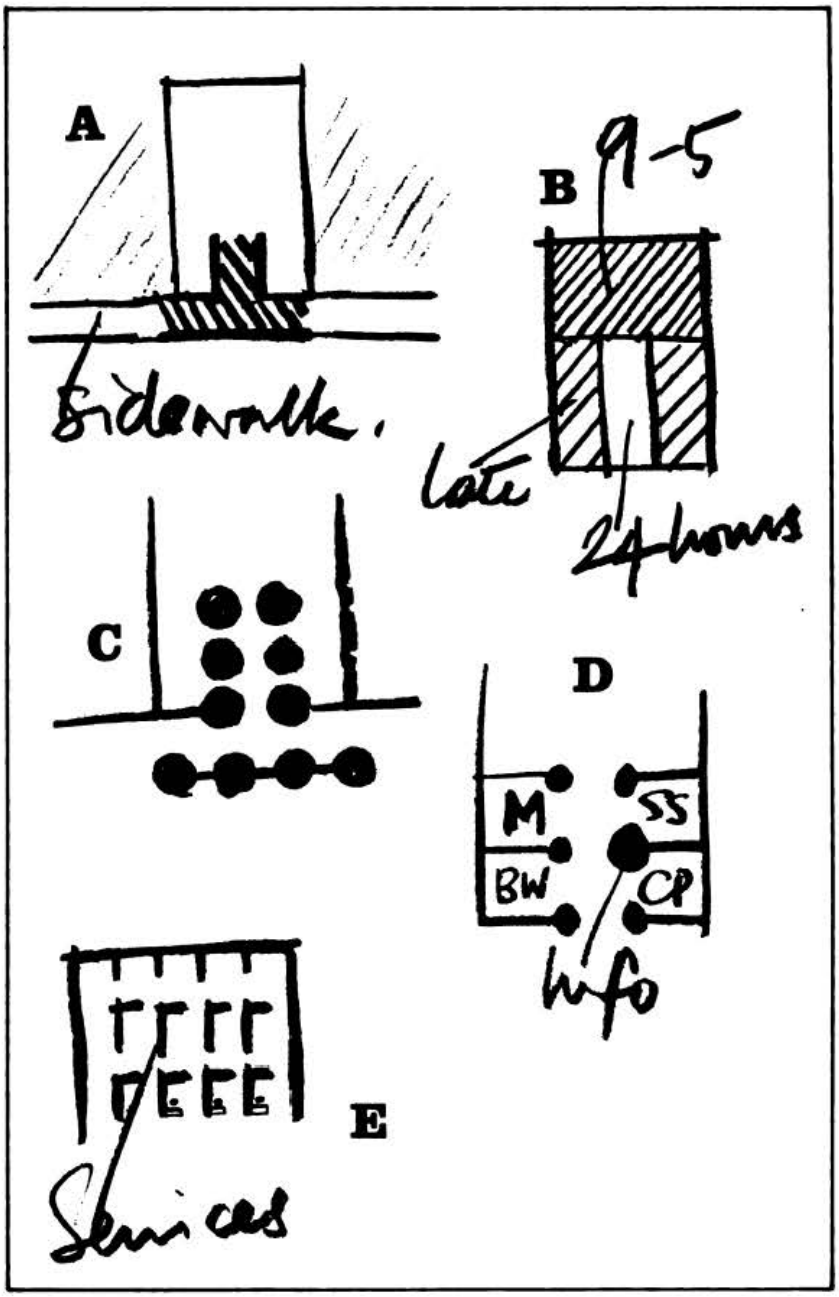
B In this building, there is no distinction between community projects and services. The services are placed towards the back, to allow child-care (57), block workers (45), self-service (21), and a meeting room (47) to be in the unlocked (late) zone (12), which has to be in the front half of the building.

C With this decision made, the problem now is to make the building community territory (4). A series of circular spaces are provided, which surround the arena and create places for people to sit down, even if they are only walking through. Some of these rooms might be used for non-service community projects.

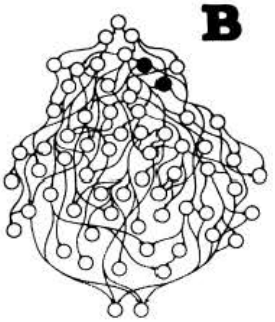
D We place the community organizers, meeting room, self-service and child-care behind these circular alcoves; and the information conversation station in one of the alcoves.

A

ommunity Territory
ntrance Location
rena Thoroughfare
rena Enclosure
edestrian Density

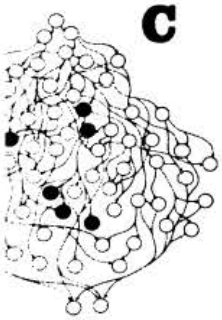


B



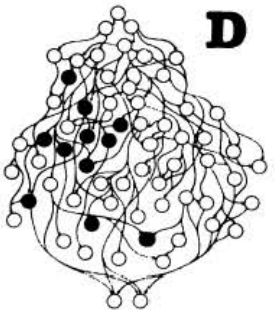
5. Small Services
12. Locked and Unlocked

C



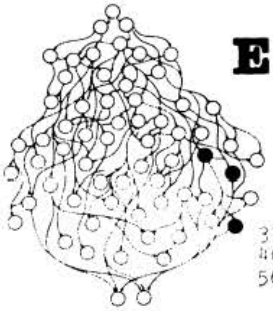
ree Waiting
ecklace of
ctivity Pockets
ntrance Shape
utdoor Seats
treet Niches
leeping OK
arbershop Politics
orm-Filling Tables

D



10. Open to Street
17. Community Projects
21. Self-Service
24. Subcommittee Watchdogs
27. Self-Service Prog
28. The Intake Process
32. Child-Care Position
35. Information
45. Block Worker Layout
54. Accessible Bathrooms
58. Seats Outside Meeting

E



33. Service Layout
40. Office Flexibility
56. Informal Reception

IV: THE LANGUAGE

We shall now discuss the nature of the pattern language, and the way in which it may be used to generate buildings. We wish to present it in such a way that anybody who wants to, can become a "speaker" of the language - that is, he can use it, in his own way, to design multi-service centers in the various special circumstances which he faces.

Let us establish one thing from the outset. The language, and the cascade, are two different things. The language contains far more structure than is captured in the cascade; the cascade is merely a partial representation of the language. However, we shall not discuss the additional structure in this report. Here, we confine ourselves, entirely, to those features of the language which are captured by the cascade.

Now we establish a second point. Although the cascade is a partial representation of the language, it is not intended that a person use this cascade as a flow chart during the actual design process. You cannot speak French by painstakingly following an open grammar book; in order to speak French, you must internalize the French grammer; when you have it in your head, and it has become automatic, then you can speak French.

Just so with the pattern language. You cannot design multi-service centers by painstakingly following the cascade with your finger; nor by following any other form of representation. In order to design with the language, you must internalize the structure of the language; once you have it in your head, and it has become automatic, then you can use it to design.

We must try to present the language in such a way, then, that the reader can internalize it, and make it his own. How is this to be done?

Let us imagine a large 3-dimensional block of transparent space, which represents the building and its surroundings. Now imagine that the patterns are represented by transparent colored clouds, floating within this block of space, interpenetrating and overlapping one another. The overall size and shape of each colored cloud, corresponds to the "domain of influence" of the pattern in question.

Thus, Pattern 4 influences the whole building: it therefore has a very large cloud. The clouds for small services (5), office flexibility (40) activity pockets (20), and necklace of community projects (16) and others, are floating within this larger cloud. Then again, arena diameter (39) is floating within activity pockets (20); service layout (35) is floating within office flexibility (40). Some of the clouds have specific shapes, and specific geometrical relationships to one another. Thus, necklace of community projects (16) is a long necklace like cloud curled around the perimeter of community territory (4); activity pockets (20) is inside the circle defined by this cloud, but does not penetrate it at all.

Some clouds overlap; that is, a part of one cloud is identified exactly with a part of another cloud. Thus self-service progression (27) and intake (28) both contain "entrance" and they both contain "block workers" - to this extent they overlap. Since the entrance is detailed by entrance shape (23), and the block workers area is detailed by block workers layout (45), the clouds for 23 and 45 both fall within the overlap of 27 and 28.

Some clouds appear many times. Thus service layout (35) appears many times within small services (5); and interview booths (50) appears many times within the service layout cloud (35), and a few times within block worker layout (45).

Although inclusion, and overlap, and some of the other geometrical relationships between clouds are clearly defined, we must be careful not to let our conception of these clouds become too rigid. It may be tempting to say that these clouds are no more than components of the building, nested inside one another. <u>But they are clouds, not components</u>. It is essential that we

visualize them as loose, cloudy, and only partly formed; since it is just this fact which lets our picture stand for all multi-service centers, not for any single one of them.

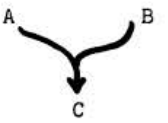
We now make the following assertion:

A person understands the pattern language for multi-service centers, when he can completely visualize this system of clouds in three dimensions.

The two dimensional cascade of patterns, shown here, is a way of explaining this three dimensional system of clouds. An arrow drawn between two patterns, like this:

means that the cloud for pattern B falls within the cloud for pattern A.

Slightly more complicated, an arrow with multiple tails, like this:

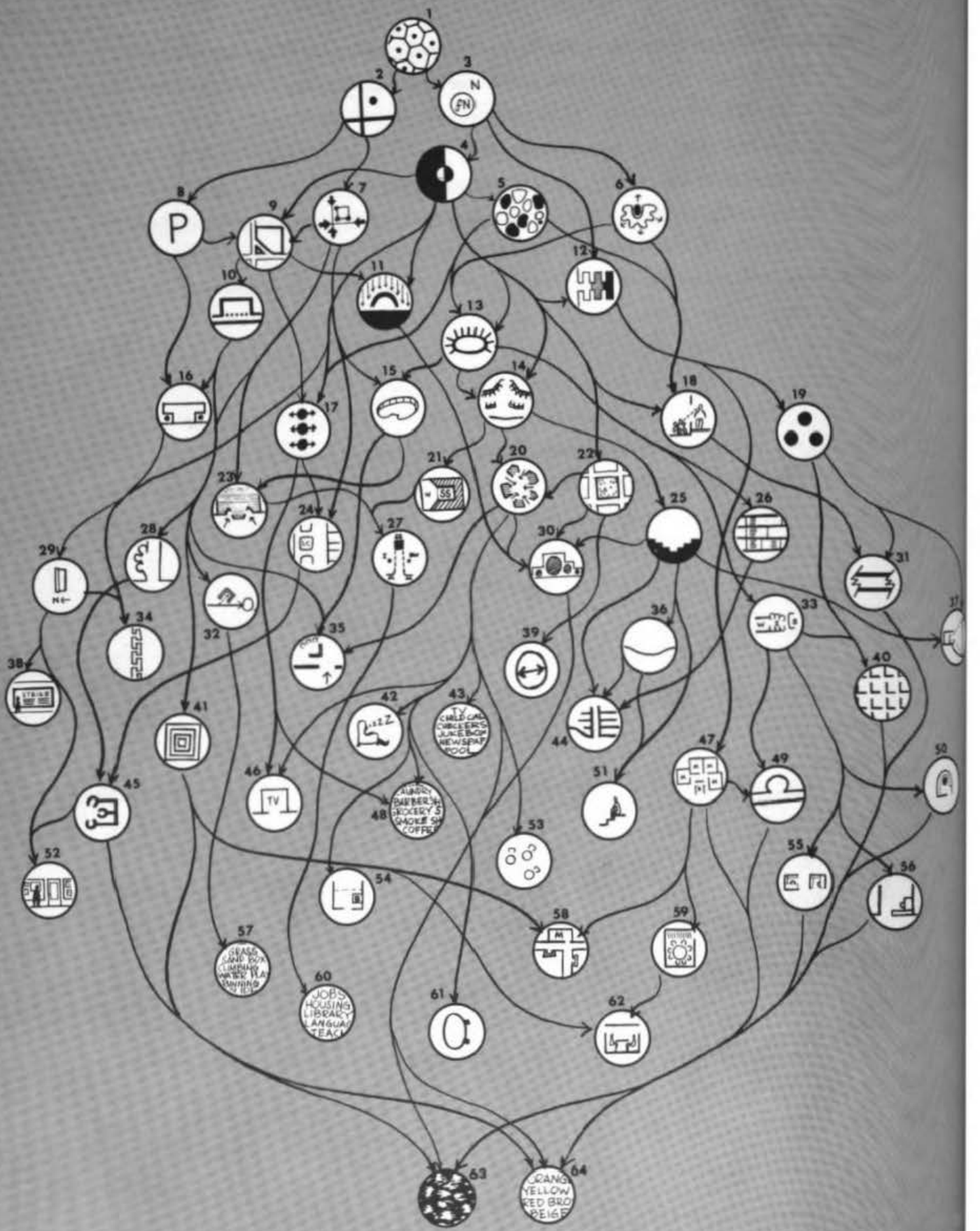


means that the cloud for pattern C falls inside the union of the clouds for patterns A and B.

If we followed these definitions strictly, we should have to draw a very large number of arrows - so many, that the drawing would become utterly obscure. We have therefore chosen to draw some of the arrows, which seem to be particularly helpful; but have left many others out. And, of course, the cascade is drawn in such a way as to make the arrangement of the arrows as simple as possible. Two properties of the cascade follow at once:

1. The higher a pattern is, in the cascade, the "larger" it is. Thus, Pattern 1, which refers to the city-wide organization of target areas, is the largest pattern, and heads the cascade.
2. If two patterns have parts in common, they will be near each other horizontally - since there will be arrows going from both of them, to other "smaller" patterns which detail this part.

Thus, it turns out that the cascade is an abstract two dimensional picture of the system of clouds described above. The vertical dimension in


1
2
3
N
4
5
6
7
8
P
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64

the cascade represents the size of the clouds; and the horizontal dimension represents the distance between clouds, and the extent of their overlap.

It is now clear that the cascade may be used to help us visualize the abstract structure of multi-service centers. Now we see how the cascade may be used to help us design multi-service centers. Every designer knows that the most important feature of any form is the covariation among relationships. As we make minor changes in one relationship, other relationships have to change along with it. If we make the arena slightly larger, then it needs to be slightly higher, and there are more services around it; but there is less room for back up services - which in turn have to be squeezed in behind the services, instead of opening directly off the arena as before.

To handle this kind of covariation, the designer strives constantly, to preserve a holistic, systemic, attitude towards the building; he is occupied with simultaneous interconnectedness. The pattern-language helps the designer to focus on more simultaneous interconnectedness than he could normally handle.

It does so by building on two simple rules of thumb:

1. He must work his way down the cascade, starting with the largest, most global, relationships, and moving gradually towards the details.
2. He must focus on clusters of patterns which are near one another in the cascade; since patterns which are near one another have parts in common, these clusters represent bundles of simultaneous relationships.

Both these rules of thumb are clearly visible in the examples in Chapter 3.

We finish by discussing the variety of buildings which the language can produce. The language is intended to generate an infinite variety of different buildings, each one properly adapted to the unique local characteristics of any given community. Since the patterns define generic relationships, based on shared, recurrent, problems, and are therefore, in a sense, standardized, we must ask how these standardized patterns can combine to give a unique local solution to an individual design problem.

First, not all the patterns are relevant to any given building. Thus community territory (4) is not relevant in the Bowery building - old people need comfort, they do not need to be organized politically. Any given multi-service center may use only forty or fifty of the sixty-four patterns. Since

there are many, many ways of choosing fifty patterns from sixty-four, this creates a rich variety of combinations.

Second, each pattern allows all kinds of voluntary variation, over and above the relationships which it specifies. Thus activity pockets (20) says the arena must be surrounded by pockets of activity, alternating with points of access. It says nothing about the size of these pockets, nor their exact number, nor the exact geometry of their relationship to the arena. All these features may vary freely from building to building.

Third, many patterns are explicitly defined to vary according to specified conditions in the context. Thus, the size of the multi-service center (3) varies according to the population of the target area. In cases like this, where the final specification of the patterns depends on the local context, each building gets different treatment from the pattern language.

In conclusion, we wish to emphasize the tentative character of the multi-service center pattern language. We have already said that the individual patterns are tentative, that they are based on much conjecture, and that they need criticism and improvement. Here we underscore what the reader, no doubt, has already gathered:

The theory of the language is itself incomplete. The difficulty is largely one of representation; although we know a great deal about the structure of the language, and the varieties of connection between patterns, it is extremely hard to find a simple way of communicating this structure - the cascade, used in this report, is helpful, but it falls far short of what we need.

APPENDIX: THE PATTERNS

SMALL TARGET AREAS.

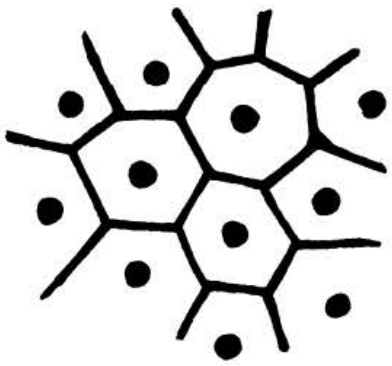
1

PATTERN

IF: An urban area is to be served by multi-service centers,

THEN: All the multi-service centers should be small and the target areas correspondingly small.

The target areas should contain 34,000 persons, ± 20% (i.e. 27,000 - 41,000). The corresponding floor areas, as given by Pattern 3, are 25,000 - 37,000 square feet, with a modal figure of 31,000.



PROBLEM

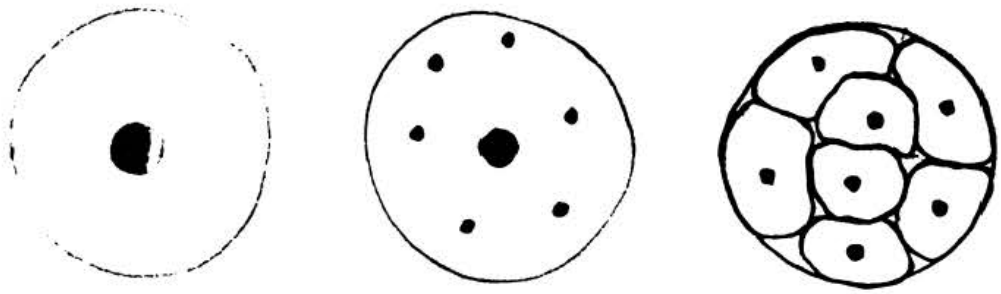
The task of determining the best size and distribution for multi-service centers is very difficult. There are strong reasons for large centers, and there are strong reasons for small centers.

To examine these reasons, we shall compare three broadly distinct patterns of size and distribution:

A. Large centers, serving large target areas.

B. Large centers, serving large target areas, supplemented by a series of smaller subcenters, equally spaced throughout the same target area.

C. Small centers, each serving small target areas.



A B C

The major needs which influence the size of centers are these:

1. The need for "multi-service". Clients' do not want to be referred from one agency in one part of town, to another agency in another part of town. Even more important, experience has shown that many clients problems, when correctly diagnosed, turn out to require some kind of service different from the service which the client sought (i.e., a client comes in asking for help in housing; after analysis, it turns out that he needs legal aid in fighting his landlord).

This is essential to the whole concept of multi-service centers. [See for instance: "Criteria for Review of Pilot Neighborhood Centers", Federal Agency Groups, April 1967; Alfred J. Kahn, et al., Neighborhood Information Centers, Columbia School of Social Work, 1966, pp. 92-95; U.S. Congress, Senate, 89th Congress, 2d Session, S.3443, A Bill to Offer Means for Coordingating State Health and Welfare Services at the Community Level by Providing Common Facilities and Encouraging their Administration as Elements of a Comprehensive Whole.]

2. The need to reach the hard-core poor. So far the service centers have a shocking record; although they have reached certain parts of the poor community, they have not succeeded in reaching the very poor. For example,

when the four Oakland centers had been in existence nearly two years (1966) only 7% of the poor (income below $4,000) in the four target areas had visited a center for any purpose. In the North and West Oakland target areas, only 4% and 3% of the poor had visited a center. ["Poverty and Poverty Programs in Oakland", Survey Research Center, University of California, Berkeley, 1967, pp. 122-126.]

These two needs are in conflict. The idea of multi-service requires that each service center have a full complement of services. Each center must therefore have a large enough target area to support various specialists, and must therefore be large.

On the other hand, the problem of reaching the poor requires that the centers be small, and closely spaced. It requires that they be small for two reasons.

First, we know that many poor people, and especially the hard-core poor, have very limited access to the city. We may describe this by saying that each person has an orbit - where orbit is defined as the parts of the city which a person visits at least once a week. A person's orbit usually consists of certain paths, connecting his home with a few special destinations. In the case of a person who is poor or old or unemployed, this orbit may be no more than four or five blocks in diameter.

In the Kirschner Report [Kirschner Associates, A Description and Evaluation of Neighborhood Centers, 530 Jefferson Street, N.E., Albuquerque, New Mexico, 1966, p. 30], we find:

> First, the very existence of the center as a visible, material feature of the local neighborhood environment makes for at least potential contact with the poor. This point should not be casually acknowledged as obvious but of minor importance. Numerous studies have revealed that the horizons of life for the poor are severely restricted. This can mean quite literally that for large numbers of the poor the outer limits for 90 percent or more of their daily activity lie just three or four blocks away. Effective contact with such people must be made within the neighborhood area.

In Robert Perlman and David Jones, Neighborhood Service Centers, U.S. Department of Health, Education and Welfare, Washington, D.C., 1967, p.31, we find:

> In summary, the centers universally reported a heavy and steady influx of people, to the point where their resources were taxed without any extensive recruiting of clients. A high proportion of people came from the area immediately adjacent to the centers on their own or through word of mouth

communication in the neighborhood. Relatively few came on referral from other community agencies. Access to the centers was easy and a friendly atmosphere prevailed. The nature of the response would tend to support some of the early assumptions that people would make use of a service that was based in their neighborhood and accessible to them.

[See also, Marc Fried and Peggy Gleicher, "Some Sources of Residential Satisfaction in an Urban Slum", Journal of the American Institute of Planners, 27, November 1961, pp. 305-315.]

At the extreme, orbits are less than a block or two. Discussing single room occupancy tenements in New York, Joan Shapiro writes:

The tenants tend to stay within a two-block radius of the building, many spending days on end, some even years, without going outside. Some do not know how to use the bus or subway system and feel incapable of traveling alone to distant parts of the City. A trip to a clinic might be a major, anxiety-provoking event. [Joan Shapiro, "The Slum Hotel", unpub. ms., Community Psychiatry Division, St. Luke's Hospital Center, New York City, April 1967.]

It is fair to say that such a person will not visit any dubious enterprise, like a multi-service center, unless it lies directly within his orbit.

Second, we know that people, and especially poor people, are not well served by rule-bound bureaucratic institutions. The functional issues are partly discussed in Pattern 5, where we show that the size of individual services should be small. There are also indications, that the overall size of the center as a whole can have a similar effect, and should be kept as small as possible.

Thus in Kirschner, op.cit., p. 26, we find:

One gets the distinct impression in reviewing these materials that success of the centers (as measured by expressions of client satisfaction) is rather more noticeable in the small communities and rural areas than elsewhere. These small community centers are almost purely service-oriented operations. Furthermore, their modest size and relatively simple organization make for a much less forbidding and more receptive atmosphere than one is likely to encounter in the large, bureaucratically organized centers in large cities.

Again, on p. 20:

Where the centers are tightly organized with clear, precise functions and status levels specified, the clientele tend to be unresponsive. These are people to whom formal, bureaucratic organization is intimidating. It appears to them to be cold, impersonal, detached, unsympathetic. The difficulty here is not entirely relieved by the intercession of neighborhood organizers, that is, neighborhood residents employed by the center to make contact with the clients. Although these local resident employees can do a lot to "humanize" the large, bureaucratically organized centers, they are not magicians. The fact is that the large centers are not very inviting, especially to the more serious poverty cases -- those types labeled earlier as 'problematic' and 'disreputable.' All of this suggests, of course,

that the points of articulation between the clientele and the poverty organization should be carefully considered and subtly contrived. This is particularly difficult to achieve in neighborhood centers with staffs of from fifty to two hundred employees.

On p. 31:

... The casual, informal atmosphere of small neighborhood centers can be disarming and hence appealing to poor people who are uncomfortable in formally organized settings. This is why large, bureaucratically organized centers tend to be self-defeating in terms of outreach. The forbidding appearance of such centers makes them little different from the central offices of traditional service agencies.

And on p. 57:

In addition to being more autonomous, it is appropriate to organize centers rather informally and to limit their size. The formal structures necessary in large centers inhibit the effective participation of the poor who are not experienced with such arrangements. Large boards, in particular, are a most inappropriate vehicle for the development of the capabilities of the poor and the expression of their views. Small boards, and smaller committees and subcommittees organized and operating on informal lines are needed. Parliamentary procedures are neither required nor useful in these situations.

Small centers, with staffs of from five to twenty persons, are also more hospitable to clientele who tend to associate large institutions with the traditional agencies. Small centers are easier to manage; they permit more personal development; and they are a useful entry level to the world of public affairs. Small centers also permit programmatic flexibility not otherwise possible. Centers with only a very few employees are not recommended. It has been noted that centers of this size have little outreach, little to offer participants and not enough solidarity to support the local people through difficult periods.

In Kahn, Grossman, et al, Neighborhood Information Centers, Columbia School of Social Work, New York, 1966, pp. 92-93, we find:

In an as yet unpublished and perhaps incomplete report for the White House, a high level task force made up of representatives of HEW, HUD, Labor and OEO, recommends a national network of 500 centers, each estimated as able to serve 30,000 to 50,000 persons. ...p. 93 ...While extensive services are listed, the report urges that the center should not grow so large as to become an impersonal bureaucracy.

We may sum up these remarks: As the scale of the operation grows, more and more of the agency's functions are translated into administrative jobs which can be performed by administrators. The result is that the community member is being handled mainly by clerks, rather than by professionals. The symbolic and realistic feeling of harassment resulting from a direct confrontation of the community member with an alienating and impersonal bureaucracy is detrimental to the success of the service center. Many individuals, especially from poverty areas, are not equipped to handle these impersonal confrontations and would rather not obtain any service than have to place themselves in such an uncomfortable situation.

Another type of bureaucratization which may occur in a large single structure facility is the promotion of rules and regulations, written and unwritten, which tend to develop in a large bureaucratic establishment. A large service center which employs a large number of public services will foster formal relationships and standardized conduct among employees, while a smaller one tends to create a more social, loose atmosphere for work and more direct identification with community standards of conduct and behavior. Therefore, there are reasons to believe that a larger center will have a more alienating image in terms of representing and functioning as an arm of the "establishment" than a small center.

Before trying to estimate the size implications of these facts, we list a number of minor factors which also have bearing on the size: (Numbers continue from 1 and 2 above.)

3. Scale economies. A large center may be able to support services which a smaller center cannot support at all.

4. Scale economies within a single service. If a service serves a large target area, and is therefore itself relatively large, the aggregation of personnel within the service may give rise to increased efficiency through the division of labor among these personnel. Simple tasks, such as typing, mailing, communications, and administrative chores, can be taken away from interviewers and professionals, thus giving them time to operate more intensively in their own special field.

5. The need for growth potential within the center. The center is intended to provide a setting in which the community can create new services easily. To create new services, the center clearly requires as large a base population as possible. For example, it might be easy for a large center to start a photographic club, but hard for a small center to do the same.

6. The need for political power. The center will be unable to initiate new programs, unless it has political power. A large center wields more political influence than a small center.

7. The need for simple comprehensive record keeping. This is another facet of the referral problem. If clients are referred from service to service, it is impossible to keep track of their records, with the result that they are asked the same stupid questions over and over again.

8. Equilibrium over time. The structure and function of community services does not remain constant over time. Changes in the demand structure for services introduce changes over time into the service system. It may be that in the long run smaller centers of a more modest scale will develop to compete with the larger center. If more than one center develops in the community there will be a tendency among these two centers to specialize in particular services. The construction of a large single structure may then prove to have been too large to begin with. A system designed with an eye to the uncertain future should not provide for too large a service center as a beginning venture. The possibility that the service system will reach a locational equilibrium with more than one facility places a limit on the size of the first facility, even if it is to be a single structure housing all service personnel, in view of the uncertainty of future developments.
9. The need to minimise capital costs, maintenance costs, and salary costs.

We now have 9 factors which influence the size and spatial distribution of multi-service centers, the first two major, and the other 7 relatively minor. Let us now compare the three possible patterns, A, B, C, on the basis of these factors. (9 does not appear in the table, since current data gives no indication about the relative costs of A, B, and C.

	Satisfies	Doesn't Satisfy
A	1 3 4 5 6 7	2 8
B	3 4 5 6 8	1 2 7
C	2 7 8	1 3 4 5 6

This table leaves it unclear which is the best solution. At first sight, A would seem to be the best. A solves more problems than either B or C. B is next best, and C is worst.

However, if we take into account our assumption that items 1 and 2 are of prime importance, and that items 3 - 9 are of less importance, then B, which solves neither 1 nor 2, is clearly unsatisfactory, while A and C might be equally good.

Since the difference between A and C is merely one of size, we may then ask: what size best resolves the conflict between the positive and negative aspects of size?

We incline towards the small centers on the following grounds. It is fairly easy to modify the organisation of a small center in such a way as to satisfy 1 (i.e. to take advantage of the idea of multi-service); on the other hand, it is extremely difficult to modify the organisation of a large center in such a way as to satisfy 2 (i.e. to be friendly, unbureaucratic, and so distributed that there is at least one in every "orbit").

Let us ask, then, what is the smallest multi-service center which can fully satisfy the demands of "multi-service":

As the basic measure of size for a multi-service center, we use the number of interviewers and client-contact personnel in the Center.

Many services may have no more than 1 interviewer. We know from Pattern 5 that no service should have more than 12 staff in all, hence 4 interviewers. We know, also that the services tend to be unequally distributed in size. There are usually many small services, and a few large ones (job-counselling, welfare).

Let us now try to set concrete limits on the size. We begin by assessing the range of problems that a multi-service center must be equipped to deal with.

From Perlman and Jones [op.cit. pp. 26 and 27]:

> The most extensive study of client problems has been done by ABCD and the Roxbury Center, where a client's statements of his difficulty was recorded as nearly as possible in his own words in order to ascertain the problem or problems to which he gave the highest priority. ABCD's report on the Roxbury Multi-Service Center notes that clients varied greatly in their problem statement, some mentioned two or three problems. If the primary problems are categorized, the percentage distribution is as follows:

Problems Cited by Clients at Roxbury Center

Problem Category	Percent
Employment	25
Family	21
Housing	16
Financial	14
Legal	12
Education	5
Health	4
Seeking Information	3
	100

We can discount Seeking Information for our purposes since it is not a "service". That leaves seven broad problem categories. We have found that these seven categories cover the spectrum of problems in poverty areas fairly well. Thus, in Hunts Point for instance, the problems were identified as:

Health
Housing
Education
Legal Services
Social Service (family, financial)
Manpower (employment)
Addiction (health)
Early Childhood (family, education)
Economic Development (employment, financial)

It stands to reason then, that every MSC should provide some service in each of these seven categories. If we assume that 1 interviewer is required for the categories of service which are least in demand - i.e. education and health - we may use the Roxbury percentages to estimate the numbers of interviewers required in the other categories. Thus:

Employment	4
Family	4
Housing	3
Financial	2
Legal	2
Education	1
Health	1
	17

This suggests that in order to provide "multi-service" an MSC must have about 17 interviewers, and a large enough target area to support them.

The arguments in Pattern 3 tell us that a population of N persons require a total of .0005N service interviewers. To support 17 interviewers, a center must therefore serve 34,000 people. Since it will be impossible to give every target area exactly 34,000 persons, we arbitrarily set upper and lower limits of $\pm$ 20%.

LOCATION.

PATTERN

IF: A service center is to be located in an urban community,

THEN: The site should be within two blocks of a major intersection, with at least twenty stores and major pedestrian activity.

PROBLEM

One of the key problems which multi-service centers face, is the problem of reaching people in the target area.

Many people do not know that multi-service centers exist, or what they do. Even when they do know, they do not always come in and use the services.

Thus, for instance, Kirschner Associates report that in ten target areas, with populations totalling 361,500 persons, 65,420 (18 percent) were involved in a recorded relationship with the center over a twelve month period. [Kirschner Associates, A Description and Evaluation of Neighborhood Centers, 530 Jefferson Street, N.E., Albuquerque, New Mexico, 1966, p. 24.]

More important, the same authors find: "There is good reason to believe that the outreach effort has so far made effective contact primarily with the 'respectable' poor...Contact with the 'problematic' and especially the 'disreputable' poor is not very conspicuous." [Ibid, p. 27.]

And again: "The success (of outreach) is very small in terms of the total number of persons to be reached,...and the extent to which the 'hard to reach' poor are being drawn to center programs." [Ibid. p. 42.]

The physical location and design of the multi-service center can aggravate the problem of outreach. If the center is hidden, no one gets to know about it by seeing it; and people are not reminded of its existence. If the center is out of the way, off the beaten track, then even people who have heard of the center, and have half made up their minds to go there, do not go, because it is too hard to get there, or too hard to find.

In positive terms: The location and design of the center can help outreach in two ways. If the center is conveniently placed it will help to encourage people who have already heard of the center, but who are still half hearted about going to use the services. If the center is prominently placed, it will remind people of its existence, and perhaps even advertise itself to people who haven't otherwise heard of it.

We first present evidence to show that the location of a center does have a gross effect on the number of people who come into the center.

There is strong evidence for the fact that location and openness do play a major part in reaching clients. The Berkeley Multi-service Center moved its location in the Fall of 1967. Before the move, the Center was located in a house, standing 100 feet back from the street - a quiet residential street, half a block from a non-commercial, vehicular artery.

After the move the Center was located on a major commercial artery, San Pablo, half a block from the main intersection of University and San Pablo, one of the two main commercial areas in the heart of the poor community.

In its first location, the entrance to the Center was set back from the street, about 100 feet, the door was not visible from the street, and the windows were so placed that you could not see into the building from the street.

In its second location, the Center occupied a one-time furniture showroom; the whole 90 foot long front of the building was glass, immediately adjacent to the sidewalk; the door was easily visible, in the center of the facade; there were few partitions inside, so that the inside of the Center was almost totally visible from the sidewalk.

Here are the figures for client business before and after the move:

	Number of people dropping in, per day	Number of people with appointments, per day
Before the move	1 - 2	15 - 20
Two months after the move	15 - 20	about 50
Six months after the move	about 40	about 50

During this period there were no major increases in outreach, and no major changes of program. It is therefore unlikely that the increases are due to any other factors besides the change in location.

Even though this evidence makes it clear that location has some influence on outreach, it is still possible to interpret the evidence in two different ways:

A. The location increases drop-in traffic because people who have never before heard of the Center, see it, and decide, on the spot, to go in and see what it is all about.

B. The location increases drop-in traffic because people who have heard of the Center have been toying with the idea of going in, but have never previously gotten around to it. Now, because it is well located, they happened to be nearby, and thought they would go and take a look to see what was happening there.

It is important to determine whether A or B is dominant. If A is dominant, one may specify that the Center be directly <u>on</u> a major artery - so that people who have never heard of it see it and walk in. If B is dominant, it is enough for us to specify that the Center be <u>near</u> a major intersection or artery - so that it gives people the opportunity to visit it, if they have been thinking about it already.

We now present evidence which strongly suggests that B is dominant.

First, clients coming to the West Oakland Center, were asked how they had first heard of the Center (i.e., by word of mouth, through advertising, through community organisers, etc.). Only 1.7% of the clients said that they first came to the Center because they just happened to walk by and see it. [Gene Bernardi, "Socio-demographic Description of Neighborhood Legal Services Clientele", City of Oakland, Department of Human Resources, Research Division, June 1967, Table 28.] In evaluating this evidence, it is important to note that the West Oakland Center is on an obscure side street, with almost no foot traffic. Nevertheless, the result does suggest that A is not dominant - few people go in <u>merely</u> because they happen to be passing by.

This conclusion is strengthened greatly by the following table, modified from Table 41 in the report: "Poverty and Poverty Programs in Oakland", Survey Research Center, University of California, Berkeley, 1967, p. 126.

The table shows what percent of poor residents in four different target areas in Oakland, had heard of the local multi-service center, knew where it was, and had visited it.

As the table shows, the four multi-service centers varied greatly in their ability to reach people. Notice that while the variation between centers is not very marked in the proportion of total <u>aware</u> of the service center's existence (from 17% to 31%), it is very marked indeed in the proportion of total <u>visiting</u> a service center (from 3% to 16%).

MEASURES OF KNOWLEDGE AND USE OF OAKLAND'S AREA SERVICE CENTERS, BY TARGET AREA: FAMILIES AND UNRELATED INDIVIDUALS BELOW DEPARTMENT OF HUMAN RESOURCES PROVERTY LEVEL IN OAKLAND'S TARGET AREAS ONLY, 1966

Measures of Knowledge and Use	Families and Unrealted Individuals Below DHR Poverty Level			
	Target Area of Residence			
	North	West	Fruitvale	East
Total = 100%	2,840	6,760	3,650	2,910
Awareness				
Proportion of total aware of ASC's . .	21%	17%	20%	31%
Knowledge of Location				
Proportion of total knowing location of ASC in "this part" of Oakland	15%	7%	19%	23%
Use				
Proportion of total visiting any ASC	4%	3%	11%	16%
Distance in blocks, to nearest commercial intersection with twenty stores	7	8 (about 10 stores 4 blocks away)	1-1/2	1-1/2

To some extent the variation may be accounted for by differences in age and education in the four target areas. However, it seems clear that the location of the four buildings also played a major role. In the last row of the table we have shown the distance from the nearest commercial center; (defined as an area with at least 20 stores, and having major pedestrian activity around it).

The centers within 1-1/2 blocks of a major intersection have far more people visiting them - yet neither of these centers is right at the intersection itself - indeed the East Oakland center is actually hidden on a side street.

We conclude that B is a better explanation than A (above), and specify merely that the MSC be <u>within two blocks</u> of a major intersection.

SIZE BASED ON POPULATION. 3

PATTERN

IF: A multi-service center serving a population of N persons,

THEN: The multi-service center contains .3N square feet of service space, .15N square feet of space for core services, and .45N square feet devoted to meeting rooms, circulation, self-service, arena, and other ancillary spaces. The total floor area of the multi-service center is .9N square feet. All figures to be taken ± 20%

PROBLEM

To establish these figures we take the following computational steps:

1. Compute the number of people who might visit the service center per day.
2. Compute the number of service interviewers who will be required to handle this load.
3. Compute the total backup staff required to help these interviewers.
4. Compute the total square feet of service space required to accommodate this staff.
5. Compute the square footage of ancillary facilities.

It must be made clear from the outset, that the computations are all approximate. We shall therefore round all numbers to the first significant decimal place.

1. To compute the percentage of N people visiting the center, we must first recognise that the number of people who visit the center depends on the number of people in the target area who know that the center exists, and that it offers services. In most existing target areas this number is far below N, in many cases as low as 0.2N.

This problem is well known. Many steps are being taken in the newest centers to overcome it by means of advertising, extended outreach programs, and more effective house to house contact work.

For the purpose of this pattern, we shall make the very strong assumption, that the outreach program has been completely successful, and that everyone in the target area knows about the center. We therefore assume that 100% of the population, i.e. N persons, know about the center, know where it is, and what it does.

We may now ask what percentage of these N people will come to visit the center.

In Oakland 28% of the households who knew about their local centers, visited them during a one year period. [In more detail, 24% of the households with incomes above $4000/year, and 33% of the households with incomes below $4000/year - but these differences are small compared with the level of accuracy in this discussion. "Poverty and Poverty Programs in Oakland", Survey Research Center, University of California, Berkeley, 1967, Table 38, p. 121.]

The mean household size in the four Oakland target areas is 2.75 [computed from figures given in "Profile of Target Areas for Economic Opportunity Program", Department of Human Resources, City of Oakland, Table 1*, 1964].

We may therefore estimate that .28/2.75 or about 10% of the people who know about the center, will visit it during a given year.

On the basis of our earlier assumption, we may therefore expect that the center will have 0.1N clients per year, or 0.008N clients/month.

2. We now try to estimate the number of interviewers required to handle this client load.

The following computation concerns only service interviewers who are working directly with clients, in the service programs. It does not include field workers, community organizers, administrators of the multi-service center, or any other members of the core service program. They will be discussed later as "ancillary facilities".

The following table [adapted from Robert Perlman and David Jones, "Neighborhood Service Centers", U.S. Department of Health, Education and Welfare, Washington, D.C., 1967, Appendix A, pp. 81-82] shows the numbers of service interview staff (excluding field workers and core service personnel) and the number of clients they served in a number of East Coast centers.

	MFY	CFO	CPI	Rox	JFK	Shawmut
Service interview staff	12	12	81	10	9	3
Client intake/month	111	359	301	194	173	35
Clients/interviewer/month	9.3	30.0	3.8	19.4	19.2	11.7

This table, averaged out, suggests that one service interviewer can take care of about 16 clients per month. (The figure must be interpreted with care.) It is important to recognise that some of the clients came back many times [Figures given by Perlman and Jones, for the Roxbury multi-service center, op.cit., p. 39, suggest that the mean number of visits, per client, is 4.8]. This means that each interviewer is in fact dealing with 75 client visits per month, an average of about 4 per day. The rest of his time is taken up by paper work, telephoning, and meetings undertaken on behalf of his clients.

The service center therefore needs one service interviewer for every 16 clients/month who come in for help. On the basis of the previous assumptions, we may say then, that a center serving a population of N, needs 1/16(0.008N) = 0.0005N service interviewers.

This estimate is supported by figures obtained from existing multi-service centers. The following table [adapted from Perlman and Jones, op.cit., Table 1, p. 11] shows the target area populations and the number of professionals serving them for a variety of centers.

	MFY	CFO	CIP	ABCD
Target population per center: N	54,000	12,000	13,000	26,000
Number of professional workers/center	24	7	17	14
Population/professional worker	2,250	1,760	776	1,880

The average of the four figures in the last row is 1670.

These centers have .006N professionals to serve populations of N. Since about half of these professionals are field workers, this gives a figure of about .003N in-house service interviewers. The figure is lower than ours; but it applies to a situation where outreach was far from perfect. If outreach were better, the figure would have to be raised. We must remember, also, that the number of professionals available influences the number of persons in the community who can get help; thus the CPI centers, with .013N professionals, have a higher relative rate of intake than the others [op.cit., p. 81].

3. Rough estimates suggest that each interviewer requires two backup staff to help him (aides, typist, researchers, receptionists, PBX operator, etc.). Thus in East Oakland legal aid, 1-1/2 full-time interviewers require 4 full-time backup; in West Oakland family counselling, 2-1/2 interviewers require 4 full-time backup; in West Oakland legal aid 2 interviewers require 4 full-time backup.

On this basis, we estimate that a center serving a target population of N persons, will require a total staff of 0.0015N persons.

(4.) Various sources suggest that general purpose office space, requires approximately 200 square feet per person (including all circulation and extras).

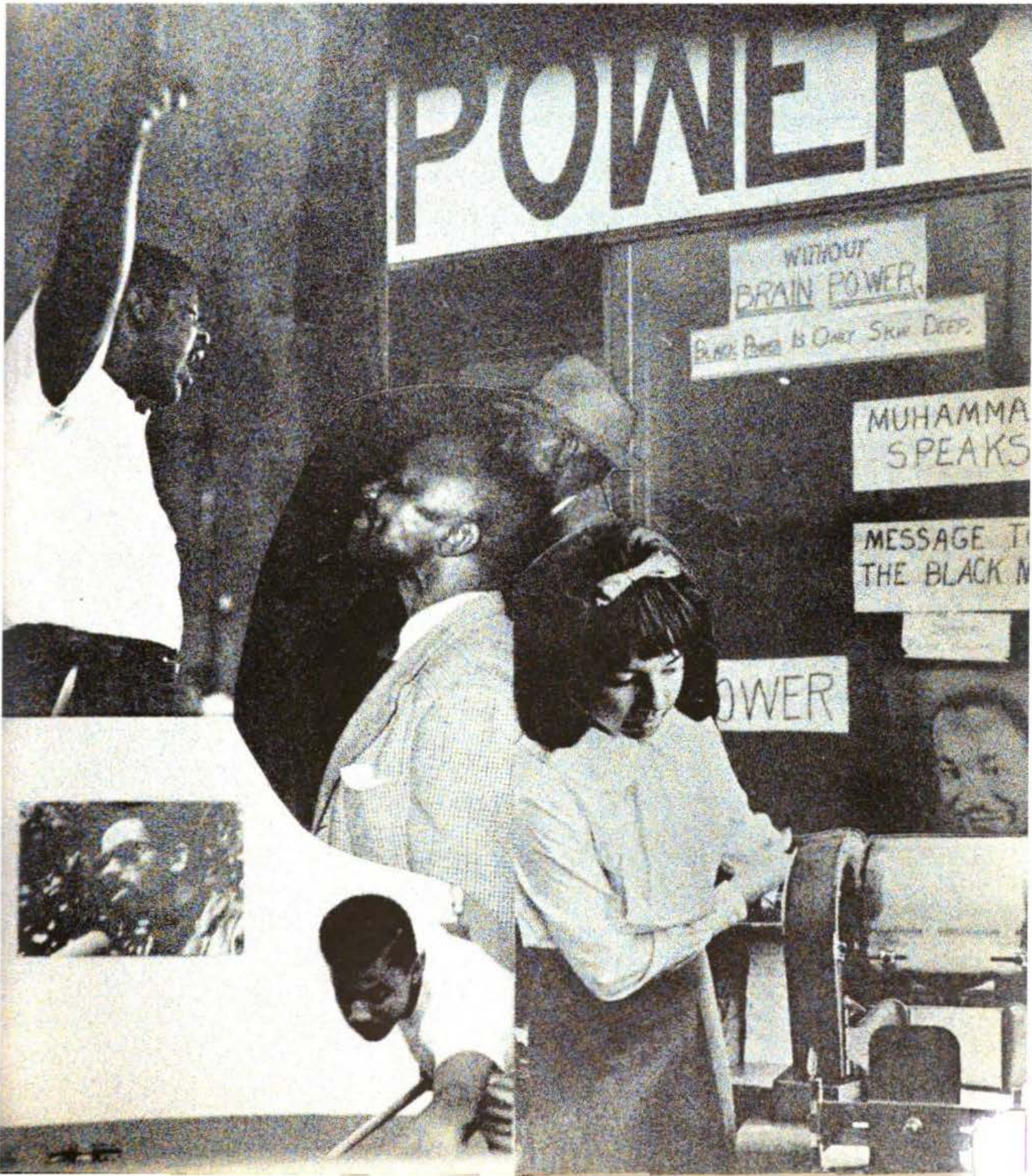
For instance, one source gives 150 square feet per person as net figure, with another 65% for all circulation and extras - making a total of 250 square feet per person. However, this figure applies to whole buildings - the percentage of circulation within a service unit would probably be rather less. [M. V. Facey and G. B. Smith, "Offices in a Regional Center", Research Paper No. Two, Location of Offices Bureau, 27 Chancery Lane, London, January 1968, p. 27.]

The best estimate for gross square footage per person seems to be 210 square feet, (though this is still liable to vary according to detailed conditions). [See Ottomar Gottschalk, Flexible Verwaltungsbauten, Verlag Schnelle, Quickborn bei Hamburg, 1963, pp. 33-35.]

On this basis we may estimate that the multi-service center will require a total of .3N square feet of service space.

5. Finally, we estimate the square footage required by core services and ancillary facilities. Core services includes all community organizers or block workers, all center administration, all subcommittees and evaluation personnel. Ancillary facilities includes all community project space, meeting rooms, classrooms, circulation, self-service, arena, child-care, storage, bathrooms.

Our experience shows that core services require about .15N square feet of space, and that major circulation, arena, meeting rooms, classrooms, child-care and other ancillary spaces require about .45N square feet. We cannot yet, support these figures with any detailed item by item account.

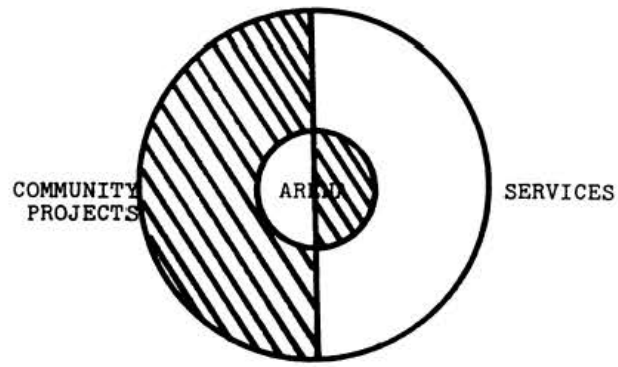

POWER
WITHOUT
BRAIN POWER,
MUHAMMA
SPEAKS
MESSAGE T
THE BLACK M
OWER

PATTERN

IF: Any multi-service center,

THEN:

1. The building should contain a major area which is established as community territory.
2. Community territory is distinct from the area devoted to services, but is interlocking with it.
3. Community territory contains two main components: An arena, and an area given over to community projects.



The arena is a public area, open to passers-by (whether or not they are visiting the service center), shaped in such a way as to encourage public discussions (both formal and informal), equipped with walls for day to day notices and posters, microphones, and loudspeakers.

Community project space is defined according to three functions:

a. It provides space where any community group can set up an office or workshop oriented towards a specific community problem. [Examples of such projects include a group fighting slumlords, a group concerned with school reform, a couple

of women who decide to run a child care center, typing classes, Synanon, local tenants seeking action on rat control, a police complaints committee, and so on.] Office equipment and duplicating machinery will be provided in this zone for each community project, as well as for the community at large. Community project spaces will be owned by the community and as free as possible from any administrative strings concerning keys, janitors, permission, etc. [See Pattern 17.]

b. Community projects also include offices for local political bodies, and for the subcommittees which have control over the service programs and to whom clients can make suggestions, and complain about services.

c. The community project zone also contains small shops, run by local businessmen, perhaps with the help of S.B.A. grants. Examples are coffee shops, barbershops, book stores, laundromats, smoke shops, flea markets. These shops should be rent controlled.

PROBLEM

The functional failures of existing multi-service centers.

This pattern is the most important of the 64 patterns. In it, we try to revise the overall concept of a multi-service center, in a way that is radical enough to overcome the massive failures of the present centers. For, in blunt terms, the multi-service program has, so far, been a massive failure. Less than 10% of the poor go to multi-service centers [see Pattern 2]. The centers do not help the hard-core rock-bottom poor at all.

To some extent the failure has been caused by inadequacies in the services themselves. The shape of the building will make little difference to that. But to a large extent, the failure has been caused by the nature of the existing centers, by the way they have been conceived: In spite of new names and new ideals, multi-service centers do not meet the real needs of the poor; they perpetuate the indignity of "welfare handouts".

The key to this failure is the syndrome of "powerlessness". It has been demonstrated again and again that the poor are effectively trapped in a subculture of poverty, that this trap is a self-perpetuating, viscious circle, and

that it precludes effective participation in society's major institutions: Because people are poor, they can get no jobs; because they have no jobs they have neither the money nor the opportunity to move about and use the city; because they cannot travel about the city, they are not well versed in the processes which govern the rest of society, and they are not able to participate in its processes and institutions; because they are effectively shut off from the rest of society, they have no power in the political arena; and they have few local leaders; because they have no power and no voice their needs and complaints and the details of their situation are not widely known to other members of society - certainly they are not represented. Because they have no voice, no power, no process by which they can communicate with centers of action, no jobs and no participation, they do not have the most central freedom that any free man has - the freedom to call their own shots and to determine their own future. And so poor people stay demoralised, and isolated. And above all they stay poor.

In short, poverty is a syndrome which hinges principally on various facets of powerlessness.

[The syndrome of poverty and powerlessness has been well documented in the past few years. See, for instance, Lewis' technical discussion of the "culture of poverty", Oscar Lewis, La Vida, New York: Random House, 1965, pp. xlii-liii; Michael Harrington, The Other America, Baltimore: Penguin Books, 1963; Moynihan's infamous report describing the self-perpetuating, identity-killing nature of the conditions under which poor people live, in Lee Rainwater and William L. Yancey, The Moynihan Report and the Politics of Controversy, MIT Press, 1967; Abram Kardiner and Lionel Ovesey, The Mark of Oppression - Explorations in the Personality of the American Negro, Cleveland: World Publishing Company, 1951.]

Like all syndromes, this syndrome can only be broken if it is attacked on all fronts simultaneously. During the last few years, this has been happening to a limited extent:

1. A little more money and much more attention is being given to the poor and their situation.
2. Many forceful and articulate leaders of the poor have gained national stature; many more have emerged as local spokesmen.
3. More and more, poor people are speaking and acting out against the system that is keeping them down (e.g. Poor People's Campaign, various ghetto rebellions).

4. More and more poor people are finding that intense organization and confrontation are the route to political power.

5. More and more, young people in poor communities are finding their voice: they are making concrete demands on society and they are finding strong identity in the process (e.g. Black Panthar Party, "Ten Demands", published in newspapers and leaflets around the San Francisco-Oakland Bay Area).

6. People with professional training and technical skills are beginning to put themselves at the disposal of the poor (e.g. Architect's Renewal Committee in Harlem, Medical Committee for Human Rights, Lawyer's Guild).

All these steps are, in some sense, reactions to the central feature of the poverty syndrome: powerlessness. Each one of them attacks some aspect of powerlessness. Where all of these things happen simultaneously, there is some real hope that the poverty syndrome can be broken down.

The multi-service program is intended by policy makers to play a part in breaking the poverty-powerlessness syndrome. Yet, in fact, as they are presently conceived, multi-service centers do little to counteract the manifestations of powerlessness, and indeed, they often help to perpetuate them.

For example:

1. It is known that the rules of the welfare system force people to tell lies, in order to get their money - thus demeaning them yet again. The message which comes through consistently is that the recipient is, in one sense or another, not what he should be.

[See for instance, the following verbatim quotes, from statements by Alameda County welfare recipients, taken from William L. Nicholls II, Esther S. Hochsheim, and Sheila Babbie, The Castlemont Survey, A Handbook of Survey Tables, Survey Research Center, University of California, Berkeley, 1966:

> Therefore, it was better for me not to work...I couldn't make it otherwise. They seem to do everything they can to discourage you from having any ambitions at all.
>
> I went to apply for help when I needed it years ago and they tried to push me off--discourage me. I don't like their attitude. They look down their nose at you.
>
> You have no private life. They want you to go out and look for a father for your children and when you do, they act like something is going on.
>
> It took a great deal of pride swallowing to go to them in the first place and they didn't try very hard to help and they're still not doing anything.
>
> They don't have any respect.

They fool around and by the time they investigate if you come down there real nice, you won't get anywhere. If you raise hell with them they'll give you what they think you should have.

When we were getting aid they had my husband and me picked up at my home at 2 a.m. and threw us into jail saying we had received money we weren't entitled to...We could have lied in the beginning and said the boys didn't help us at all and gotten full aid, but we tried to be honest and this is what they did to us.]

2. In the same vein, the whole idea of coming in to receive "service" perpetuates acceptance of the fact that people in the community are being told what to do, and are not able to call their own shots.

Thus, one can say of the target population that most have not yet been reached in a meaningful way at all; that some have become clients for services and perceive the centers as givers of services and themselves as recipients of services; and that a still smaller number regard themselves as active members of society with the right and ability to influence it. [Kirschner Associates, A Description and Evaluation of Neighborhood Centers, 530 Jefferson Street, N.E., Albuquerque, New Mexico, 1966.]

More concretely, Scott Briar and others ["Mexican-American Recipients Orientations Towards and Mode of Adaptation to the Welfare System", School of Social Welfare, University of California, Berkeley, dittoed, June 1966], found that only 33% of Negro recipients, 28% of Mexican-American, and 20% of the white recipients disagreed with the statement "Its best to do anything they tell you to do".

3. Although many multi-service programs have made special efforts to hire staff from the local community, it has been shown that within a few months these staff members lose their ability to perceive issues as the members of the community see them - their perceptions tend to become like the perceptions of other staff members. [Burt Waldrich, "Indigenous Worker as an Agent to Social Change", Ph.D. Thesis, Department of Social Welfare, University of California, Berkeley, 1968, measured the ability of community workers hired by services to retain their affinity with the clients, by asking community service aides to try to predict client responses to a series of questions. He found that "...length of time on the job is strongly and inversely related to ability to predict clients' responses (Table XI). Aides who have been in the program less than one month are considerably more accurate than the professionals".] Apparently there is something about the present organization of multi-service centers that tends to replace the clients point of view, by the staff members point of view, and that tends, therefore, to prevent the real needs of the poor from coming into sharp focus.

4. Even in those cases where service centers try to initiate community "action" this idea remains in the heads of the center staff - it does not communicate itself effectively to the members of the community. Thus Kirschner [op.cit., Appendix III], reports that only 20% of all service center clients recognise the community action function of the service center, while 80% of the agency staff recognise it.

5. Even when the center is run by an elected local board, the board members often feel that they are not really in control - they feel that the real decisions are being made by staff members.

> There seems to be a great deal of frustration associated with board membership, especially as compared with being a paid staff member...Council members feel that their views are not respected, that they have no control over the center and/or that they are inadequate to cope with the complexity of affairs confronting them. There are exceptions to this generalization, but they are rare. [Kirschner Associates, op.cit., p. 46.]

6. In at least one case on record, center administrators have refused to allow controversial community meetings to take place in the center - thus driving community organizers out, to hold their meetings somewhere else, and reinforcing the suspicion, already rife in the community, that the center represents government interests, and is not really theirs. [Personal communication from Gene Bernardi.]

7. The established services tend to "take over" the center - thus making it foreign territory to the community. It becomes a favor to be there, not a right, for community residents. Interviews with 200 multi-service center clients showed that in answer to the question: "Who runs the center and decides what is to be done?", only 8% said neighborhood people. The remaining 92% mentioned the center director, center staff, social workers, federal government and other assorted agency personnel. [Kirschner Associates, op.cit., Appendix V.]

Now the question arises, what should a multi-service center be like, if it is to be effective in fighting poverty and powerlessness.

The limited though real success of the various measures now being taken against powerlessness (i.e. black power tactics, community organization, welfare rights groups, rent strikes, the mission rebels, A.R.C.H., the emergence of many articulate leaders, etc.) makes it clear that a successful multi-service center, must, likewise, concentrate on the problem of giving power and self determination to the poor.

The poor can and will articulate their needs, if given the proper setting and means. It cannot be left only to the hiring of indigenous members of the community in programs and services (although that may help). Board members, if they are to represent the community, must be given the incentive and prestige which should be associated with their positions; everyone must feel that he has control over his own destiny; that he can call his own shots; that he has some power.

None of this is possible without community organization. If the multi-service center is meant to help the poor, it must help the process of community organization. This means, essentially, that the multi-service center should have two features: First, the whole center must be built around the process of community organization. Second, the center must be clearly recognisable as community territory.

In more detail:

1. The community cannot organize itself without professional organizers, acting in concert with the entire community; but the entire community should be encouraged to participate. It must be easy for any member of the community to organize the community around a given issue. This process requires a physical nerve center. The multi-service center should be the nerve center for ongoing community organization.

2. The service center cannot be a hub of community organization, unless it is clearly recognized by every member of the community, as community territory. Yet administrators of existing service centers have not succeeded in making places which belong to the community - they are still thought of as "foreign" territory. The service center must be clearly recognizable as community territory - a place where everyone has the right to be, day or night; a natural place to go at any time, especially in time of need.

When we translate the idea of community organization and community territory into physical terms, they yield two components: the arena, and the community projects zone.

1. The most immediate instrument people have for solving a community problem is to rally around the issue at hand and to get other people interested enough to support their point.

Thus the community needs a public forum, equipped with sound system, benches, walls to put up notices, etc., where people are free to gather; a place which belongs to the community where people would naturally come whenever they think something should be done about something. We call this public forum, the arena.

2. Once a group is ready to move, it takes typewriters, duplicating machines, telephones, etc., to carry through with a project and develop broad based community support - whether it involves setting up typing classes, volunteer child care service, writing to congress, or the board of education, demonstrating against the county health service, conducting an investigation into police brutality, building a third party, and so on.

[Gene Bernardi interviewed Benny Parrish, Community Organizer, formerly with the California Council of Community Development, and Art Schroeder, Neighborhood Organization Director of the East Oakland Service Center. Both men said that the most common and effective action-oriented projects were those using group appeal, negotiations and demonstrations. "...an office and equipment, telephones, mimeo machines and paper for leaflets, newsletters and press releases, are all essential for these projects...There was never a demonstration without a leaflet".]

The community needs a place where people can have access to storefronts, work space, meeting rooms, office equipment, etc. The place would inevitably become known as community territory and would serve as an inspiration for the exercise of community initiative. We call this space the community projects zone.

The community projects zone and the arena, together, form a base for community organization. And together they establish in a clear cut way, the fact that the service center is community territory. (See also patterns 16 and 17.)

A multi-service center with these physical features, and parallel social innovations, has some chance of breaking down the syndrome of poverty and powerlessness.

SMALL SERVICES WITHOUT RED TAPE.

PATTERN

IF: Any community center in a poor community offering services,

THEN: The services may include any of the following, and any others which the members of the community develop.

Individual rehabilitation for the chronically unemployed
Child welfare
Health advice
Fair employment practices
Psychiatric services
Neighborhood Youth Corps
Motor vehicles assistance
Legal Aid
Vision care
Welfare rights
Small businesses
Police complaints
Recreation programs
Cancer society aid
Nursery
Travelers aid
Farm labor office
Real estate counselling
Relocation agency
Emergency financial aid
Income tax service
Drug addiction
Job-skills training and placement
Family counselling
Welfare counselling
Parole assistance and liason
Apprenticeship and on the job-training program
Consumer advice
Veterans affairs
Building and housing
Group homes for teenage student mothers
Probation rights
Credit union
Head Start
Parent child center
Planned parenthood
Soup kitchen
Chest x-ray and vaccinations
Civil Service test preparation
Jitney service
Services for the aging.
Emergency housing
Tenant rights
Emergency housing repair

The services should have the following characteristics:

1. No one service should have more than 12 staff members, total.

2. Each service should be autonomous as far as possible: it should be housed in an identifiable, physically autonomous unit, with direct access to a public thoroughfare.

3. The services should be arranged in a loose informal way: so that there is no hard and fast distinction between services provided by agencies, and services which are initiated and run by members of the community.

PROBLEM

Bureaucracy is one of the greatest enemies of effective service programs in low-income communities. Its essential feature is "red tape", a middle-class invention. The poor do not know how to deal with red tape; they are overwhelmed by it, and antagonised by it.

We shall now present evidence to show that to overcome red tape, individual service programs within a community center must be small (12 persons maximum) and autonomous; and further, that they must be loosely arranged, so that new services, created by members of the community, can immediately be housed alongside existing programs.

First, we present excerpts from recent papers which describe some ways in which bureaucracy and red tape work against the needs of the poor.

From Gideon Sjoberg, Richard Brymer, and Buford Farris, "Bureaucracy and the Lower Class", Sociology and Social Research, 50, April, 1966, pp. 325-337:

Our investigations, particularly depth interviews of Mexican-American families in San Antonio, support the conclusion of other social scientists - that members of the lower class encounter serious difficulties when they attempt to understand or to cope with the normative order of bureaucratic systems.

First and foremost, the lower-class person simply lacks knowledge of the rules of the game. Middle-class persons generally learn how to manipulate bureaucratic rules to their advantage and even to acquire special "favors" by working through the "private" or "backstage" (as opposed to the "public") sector of the bureaucratic organization. Middle-class parents teach by example as they intervene with various officials - e.g., the police or school teachers - to protect the family's social position in the community. In contrast, the lower-class person stands in awe of bureaucratic regulations and frequently is unaware that he has a legal and moral claim to certain rights and privileges. More often, however, it is the lack of knowledge of the system's technicalities and backstage regions that is responsible for the lower-class person's inability to manipulate a bureaucratic system to his advantage.

We mentioned earlier that in its lower echelons the bureaucracy is highly specialized and governed by numerous regulations. Therefore, the lower-class person, whose knowledge of the system is least adequate, must interact with the very officials who are constrained by the most formal rules. This situation is complicated by the fact that the problems the lower-class person faces are difficult to treat in isolation. The lack of steady employment, of education, and of medical care, for example, interlock in complex ways. Yet, the lower-class client encounters officials who examine only one facet of his difficulties and who, in the ideal, treat all cases in a similar fashion. After one agency (or official) has dealt with the special problem assigned it, the client is then referred to another agency which will consider another facet of the situation. It follows that no official is able to view the lower-class client as a whole person, and thus he is unable to point up to the client how he might use his strengths to overcome his weaknesses.

The cleavage between modern bureaucracies and the lower-class is intensified by various cultural differences. Gans, for example, has found that lower-class persons typically relate to one another in a personal manner. Middle-class persons are better able to relate to others within an impersonal context. Thus, members of the lower-class face a greater gulf when they attempt to communicate with middle-class bureaucrats who ideally must administer rules according to impersonal, universalistic norms.

This divergence between the lower class and bureaucratic officialdom in patterns of social interaction simply makes it more difficult for a lower-class person to acquire knowledge of how the system operates. It is not surprising that under these circumstances members of the lower class often experience a sense of powerlessness or alienation. This alienation in turn reinforces and is reinforced by the sense of fatalism that is an integral part of "the culture of poverty". That is, those who live in the world of the lower class account for events in the social sphere in terms of spiritual forces, chance, luck, and the like; they have little or no sense of control over their own destiny."

Again, from the same source:

In welfare bureaucracies, social workers have struggled to escape from their traditional identification with the poor, either by redefining functions in order to service middle-class clients or by moving away from clients into administrative posts. Once again, evidence suggests that the lower class comes to be served by the least qualified personnel.

In addition to staffing arrangements, the bureaucracy's method of selecting clients reinforces the class system. At this point we must remember that bureaucracies are under constant pressure to define their goals so that the efficiency of their programs can be measured. But unlike corporate systems, client-centered bureaucracies experience grave difficulties in specifying their goals and evaluating their efficiency. The client-centered bureaucracies meet the demands placed upon them through the use of simplified operational definitions. Universities, for instance, do not judge their effectiveness in terms of producing "educated men" but according to the ratings of their students on national tests, the number of students who gain special awards, etc. These operational criteria reflect the orientation or view of persons in positions of authority within the bureaucracy and the broader society. In turn, these criteria become the basis for the selection of clients. Through this procedure, a bureaucratic organization can ensure its success, and it can more readily demonstrate to the power structure that the community or society is "getting something for its money". The bureaucracy's success is likely to lead to an increase in funds and expanded activities. It follows that client-centered bureaucracies often find it advantageous to avoid lower-class clients who are likely to handicap the organization in the attainment of its goals.

Several illustrations should clarify our argument. The Federal Job Corps program has been viewed as one means for alleviating the unemployment problem among youth, especially those in the lower class. This program has sought to train disadvantaged youths in various occupational skills. The success of the Job Corps is apparently to be evaluated according to the number of trainees who enter the industrial labor force. Consequently, the organization has sought to select those youths who have internalized some of the middle-class norms of upward mobility and who are likely to succeed in the occupational system. The Job Corps by-passes many persons who in theory stand in greatest need of assistance; for example, potential "troublemakers" - young men with criminal records - are not accepted as trainees. Because of this selection process the Job Corps leadership will likely be able to claim success and to convince Congressmen that the program should be continued and perhaps broadened.

A more subtle form of client selection can be found in child guidance clinics. Here clients are often accepted in terms of their "receptivity" to therapy. However, this criterion favors those persons who have been socialized into the middle-class value orientation held by, for example, the clinic staff and the social groups who pay the bill. The poor, especially the families from ethnic groups within the lower class, who according to the ideal norms of these agencies should receive the greatest amount of attention, are quietly shunted aside. Moreover, one study has indicated a positive association between the social status of the client and the social status of the professional worker handling the case in the agency.

Again, from Alvin W. Gouldner, "Red Tape as a Social Problem" in Robert Merton's Reader in Bureaucracy, Free Press, 1952, pp. 410-418: asking what characteristics of situations lead people to label them as "red tape":

Some clues may be provided by examining the kinds of organizations alleged to have the least red tape. Most respondents mention nonprofit, private associations as having least red tape. These include churches, Y's, the American Legion, the Salvation Army, fraternities, and trade unions. In part, these groups are distinguished by their relatively personalized and informal relationships. The tendency to choose "least red tape" groups on the basis of this criterion is epitomized by one person who nominated "the home".

A second criterion apparently used by respondents involves the effectiveness of the possible cash transaction. Thus one respondent, who declared that second-hand car dealers have little red tape, went on to say, "Here, money talks".

The organizations listed as having least red tape in general appear to have well-developed, personalized, and informal relations or effective cash relationships. Among privately owned businesses believed to have little red tape, small businesses were prominent. These, providing "service with a smile", also effectively fuse informal and pecuniary ties.

Apparently, many individuals in our society expect organizations to operate on one or both of these bases. But a distinctive feature of contemporary bureaucracies is their use of relationships which are neither personalized nor pecuniary, neither informal nor contractual. Instead, they are attuned to abstract and impersonal rules. These considerations suggest that those who pronounce red tape to be a "mix up" and "befuddlement" are utilizing a frame of reference which relies upon somewhat outmoded techniques for realizing goals. A frame of reference which depends upon market and informal arrangements as instrumentalities will be less and less effective as bureaucratic organization invades ever-widening spheres of the society.

These excerpts identify two main features of the red tape syndrome:

1. Lack of personal relationships, size of organisation, and frameworks of rigid rules.
2. Feelings of impotence on the part of the client.

These suggest that red tape can be overcome in two ways. First, it can be overcome by making each service program small and autonomous. A great deal of evidence shows that "red tape" occurs largely as a result of impersonal relationships in large institutions. When people can no longer communicate on a face to face basis, they need formal regulations - and in the lower echelons of the organization, these formal regulations are followed blindly, and narrowly.

Second, red tape can be overcome by changing the passive nature of the clients' relation to the service programs. There is considerable evidence to show that when clients have an active relationship with a social institutions, this institution then loses its power to intimidate them.

We conclude, therefore:

1. No service should have more than 12 persons (all staff, including clerks). We base this figure on the fact that 12 is the largest number that can sit down in a face to face discussion. It seems likely that even smaller staff size will work better still.

2. Each service should be autonomous - not subject to regulations from parent organisations outside the center. This should be emphasised by physical autonomy. In order to be physically autonomous, each service should have an area which is entirely under its own jurisdiction; including access to some public thoroughfare, and complete physical separation from other services.
3. The center must encourage the community to formulate new service programs on its own initiative. (The fact that this will require extensive community organisation is dealt with in Pattern 4.) To give these new services full support, they must be able to take their place, along with the existing services. This requires a very loose and flexible arrangement of service areas.

These conclusions are reinforced by the very great variety of possible service programs. As we see from the list given in the pattern statement (above) a center could theoretically provide as many as twenty or thirty different services. The more of these services the multi-service center can provide, (consistent with the constraints of Pattern 1) the better for its clients. All the services listed above have been proposed, or implemented, in some real multi-service center, somewhere in the country.

EXPANSION.

6

PATTERN

IF: Any multi-service center which satisfies Pattern 13, and which requires future expansion,

THEN: Vacant land for expansion must be provided in two positions:

1. There must be vacant land, next to the services, on the side of the services away from the arena, so that the services can expand outwards, away from the arena.
2. There must be vacant land next to the arena, on any one side, so that the arena can expand out into it.

PROBLEM

At the time a multi-service center is planned, no one knows for certain how many service programs will eventually be provided in the building. Even when the needs are known, the full amount of money for building and/or services is not always available ahead of time, and no one can be sure if the full amount ever will become available.

Yet, of course, the members of the community want the MSC to function properly - now and in the future. They want to make sure that when and if funds for additional services do become available to the community, they will still be housed under the same roof. Individual services may also need to expand as they get more funds or become more specialized.

This uncertainty about the number of services and the total square footage of services is an inevitable part of the planning process. MSC's should be designed so that two kinds of expansion can take place: (A) New services can be added on; (B) Existing services can expand. Yet the expansion must not destroy the overall relationships between parts of the building specified by Patterns 13 and 14, which say that all services must surround the waiting arena.

In order to maintain these relationships, we may state:

1. The expansion of individual services must be directed away from the arena. There must therefore be vacant land on the side of the services away from the arena.
2. The overall expansion required to make room for entirely new services, will increase the frontage of the arena, and therefore requires that the arena itself expand in one direction. There must therefore be vacant land next to the arena on one side.

For areas where land costs are relatively high, vertical expansion will be appropriate.

ENTRANCE LOCATIONS.

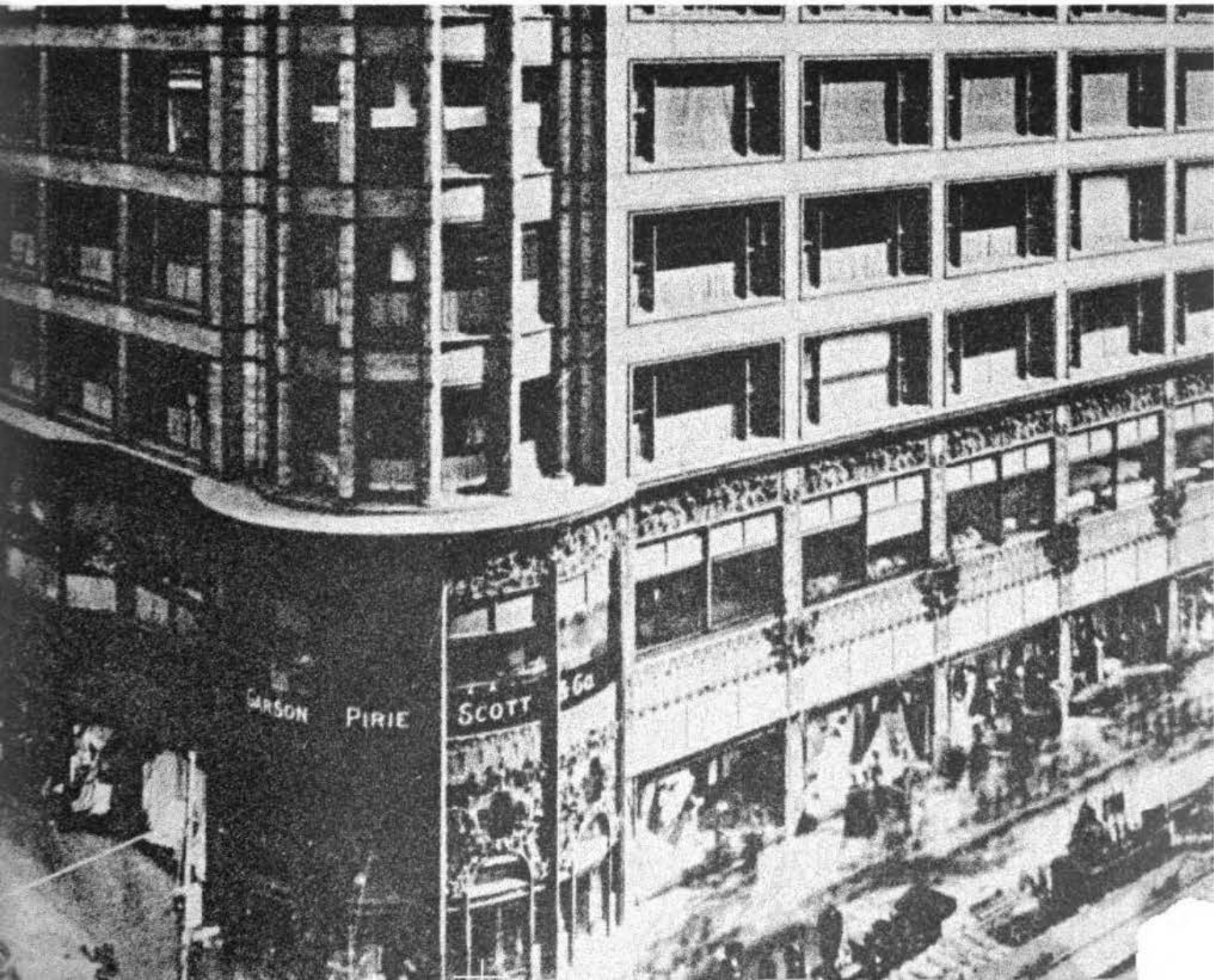
7

PATTERN

IF: Any public building,

THEN: Entrances must be placed in such a way as to satisfy the following two criteria:

1. From any possible approach to the building, an entrance must be visible as soon as the building itself becomes visible.
2. Regardless of the direction of approach, one should not have to walk along the building for more than about 50 feet before reaching an entrance.



PROBLEM

1. Consciously or unconsciously, a person walking works out his path some distance ahead, so as to take the shortest path. [See Tyrus Porter, A Study of Path Choosing Behavior, Thesis, University of California, Berkeley, 1964; in particular the study of the Kaiser Center Lobby.]

When he is approaching a building, this means he must be able to see the entrance early. If the entrance is not visible, when the building itself becomes visible, he cannot work out his path.

2. No one likes to back-track, or to retrace his steps. If he has to walk along the building for some distance, before being able to enter, the chances are high that he will have to turn back after entering, and walk back in the direction he came from.

Furthermore, if he has to walk along the building for some time before he can enter, it is not only annoying for him, but he may begin to wonder whether he is going the right way, and whether he hasn't perhaps missed the proper entrance.

It is hard to pin this down numerically. For the moment, we have fixed on 50 feet to designate an order of magnitude. No one is bothered by walking along blind walls less than 50 feet long; if they get much longer, it begins to be annoying.

PARKING.

8

P

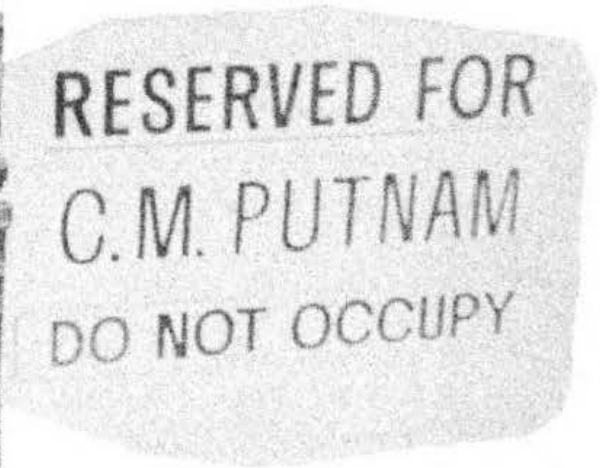
PATTERN

IF: Any multi-service center serving a population of N persons,

THEN: In no case should there be "staff only" parking.

Either: Parking for all clients, and all interview staff. This will require at least .5N square feet. In this case the parking places should be visible from the line of approach to the building. There should be direct access from the parking area to the arena.

Or: Parking for four or five emergency vehicles only, if possible behind the building, near a staff entrance.



PROBLEM

Staff-only parking is likely to create the sense that the building belongs to the staff; it is likely to contribute, substantially,to the feeling that the building does not belong to the community, and to weaken the effort made by Pattern 4, to establish the building as community territory.

If more than emergency parking is required, then, at the very least, space should be provided for all the interview staff (including community organizers), and for the maximum number of clients that might ever be in the building at once during the day.

From the argument in Pattern 3, we know that there will be about .0005N service interviewers.

We may guess that the maximum number of clients would be about the same as the number of interviewers - again about .0005N persons. Let us assume that under the heaviest load conditions, every visitor has a car. From the argument in Pattern 19 we know that there are about .0005N core service interviewers and organizers.

The building therefore requires .0015N parking spaces. Each parking space requires about 320 square feet (gross). [Geoffrey Baker and Bruno Funaro, Parking, New York: Reinhold, 1958, pp. 170-179.]

We conclude then, that if the building is to have more than emergency parking, it must have at least .5N square feet of parking space.

ARENA THOROUGHFARE.

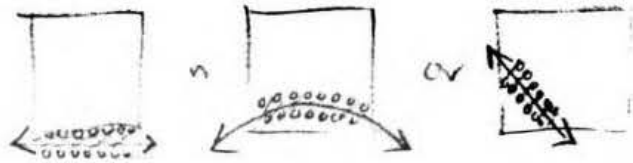
PATTERN

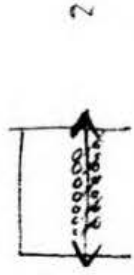
IF: There is any area in a public building where people are meant to feel free to loiter without a "reason" (like the arena in Pattern 1),

THEN:

1. There is a natural pedestrian path through the area (if possible a shortcut, with respect to the bounding sidewalk).
2. There are no steps along this path.
3. The path has the same surface material as the sidewalk it touches: the two are continuous.
4. Entrances along this path (where the path meets the bounding sidewalk) are open, if climate permits it, and at least 15 feet wide.

5. The path is lined with opportunities for involvement like displays, notices, etc.





PROBLEM

When a building is to have a fairly open public area within it, the following conflict develops:

1. People will not come in and use the public space if they feel they are committing themselves to use the building in some formal or regulated way.
2. People seek public spaces where they feel it is alright to be, without a specific reason.
3. If people are asked to move along or to state their reason for being in a place they will no longer use it freely.
4. Having to enter a public space through doors, corridors, changes of level, and so on, tends to keep away people who are not entering with a specific goal in mind. (See Pattern 94.)

The following long passage from Erving Goffman, Behavior in Public Places, New York, 1963, pp. 56-59, describes the problem perfectly.

...Being present in a public place without an orientation to apparent goals outside the situation is sometimes called lolling, when position is fixed, and loitering, when some movement is entailed. Either can be deemed sufficiently improper to merit legal action. On many of our city streets, especially at certain hours, the police will question anyone who appears to be doing nothing and ask him to 'move along'. (In London, a recent court ruling established that an individual has a right to walk on the street but no legal right merely to stand on it.) In Chicago, an individual in the uniform of a hobo can loll on 'the stem', but once off this preserve he is required to look as if he were intent on getting to some business destination. Similarly, some mental patients owe their commitment to the fact that the police found them wandering on the streets at off hours without any apparent destination or purpose in mind. An illustration of these street regulations is found in Samuel Beckett's description of the plight of his fictional crippled hero Molloy, who tries to manage his bicycle, his crutches, and his tiredness all at the same time:

'Thus we cleared these difficult straits, my bicycle and I, together. But a little further on I heard myself hailed. I raised my head and saw a policeman. Elliptically speaking, for it was only later, by way of induction, or deduction, I forget which, that I knew what it was. What are you doing there? he said. I'm used to that question, I understood it immediately. Resting, I said. Resting, he said. Resting, I said. Will you answer my question? he cried. So it always is when I'm reduced to confabulation, I honestly believe I have answered the question I am asked and in reality I do nothing of the kind. I won't reconstruct the conversation in all its meanderings. It ended in my understanding that my way of resting, my attitude when at rest, astride my bicycle, my arms on the handlebars, my head on my arms, was a violation of I don't know what, public order, public decency.

[Molloy is then taken to jail, questioned, and released.]

'What is certain is this, that I never rested in that way again, my feet obscenely resting on the earth, my arms on the handlebars and on my arms my head, rocking and abandoned. It is indeed a deplorable sight, a deplorable

example, for the people, who so need to be encouraged, in their bitter toil, and to have before their eyes manifestations of strength only, of courage and of joy, without which they might collapse, at the end of the day, and roll on the ground.'

Lolling and loitering are often, but not always, prohibited. In societies in which cafe life is institutionalized, much permitted lolling seems to exist. Even in our own society, some toleration is given to 'lolling groups', in which participants open themselves up to any passing momentary focus of attention and decline to maintain a running conversation unless disposed to do so. These clusters of persons passing the time of day may be found on slum corners, outside small-town stores and barber shops, on the streets during clement weather in some metropolitan wholesale clothing districts, and, paradoxically, on the courthouse lawns of some small towns.

The rule against 'having no purpose', or being disengaged, is evident in the exploitation of untaxing involvements to rationalize or mask desired lolling - a way of covering one's physical presence in a situation with a veneer of acceptable visible activity. Thus, when individuals want a 'break' in their work routine, they may remove themselves to a place where it is acceptable to smoke and there smoke in a pointed fashion. Certain minimal 'recreational' activities are also used as covers for disengagement, as in the case of 'fishing' off river banks where it is guaranteed that no fish will disturb one's reverie, or 'getting a tan' on the beach - activity that shields reverie or sleep, although, as with hoboes' lolling, a special uniform may have to be worn, which proclaims and institutionalizes this relative inactivity. As might be expected, when the context firmly provides a dominant involvement that is outside the situation, as when riding in a train or airplane, then gazing out the window, or reverie, or sleeping may be quite permissible. In short, the more the setting guarantees that the participant has not withdrawn from what he ought to be involved in, the more liberty it seems he will have to manifest what would otherwise be considered withdrawal in the situation.

Here it is useful to reintroduce a consideration of subordinate involvements such as reading newspapers and looking in shop windows. Because these involvements in our society represent legitimate momentary diversions from the legitimate object of going about one's business, they tend to be employed as covers when one's objective is not legitimate, as the arts of 'tailing' suspects have made famous. When Sam Spade affects to be examining a suit in a store window, his deeper purpose is not to try to suggest that he is interested in suits but that he has the same set of purposes as a person in a public street who diverts himself for a moment in going about his business to gaze in a window. Similarly, as an ex-bum tells us, when one's appearance and real purpose put one outside of the current behavior setting, then a pointedly correct subordinate involvement is of the kind that is associated with these subordinate involvements.

One idiosyncrasy that he [a friend] has discovered but cannot account for is the attitude of station policemen toward book readers. After seven-thirty in the evening, in order to read a book in Grand Central or Penn Station, a person either has to wear horn-rimmed glasses or look exceptionally prosperous. Anyone else is apt to come under surveillance. On the other hand, newspaper readers never seem to attract attention and even the seediest vagrant can sit in Grand Central all night without being molested if he continues to read a paper.

In order to provide an opportunity for "lolling", the area which is to be public must be a direct continuation of the public sidewalk. There must be no breaks in continuity which might suggest that this space is private, regulated territory. Hence, specifically: The surface must be continuous with the sidewalk, made of the same material. There must be no steps from

the public sidewalk into this space. If there is any change in level, it should be a continuous ramp. There must be no doors between the public sidewalk and the space. If climate control is essential, this should be provided by air-curtains. The openings must be large enough to create a "public" space - hence at least 15 feet across.

Further, if the space is a dead end, people may feel inhibited from exploring it, since a venture into it marks them clearly as "interested persons". To overcome this difficulty, the space must have at least two openings, one at each end, so that it can be used as a through passage by people who are curious. It will then give them the opportunity to explore it, while seeming to take a walk for some other purpose.

This effect will be enhanced if the area is so placed that it provides people with a natural shortcut. They will then go through it for pure convenience, and will need no excuse whatever for being there.

Finally, the path must be lined with excuses for involvement. (See the last two paragraphs of the Goffman passage.)

OPEN TO STREET.

10

PATTERN

IF: Any multi-service center,

THEN: The following activities, if they are part of the multi-service center program, should be visible from the street:

Information-conversation station (see Pattern 35).
Child care station (see Pattern 32).
Community projects (see Patterns 4 and 17).
Waiting arena and activity pockets (see Patterns 20 and 43).
Intake (see Pattern 28).
Town hall meeting room (see Pattern 41).
Self-service (see Pattern 21).

As far as possible, the outer face of the center is transparent at ground level, with glass and openings looking into the activities named.

PROBLEM

We have seen that a service center's openness to the street plays a role in enticing people to come in (Patterns 2 and 9).

Now we shall consider the exact nature of the openness requirement, namely, how is the building to be opened up, and what is to be visible through the openings.

1. We know that people will stop and window shop if the center is transparent to the street, and some will decide to come in. [The Berkeley MSC moved from a rennovated house, turned away from the street, to a rennovated

furniture showroom, completely transparent to the street. The number of drop-ins soared after the move - see Pattern 2. For the most part, the increase is due to the fact that the new location was a much busier pedestrian and vehicular artery. But the following data suggests that transparency also played a role in bringing prople in: Of the people walking past the Center about 66% turned and looked into the Center, and about 7% stopped - either to read a notice or to look into the interior more carefully.]

2. When people have the opportunity to watch a friendly activity involving people like themselves, they get the urge to participate. Accordingly, the sight of action is an incentive for action. The transparent face of the center should make visible those activities which are most likely to operate in this fashion.

Let us consider this principle as applied to one example, the town hall meeting room (Pattern 41).

The meetings held in the town hall are meant to be open to the community. This intention is lost if the general public does not know that the room exists, and that it is open to them. How do people get this sense?

1. If the room is buried in a building out of people's view, there is little chance that they will identify with it and use it.

2. When people are <u>told</u> that such a room exists, or if it is <u>announced</u> on a bulletin board womewhere, there is also little chance that they will begin to use it in a serious way.

3. The rooms that are used most by the public for open meetings, are the rooms that they have seen before, with their own two eyes. This is especially true when people have seen meetings in session in these rooms, and when the shape of the room itself suggests an open and democratic style. Our evidence for these points comes primarily from the way rooms are used for student political meetings on the University of California, Berkeley campus: If an open meeting is to be held in a room that nobody has ever seen or heard of, the attendance will almost certainly be small. But the same kind of meeting, held in a place that people have often passed by, a place that they know exists, will draw a much larger crowd. Other evidence comes from the use of meeting rooms in multi-service centers in Oakland, California: Again, if people do not have a clear image of what the room is like and where it is located, they will be

hesitant to use it; "public" meetings held in "invisible" rooms end up being attended almost entirely by "professionals". As positive evidence we refer to an East Oakland Center, where a meeting room was placed in a way roughly comparable to the pattern specification. This room became, in the words of a community organizer, "the heart of the Center". This same organizer said that an ideal community service center, would contain a large meeting room, open to all.

Similar arguments can be presented for the visibility of waiting arena, intake, self-service, and information-conversation. These arguments are presented, at least in part, under the patterns stated (4, 27, 28, 35).

Another instance of the transparency principle is the visible location of child care: If young mothers passing by see the care station they will be more ready to come to the center, realizing they don't need to hire a baby-sitter.

Perhaps the best general evidence for success of the "transparency principle", comes from the Peckham Health Center, in South London.

> ...the first floor of the building, is taken up by a cafeteria and by a large hall for social purposes, from both of which the central swimming bath is visible through a continuous encircling band of glass window. From the long hall, looking down through two large windows on to the ground floor, are seen at one end a gymnasium and at the other a theatre. The rest of the ground floor consists of infants' nurseries opening on to the ground; of an infants' and learners' swimming bath, which again can be seen through a window from the passage leading to the nurseries; of cloakrooms, changing rooms and spray chambers, etc., for the bath, gymnasium and theatre.
>
> ...The action in the building is not to result from any professional leadership, but to arise spontaneously out of the circumstances of the environment freely impinging upon the families as they use it. So all activities, sequestered though they may be because of their intrinsic nature - e.g. the swimming bath, the gymnasium - are at the same time visible to all who use the building for any purpose. The swimming bath illustrates admirably this dual necessity in construction. It is in an enclosed chamber, the temperature and humidity of which can be controlled, but through its encircling band of glass it is visible to the occupants of the rest of the building, and it is sight of action going forward in the water that will constitute the familiarising factor stirring the spectator to new achievement and drawing non-swimmers to the attempt. So with the nurseries, the dance floor, cafeteria, theatre, library, workrooms, etc., etc.; all are planned to come within the vision of families and observers alike as they use the building.

Finally, the authors (biologists who ran the Center) comment on the functional success of the idea:

> ...the task we set the architect was to provide a building so planned that the <u>sight</u> of action would be the incentive to action. Four years' experience in the Centre has established the postulate of the potency of vision and propinquity as an effective invitation to action for people of all ages. But it must be remembered that it is not the action of the skilled alone that is to

be seen in the Centre, but every degree of proficiency in all that is going on. This point is crucial to an understanding of how vision can work as a stimulus engendering action in the company gathering there. In ordinary life the spectator of any activity is apt to be presented only with the exhibition of the specialist; and this trend has been gathering impetus year by year with alarming progression. Audiences swell in their thousands to watch the expert game, but as the 'stars' grow in brilliance, the conviction of an ineptitude that makes trying not worth while, increasingly confirms the inactivity of the crowd. It is not then all forms of action that invite the attempt to action: it is the sight of action that is within the possible scope of the spectator that affords a temptation eventually irresistible to him. Short though the time of our experiment has been, this fact has been amply substantiated, as the growth of activities in the Centre demonstrates.

The reader will now appreciate that it is no accident in the design of the building that to reach the reception vestibule and consulting rooms for the initial enrolment, it is necessary to walk through the cafeteria with full view of the swimming bath and other activities. In so doing the enquiring family all unconsciously taste the full flavour of the buoyant life they are moving towards. Once joined, they are surrounded by many activities of which they may never have felt the attraction before - a very different situation from that of the man who joins a billiards club or a dramatic group urged by an already established interest in billiards or in acting.

In the Centre the design of the building makes it very difficult for any but the most inert to sit day after day at the cafeteria tables overlooking the swimming bath and not eventually succumb to the insidious urge themselves to join in the activities. We have aimed at making entry into every activity as easy as possible, not only for those already skilled, but for the shy beginner feeling the first dawning of interest, and who is so easily discouraged by the expert and the professional. That this should be so is the 'curator's' special concern. He or she must see that entry into the bath, for instance, and friendly instruction in swimming for the older members and others who need that assistance, is easily available and as unintimidating as possible. [Innes Pearse and Lucy Crocker, The Peckham Experiment, New Haven: Yale University Press, 1947, pp. 67-70 and 126-127.]

ARENA ENCLOSURE. 11

PATTERN

IF: There is a public arena for public meetings, rallies, and discussions,

THEN: The arena enclosure must be designed to resolve the following conflict.

1. If the arena is to be truly public and attract public crowds it must be completely open on a walk-in basis. There must be no doors between the outside world and the arena. Ideally the arena should be as open and public as a park.

2. But people will not stop in the arena for any length of time if it is too hot or too cold or too windy.

The arena must have just enough enclosure to maintain a comfortable climate, and no more.

1. In a wet or snowy climate it requires a roof.

2. It requires protection from high winds.

3. The effective temperature in the arena, on any given day, should be halfway between the indoor temperature and the current outdoor temperature. ["Effective temperature" being the empirical sensory index combining temperature, humidity and air-movement, as defined in ASHRAE, American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc., Handbook of Fundamentals, New York, 1967, pp. 117-118.]

Note: Strictly speaking the statement above is not a pattern, since it does not specify any geometrical relationships. It is a performance specification: It states the way in which a particular geometry ought to perform, but it does not give even a hint as to what that geometry ought to be like in order to achieve the desired performance. All the other patterns in this report are real patterns: they state a geometry. This one is not,only because we have so far been unable to invent a generic form to satisfy the performance specification.

PROBLEM

Only the temperature specification needs discussion.

The arena is a transition area between the street and services. People in the arena will usually be wearing street clothes; but the arena needs to be warmer than the street in winter, and cooler than the street in summer.

In cold weather, people choose their street clothes with the idea that they will be walking while they wear them. These clothes are not usually enough to keep them warm if they are sitting or standing still, as they will be in the arena.

The arena must therefore be protected; but it must not be heated to the same level as the interior spaces; since the arena is a public space, it would be hard for people to take off coats etc.; there would be no place to put them.

It may be possible to achieve an effective temperature half-way between indoors and outdoors by very simple means: i.e. by protecting the area from all wind, and using industrial space heaters. It may not be necessary to enclose the arena completely, even in very cold climates.

In very hot weather we face a different problem. Outdoor areas are too hot for comfort. People go in search of indoor areas which are cool. This means that the arena should be cooled somehow. Again, however, it seems inadvisable to cool the arena to the same level as interior spaces.

Arguments centered on the body's ability to adapt to temperature change, suggest that the summer inside-outside temperature difference for spaces of short time occupancy (like stores, theaters, and the arenas under discussion) should be less than for long-time occupancy spaces like offices. [See Bertram Kinsey and Howard Sharp, Environmental Technologies in Architecture, New York: Prentice Hall, 1963, p. 17.]

Again, it may be possible to achieve an effective temperature half-way between indoors and outdoors by very simple means: i.e. by shading, by allowing summer breezes to blow through the arena, and by minimal use of air-conditioning.

LOCKED AND UNLOCKED ZONES.

PATTERN

IF: A multi-service center,

THEN: The building is divided into three zones: Zone A is open from 9 a.m. to 5 p.m. - it contains clerical and administrative areas.

Zone B is open from 9 a.m. to about 11 p.m. - it contains interviewing areas, classrooms, meeting rooms, library, self-service, lounge and waiting activities.

Zone C is open all the time - it contains the arena and community projects.

Zone C is completely public, and opens directly off the sidewalk. Zones A and B are in back of Zone C, behind a single door or scissors gate which can be locked at 11 p.m. Zone A is in back of Zone B, behind another single door or scissors gate which can be locked at 5 p.m.

PROBLEM

This pattern comes directly from the following considerations:

1. Since much of the building will include materials of some value (like equipment and records), there will have to be ways of locking and securing them.

2. At the same time, different parts of the building must be left open at different parts of the night. The arena and community projects should be open twenty-four hours per day. Meeting rooms, evening interview areas, self-service, classrooms, and recreation activities must be open in the evening.

3. The idea of the public being confronted with locked doors goes completely against the nature of this kind of community facility. Locked doors connote secrecy, mistrust, unwelcome, etc. Some areas have to be locked off, but the fewer locked doors the better.

4. The number of people needed to guard the MSC at night should be kept to a minimum.

5. Those parts of the building which are open at night should be consolidated, so that they have as many people in them as possible during the evening hours. If the evening parts of the building are scattered, then evening visitors have to find their way through deserted areas of the building, which are liable to be very unpleasant.

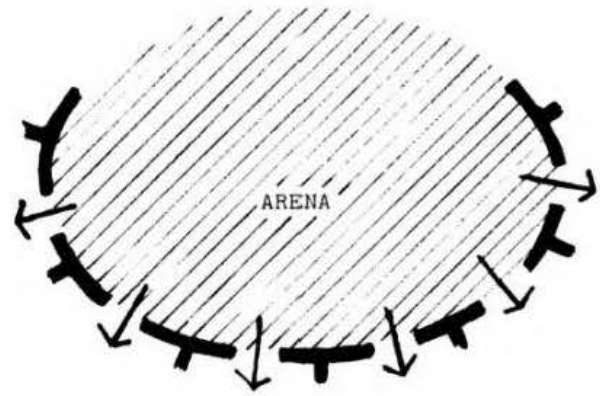
ALL SERVICES OFF ARENA.

PATTERN

IF: There is a multi-service center, or other public building which contains a number of services, working in parallel,

THEN:

1. There is a floor clearly identified as the main floor.
2. Each service has all its interview space on the main floor (even though back-up personnel may be working on other floors).
3. On the main floor, all the services open off a common waiting area (the arena, if Pattern 4 holds).
4. Each service has approximately equal frontage on this waiting arena, typically 10 - 20 feet.
5. If the service has a receptionist, she must be directly visible and accessible from the arena.



PROBLEM

This pattern is based on the following demands:

1. The members of the community regard the services themselves as the most important part of the multi-service center.
2. Since the services are intended to operate in parallel, no one service or group of services should dominate the others.
3. In order to make the referral process successful, it must be very easy to get from one service to another.
4. The success of multi-service requires that people be aware of all the services available in the building.
5. Multi-service is improved when the interviewers of one service are in touch with interviewers of other services.

In more detail:

1. Since the members of the community regard the services themselves as the most important part of the service center, they are not willing to let these services fade into the background.

This sentiment was clearly expressed by members of the Hunts Point community in subcommittee meetings during 1967-68.

The services must therefore occupy the main floor of the center.

2. The problem of one or several services dominating the others is based on the following observations:

   a. People using the public building tend to associate it with the kinds of activity they see as they enter.
   b. Those activities taking up the most space on the ground floor tend to catch a user's eye first.

Once one service dominates others, the principle of multi-service becomes diluted; the center appears more like a two-service or three-service center; weak services get shuffled to the back, and they become weaker.

These observations suggest that, each service should be on the main floor, and that no one service should have more public frontage than another.

3. The whole idea of multi-service hinges on the possibility of referrals from one service to another. This is simple in theory. In practice,

unfortunately, many clients who are referred from one service to another, do not follow through on the referral.

In a follow-up study of referrals in Oakland, Gene Bernardi found that 55.6% of all persons referred did not go to the place they were referred to. [Gene Bernardi, "Preliminary Evaluation of Neighborhood Organization Programs - Individual Contact and Referral Activity", Department of Human Resources, City of Oakland, California, 1967, Table V.]

This probably happens because it seems like too much trouble, the service is far away, hard to reach, the client does not want to go through the whole thing over again, etc. He will be much more likely to follow through on the referral if the service in question is right there, on the same floor; the person referring him can point directly at it, or take him over and introduce him.

Again, that part of the services where the interviewers work, should be on the main floor; and all the services should be visible from any one of the services.

4. The concept of multi-service must come to have meaning in the mind's eye of the client. There is some evidence to indicate that this rarely happens in service centers today. Gene Bernardi interviewed clients waiting for service at the East Oakland MSC. Four of the five persons interviewed could not name any services the Center offered other than the one they were waiting for; the fifth person was a "veteran" at the Center, having been there many times, and could name all the services offered. (The East Oakland Center offers four services, none of which are clearly marked and visible to the client as he enters and as he waits.)

The following quote from the Kirschner study, "A Description of Neighborhood Centers", Report for the O.E.O., December, 1966, p. 25, also illustrates this point:

> ...most of the clients know about the centers in a very limited fashion. That is to say, their acquaintance with the center is likely to be for the purpose of securing a particular service. Accordingly, they associate the center with that function and nothing else. Thus, the center is known as the place where you can get help with your late AFDC check, or where Mr. X can get a job for eighteen-year old Johnny, or where you can leave the pre-schoolers when you take on a job as a cleaning woman Thursday mornings, etc.

From the same report, page 45:

...Clients continue to perceive the center and the agencies as places where they may get help with a particular kind of problem. Indeed, most clients tend to identify the centers so closely with particular services that they often do not even know that it is a neighborhood service center as such.

To help solve this problem there should be a common waiting room for all services; all service programs should open off this waiting area; and the essential activities of information giving, reception, interviewing, etc., for each service, should be immediately visible. There is then some hope that clients will get to know the other services.

5. Inter-service communication between staff interviewers must be fluid. Clients get better help with their problems when staff members from various agencies are able to coordinate their efforts, and deal with the problem on a "case" basis. In theory this is obvious, but in practice it has been a very difficult relationship to achieve. Kirschner reports [op.cit., p. 34.]:

At present, with rare exceptions the most that can be said about the coordinating function of neighborhood centers is that they represent a single accessible point for the dissemination of information about services. This is a convenience for clients seeking information and represents a service whose values should not be underestimated. At the same time, however, it is a far cry from the idea that centers should function to coordinate services on 'a case' basis. This is a much more difficult task requiring a high order of professional and technical skills. Where efforts have been made to set up integrated programs the impetus seems to have come from planning at the CAA level.

And on page 44:

The integrated efforts that appear to have been most successful have focused on 'case' coordination and have involved a very considerable devotion of time and effort to provide across-the-board but intensive help for families. Integrated efforts of large organizations dealing with particular neighborhoods, types of clientele or problems have been rare and not often successful.

We also have evidence from Robert Perlman and David Jones [Neighborhood Service Centers", HEW, Washington, D. C., 1967, p. 34]:

Despite the strains, more inter-service activity occurred than would be indicated by the fact that 70% of the cases in the sample received service from only one unit in the center. Actually, in connection with the 23 multi-service cases in the sample, there were four Review Conferences and 21 inter-service consultations. Informal contacts among workers go on all the time but do not show up in forms and statistics. The lawyer pointed out, for example, that the usefulness of the other services for her clients is enhanced by the possibilities for communication within the staff and that this contrasted with the more typical legal aid office which must refer to other agencies all non-legal problems.

This last remark makes it clear that inter-service coordination does exist; but also makes it clear how important it is to enhance it wherever possible.

Good integration of services thus seems to depend to some extent on open and informal lines of communication among staff interviewers throughout the center.

It is hard to know why this kind of communication has been so difficult to achieve in practice, and how physical organisation might help. It seems clear that convenient places for informal contact among staff members would help (see Pattern 49, Staff Lounge). But here we are looking more for sources of on-the-job coordination. Intuition tells us that a staff member is most likely to be in touch with other staff members who work near him, and on the same floor.

Thus all interviewers should be located on one floor off a common space (The earlier part of this pattern says this floor should be the ground floor and that the common space is the waiting area.) If any service needs more space, than it can have on the main floor, the clerical staff should move onto another floor, with some convenient vertical connection between them and their ground floor counterpart. (See Pattern 26.)

This pattern enchances inter-service communication among interviewers, at the expense of intra-service communication between interviewers and clerical staff. It is true that this is an unusual step, and that the individual services may try to resist it. In defense, we must point out that the communication between services is, from the point of view of multi-service, more important functionally than the communication between interviewers and clerical staff within a given service.

FREE WAITING.

PATTERN

IF: Any large institution where clients have to wait for appointments and interviews. This includes hospitals, medical centers, multi-purpose centers, offices of various types, government agencies, the faculty areas of university departments, etc.,

THEN:

Designate each of the rooms where an interview is to take place, as an "office".

We require the following:

1. Immediately outside every office, within sight of its door, there are seats. The exact number of seats depends on the average number of people waiting at any one time, plus a safety factor. The safety factor must reflect the idiosyncrasies of waiting frustration for the particular institution.
2. Within view of these seats, there are exhibits of material relevant to the subjects which are most usually discussed in the office interviews.
3. The exhibit and seating areas are directly connected to a larger open area called the waiting activities area. The activities in this area wi... vary from institution to institution. In a multi-service center they might

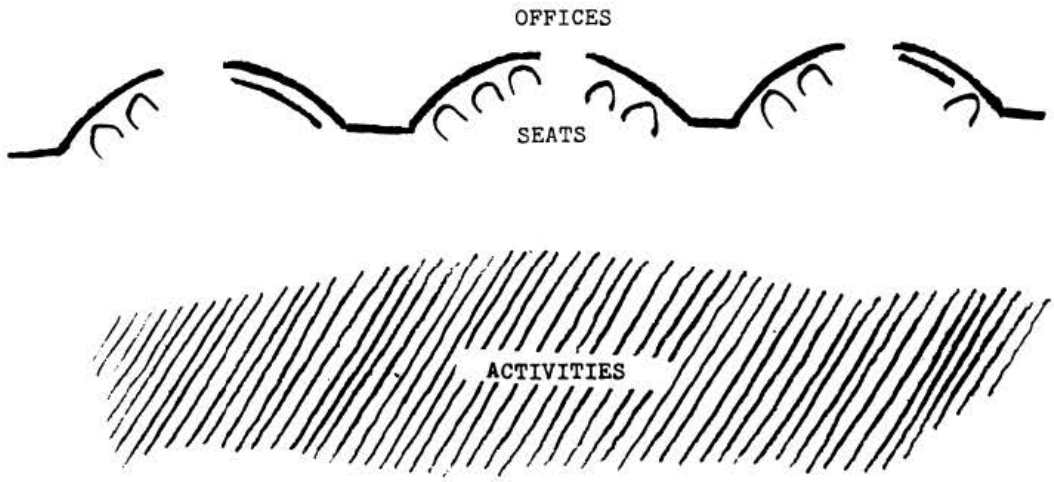
FREE WAITING.

14

PATTERN

IF: Any large institution where clients have to wait for appointments and interviews. This includes hospitals, medical centers, multi-purpose centers, offices of various types, government agencies, the faculty areas of university departments, etc.,

THEN:



Designate each of the rooms where an interview is to take place, as an "office".

We require the following:

1. Immediately outside every office, within sight of its door, there are seats. The exact number of seats depends on the average number of people waiting at any one time, plus a safety factor. The safety factor must reflect the idiosyncracies of waiting fluctuation for the particular institution.
2. Within view of these seats, there are exhibits of material relevant to the subjects which are most usually discussed in the office interviews.
3. The exhibit and seating areas are directly connected to a larger open area called the waiting activities area. The activities in this area will vary from institution to institution. In a multi-service center they might

include a public discussion arena, and pool tables. In a medical center they might include a swimming pool, a coffee counter, and exercising equipment. This area is not exclusively for use of people waiting for appointments. Though its use may be restricted, it is also open to people not waiting for appointments.

4. The waiting activities areas are equipped with a public address system, so that a person waiting can be paged when the interviewer is ready.

5. Each interviewer can speak directly into the public address system through his own telephone.

PROBLEM

All large institutions with busy professionals subject their clients to endless waiting. The client is usually forced to sit in some waiting room, reading old copies of Reader's Digest and Life. From the clients point of view this waiting is almost always unpleasant. This problem arises in the following way:

The interviewers have to squeeze as many interviews as possible into a busy schedule, and cannot afford to be kept waiting between interviews. For this reason interviews are always scheduled very tightly.

At the same time, some interviews take longer than others, and the exact length of any one interview is unpredictable.

This means that clients will inevitably be kept waiting. There is no way of making appointments which can overcome this difficulty.

Further, since people never know exactly when their turn will come, but must be on hand at the very second the previous interview is finished, they cannot even take a stroll or sit outside. They are forced to sit in the narrow confine of the waiting room, waiting their turn.

Yet, people get bored and tense sitting and waiting with nothing to do. If they are nervous about the problem to be discussed in the interview, the longer they wait, the more nervous they are apt to become.

Psychologically, waiting is also demoralizing. Nobody wants to wait at somebody else's beck and call. [Franz Kafka's greatest works, The Castle and The Trial, both deal almost entirely with the way that this kind of atmosphere destroys a man.]

Evidence for the deadening effect of waiting comes from Briar's study, "Welfare From Below". We all know that time seems to pass more slowly when we are bored or anxious or restless. Briar found that people waiting in welfare agencies always thought they had been waiting for longer than they really had. Some of them overestimated their waiting time as much as four times. (Although)"applicants rarely have to wait more than thirty to forty-five minutes to see the intake social worker", they perceived the wait to have been anywhere from forty-five minutes to two hours. [Scott Briar, "Welfare From Below: Recipients' Views of the Public Welfare System", in Jacobus Tenbroek, (Ed.), The Law and the Poor, San Francisco: Chandler Publishing Company, 1966, p.52.]

For most people the best possible antidote for the waiting feeling is to get involved in something interesting which has nothing to do with waiting. For this reason, there must be waiting areas within which various activities are available. The activities will vary from institution to institution. In a multi-service center, the public arena, the child care center, the pool tables, the TV and checkers lounge, are all examples of activities which qualify as waiting area activities (See Pattern 43, Waiting Diversions.) Displays relevant to the subject of the forthcoming interview also provide clients with something to do while they are waiting.

People feel less bored waiting, when they are able to watch other people doing things. They spend hours watching a skating rink, watching people going by on a busy street, watching children playing, watching a construction site. Even if the people waiting do not participate in the activities described above, these activities will still provide them with something to watch.

In order to boost the number of people taking part in these activities, the activity area should be open to other people, besides those who are waiting.

It is clear from the above, that the activity area will be useless unless people feel free to go there without worrying about the possibility of missing their turn or losing their place in line. There must therefore be a public address system in the activity area. Since the activity area will be fairly noisy, the public address will not disturb its atmosphere.

The interviewer cannot afford to waste time finding clients who are not waiting at his door. Each interviewer must therefore have direct access to the PA system (preferably through his own phone).

There will always be some clients who are especially anxious about missing their turn or being forgotten. These clients usually want to keep watch over the door of the interviewer, both so that they can see when he is ready, and also to make sure that they are seen by him.. There must therefore be seats immediately outside each interviewer's door, each seat visible from the door. For these clients, the problem of boredom and confinement cannot be solved by going out into the activity area. However, since watching people helps, each seat must command a view of the activity area. Above all, the seats must not be enclosed in "blind" areas typical or waiting rooms today.

In summary then, people who are waiting must be free to do what they want. If they want to sit outside the interviewer's door, they can. If they want to get up and take a stroll, or play a game of pool, or have a cup of coffee, or watch other people, without having to fear that they are losing their place in line, they can.

OVERVIEW OF SERVICES.

15

PATTERN

IF: Any public building with various departments which service the public,

THEN:

1. All departments open off a common space, and all entrances into this common space have sight lines to each of the departments.
2. Each department should have its name written near its entrance in large letters.
3. The departments should be located below the level of the building entrances, so that the sight lines from the eye of a person entering to the signs carrying the names of the departments, are ten degrees below the horizontal.

PROBLEM

A public building deals to a large extent with people who do not know the exact relative locations and internal contents of its various departments. It must be very easy for each person coming into the building to become immediately oriented in it.

Further, the person who is coming to the building may not know the way in which the departments are categorized, or even if he knew what service he needed, he may not know the name given to the service in this particular building. (Thus, what is called "Job Counselling" in one multi-service center, may be called "Urban League" in another, and "Manpower" in yet another.) It must be easy for someone to find what he needs, even if he doesn't know the exact name.

Sometimes, a person is unaware of the existence of a certain service - a service that would be useful to him if he knew about it. Further, even though he will not usually want to use all the available services, he should know them all so that he is confident he is not missing anything he might need. It must be clear to people what all the services available in the building are.

It is possible that these problems might be solved by a directory of the kind found in the lobby of many public buildings and office buildings. However, directories often leave unclear what each service is, and just where in the building it is, even after it has been clearly identified.

In order to solve these problems properly, the person who comes into the building, must immediately be confronted by all the departments - this means actually seeing the entrances to all the services, together with a clear and simple sign identifying them

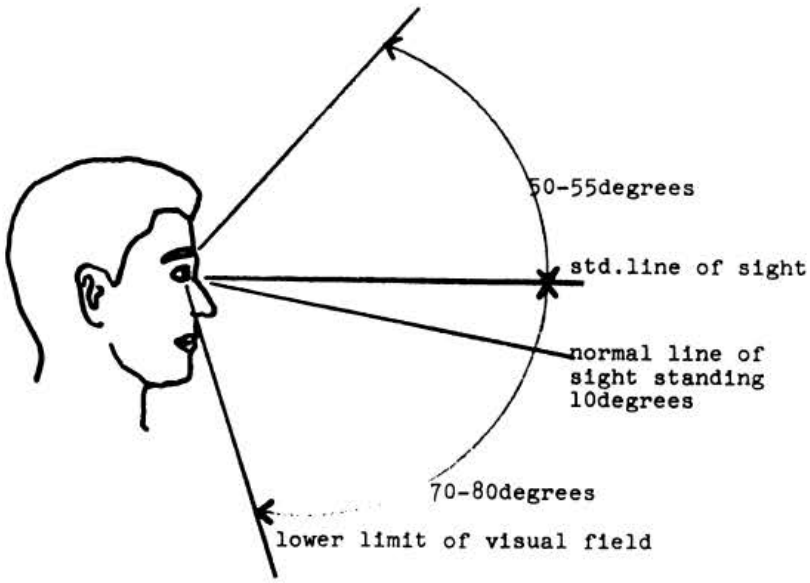
This makes it clear that the services should be fanned out in such a way that all of them are directly visible from the main entrances.

This specifies the arrangement in plan. To guarantee effective visibility, the arrangement in section also needs to be carefully specified.

It is well known, informally, that we see an array of buildings better if we approach them slightly from above. People get a better view of something when looking down at it, than when they are looking at it on the level or looking up at it. There are two reasons.

1. The normal line of sight for a person standing on a horizontal plane, is 10 degrees below the horizontal. [Henry Dreyfuss, The Measure of Man, Whitney Publications, New York, 1959, Chart F.] It is also known that looking up at things is tiring. This has been measured only in the extreme case [Kinzey and Sharp state that looking up at an angle greater than 20 degrees above the horizontal is tiring, Environmental Technologies in Architecture, New York: Prentice Hall, 1963, p. 354.], but it seems likely that any deviation from the line 10 degrees below the horizontal is relatively uncomfortable according to its magnitude.

2. When a person looks straight ahead, fixating on the horizontal, his field of vision extends about twice as far below the horizontal as it does above the horizontal. This supplements the first effect. It is shown on the diagram below. [The source again is Dreyfuss, Chart F.]



Both these effects make it clear that a person entering a building, will be able to see the various services and their signs most easily, if they are more than 10 degrees below the horizon for him. Of course the person has to see over the heads of others, so that the signs must be at least 6 feet from the floor in front of it.

NECKLACE OF COMMUNITY PROJECTS.

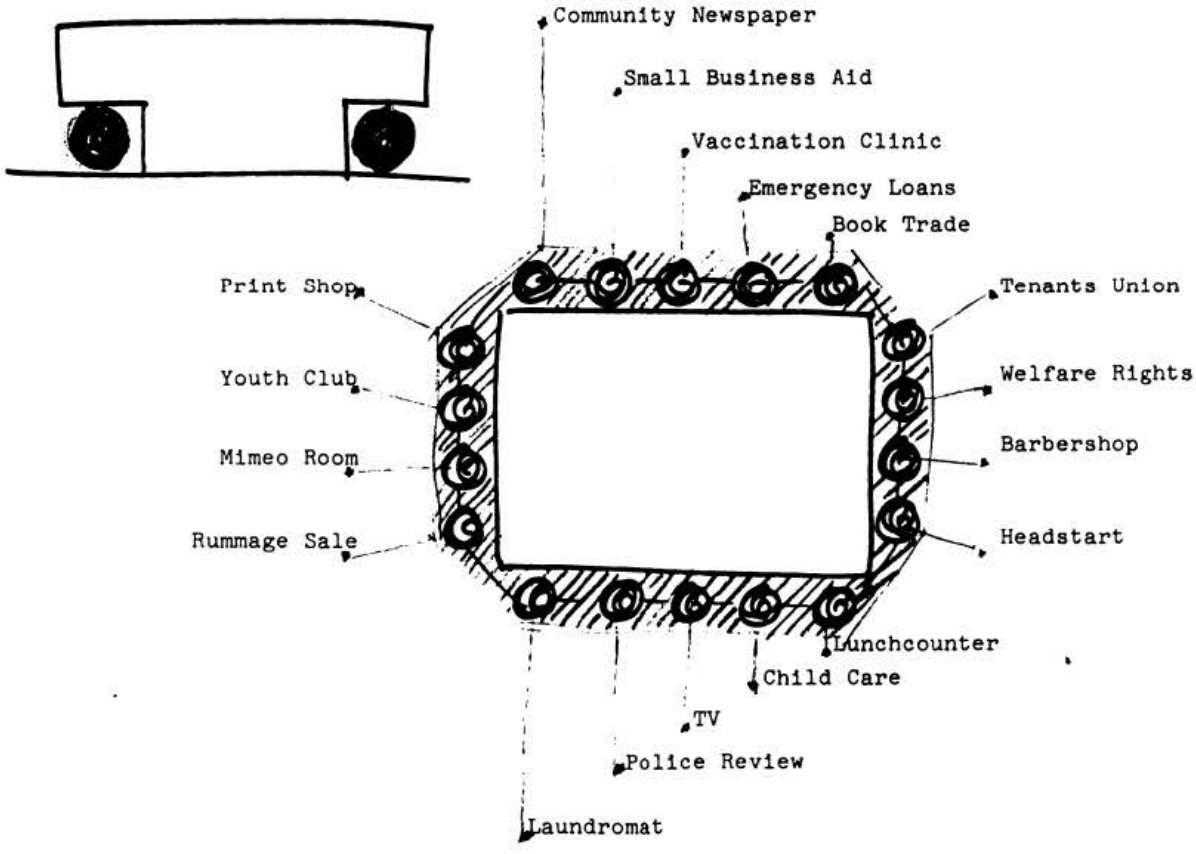
16

PATTERN

IF: A multi-service center has any street frontage which is not either entrance space, public open space, or transparent glass showing interior public space,

THEN:

1. With the exceptions stated, the building should be surrounded, at ground level, by a necklace of community projects.
2. These community projects should be individually built, and built after the superstructure of the multi-service center itself.
3. The ground floor frontage zone committed to these projects, should be given a roof, a floor slab, and conduit boxes in the rear wall, at the time the superstructure of the multi-service center is built; so that when the time comes to build the individual community projects, they can make use of these elements.



PROBLEM

The physical outside of an MSC makes a strong impression in the community. If it is recognisable as standard office space, it will convey the message of administration and red tape.

Various experiences lead us to believe that any office building which looks like an office building (i.e., equally spaced standard windows; concrete, steel, and glass exterior; etc.) placed among residential buildings in a community creates the impression of disrespect for the community. [See, for instance, recent statements by Harlem inhabitants, as reported in Blyden Jackson, "Building Harlem Down, The Guardian, March, 1968.] Many committee members of the Hunts Point Multi-service Center made similar comments.

On the positive side: Art Schroeder, Neighborhood Organisation Director in the East Oakland Service Center says:

> In order to attract people who might be potential community organisation members, the Center should be spacious, with outdoor waiting space, with trees, garden, grass, and a proper combination of sunning and shade places.

Benny Parrish, Community Organiser, formerly with the California Committee for Community Development, says:

> Our office was like a house - the thing I liked - it was like a living room.

The Kirschner Report ["A Description and Evaluation of Neighborhood Centers", Kirschner Associates, 530 Jefferson Street, N.E., Albuquerque, New Mexico, December, 1966, p. 31] says:

> The casual, informal atmosphere of small neighborhood centers can be disarming and hence appealing to poor people who are uncomfortable in formally organised settings. This is why large, bureaucratically organised centers tend to be self-defeating in terms of outreach. The forbidding appearance of such centers makes them little different from the central offices of traditional service agencies.

How can the building be made less bureaucratic, less oppressive, less disrespectful to the community?

To begin with, the internal operations of the center must, itself, have these qualities. If not, any such appearance would be fake. Assuming that the internal operations of the multi-service center is in fact personal, respectful of the community, non-bureaucratic, and non-oppressive, then how can the building be organised so that these qualities are visible from the outside.

One clue, may be this: Red tape is seen as the opposite of small informal organisation, private ownership, simple direct relationships. [Alvin W. Gouldner, "Red Tape as a Social Problem" in Robert K. Merton's Reader in Bureaucracy, Free Press, 1952, pp. 410-418.]

In order to make it clear to people outside the building that the multi-service center is not subject to red tape nonsense, the outside of the building, at ground floor, should be entirely made of community owned projects, which are small in scale, privately built, individually accessed, not under the aegis of formal receptionists.

It is especially important that they be privately built; if they are not, they will seem standardised, and impersonal. But this is clearly difficult. The individuals and groups in the community who try to build community projects will be very short of funds. In order to make it as easy as possible for them to build space, the most expensive elements should be provided in advance. These are foundation, floor, roof and services. It therefore makes sense to create an overhang, with roof and floor slab complete, and with electric conduit boxes in the wall.

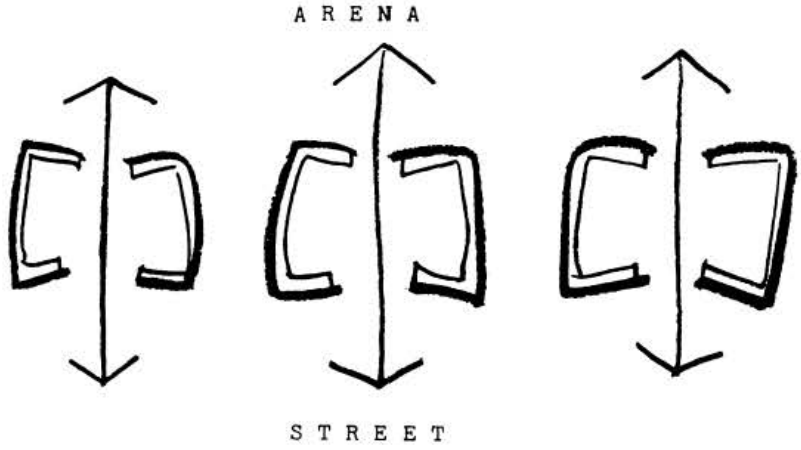
COMMUNITY PROJECTS TWO-SIDED.

17

PATTERN

IF: A community service center containing space for community initiated projects, as described in Pattern 4,

THEN: Each community project has a private entrance opening off the street. If possible, each community project has two entrances: one opening off the street, and the other opening off the community arena.



PROBLEM

If a service center is using the community project idea, according to Pattern 4, it faces the following problem.

The kinds of people who have the initiative to create successful projects will not come to the center if there are excessive strings attached to the use of center space. If the center will hinder their project in any way, they are better off renting a store front, or operating out of their own home. [This point was made repeatedly by residents in the Hunts Point community during meetings concerned with program development for the Hunts Point Service Center.]

It is therefore essential to the vitality of a community project program that project spaces be given over to community people with very few strings attached.

First and foremost, this means that a community project staff should be able to use their space when and how they please. If they are bound by rules and regulations covering the center in general they will almost certainly balk.

This argument suggests that community projects spaces should be individually lockable, and accessed of a public street, so that project staff can come and use the space whenever they want to, on weekends and evenings for example, when the rest of the center is closed.

At the same time, several arguments make it plain that the community projects should open off the arena. Briefly:

1. The relationship between community projects and arena is intended to enhance the process of community organisation (Pattern 4).
2. Some community projects will offer services which are indistinguishable from the services offered by the establishment agencies and should therefore have the same relationship to the building (Patterns 5 and 13).

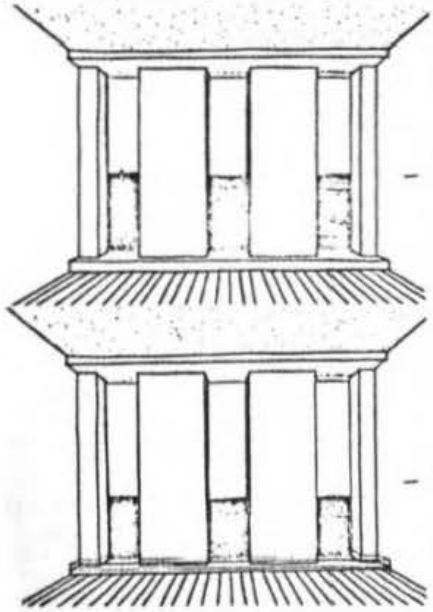
WINDOWS OVERLOOKING LIFE.

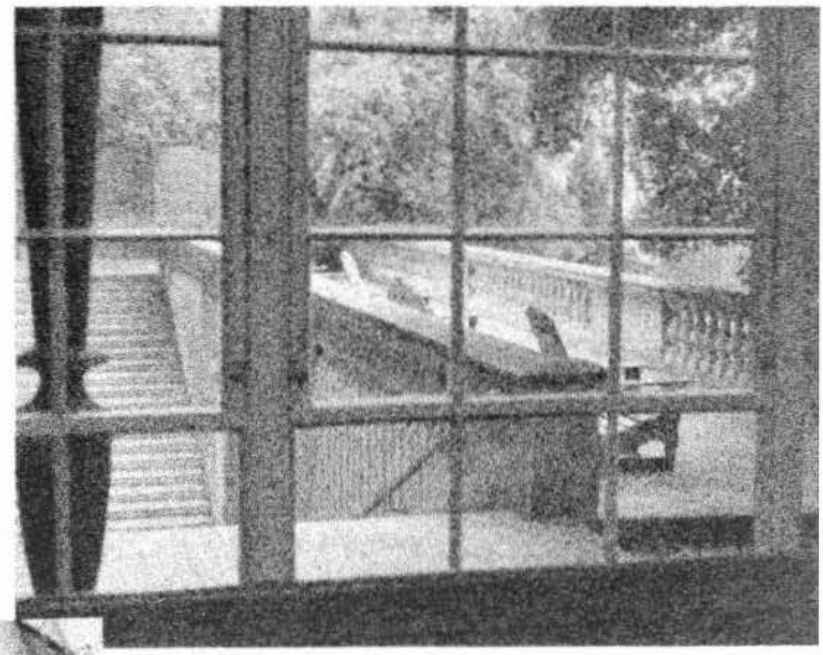
PATTERN

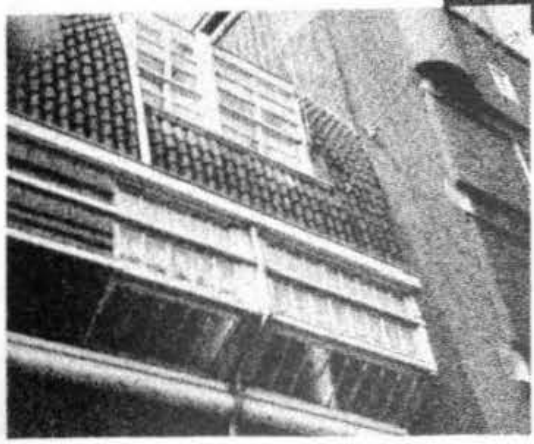
IF: There is any internal space S in a building where people spend more than a few minutes at a time, awake (this pattern applies especially to workplaces, which often fail to solve the problem stated here),

THEN: The space S must have windows with the following characteristics:

1. The windows look onto some other place, which has a life as refreshing and different as possible, from the life inside S. (Thus: a small and tranquil flower garden; a place where people are bustling about, a river; etc.)
2. The windows should be divided into as many different openings as possible. The distance between the openings should be at least 12 inches.
3. The windows should go as low as possible - if possible all the way to the floor - especially if the place in question is above ground.







PROBLEM

This pattern is based on the following conjecture.

When people are in a place for any length of time, they need to be able to refresh themselves by looking at a world different from the one they are in, and with enough of its own variety and life to provide adequate refreshment.

There is no direct psychological evidence for this conjecture. We present three sources of indirect evidence.

Amos Rapoport gives written descriptions of three windowless seminar rooms at the University of California. The descriptions are by teachers and students of English, asked to write descriptions of the rooms as part of an exercise in creative writing. The descriptions are heavily loaded with negative content, and in many cases refer directly to the windowless, boxed-in, or isolated-from-the-world character of the rooms.

Examples are:

> Room 5646 is an unpleasant room in which to attend class because in it one feels detached and isolated from the rest of the world under the buzzing fluorescent lights and the high sound-proofed ceilings, amid the sinks, cabinets, and pipes, surrounded by empty space.
>
> The large and almost empty, windowless room with its sturdy, enclosing, and barren grey walls inspired neither disgust nor liking; one might easily have forgotten how trapped one was. [Amos Rapoport, "Some Consumer Comments on a Designed Environment", Arena - The Architectural Association Journal, January, 1967, pp. 176-178.]

Brian Wells, studying office workers' choice of working positions found that 81% of all subjects chose positions next to a window. [Pilkington Research Unit, Office Design: A Study of Environment, pp. 118-121.] Many of these subjects gave "daylight" rather than "view" as a reason for their choice. But is shown elsewhere in the same report, that subjects who are far from windows, grossly overestimate the amount of daylight they receive as compared with artificial light - in essence they cannot tell the difference between daylight and artificial light. [Pilkington Research Unit, op.cit., p. 58.] This suggests strongly that people really want to be near windows for some other reason - not because of daylight. We cannot be sure that it is because of the view - but it seems likely. The conjecture is made even more likely by the fact that people are less interested in sitting near windows which open onto light wells, which admit daylight, but present no view.

The most comprehensive study of view from windows, is by Markus.

He presents evidence which shows clearly that office workers prefer windows with meaningful views (i.e. views of city life, and views which present the city in relation to surroundings) as aginst views which also take in large areas, but contain uninteresting, and less meaningful, elements like bombed sites and parking lots and industrail sites. [Thomas A. Markus, "The Function of Windows: A Reappraisal", Building Science, 2, 1967, pp. 97-121, see especially p. 109.]

Let us assume, on the basis of the available evidence, that people do need to be able to look out of windows, at some world different from their immediate surroundings.

The question then arises:

What size and shape of windows will best satisfy this demand?

Markus [op.cit., pp. 103-109] makes the following points.

1. Since the ground usually has the most interesting things on it, and people want to see interesting things going on - not just walls of nearby buildings, or sky - the window sill should be as near the floor as possible - especially in upper storeys. This becomes even more important, when we consider the way a view is diminished in a room with window sills at today's standard heights, as the observer goes back away from the window. [Note: With low sills there is some chance that people in upper stories will not feel safe. This can be overcome by means of a rail in front of the window, or by making the windows very small, or by letting panes divide a large window into many small sections.
2. Since the apparent variety and interest of the outside world depends on the number of different scenes that are visible, not on the size of the visible scene, several narrow windows are better than one large one.

It seems, therefore, that the windows should be:

1. Oriented towards a view of life.
2. Narrow and separate.
3. Tall, with window sills down to the floor.

CORE SERVICE ADJACENCIES. 19

PATTERN

IF: There is a "core service" staff in a multi-service center,

THEN:

1. The core service staff falls into three groups:
   a. Administration
   b. Program development and evaluation
   c. Community organisation
2. Each of these groups is a physically cohesive unit.
3. The supervisors within these groups (see personnel underlined in the example below), are in close contact with one another, and near a special strategy meeting room where charts, data, etc., can be left permanently on the walls.

The exact members of these groups will vary from center to center. For the sake of example, we show the way these groups are constituted in the Hunts Point Multi-service Center, with some of the key adjacencies:

ADMINISTRATION

1. Executive director is adjacent to deputy director, and administrative assistant, near fiscal offices, program developer, community organizer, personnel officer.
2. Deputy director has the same requirements as the executive director.
3. Administrative assistant is adjacent to the director, deputy director and near all clerical staff.
4. Fiscal officer is away from the public, adjacent to his assistants and near the director.
5. Personnel officer is convenient to the public, adjacent to a private waiting room, adjacent to his assistants and near the director.

PROGRAM DEVELOPMENT AND EVALUATION

1. Program developer is adjacent to his assistants, a library and/or meeting room, and near the director.

2. Planning/evaluation aides are in a large room adjacent to library, program developer and library/meeting room.

COMMUNITY ORGANIZATION

1. Director of community organization is in the front of the building, adjacent to his assistants and near the director.

2. Community organizers are in a large room near the front of the building.

PROBLEM

Staff members whose tasks are directly related should be located close to each other. This is self-evident. [For full details of functional relatedness in a multi-service center staff see Neighborhood Service Program II (NSP II), submitted by Hunts Point Multi-service Center Corporation to the Washington Interagency Review Committee, Neighborhood Centers Pilot Program, Washington, D. C., February, 1968.]

There are just two specific relationships worth commenting on.

1. The director spends a great deal of his time in contact with outside organizations and people outside the center. He delegates major responsibility for day to day operations in the center to his deputy director. Since he is so busy outside the center, he must be able to use any free moments between appointments, for short discussions with the deputy director. Thus the deputy director must be immediately adjacent to him.

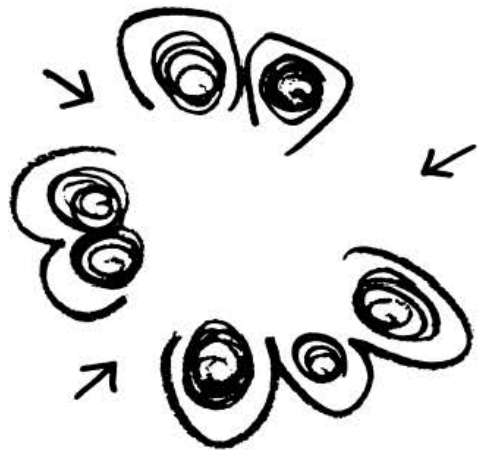
2. Directory, deputy director and personnel officer, fiscal officer and program developer should be clustered. Questions of personnel, budgeting, new programs, and extensions or modifications of existing programs, based on developments in various funding sources, will develop at the spur of the moment and demand quick decisions. This group, or a part of it, must be able to come together in an office or conference room quickly and easily. A "SAC command" room containing maps, data, etc., is required.

ACTIVITY POCKETS. 20

PATTERN

IF: There is any large public space where people come to linger, and where large numbers of people are intended to collect,

THEN: The space is entirely surrounded by an alternating pattern of small activity pockets and access paths.



PROBLEM

The life of a public space forms naturally around the edge. If the edge fails, then the space never becomes lively.

In more detail: People gravitate naturally towards the edge of public spaces. They do not linger out in the open. If the edge does not provide them with places where it is natural to linger, the space becomes a place to walk through, not a place to stop.

It is therefore clear that the place should be surrounded by activity pockets. In effect, the edge must be scallopped.

Further, the process of lingering is a gradual one; it happens; people do not make up their minds to stay; they stay, or go, according to a process of gradual involvement. This means that the various activity pockets round

the edge should all be closely associated with entrances and exits - so that people can pass by any of them, in the process of passing through, or going to investigate something. The goal oriented activity of coming and going, then has a chance to turn gradually into rather more relaxed, goal-less, "involvement". And once many small groups form around the edge "involvements", it is likely that they will begin to overlap and spill in towards the center of the square.

We therefore specify that there are many access points, alternating with the activity pockets.

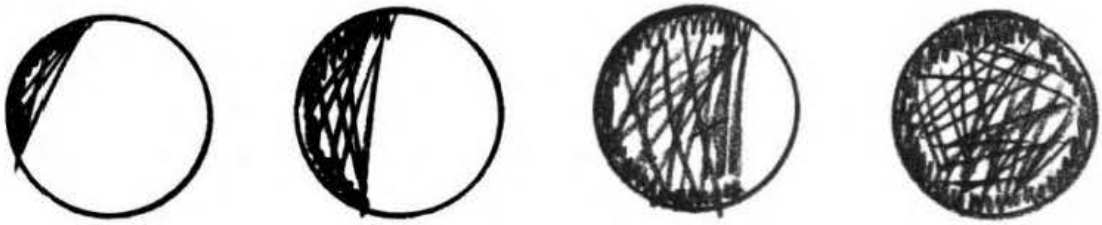
Finally, it is clear that this "scallopped" edge must surround the space entirely. We may see this clearly as follows:

Draw a circle to represent the space, and darken some part of its perimeter to stand for the "scallopped edge".

Now draw chords which join different points along this darkened perimeter. As the length of the darkened edge gets smaller, the area of the space covered by these chords wanes drastically.

This simple analog shows, graphically, how the life in the space dwindles when the part of the edge sustaining life dwindles.

To make the space lively, the scallopped edge must surround the space completely.



SELF-SERVICE.

21

PATTERN

IF: Any multi-service center,

THEN:

1. The multi-service center contains a self-service area.

2. The self-service area contains all the basic information required by people who need help. It includes information about currently available jobs, information about the legality of eviction, the procedures to be followed in divorce cases, the location of currently available apartments, citizen rights under welfare law, schedules for skills training classes, teaching machines for skills like typing and shorthand, etc. This information may be in the form of card catalogs, books, pamphlets, displays, etc., according to its nature. (Detailed in Pattern 60.)

3. Where the center is used by people from two language groups, as at Hunts Point, all information is in both languages.

4. The self-service area is at the center of gravity of the waiting area, and transparent so that its inside is visible from all points in the waiting area.

5. The self-service area is continuous with at least part of the service area.

6. There are no receptionists or intake workers located at the entrance to the self-service area. A person can enter the self-service area and browse there for as long as he wants, without having to explain himself to any receptionist or intake worker.

7. Within the self-service area, there is an advice area. This advice area contains at least one easily accessible assistant, visible from the self-service area, and obviously on hand to help people find the information they want, or to answer questions about it.

PROBLEM

Most service programs today effectively perpetuate the structural asymmetry of the dole: The great bureaucratic hand reaching down and dropping a few crumbs into the pockets of the poor. If service programs ever hope to break the chains of poverty, this structural asymmetry, with all its psychological implications, must be destroyed. ["The welfare system...imposes restrictions that encourage continued dependency on welfare and undermine self-respect...Drastic reforms are required if it is to help people free themselves from poverty." Report of the National Advisory Commission on Civil Disorders, Bantam Books: 1968, p. 457.]

One way to help break down the traditional service posture is to offer as much service as is practically possible on a self-service basis, with the center seen as a resource to aid people making their way through the self-service process. Consider the following analogy: In a supermarket we walk around and select the goods we need, and if we have any questions we ask the grocer; it would be offensive for a grocer to say to a man entering the market, "Sit down, tell me a bit about yourself and your family, and I'll make out your grocery list."

Of course this analogy does not hold completely. Many services require technical insights that only trained personnel can be expected to master. But more often than not the service process is made more complicated than in truth it needs to be. We are all familiar with the way large bureaucracies tend to over-handle information, shuffling endless papers, filing endless forms.

This red tape process must be limited to its barest essentials; the key image of the service center must be as a community self-service institution. Insistence on the self-service ideal means that the actual services that the agency renders be made perfectly clear to the community; what an agency can and cannot do, and under what conditions, must become perfectly explicit.

Much of the information relevant to problems - phone numbers about jobs, time and place of job training classes, legal questions concerning eviction, location of apartment rentals - can quite easily be made available to the public in the form of written information and signs. When an agency worker holds this information, it contributes to the illusion that the client is a lowly person not capable of understanding the world, while the agency worker is a superior person who knows what is best for the client.

This is precisely the kind of experience a poor person needs least; rather, he is looking for the kind of experience that tells him that **initiative**, when forecefully exercised, pays off: This experience, and not the bureaucratic dole, must be available at every chance, throughout the center.

When the center opens it is likely that only a few services will be able to adopt the self-service format. However, it must be made clear that a major responsibility for the staff will be to put ever more services into the self-service format; this thought must be expressed and encouraged by the organization of the building.

What evidence is there that a self-service program can help solve the problem of the bureaucratic dole? Some people argue that even the most enlightened self-service program will fail when it is offered to the poor; these people argue that the poor have been on the bottom for so long, their initiative so often unrewarded, that a self-service program could never really get started, it is an unworkable ideal. And it follows quite logically from this position that the job of the staff, no matter how liberal, is to take the poor by the hand and lead them through the service center

paces - like the grocer presuming to write up a shopping list for each of his customers. No matter that this attitude begins as good faith; it always ends with the petty bureaucrat who believes that the function of poverty is to test his generosity. Sartre has expressed this mentality perfectly: "They are the uncomplaining poor; they hug the walls. I spring forward, I slip a small coin into their hand, and, most important, I present them with a fine egalitarian smile."

There is some evidence to suggest that in fact the best way to extend service to the poor is simply to make the service openly available, in a setting where people can discuss their needs and the usefullness of certain services with members of their community; and then ask questions and guidance from a resource group of competent technocrats:

A. The Mission Rebels, a group organized to support the needs and solve the problems of young people in San Francisco's poverty stricken Mission District, is notoriously successful; it is based completely on the self-service principle; the Rebel's have turned down help which had the flavor of the bureaucratic dole associated with it; they demand that help be given on their own terms, when and where they need it; their motto is, "We can do it ourselves". ["Kids say it isn't as important to come here every night as to know something is here - that it isn't an agency but that Mission Rebels in THEIRS," Rev. James contends.]

B. In his definitive paper, "The Power of the Poor", Warren C. Haggstrom, shows that it is the lack of self-service type programs, with their associated attitudes and institutional structures, that keep the poor psycologically powerless, their needs consistently unmet. [See Ferman, Kornbluh, and Hober, (Eds.), Poverty in America, University of Michigan Press, 1965, p. 315.]

C. In 1964, Students for a Democratic Society began a number of projects aimed at organizing low income people. Two kinds of project philosophy emerged: There were those who assumed they knew exactly what the poor needed, and tried to organize around these assumed needs - such a project was JOIN, Jobs Or Income Now; secondly, there were those who assumed that the process of defining a communities needs and the programs required to solve them could only come from a community instigated process of self-service - this was the philosophy of NCUP, Newark Community Union Project.

Of the two approaches the NCUP approach was by far the most successful; and it turned out that the kinds of services that the community selected were quite different from what the organizers had expected. NCUP and similar projects have become institutions in a handful of poor communities across the United States; the JOIN approach has never established itself so strongly. [See Tod Gitlin, "The Radical Potential of the Poor", International Socialist Journal, December 1967, pp. 861-886.]

Also, the fact that NCUP has, in recent months, outlived its usefulness is a tribute to its success. It put people into the mood of doing things for themselves, and once this mood found its indigenous expression there was no need for the NCUP staff to hang around.

D. The "Kerner Report" on civil disorder calls for a thorough overhaul of service programs. As a basic strategy the report calls for the elimination of "features that cause dependency". If taken seriously, this would mean the dissolution of special service programs altogether, replaced by pure self-service operations, like the income supplementation plan. [See Report of the National Advisory Commission on Civil Disorder, op. cit., p. 462.]

One final piece of evidence comes from a statement written by two doctors; it refers to the Peckham Health Center, a community health center which they ran for many years:

> The'self-service' aimed at throughout the buildings is a primary need of the biologist. A healthy individual does not like to be waited on; he prefers the freedom of indpendent action which accompanies circumstances so arranged that he can do for himself what he wants to do as and when he wants to do it. The popularity in tube stations of the moving-staircase compared with the lift attests to this. It is not merely speed, but the possibility the moving-staircase gives for independent individual action as opposed to collective action dependent upon an attendant, that is significant. Servants tend to bind and circumscribe action, for their presence makes inevitable the establishment of a routine that only too often rebounds upon their employers.
>
> Self-service has the merit of engendering responsibility and of enhancing awareness as well as of increasing freedom of action. As unhampered in the Centre as in their own houses, the members are free to improvise to suit all occasions as they arise. As the embryo newly lodged in the womb begins to build its cells into the substance of the uterine wall, so each new family emboldened to strike out for itself in this living social medium can add its own quota of 'organisation' to the Centre - the outstanding characteristic of which is the abiding fluidity of its constitution, permitting continuous growth and the functional evolution of its society from day to day and from year to year.
>
> So in the Centre there are no attendants, no waitresses. This means that where possible all equippment has had to be designed to be handled by the members themselves. In the main the furnishings are light stackable

tables and chairs which can be moved from place to place as occasion demands; the cafeteria utensils also are stackable and devised to be taken and replaced by the members. These are seeming trifles, but they have their far-reaching significance in the type of social organisation that is growing up in the building. [Innes H. Pearse and Lucy H. Crocker, The Peckham Experiment, Yale University Press, New Haven, 1946, pp. 74-75.]

Having established a functional case for the self-service concept, we now argue that the self-service facility should be part of the waiting area, and continuous with some part of the service area.

1. People will not come to the center expecting to use the self-service facility; it is a new concept in service center programs and people will not be familiar with it.
2. When people have to wait for an appointment they usually try to find something to do to pass time. (See Pattern 14.)
3. People waiting will not leave the waiting area for more than a minute or two for fear that they will miss their call.

Taken together, these three facts suggest that self-service should be a part of waiting. In the beginning, people will come to the center primarily to use the agencies; inevitably they will have to wait for their appointments. If the self-service facility is in the waiting area and recognizably open to casual use, people will use it to pass time, and hence become familiar with the self-service program.

Finally, the success of self-service is unpredictable. It is is highly successful, one would hope that the whole center might become more and more oriented towards self-service. If this happens the service will need to expand.

If self-service doesn't work, of if it turns out that people in self-service need more help and advice from staff members - then the self-service area will need to be more nearly a part of other services.

In both cases, it should be continuous with at least one service area.

PEDESTRIAN DENSITY IN PUBLIC PLACES. 22

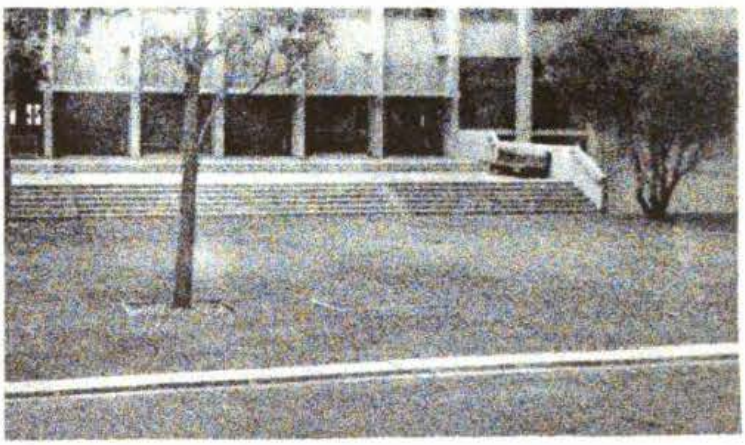
PATTERN

IF: There is a public place which is intended to be "full of life", and the estimated mean number of people in the place at any given moment is P,

THEN: The area of this place should be between 150P and 300P square feet.

PROBLEM

Many of the public places built by architects and planners in recent years, though intended as lively piazzas, are in fact deserted and dead.



Of course one cannot say categorically, that the number of people per square foot controls the apparent liveliness of the place - other factors, including the nature of the land use round the edge, contribute to it.

Another issue is the grouping of the people and what they are doing. Moving people, especially if they are making noise adds to the liveliness. A small group, usually attracted to a couple of folk singers in a plaza at the University of California, gave much more life to the plaza than a similar number, sunning on the grass.

However, the number of square feet per person does give a reasonably crude estimate of the liveliness. Informal observation shows the following figures for various public places in and around San Francisco:

Golden Gate Plaza, noon:	>1000	Dead
Fresno Mall:	100	Alive
Sproul Plaza, daytime:	150	Alive
Sproul Plaza, evening:	2000	Dead
Union Square, central part:	600	Half-dead

One observer's subjective estimates of the liveliness of these places, are given in the right hand column.

Although the subjective estimates are clearly open to question, they suggest the following rule of thumb: If there are more than 300 square feet per person, the area begins to be dead. If there are 150 square feet per person, the area is very lively.

Appendix:

Since this pattern applies to multi-service center arenas, we now give the upper limit on the arena size, as a function of N, the total population in the target area served by the multi-service center.

We know from the arguments presented in Pattern 3, that a center serving a population of N persons, will require about .0005N service interviewers. Since each interviewer sees about 4 people per day, and a typical interview lasts about 30 minutes, the number of people being interviewed at any given moment is about .00012N, and the number of people waiting for interviews will be about the same.

Besides the services, other MSC activities draw people into the arena. They include people coming to classes and meetings; people using self-service; people coming in to see the director and community organizers; people being interviewed for jobs in the multi-service center; people using community projects; people using recreational facilities, etc. In fact people coming in for these ancillary activities most likely equal those coming into the MSC for services. We guess that the people in the arena at any given moment may be twice the number of people waiting, thus P = .00025N. This gives an arena size of 300P or .07N square feet.

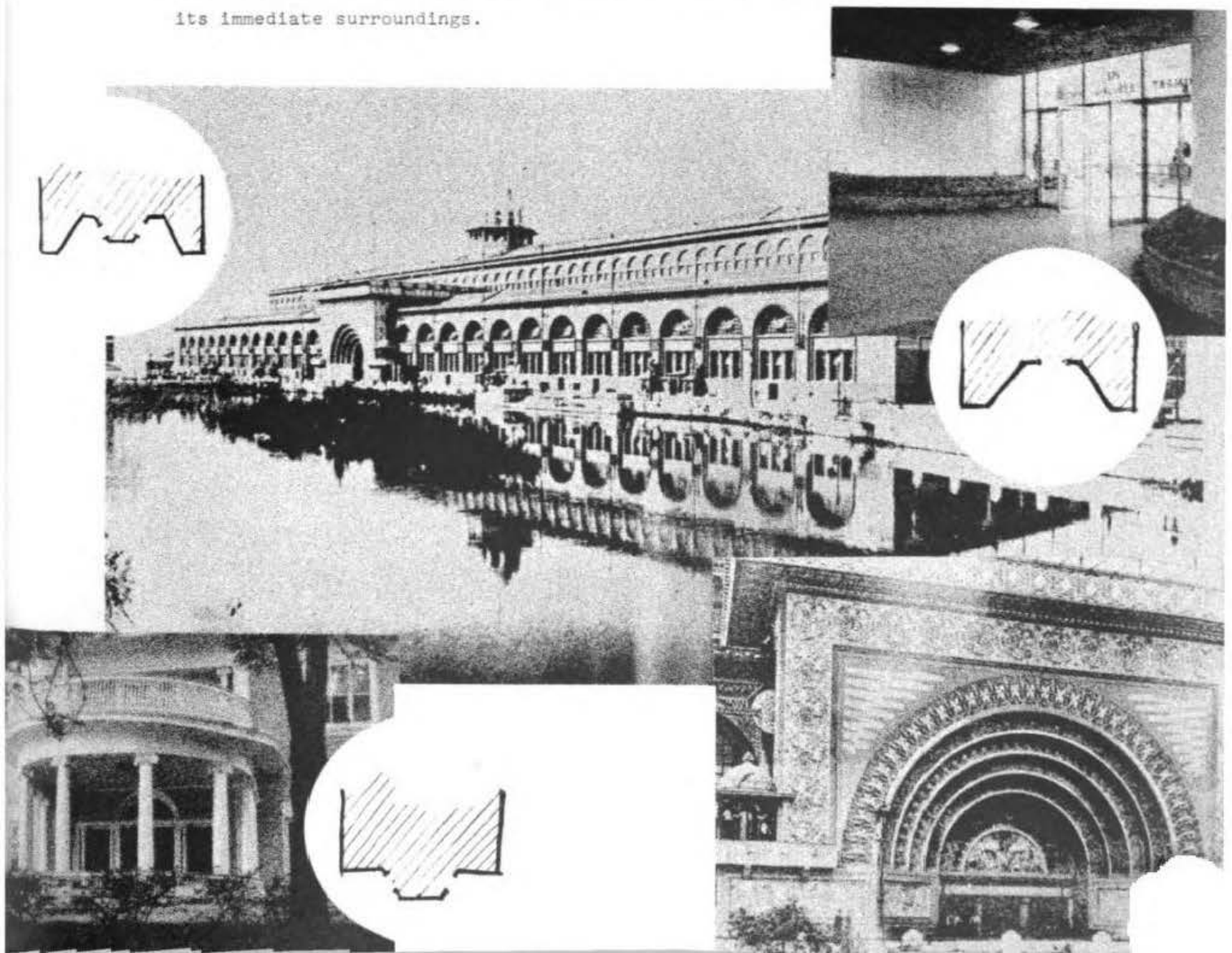
ENTRANCE SHAPE.

PATTERN

IF: Any main entrance to a public building,

THEN: Either, the entrance projects strongly beyond the building front. Or, the entrance is set into a deep, flared, recess. Or, some conbination of the above.

Although the heart of the pattern lies in these relationships there are many important refinements which are, for the moment, too hard to pin down. The relative color of the entrance, the light and shade immediately around it, the presence of mouldings and ornaments, may all play a part. Above all, it is important that the entrance be strongly differentiated from its immediate surroundings.



PROBLEM

A person approaching the building must be able to see the entrance clearly. Yet, many of the people approaching the building are walking along the front of the building, and parallel to it. Their angle of approach is acute. From this angle, many entrances are hardly visible.

An entrance will be visible from an acute angled approach if:

1. The entrance sticks out beyond the building line.
2. The entrance is so deeply recessed, that the void is visible from this angle. In this case, it will help further, if the recess if flared, so that the far side of the recess shows up as a source of differentiation.
3. The building front flares back gently, and the entrance sticks out into the recess so created. This will be useful, if the building is built all the way forward to the building line.

SUBCOMMITTEE WATCHDOGS. 24

PATTERN

IF: There are community elected subcommittees in a multi-service center,

THEN:

1. The subcommittees have their offices in some location easy to reach from the path between services and entrances, and they are clearly marked "COMPLAINTS".
2. The subcommittee offices are physically distinct from the services.
3. If the center has program-evaluation aides, or any comparable staff in core-services, these aides should work out of the subcommittee offices.

PROBLEM

The success of the multi-service center depends on the possibility of effective complaint and review procedures. Clients must be free to express their complaints about the services. The services must be responsive to these complaints.

If these two features are not real, then the idea of community ownership will be meaningless.

An effective complaint and review procedure needs the following features:

A. The group receiving complaints must be the kind of community people clients can identify with, not "service personnel".

B. The group which receives complaints, and acts on them, must be distinct from the services which the complaints concern.

C. The group receiving the complaints must actively seek suggestions and complaints.

On the basis of these three requirements, we specify: Complaints and review are in the hands of two groups in a multi-service center: the subcommittees, and the program-evaluation aides. The subcommittees are unpaid, elected, committees which represent the major categories of service. The program-evaluation

aides are paid members of the core service program; they are intended to work closely with the subcommittees, making recommendations for changes and improvements in service programs. Further: The subcommittees have their offices near the exits where they are easy to reach. The subcommittee offices are physically separate from the services. The program and evaluation aides work out of the subcommittee offices. This will make sure that these P-E aides are in direct daily contact with complaints, so they will really know what is going on.

We now give the arguments for requirements A, B, C, in detail.

A. In existing multi-service centers, the members of the community have not yet really gotten ownership. In a study of twenty multi-service centers, Kirschner Associates, [A Description and Evaluation of Neighborhood Centers, 530 Jefferson Street, N.E., Albuquerque, New Mexico, 1966], found that only 8% of the community persons interviewed thought that the local multi-service was run by neighborhood people.

We know, also, that members of the community, once they get onto the center payroll, take on the characteristics of "them"; they lose their identity as members of the community [Burt Wallrich, New Careers, Ph.D. Thesis, Department of Sociology, University of California, Berkeley, 1968, pp. 43-50].

If the members of the community can identify with any group in the MSC, they are most likely to be able to identify with members of subcommittees, who are elected, not paid, and responsible to the community, not to the multi-service center staff.

The sheer existence of the subcommittees in the building, then, especially if they have a prominent position, will help people to make complaints, because they can talk to people they identify with.

B. It is rather obvious that the subcommittees will not be able to monitor the services successfully if they are too closely associated with them. Since service programs are often "babies" of the subcommittees, there is the danger that subcommittees will loyally defend the programs. To be effective, as critics,

they have to maintain social distance. It is essential, then, that the subcommittees are physically distinct from the services.

There is a second advantage to physical separation of subcommittees from services. Burt Wallrich describes one multi-service center where the aides are not perceived as professional service personnel, but as members of the community, because they are physically concentrated, and separate from the services. [op.cit., p. 49.] It suggests that if the subcommittees are physically distinct from services, it may help the members of the community to identify them as friends.

C. There is a good deal of evidence in support of the thesis that multi-service center clients will not usually feel free to complain.

Scott Briar states "Welfare assistance under federally assisted programs such as AFDC-U is a right in that entitlement is defined by statute and not by the arbitrary ...decision of a charitable organization....While this conception of the federal assistance programs is held by the social workers in the department studied, our findings suggest that few recipients regard welfare assistance as a right" [Scott Briar's "Welfare From Below: Recipients' Views of the Public Welfare System", in Jocobus Tenbroek, (Ed.), and the Editors of California Law Review, The Law of the Poor, San Francisco: Chandler Publishing Company, 1966, p. 46-61.]

He continues, "The recipients' vague, diffuse, and limited conceptions of their own rights and the welfare department's obligations to them contrast sharply with the well-crystallized views most of them have of the welfare agency's rights and of their own obligations to the agency... The extent of authority these recipients confer on the agency and which best illuminate their reasons for granting the agency extensive authority over their lives are those obtained in response to a series of questions about the use of night visits as a means of checking on recipients."

Although 87% of the recipients said there is a law that says you can refuse entry to your home to anyone who does not have a search warrant, two-thirds of this group said this law does not apply to welfare recipients. Furthermore, when asked "Should the welfare department make night visits?", 69% of the recipients answered "Yes".

A School of Social Welfare group study, under the direction of Scott Briar, ["Mexican-American Recipients' Orientations Toward the Modes of Adaptation to the Welfare System", University of California, Berkeley, June, 1966], compares three ethnic groups, Mexican-Americans, Negroes and Caucasians on their modes of adaptation to the welfare system.

The recipients had three choices with respect to statements presented to them: Agree, Disagree or Uncertain. Following are the results with respect to selected statements:

	Agree	Disagree	Uncertain
	%	%	%
1. You can be sure they (the agency) always have a good reason for what they do.			
Mex-Ams.	75%	22%	3%
Negroes	74%	6%	20%
Caucasians	74%	13%	13%
2. Trust the social worker 100 percent.			
Mex-Ams.	59%	34%	6%
Negroes	74%	6%	20%
Caucasians	74%	10%	16%
3. It's best to do anything they tell you to do.			
Mex-Ams.	72%	28%	---
Negroes	40%	33%	27%
Caucasians	47%	20%	33%
4. You have to keep after them about things.			
Mex-Ams.	44%	50%	6%
Negroes	33%	50%	17%
Caucasians	20%	60%	20%

[Source: Based on data in Ibid., pp. 63-64.]

It is clear, then, that many poor people are cowed into accepting agency decisions and procedures without question.

There is some hope that clients will be helped to complain, in spite of these difficulties, if the subcommittee offices are clearly marked "complaints", and it becomes known that they are actively interested in hearing complaints and suggestions.

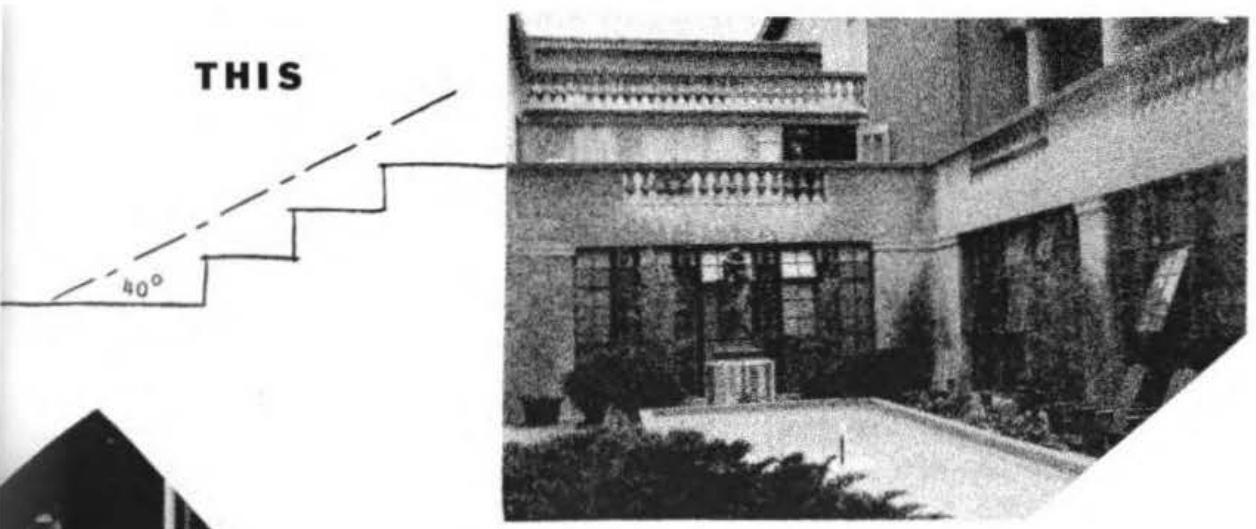
Scott Briar concludes his article on "Welfare From Below: Recipients' View of the Public Welfare System" [op.cit.] with the following recommendation "...welfare agencies...could become positive instruments for the inculcation in recipients of a conception of themselves as rights-bearing citizens...To accomplish this would require...making accessible to the recipient the information necessary to understand and review agency decisions affecting his claim; High visibility and accessibility of appeal procedures..."

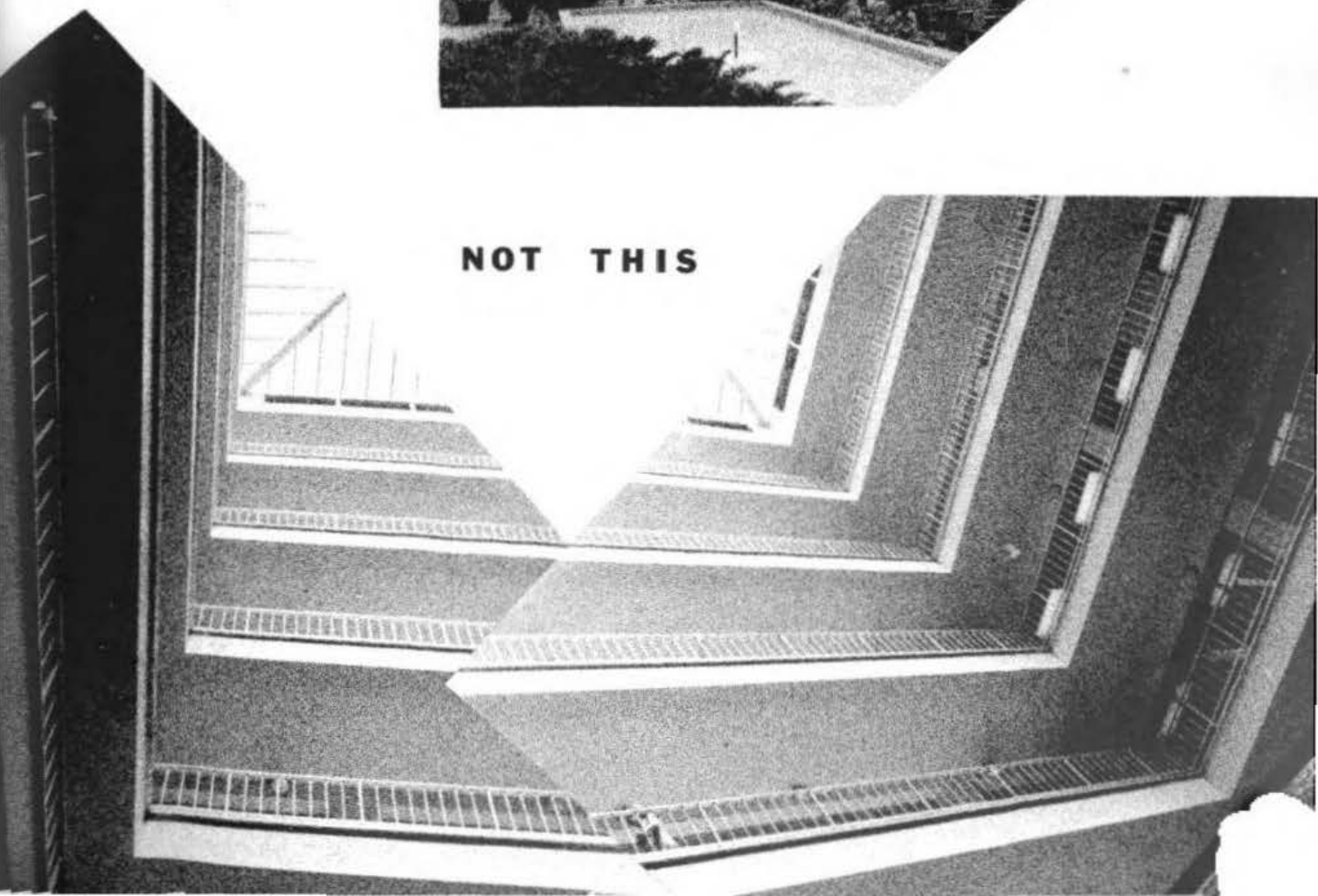
BUILDING STEPPED BACK FROM ARENA.

PATTERN

IF: There is a public courtyard where people congregate,

THEN: The buildings around the courtyard are raked back at angles of less than 40 degrees:





PROBLEM

If the buildings around an open court are too close around it, then people do not feel comfortable in the middle of the space; they will not stop there, sitting or standing, but will move to the edge instead. This makes the space useless as a meeting place - no one will use it.

This much corresponds to common experience and intuition. But in order to solve the problem, we must be able to precisely specify under which circumstances people feel oppressed by buildings around them, and under which circumstances they do not, and to do this, we must know why people feel oppressed.

We conjecture as follows:

People feel uneasy when high buildings surround them, essentially because, consciously or unconsciously, they are afraid things will fall on them or be thrown down, afraid because they are threatened by the possibility of something hovering above them, and self-conscious about people looking down on them.

If this conjecture were true we should expect the following:

The feeling that a building is threatening should come into play most forcibly when there are parts of the building too high to be seen clearly, but placed so that their "presence" is felt, towering above. This will happen if the building rises above the field of clear vision.

It is known that a man normally fixates about 10 degrees below the horizon, and that his visual field extends about 50 degrees above his line of sight. [Henry Dreyfuss, The Measure of Man, Whitney Publications, New York, 1959, Chart F.] His clear vision therefore extends about 40 degrees above the horizontal. Anything more than 40 degrees above the horizontal, from where he stands, will be out of view - but "felt". It therefore seems reasonable to expect that buildings become oppressive if they subtend more than 40 degrees to the horizontal, in an open court.

There is a second argument which suggests that a stepped back court may help to solve the problem, irrespective of its angle.

If the conjecture stated is correct, then the feeling of oppression and threat is probably caused, at least in part, by the fact that things can fall down out of windows and off roofs. (This might explain why a deep canyon in the mountains, though somber, is not nearly as threatening as a deep well-like court in the heart of a building, lined with windows.) If the building is stepped back, then things cannot fall out of windows or off the roof, and people who lean out of windows will not be able to look down onto the people below. The threatening feeling should vanish almost entirely.

Since so little is known about the phenomenon, we shall for the time being assume that our conjecture is correct. The pattern is based on the conclusions which follow from the conjecture. It must be emphasised, though, that there are no sound theoretical or empirical grounds for the conjecture. It may well turn out that the phenomenon of oppression is caused in some entirely different manner.

VERTICAL CIRCULATION IN SERVICES. 26

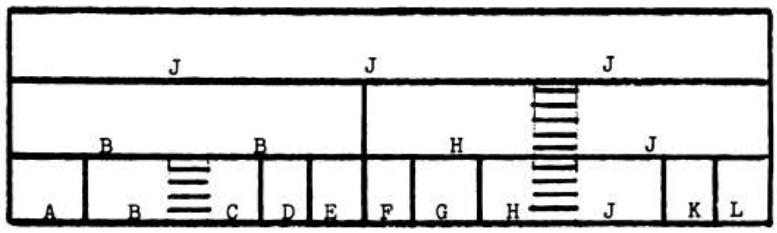
PATTERN

IF: Any multi-service center where pattern 13 holds, and where there are services that occupy more than one floor of the building,

THEN: Each service that occupies more than one floor must have all its floors opening off the same vertical circulation shaft (stair or elevator).

Therefore all services which require more space than the maximum permitted at ground level, should be grouped in pairs around stairs.

Thus, if there are N services which need more than the allowable ground floor space, then there must be N/2 vertical shafts.



PROBLEM

If services cannot manage with the allowable ground floor space as derived from Pattern 13, they will be forced to find some form of vertical organisation.

As stated in Pattern 13, all interviews are to be at the first floor level. Clients will only rarely need to visit the upper floors of any given service. However, the staff members of a service will need to be in constant contact with one another. Unless the vertical circulation is

exceptionally convenient, these services will want to move their entire operation to another floor, thus destroying the intentions of Pattern 13. It should not be necessary, for example, to go outside of the service, along a corridor, up a stair, and back along another corridor, to get to the upstairs space.

The vertical circulation linking a divided service must, therefore, be extremely direct. It must go straight up from the ground floor service space and open directly into the upper spaces.

This does not require that all the services, or even most of them, have vertical access to the upper storeys. The distribution of sizes among services is extremely uneven. Many services are small, and can fit comfortably into the ground floor premises available under the constraint of Pattern 13. Among ten services, for example, there would probably be no more than three large enough to require extra space on the second floor; and probably no more than one which required additional extra space on a third floor (if provided).

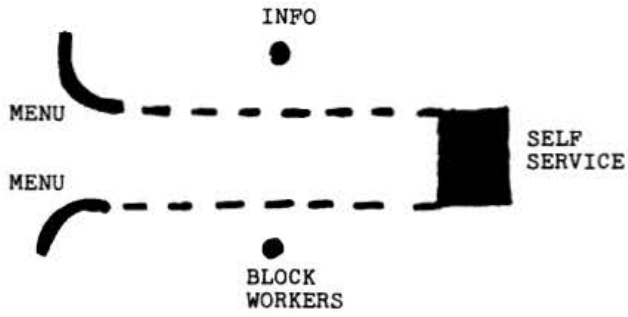
In such a case this pattern would be satisfied by two staircases (perhaps even one) from the first floor to the second, and by one staircase from the second floor to the third. Administrative arrangements can ensure that those few services which have space on upper floors, are given the floor space next to the stairs.

SELF-SERVICE PROGRESSION. 27

PATTERN

IF: A service center with self-service programs as described in Pattern 21,

THEN: There should be two kinds of self-service areas; the first area is a self-service menu, the second area is self-service itself.



The menu is filled with very general information; it tells what services are available, and invites people to make use of them.

The self-service area contains specific information about problems - information which in itself renders service; like housing listings, job opportunities, welfare rights news, etc.; it also contains equipment for typist training, language labs, etc.

Where the center is used by people of two language groups, all information in both self-service areas is in both languages.

The menu is out along the front of the building in full view, such that people on the sidewalk can see it. It is closely associated with the block worker area and the information station - so that community people can ask other community people questions. Self-service itself is well within the building and placed so that it can be locked up at night. It is closely associated with waiting areas and agencies; also it is immediately adjacent to the planning and evaluation worker stations.

There are no receptionist or intake workers located at the entrance to either the menu or self-service; a person can enter the self-service area and browse there for as long as he wants, without having to explain himself to any receptionist or intake worker.

There is a natural circulation path from the menu to self-service - a progression directly from one to the other.

The entrance to self-service is very prominent, and visible to people immediately as they enter the center.

PROBLEM

Once it has been decided that a self-service program should be a part of a service center, as argued in Pattern 21, new problems come into play:

How should self-service information be organized?

1. People will want to get a clear overview of the services offered by the center in general terms before they decide whether or not there is a specific program for them.
2. People do not want to be bothered with formal intake procedures when they are trying to get the general overview of service programs.
3. Once they get the general picture, people want to move immediately to the specific service relevant to them; this means they will want to have direct access to the relevant information and/or make an appointment to see a staff member.

Together these tendencies mean that the self-service material should be organized in two parts - first, a part that gives the general overview, a kind of menu, describing what exists, who is eligible, where in the building, etc.; and second, a part that makes available specific information aimed at solving specific problems, e.g. available jobs, eviction laws, apartment listings, welfare rights laws, teaching machines for language, typing, shorthand, etc. These two parts are the self-service menu, and self-service itself, as described in the pattern statement. Since people will want to get at the menu without entering the building in the formal sense, this material must

be at the front of the building, visible from the sidewalk, and situated such that people can freely loiter around it: there must be no reception or intake workers guarding the material. Once a person decides what service might be best for him, he wants to get at it directly. Thus there is a direct path from the menu to self-service; this path does not pass through any "bureaucratic territory" and, again, is not guarded by intake or reception workers.

The entrance to self-service is prominent and visible from the menu area. Since the materials used in self-service will be valuable, the self-service space must be situated such that it can be locked up after hours, without necessarily closing down other parts of the building.

How can people using the self-service material get their questions answered, without going through layers of red tape?

1. It is impossible to design a self-service display that every individual can use in a foolproof way; for most people a question or two will arise as they go through the self-service experience.
2. People want straight answers to their questions; poor people rarely feel they are getting a straight answer from agency bureaucrats: and so they learn to play the agency game.
3. The most reliable information comes from discussion among community residents, neighbor to neighbor.

Richard A. Cloward and Irwin Epstein, in their article "Private Agencies' Disengagement from the Poor" [Mayer Zald, ed., Social Welfare Institutions, New York: John Wiley and Sons, 1965, p. 640] state:

> ...Those (persons) coming because they had found the agency listed in the phone book were highest in social status...Clients coming because of what they had seen or heard through the mass media were predominantly from the middle or lower-middle-class groups...Over half of those coming on the informal advice of friends or relatives, on the other hand, were from the lower class.

These tendencies tell us that it must be possible for people to ask questions and discuss service center matters in the course of their self-service experience; and furthermore that these questions and discussions must not include the typical agency bureaucrats - they must be among members of the community themselves. Thus both the menu and self-service are immediately

adjacent to places in the building where community people, experts on various facets of the center, are available for question and discussion. The menu is near the block worker and information station; self-service is near the information station and the planning and evaluation workers. All these people are residents of the local community; they are visible from the self-service area they are associated with. They are trained to answer questions about the self-service material, and it is part of their job to keep the material current.

Note: There is some evidence to suggest that clients cannot get straight answers to their questions from other community members, once these people have been hired by the center. It is claimed that very often the people who take the center jobs get assimilated into the bureaucratic ethos, and, indeed, become worse tyrants than the uptown liberals.

This evidence comes from a study of service centers in Oakland. [B. Waldrich, "Study of New Careers Programs", Ph.D. Thesis, Department of Sociology, University of California, Berkeley, 1968.] It is not completely clear that the Waldrich findings apply to the case under question. First of all, community residents hired for block worker, information and planning and evaluation work, are to be selected by a community corporation; second, these workers are not attached to specific agencies - they are supposed to be free-floating workers, under the control of a community director, and representative of community interests; third, the organization of the building emphasizes these two points - all these workers are located in the front parts of the building - and the agency staff is kept quite distinct, towards the back of the building behind the arena.

None of these three conditions occurred in the centers Waldrich studied. Whether or not these conditions are powerful enough to effect his findings is, at the moment, unclear.

THE INTAKE PROCESS.

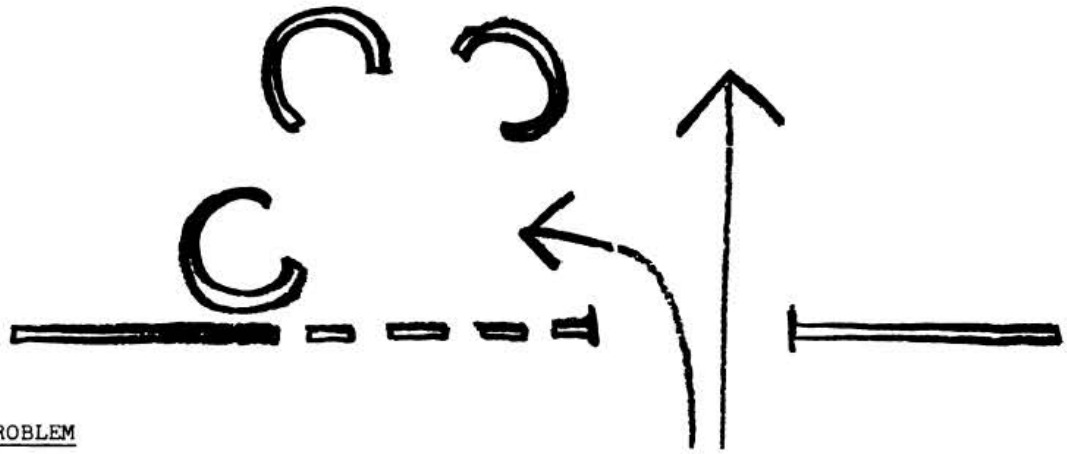
28

PATTERN

IF: A multi-service center with field workers (block workers, contact workers, community organisers, etc.),

THEN: There should be no formal intake process. Instead, "intake" should be handled in the following manner:

1. The function of intake should be performed by field workers, in rotation, each spending a certain number of hours per week at the center, in a conversation and interview area.
2. The intake area should be located immediately next to the main entrance(s) of the center, visible from the outside, and directly accessible from the outside; there should be no receptionists.
3. The intake area should contain one or more open alcoves, at least 7 feet in diameter, and furnished with comfortable seats.



PROBLEM

Many existing centers create the feeling that people coming to the center are being processed, like cattle, by receptionists and intake workers.

Thus, Benny Parrish, Community Organiser, formerly from the California Committee for Community Development says:

There should be no receptionists. This has always turned me off - you go into a center and first thing you run into is somebody sitting behind a desk to take your name.

Similarly, Diane Lacey, Assistant Director of the Hunts Point Multi-Service Center Planning Team, described a small service center in East Harlem as being very well used by the community because there was essentially no formal intake: Clients were asked only their name and address before seeing an interviewer.

During the course of our study we have heard many complaints about the typical intake process. Among these complaints three themes emerge.

1. Most clients dislike the indignity of telling their problems to receptionists and intake workers. The very term "intake" is a hangover from the 1930's welfare vocabulary.

2. When middle-class members of our society have problems, they don't have to go and talk about them to intake workers - they use their own initiative to find out what kind of help they need, and then they go and get it. Why should poor people have to tell their problems to intake workers?

3. Many people are very anxious about asking for help with their personal problems. The intake worker perpetuates this anxiety, by taking a client's "particulars" - a procedure not usual anywhere else except in police stations.

Taken together these arguments say one thing: <u>There should be no "intake workers"</u>.

Detailed consideration of the various ways in which a person may become a client in a multi-service center, shows that the process is extremely varied, and that in most cases it involves a community organiser or contact worker at some early stage. This strongly suggests that the so-called intake function should be performed by the very same organisers and contact workers who first introduce the clients to the center.

The following descriptions of ways in which a person typically becomes a client in a multi-service center, are taken from the "Hunts Point Neighborhood Service Program II", Hunts Point, Bronx, New York, submitted to the OEO, Washington, D.C., January 1968, A-2.14.

I. Community Contact Worker approaches the individual or family at home for an informal interview.

II. Resident receives through the mail information about the Multi-Service Program from the Contact Worker working in his Neighborhood.

III. Resident receives telephone call from Community Contact Worker.

IV. Resident encounters Community Contact Worker on street, in a store, shop, restaurant, or bar.

V. Resident hears of Multi-Service Program from friends, relatives, at work, or in other community institutions (such as the church).

VI. Resident happens to walk by the Multi-Service Center.

VII. Resident hears of Multi-Service while seeking assistance from a public or private institution.

Once it is determined that the "intake function" will be handled on an informal basis by community organisers and contact workers, it is then easy to see that the interview area must be immediately next to the main entrance to the center, and highly visible and accessible.

Clients must be able to wander in, and find someone to talk to, without going through any reception process.

Examples of centers organised on the basis of this principle, are five centers organised by Community-Progress, Inc., New Haven, Connecticut. [Robert Perlman and David Jones, "Neighborhood Service Centers", U.S. Department of Health, Education and Welfare, Washington, D.C., 1967, pp. 26 and 30.] The authors write:

In the CPI employment centers, neighborhood workers have the first contact with applicants, dividing their time between making contacts outside the office and covering the intake at the center. In several CPI centers the neighborhood workers are at desks in a large open room in order to emphasise their accessibility and the absence of red tape and formality...they are in a large open room in view of people entering the center, as a means of giving applicants the easiest possible access to someone they knew or had previously met.

OUTDOOR SEATS.

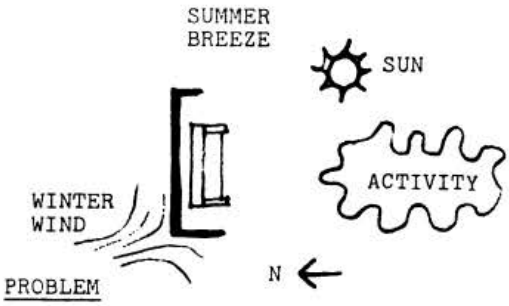
29

PATTERN

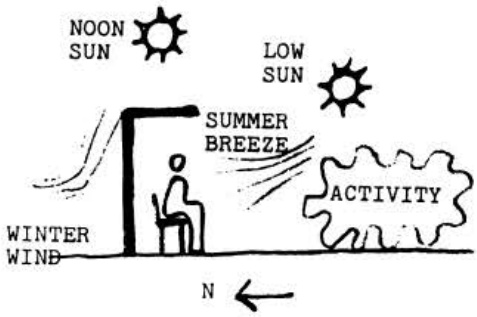
IF: Any place in a city, but especially places within walking distance of old peoples dwellings, where something potentially interesting is going on,

THEN: Benches should be placed in such a way that they meet the following conditions:

1. They face directly onto pedestrian activity.
2. They are open to the south, southeast and southwest as shown in the accompanying diagram, to allow sun exposure during winter months. (The exact angle depends on latitude.)
3. In hot climates, they are covered by a roof or overhang, at the angle shown, to give sun protection during midday hours of the summer months.
4. They are surrounded by adjacent walls on those sides where the winter wind comes down.
5. They are open to the direction of summer breeze, if any.



PROBLEM



1. Old people are perennially bored, and seek something to watch, especially places where there are people, and where people are doing things. (For example, observation of Union Square in San Francisco at 3:00 P.M. on a sunny day following a foggy, cloudy day showed 175 people seated in the area; at least 3/4 of them were elderly men.)

2. In a cool climate, or in winter, or at the end of the day, people will not sit in the shade, or in places exposed to wind. This is especially true of old people, who are more susceptible to rheumatism, colds, etc.

Karren and Palmer, show that, given a choice of benches, a person will select those with best exposure to view and sun. ["Personal Space on Benches, unpub. ms., Department of Architecture, University of California, Berkeley, 1968.]

We have two informal observations which support the same conclusion.

First, we made random spot checks of selected benches in dense pedestrian areas. A small number of benches in Berkeley showed the following: At the moment of observation, we recorded four facts about each bench. Was it occupied or empty? Did it give a view of current activity or not? Was it in the sun or not? What was the current wind velocity? Of the eleven spot checks, three showed occupied benches, and eight showed empty benches.

At the moment of observation, all three occupied benches looked onto activity, were in the sun, and had a wind velocity of less than 1.5 feet per second. At the moment of observation, none of the eight empty benches had all three of these characteristics. Three of them had shelter and activity but no sun; three of them had activity, but no sun and wind greater than 3 feet per second; two of them had sun and shelter, but no activity.

A second series of observations compared the numbers of old people in Union Square, at 3:00 P.M., on a sunny day, with the number at 3:00 P.M. on a cloudy day.

	Sunny	Cloudy
Number of persons sitting on 126 linear feet of bench in Union Square	65	21

The air temperature was approximately the same on both days. The wind velocity was < 2 ft/sec. on both days.

These informal observations leave much to be desired. However, in the absence of any further evidence, it seems reasonable to conclude that benches should be placed in such a way as to give onto activity, to be in the sun during cool parts of the year, and to be sheltered from wind.

3. In a hot summer, during the hot part of the day, people do not want to sit in the sun, and do seek a breeze. For hot climates, benches should be placed so that they are shaded from the midday summer sun.

CEILING HEIGHTS.

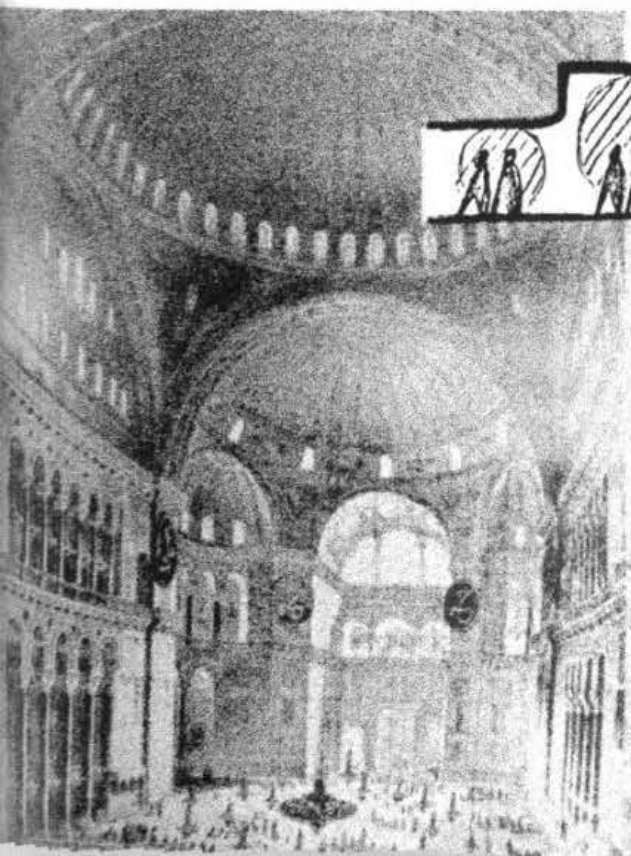
PATTERN

IF: A space containing social situations with appropriate social distance of x feet,

THEN: The ceiling height over these social situations should be of the same order of magnitude as x.

Since rooms for situations with large social distance are usually large, and rooms for situations with small social distance are usually small, the simplest rule of thumb says that the ceiling height should be about equal to the diameter of the room.

However, there are often places where the room diameter is greater than the social distance of typical social situations (a normal living room, for example); in this case a lower ceiling is right. There are also rooms which contain more than one appropriate social distance - for example a public room in which small groups of people meet intimately (a restaurant, the gate of an airport, the lobby of the U.N.). In this case we should expect to find a large overall ceiling height, with lower canopies, slung ceilings, or alcoves within it.



PROBLEM

It is well known that in badly designed buildings ceilings are often either oppressively low, or unpleasantly high. It is common practice for architects to take this into account - for instance, by making large public rooms with high ceilings.

This subject has most often been discussed in terms of proportion. Many efforts have been made to establish rules which will make sure that rooms are "well-proportioned".

The intuition that the height of a room does make a difference to the way it functions, is undoubtedly real. However, the theory of proportion seems hard to defend. Thus, for instance, Palladio laid down three rules of proportion: All of them shared the feature that the height of a room should be intermediate between its length and its breadth. [See A. Palladio, The Four Books of Architecture, New York: Dover, 1965, pp. 28-29. Also Wittkower, Architectural Principles in the Age of Humanism, London: 1952, p. 96.]

However sound this may seem to be in certain cases, it is clearly not a universally valid geometric principle. There are many rooms with extremely low ceilings, especially in cottages and informal houses, which are extremely pleasant - even though they violate Palladio's principle utterly.

The theory of proportion also makes it hard to find any reasonable sense in which a badly proportioned room could be called "problematical".

The following theory makes it clear what is problematical about badly proportioned rooms, and gives the beginning of a sound functional basis for establishing the right height for different spaces.

The problem hinges on the question of appropriate social distance. It is known that in various kinds of social situations there are appropriate and inappropriate distances between people. [See Edward Hall, The Silent Language, New York: Doubleday, 1959, pp. 163-164; and Robert Sommer, "The Distance for Comfortable Conversation", Sociometry, 25, 1962, pp. 111-116.]

Now, the ceiling height in a room has a bearing on social distance in two ways:

1. In an acoustic manner.
2. Through the medium of three dimensional "bubbles".

We discuss them separately.

1. The height of a ceiling appears to affect the apparent distance of sound sources from a hearer. Thus, under a low ceiling, sound sources seem nearer than they really are; under a high ceiling they seem further than they really are.

Since the sound is an important cue in the perception of distance between people (voice, footstep, rustle, etc.), this means that ceiling height will alter the apparent distance between people. Under a high ceiling people seem further apart than they actually are. It may even be the case that room shape adds to the effect. [Informal empirical investigations suggest that this effect is true. However, it has not been tested thoroughly, and the social and physiological literature does not refer to it. For a similar intuition see Richard Neutra, Survival Through Design, New York: Oxford University Press, 1954, p. 169.]

On the basis of this effect, it is clear that intimate situations require very low ceilings, less intimate situations require higher ceilings, formal places require high ceilings, and the most public situations require the highest ceilings: e.g., the canopy over a double bed, a fireside nook, high ceilinged formal reception room, Grand Central Station.

The acoustic theory may account for some of the effect; we know, however, that it cannot account for such phenomena as the way exposed beams seem to "lower" ceiling height and make rooms more intimate.

The following theory, is similar to the acoustic theory, but may account for these phenomena:

2. We know that each social situation has a certain horizontal dimension or diameter. We may think of this as a kind of membrane or bubble which encloses the situation. It is likely that this bubble has a vertical component - equal in height to its diameter. If this is true, a social situation taking place in a room which is lower than the apparent bubble will make the ceiling seem oppressively low, while a ceiling which is higher than the apparent bubble will seem uncomfortably high. Thus, according to this theory, the height of the ceiling should, for comfort, be equal to the dominant social distance in the room. Since people in Grand Central are strangers, and

require a separation of 100 feet, this would explain why the ceiling has to be very high; similarly, this explains why the ceiling over an intimate nook, or over a double bed, has to be very low.

It is clear, in this case, that it is the apparent ceiling height which counts - thus, the bottom faces of the beams, in a room with exposed beams, create a virtual plane - and it is the height of this plane which must be measured against the dominant social distance.

This social bubble theory also explains why the huge but low-ceilinged "office landscape" designs [introduced by the Schnelle organisation, see Francis Duffy, Burolandschaft, Architectural Review, February 1964] are not oppressive. Though hundreds of people may be working in the same basic office space, the space is "landscaped" into small social bubbles through manipulation of furniture, screens and plantings. In these relatively small social bubbles the low ceiling height of 8'2", specified by the Schnelle organisation, is perfectly appropriate. Furthermore, due to the acoustic phenomenon mentioned above, the low ceiling helps each social bubble retain its privacy.

SHORT CORRIDORS.

31

PATTERN

IF: Any building with rooms opening off corridors,

THEN: No straight stretch or corridor has more than 5 or 6 doors opening off it along one side, and its length is no more than about 5 times its width.

For most buildings this means, in effect, no straight stretch of corridor more than about 50' long.

PROBLEM

This problem is based on the following conflict:

1. In buildings where a number of rooms are to share a circulation path, it is common practice to string the rooms along a straight corridor. This is deemed the technically efficient solution, since it minimizes circulation space and reduces the construction costs of "turning corners".
2. However, the intuition persists that, from a human point of view, long corridors with many rooms off them are dysfunctional: People dislike them; they represent bureaucracy and monotony.

Let us try to make this intuition more specific. What evidence is there that long corridors contribute to human uneasiness?

We refer first to a questionnaire distributed by Murray Silverstein in 1965. The sample was small (12) and limited to college graduates, so the results are, at best, provocative. The questionnaire asked people to describe those elements in buildings that contributed most to impersonal and institutional feelings. Subjects reported experiences with many different building types: army barracks, dormitories, office buildings, government agencies, and so forth. The most recurring theme in their remarks was the unpleasantness associated with long corridors. One person wrote, "...long corridors set the scene for everything bad about modern architecture." [This material is unpublished. For a more detailed discussion see Sim Van der Ryn and Murray Silverstein, Dorms at Berkeley: An Environmental Analysis, Center for Planning and Development Research, Berkeley, 1967, pp. 23-24, 62-63.]

Similarly, Russell Barton asserts that the long corridor condition contributes to "institutional neurosis" - a condition wherein building inhabitants become less lively, unmotivated, and their concentration span limited. [Russell Barton, Institutional Neurosis, New York: Williams and Wilkins, 1959.]

Finally, we refer to a study by M. Spivack on the non-conscious effects of long hospital corridors on perception, communication and behavior:

> Four examples of long mental hospital corridors are examined...It is concluded that such spaces interfere with normal verbal communication due to their characteristic acoustical properties. Optical phenomena common to these passageways obscure the perception of the human figure and face, and distort distance perception. Paradoxical visual cues produced by one tunnel created interrelated, cross-sensory illusions involving room size, distance, walking speed and time. Observations of patient behavior suggest the effect of narrow corridors upon anxiety is via the penetration of the personal space envelope. [M. Spivack, "Sensory Distortion in Tunnels and Corridors", Hospital and Community Psychiatry, 18, No. 1, January, 1967.

All of this evidence is speculative; none of it proves the intuition. However, it is extremely suggestive. If we assume the intuition is correct, then the question arises: how can we establish an upper limit on corridor length?

Evidence suggests that there is a definite cognitive breakpoint between things seen as "reasonable" circulation spaces, and things seen as "long corridors". We shall try to define the point where this change in perception occurs.

The following two results are highly suggestive: It is known that when a person sees 4 or 5 regularly spaced objects of the same kind, he perceives them as a unit. He can judge their number without counting them. When the number of objects goes above 5 or 6, he no longer sees them as forming a unit. He now sees them as a collection. If he wants to estimate their number, he has to count them, one by one, in sequence. At this stage, it seems likely that the feeling of monotony and repetition sets in. In its most extreme form, we might say that the perceiver, faced with a "collection", sees the objects as digits. If the objects were offices along a corridor, then the perceiver would begin to see the offices, and their inhabitants, as digits. [G. Miller, "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information", in D. Beardslee, and M. Wertheimer (Eds.), Readings in Perception, New York: Van Nostrand, 1958, esp. p. 103; also E. L. Kaufman, M. W. Lord, T. W. Reese and J. Volkmann, "The Discrimination of Visual Number", American Journal of Psychology, 62, 1949, pp. 498-525.]

Another experiment, done by the authors, is also relevant. It was found that, in the perception of rectangles, there is a definite cognitive break between that class of rectangles with ratio 5:1 or less, and that class of rectangles with ratio greater than 5:1. Rectangles from the first class are seen as rectangles with a specific proportion. Rectangles from the second class are seen merely as "long thin things".

The first of these results suggest that there may be a clear cognitive distinction between corridors which have five or less equally spaced doors, and those which have more than five.

The second result suggests that there may be a clear cognitive distinction between rectangles (and hence, perhaps, corridors) which have a ratio of less than 5:1, and those which have a ratio greater than 5:1.

(As it happens, both of these breakpoints coincide approximately: Given standard corridor widths, and standard office sizes, they both make a distinction between corridors less than 40-50 feet long and those more than 40-50 feet long.) Since common sense indicates that a corridor becomes unpleasant when it has five or more equally spaced doors down one side, and when it is more than five times as long as its width, it is very likely that this breakpoint is the one we are looking for.

The assertions upon which this pattern rests await experimental investigation. However, we wish to note here that even if research corroborates the assertions, the original conflict still remains unsolved. Part of the reason that buildings are now built with long corridors, is because it is cheaper. Even if we can establish the the unpleasantness of long corridors on a sound empirical basis, it still remains to find a cheap way of making buildings with short corridors.

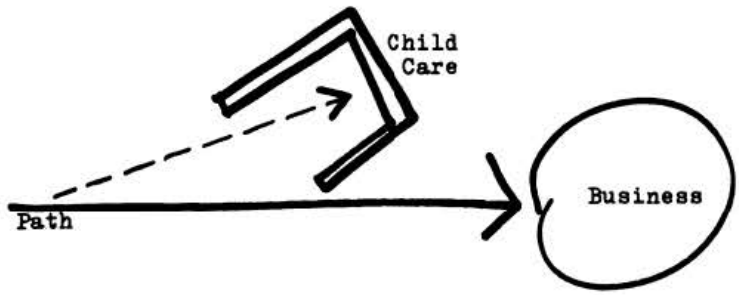
CHILD-CARE POSITION.

32

PATTERN

IF: A child care station in any building where mothers have prolonged business (multi-service center, supermarket, etc.),

THEN: The child care station should be on the path from the building entrance to the place of business, and visible from this path; and the path should be laid out so that it looks into the child care station for roughly 20 feet along its length.



PROBLEM

When small children are left off at care centers they are often extremely anxious; they feel deserted, and the ensuing scene causes tension between mother and child. [See Glen Lym, Marsha Shapiro, Murray Silverstein, "Kiddie Korral Observations", unpub. ms., December 1966.]

The only certain way to solve this problem, is to create circumstances under which the child decides, of his own accord, that he wants to play in the center.

Of course, physical design cannot guarantee this circumstance - since it depends on many personal and idiosyncratic factors. However, the physical

environment can help to increase the likelihood of the circumstance, by exposing the inside of the child care space to the child, for as long as possible, during the time that mother and child approach it. The longer the child has a chance to see what is going on in the care center, the greater the probability that he will, of his own accord, decide that he wants to be there.

SERVICE LAYOUT.

33

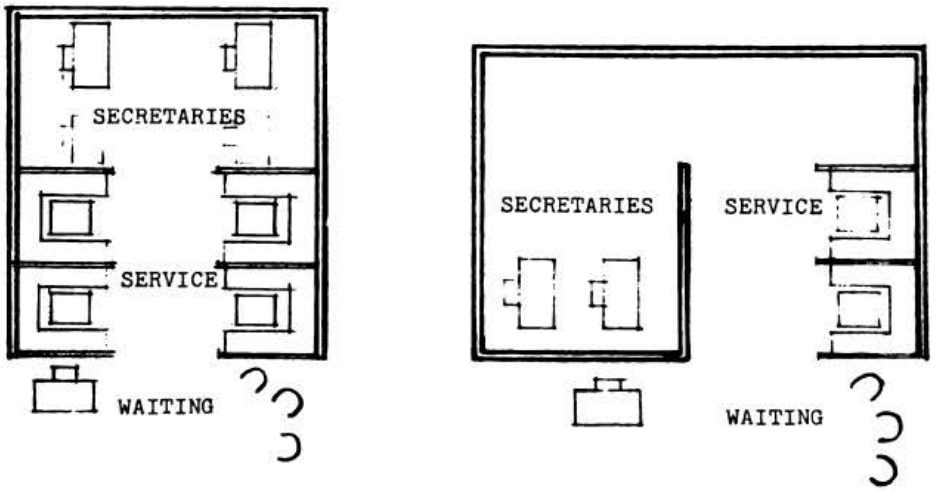
PATTERN

IF: A public service agency,

THEN: Each service has three zones:

1. Client waiting
2. Client service
3. Clerical back-up

No matter how the zones are arranged, one condition must hold: The clerical zone must be invisible from the waiting zone. (Thus the clerical zone is either on the far side of the service zone, away from waiting, or between waiting and service, in a partitioned island, facing away from waiting.)



PROBLEM

This pattern has for its rationale a single conjecture. When people are confronted, upon entering a public service facility, with a sea of secretaries, typing and shuffling papers, they turn off. They know they will be handled impersonally; they feel they are just numbers in the eyes of a bureaucracy.

In many situations there is nothing wrong with this kind of impersonal confrontation. It would be silly to make every routine encounter into a personal affair. The trouble occurs when an individual with a unique problem cannot get personal recognition.

In public service facilities impersonal and routine interactions can be carried on over the phone, in the mail or at special windows or counters. When, however, a client schedules an interview and makes a special trip to the facility to get his service we can assume he has a problem that in some sense is special to him.

Thus, if our conjecture is correct, that the sight of secretarial pools tells a man he is in the impersonal hands of bureaucrats, then this experience ought to be avoided when people make a special trip to a service facility to express their needs.

If our conjecture is correct, and admittedly it is based purely on intuition, then the pattern in question follows straightforwardly. Although we have not been able to find direct evidence to corroborate our assertion, the spirit of the problem is caught perfectly in the following quote from Franz Kafka's great novel, The Castle:

> He's usually admitted into a large room, but the room isn't Klamm's bureau, nor even the bureau of any particular official. It's a room divided into two by a single reading-desk stretching all its length from wall to wall; one side is so narrow that two people can hardly squeeze past each other, and that's reserved for the officials, the other side is spacious, and that's where clients wait, spectators, servants, messengers. On the desk there are great books lying open, side by side, and officials stand by most of them reading. They don't always stick to the same book, yet it isn't the books that they change but their places, and it always astounds Barnabas to see how they have to squeeze past each other when they change places, because there's so little room. In front of the desk and close to it there are small low tables at which clerks sit ready to write from dictation, whenever the officials wish it. And the way that is done always amazes Barnabas. There's no express command given by the official, nor is the dictation given in a loud voice, one could hardly tell that it was being given at all, the official just seems to go on reading as before, only whispering as he reads, and the clerk hears the whisper. Often it's so low that the clerk can't hear it at all in his seat, and then he has to jump up, catch what's being dictated, sit down again quickly and make a note of it, then jump up once more, and so on. What a strange business! It's almost incomprehensible. Of course Barnabas has time enough to observe it all, for he's often kept standing in the big room for hours and days at a time before Klamm happens to see him. And even if Klamm sees him and he springs to attention, that needn't mean anything, for Klamm may turn away from him again to the book and forget all about him. That often happens. [Franz Kafka, The Castle, New York: Alfred A. Knopf, 1946, pp. 230-231.]

STREET NICHES. 34

PATTERN

IF: Any building, open to the public along a pedestrian path, where it is hoped that people will stop, linger and become familiar with the building's service, before they actually enter,

THEN: Along the building's frontage, where it meets the pedestrian path, a series of niches with the following characteristics:

1. The niches are set just off the sidewalk; in effect they are extensions of the sidewalk.
2. The niches display the service that the building offers; they contain display windows and/or panels for posting displays.
3. The niches provide relief from the pedestrian path: thus they may have seats, radiant heat, a different surface texture; anything that seems appropriate to the immediate neighborhood.
4. The niches are at least 5 feet deep.

The exact number and size of the niches will vary according to the amount and nature of the building's display needs.

PROBLEM

A public building has a curious relationship to the land around it, quite different from the relationship between a private building and the land which surrounds it. A private building is distinct and separate from the land around it; the building is private and the land is public. But a public building is public; it belongs to the community, just as the land around it also belongs to the community. The wall which connects it to the land outside, instead of being a barrier, should be more like a seam; its form should unite the two, so that they become clearly visible as interlocking parts of a single extended community domain.

Though there is almost certainly psychological truth in this idea, it is not in itself a sufficient basis for a pattern. We now present a rather more detailed analysis, based on the insight just stated, yet expressed in detailed functional terms.

We know that people like to "window shop" as they walk along the street. When given the chance, people will spend a long time exploring a building's merchandise before they decide whether or not to enter. But as long as it is done from the sidewalk, window shopping is rarely more than a short glance: There is a countervailing tendency for people not to linger while they are moving along a city path.

The conflict between these two tendencies may be resolved by deep niches, set into the building, along the pedestrian path. Because they are both inside the building, and outside it, people feel freer to linger in them.

The picture shows a deep display niche off a San Francisco sidewalk. This kind of form truly gives people a chance to get out of the stream of movement, and look over merchandise. It was informally observed by the authors that people who enter this niche spend on the average, one minute and ten seconds exploring the display, before either going in or returning to the sidewalk. On the same block, where display cases front immediately on the sidewalk, people spend on the average, fifteen seconds window shopping. That is, given the opportunity created by the niche, people spent almost five times more time window shopping.

There is also some evidence to show that such forms actually do help people become familiar with merchandise before they enter a building. A men's clothing shop across from Union Square in San Francisco has a T-shaped niche, like the one in the picture. This niche lets people step off the sidewalk, into a carpeted foyer, and inspect the clothing before they enter the front door. A salesman in this store compared his experience there, with his experience at another store, with a more conventional display case (one facing directly onto the sidewalk). He said the difference was dramatic: Merchandise put into the T-niche display was usually sold out in a week, compared with much longer time periods for similar goods displayed at the other store.

INFORMATION-CONVERSATION.

PATTERN

IF: Any public building which offers free information to users as an optional service,

THEN: An information station is provided with the following characteristics:

1. The information station has a counter. The information person serves coffee over this counter; there is a daily newspaper on the counter; at the back of the counter, or beside it, there are loosely arranged seats.
2. The station is clearly visible and accessible from all major entrances to the building.
3. The station must not control access to any part of the building; it must be located such that the direct paths to the building's services pass at least 20 feet from it.
4. The station is clearly marked INFORMATION, legible from the entrance, and the attendant at the station has no formal responsibilities other than giving out information.
5. There is a direct path from each major entrance to the station; this path does not pass any receptionists or other control points, and is at least 30 feet long.

PROBLEM

The following demands control the form of information stations.

1. Since the multi-service center is meant to be community territory, it is essential that people feel free to go in and out without explaining themselves to anyone. [See the remarks by Benny Parrish quoted under Pattern 28.]

If the information desk is placed close to entrances, so that people have to walk past it, it may seem to be guarding the building. This happens more often than one might think. Even though a receptionist may be pleasant and kind, she will often have orders to question people who come in - or may even just do it as a way of "trying to do a good job".

2. On the other hand, there will be people who will need information immediately, upon entering the building; if an information source is not instantly available, they will feel disoriented.

3. There will be some lonely people who just want to stop and talk with the information attendant, without committing themselves, in any formal sense, to using the building.

Alfred Kahn, et al, point to a similar need in their proposal for information centers:

> The inquirer might not be prepared to accept advice, referral or steering or might not need it. The entire service might consist of occasional friendly 'chats' or the giving of reassurance, which keeps a dependent or slightly disturbed person functioning in the community. [Alfred Kahn, et al, Neighborhood Information Centers, Columbia University, School of Social Work, 1966, p. 34.]

For these people the information desk should be easily accessible from the street, and designed to allow and sustain casual conversation.

We have observed, informally, that people are more apt to talk freely in these situations if they are talking over a counter, just above their waist, that is, about 40" high. Obviously they will feel freer if the counter is a coffee counter - it gives them an ostensible reason for being there. When the station is simply a desk, people will tend not to linger there; they will get their information and move on.

Further, the information person should not have any other job to do, besides giving out information. Normally receptionists are doing some office chore when they are not giving help, and they do not invite casual conversation.

4. People who are coming to use the station will want an instant to collect their thoughts as they approach. This is impossible if the information attendant is right on top of the door: it is generally unpleasant to confront a receptionist face to face, immediately upon entering a building. Thus the station should be set back about 30 feet from the entrance to give people a chance to collect their thoughts and glance around as they approach. [This figure is based on intuition; in his specification for an office entrance Barry Poyner suggests a similar figure - 40 feet; see Barry Poyner, "The Office Entrance" in Poyner and Alexander, The Atoms of Environmental Structure, Ministry of Public Buildings and Works, London, England, 1966, p. 112.]

5. In some buildings the information station can become a major hub of activity. This can happen for example, in a community service center where the information attendant becomes a kind of community "mother" - dispensing coffee and gossip; or it can happen in a community health center, where the information station becomes the nerve center for all that happens in the building:

> As prominent as the centrally placed swimming pool is the 'pool of information' into which members from the first moment of joining are invited to dip.
>
> This pool of information is primarily located in the physiological department, popularly called the 'medical department', where the family overhauls take place. But as the Centre has grown and as staff and members alike have come through practice with a new instrument to know more of its use and possibilities, it has become clear that all action in the building is illuminated by knowledge from this source. Facts which the member-family first meets with in the physiological department are continuously being digested through experience in action throughout the building, added to through contact with the staff in all other departments and confirmed through association with other member-families grown familiar with their meaning and with the use of this source of information. Unlike the casual visitor then, those who dip into this 'pool' do not mistake the main drift of what they find in the Centre; while some in a short four years have come to sense the far-reaching significance of the service. [Innes Pearse and Lucy Crocker, The Peckham Experiment, New Haven: Yale University Press, 1947, p. 79.]

DISH-SHAPED ARENA.

36

PATTERN

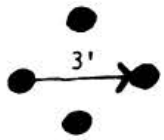
IF: Any large public space used for informal social gatherings as well as public meetings,

THEN: The space should be a shallow half dish with a slope of about 7%.

PROBLEM

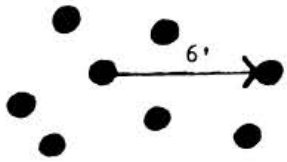
Public gathering places function better if people are able to see each other across the crowd. It is difficult to achieve this in an area completely flat; but a very slight slope helps tremendously. The main square in Sienna provides a classic example:

In a dense crowd of people who are all the same height, the required slope to see what is going on in front of the crowd is about 14%. This figure is arrived at by assuming that a person's eye is roughly 5" below the top of his head, and that people in a dense crowd are close packed, 3' apart, thus:



However, such tight crowds are unlikely. Usually people place themselves in ways that are more random and unregimented.

We guess that a person of average height will usually be able to place himself at least 6 feet away from the next person of similar height. This means that the more common instance would be:



It gives a lower limit of 7% on the slopes.

Since other needs (i.e. everyday comfort, the possibility of bazaars or dances) require that the arena be as near to level as possible, the slope should certainly be no greater than 7%.

In conclusion, we show that the 7% figure is well below the limits of safety and convenience.

1. At what slope does a surface become uncomfortable to walk on, and dangerous for a crowd? Preferred slopes for crowded ramps given by various sources are as follows:

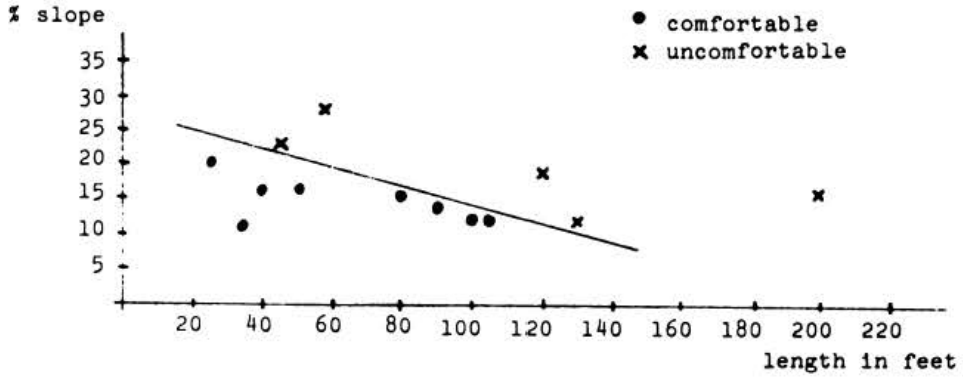
Henry Dreyfuss, Measure of Man, Whitney Library of Design, New York: 10%

Time Saver Standards, p. 1289: 12.5%

California Building School Code: 12%

National Safety Council: 10% for wheelchairs

David Arbegast ["Steps, Ramps and Inclines", Master's Thesis, Department of Landscape Architecture, University of California, Berkeley, 1951] states that the comfort of slopes depends on the ramp's length. He measured 12 ramps of various lengths and slopes for comfort. His findings are shown on the following graph:



From the above graph, we see that for 100 feet lengths (the maximum likely dimension of the arena), the maximum comfortable slope is 15%.

However, David Arbegast further states [Ibid., p. 51.]:

Through the survey it was found that ramps give a greater sense of security if partially enclosed or contained, by walls, plant materials, etc.

Since the arena is a wide space surrounded by more space, its slope should be well below the 15%.

2. At what slope does it become uncomfortable to stand, or sit in an ordinary chair, for long periods? Informal experiments on streets of various slopes, suggest that the upper limit for comfort is about 10%.

Thus, both figures are greater than the 7% we specify.

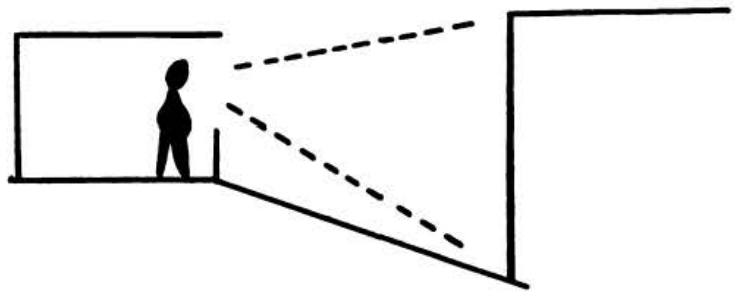
DIRECTOR'S OVERVIEW.

37

PATTERN

IF: Any multi-service center,

THEN: The director's office is located so that from one part of his office he has a view of the major activity zones in the center (he can see some of the waiting areas, some of the community spaces and the services); and the other part of his office is private. His office is conspicuous so that people using the center see where it is, and can reach it easily. It is on a circulation path used by community leaders and staff, and not a dead end.



PROBLEM

In many centers, the director's office is tucked away in back, or to one side. The director himself is impossible to find, and hard to reach when he is there; he is out of touch with the people who visit the center, their problems and their needs. His association with the center becomes remote and formal. There is a danger that he will become nothing more than an administrator. Clients and staff will both relate better to the center if the director is perceived as a friendly person, accessible, and personally interested in them.

At the same time, the director needs some privacy to meet with individuals, and to get his work done.

Thus, the director's office is located such that one part of his office has a view of at least part of the "action" areas (waiting, services, community spaces) and the other part of his office is private. His office is in a prominent position so that people can readily see it from these same areas: It is especially important that the director have informal contact with his own staff, with directors of service programs in the center, and with community leaders. This kind of contact occurs most naturally when people have the chance to wave hello, or start a friendly chat by catching the director's eye on their way to the water cooler or the restroom. The director's office should be on the main circulation path that these people use; it should not be on a dead end.

COMMUNITY WALL.

PATTERN

IF: Any community space functioning as a center or rallying point for the community,

THEN: Along a major path within this community space, there is a Community Wall; this wall is characterised as follows:

1. It can be seen by the public, walking or driving through the public space.
2. It is at least the size of a standard billboard and may be as large as the entire side of one block.
3. It is surfaced with concrete or wood panels; or any other material that can take periodic repainting.
4. Parts of it are within reach of pedestrians; these parts are available for ever-changing community messages and information.

PROBLEM

One of the most characteristic things about the bureaucratic society, is the fact that no man feels his complaints are legitimate concerns of society, except in those rare cases where they can be expressed in terms of law infractions.

This is especially true of poor people. Since no one listens to their complaints, they don't bother to express them, and nothing happens.

The civil rights movement has recently made it clear that when a determined, massive effort is made, to express dissatisfaction, this dissatisfaction gets results.

The simplest way of stating this fact is this: Pure information about dissatisfaction is a first step toward getting action. It is therefore crucially important that complaints be made public, be put on the public record. If the facts show that thousands of people are dissatisfied because some need is not being met, and these facts can be made public and self-evident, the public officials cannot ignore the problem for long. [See for example, "The Roles of Intelligence Systems in Urban Systems Planning", Journal of American Institute of Planners, 31, No. 4, November 1965, pp. 289-296.]

But information alone will not bring action. It must be coupled with constant pressure by the public, on the institution in question.

This of course is a political task; it is a job for a staff of community organizers. The question here, however, is whether or not the physical surroundings can help this process.

In low income communities there is no device for making the volume of felt complaints public and visible, other than demonstrations by the people themselves. It is suggested here that a central and highly visible community complaint wall would help keep the mass of complaints visible; and would help the people who are struggling to rectify these conditions to maintain solidarity.

However, it seems clear that a complaint wall would have a very difficult time getting off the ground and becoming a rallying point in this country. The idea of using public buildings and billboards as "walls" on which to

state grievances is not generally acceptable: The walls are usually private property; and people write on them at risk of jail sentences. Thus, if we want a community wall to take hold, we will have to find a legitimate way of getting it off the ground.

The Wall of Respect in Chicago is one such project that has already proven itself; and we shall look to it for clues.

The Wall is the side of a typical slum building; it was turned into a mural communicating Black dignity, by neighborhood artists. The establishment and maintenance of the Wall became a source of neighborhood solidarity. Two facts about this situation seem to be important. First, the Wall was commissioned: a small group took the initiative to begin it and see it through. Second, the complaints on the Wall were woven into a more general, artistic message.

Thus, it seems essential that, if a community wall is to become a focus for complaints and a community rallying spot, it must be initiated and maintained, in the beginning, by a small group, and be part of a more dramatic community mural.

This suggests that the community wall be central and highly visible to the community; that it be of a material that allows constant re-painting; and that it be large enough (at least the size of a billboard) to weave notices and complaints across a "commissioned" mural.

ARENA DIAMETER.

39

PATTERN

IF: There is a public space which is associated with any social group which seeks to maintain its integrity as a group, or whose social fabric depends on a reasonable density of interactions between members of the group, (This would include the arena in a multi-service center, the courtyard in a university department or high school. It would not include public skating rinks, parks, or public squares.),

THEN: The maximum diameter of this space should be less than 70 to 80 feet.

PROBLEM

If a public space belonging to an identifiable group is too large, it will not support the social fabric of that group. In more detail:

The members of an identifiable social group will be able to maintain the social fabric of their group in a public space, only if the space has the following characteristic: "Any two people in the space, even if they are in opposite corners, can still communicate effectively with one another".

The consequences of this assertion are made clear by the following assertions: Two people in a public space can communicate with each other only if:

1. They can read the expressions on one anothers faces.
2. They can talk to one another.

The second of these assertions is obvious, and needs no evidence. The first is far from obvious, and evidence is scant. Roughly similar things have been said by Philip Thiel [An Architectural and Urban Space Sequence Notation, unpublished ms, University of California, Department of Architecture, August, 1960, p.5], and by Hans Blumenfeld ["Scale in Civic Design", Town Planning Review, April, 1953, pp. 35-46]; but we have been unable to find any formal observations which support it. With the full understanding that this assertion needs investigation, we shall, for the time being, assume that it is correct.

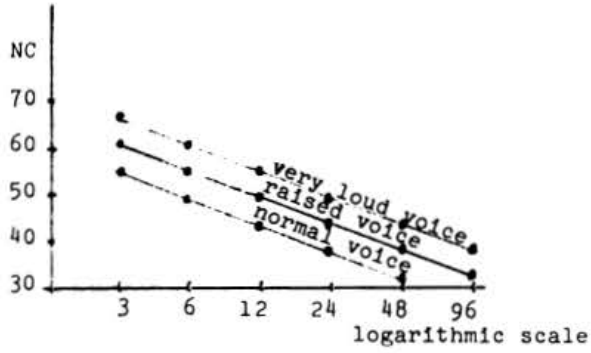
We may then go on to determine the maximum distances at which people can see expressions on one anothers faces, and can talk to one another.

Our own informal experiments show the following results. Two people with normal vision can communicate comfortably up to 75 feet. They can talk, with raised voice; and they can see the general outlines of the expression on one anothers faces. This 75 foot maximum is extremely reliable. Repeated experiments gave the same distance again and again, ± 10%.

At 100 feet it is uncomfortable to talk; and facial expression is no longer clear. Anything above 100 feet is hopeless.

These experiments were conducted in the open on a fairly quiet residential street: social and acoustic effects in an interior space, would decrease the distances. The few published results we have been able to find support these estimates.

Hailing Distance. The following table, adapted from Peterson and Gross, [A.P.G. Peterson, and E.E. Gross, Handbook for Noise Measurement, Fifth Edition, General Radio Company, New Concord, Mass., 1963], shows the relation between audible speech and background noise level (expressed on the background noise criterion scale).



Most public spaces of the kind under discussion will have a noise level of about NC30-40. At NC40, a very loud voice can be heard at 72 feet. At NC30, a raised voice can be heard at 96 feet, and a very loud voice at 180 feet.

It is therefore clear that the maximum permissible hailing distance is somewhere between 70 and 180 feet, according to the background noise level.

E. T. Hall, without taking variation in sound level into consideration, gives the maximum hailing distance, outdoors, as 100 feet. [The Silent Language, New York: Premier, 1961, p. 164.]

Seeing Distance. Hans Blumenfeld [op.cit.] quotes the following figures:

1. A persons face can be recognised at up to 70 or 80 feet.
2. A persons face can be recognised as "a portrait", i.e. in richer detail, at up to about 48 feet.

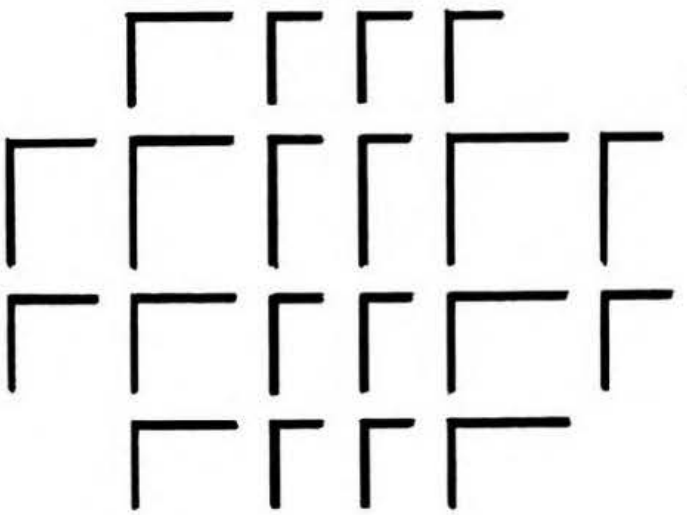
OFFICE FLEXIBILITY.

PATTERN

IF: There is office accommodation containing a number of working groups; and if the groups are, by the nature of their work, cohesive groups, whose number and size and distribution are unpredictable,

THEN: The office space should be arranged as a two dimensional sheet of interconnected small rooms, as shown below:

1. The individual rooms are anywhere between 8' x 10' and 16' x 20' The rooms need not all be exactly the same size.
2. Doors between rooms are lined up along walls, as shown.



Four working groups expanding and contracting over time.

PROBLEM

During the life of an office in which there are many working groups, the working groups change constantly. They change in number, and size, they join together and they break apart.

A configuration of rooms that is suitable for one pattern of working groups, may not be suitable for another pattern of working groups six months later.

It is clear, therefore, that in some loose sense, the office space must be flexible.

There are two conventional solutions to this problem:

1. An uninterrupted modular space, with modular partitions (full height or half height).
2. An uninterrupted space, with low ceiling, sound absorbent materials, and no partitions (the office landscape).

We discuss the partition solution first. In a naive sense, it seems obvious that the problem can be solved by movable partitions. However, in practice there are a number of serious difficulties.

1. If partitions are made easy to move, they become lightweight, and provide inadequate acoustic insulation.
2. If the partitions are both easy to move and acoustically insulated, they are usually very expensive.
3. The actual cost of moving a partition is usually so high that even in highly "flexible" and "modular" systems, the partitions are in fact very rarely moved.
4. Most serious of all: It is usually not possible to make minor changes in a partition system. At the moment when one working groups expands, and needs more space, it is only by rare accident, that the working group next door, happens at this same moment to be contracting. In order to make room for the expanding group, a large part of the office must be re-shuffled, but this causes so much disruption that many office managements adopt the simpler solutions - they leave the partitions as they are, and move the people.

5. Finally, it is in the nature of office space, that certain informal, semi-permanent arrangements grow more permanent over time (e.g., furnishings, filing systems, "ownership" of special spaces or windows). This makes the occupants resistant to change. Though they may be willing to move when the growth of their own working group is at stake, they will resist moving strongly, as part of any general office re-shuffle, caused by the expansion or contraction of some other working group.

It is clear then, that systems of movable partitions don't really solve the problem.

The office landscape solution, since it has no partitions, is more genuinely flexible. However, this system is only suitable for types of work which require neither a high degree of privacy, nor much internal cohesion within individual working groups. Moreover, extensive studies by Brian Wells, have made it clear that office workers strongly prefer small workspaces to larger ones. [Pilkington Research Unit, Office Design: A Study of Environment, Department of Building Science, University of Liverpool, 1965.]

Wells' survey shows that the attitude, "the larger offices make one feel unimportant" is held by four times as many people as the attitude "a large office is definitely better to work in than a small one" [op.cit., pp. 108-110]. He shows that office workers consistently choose office layouts which are divided into small spaces, over those which are not divided, or less divided [op.cit., pp. 111-113]. He shows that, when given a choice among different sized offices, people choose desks in small offices rather than large ones. [The small offices contain 10 to 30 desks, the larger offices contain 60 to 100 desks, op.cit., pp. 118-121.]

Finally, and for our purposes most important, he shows that working groups in small offices are much more cohesive (defined by a larger percentage of internal sociometric choices), than the working groups in large offices [op.cit., pp. 113-118].

It is clear then, that the office landscape, though it solves the problem of flexibility for relatively uncohesive working groups, is not suitable for an office whose working groups must be cohesive.

The question now arises: Given cohesive working groups, how can the need for flexibility be satisfied, in a way which overcomes the difficulties which partition systems run into.

Let us first define the problem more exactly. Given a fixed amount of space, divided up in a certain way among working groups, with partitions between groups as massive as possible for acoustic reasons, it must be possible to re-distribute this space, for any new pattern of working groups, in a way which forces the least amount of re-shuffling upon the groups remaining stationary.

Clearly a successful solution must contain a large number of small spaces, which can be grouped, and re-grouped in many different ways. Yet at the same time, the partitions between spaces must be acoustically private.

It is possible to solve this problem, by providing a large number of small rooms, interconnected by very many doors, their walls otherwise massive. In this arrangement, it is possible to regroup merely by locking certain doors, and opening others.

Evidence for the success of this solution, comes from the fact that organizations which use converted houses as office space, have no difficulty with flexibility at all. Indeed, it appears that these old buildings actually provide more real flexibility, than the apparent flexibility of modular partition offices. The reason is simple. Since there are many small rooms in these old houses, usually interconnected in a variety of ways, it is possible to group and regroup spaces, without going to any expense at all. The system is truly flexible - since changes in connections can be made in a few minutes, at no cost. Yet the acoustic characteristics are excellent - since most of the walls are solid, often load bearing, walls. [For indirect reference to the popularity of one-time houses as office accommodation, see Peter Cowan, et al., The Office: A Facet of Urban Growth, Joint Unit for Planning Research, University College, London, 1967, pp. 90-96.]

For an arrangement of this type, two crucial questions must be answered. How big should the individual rooms be? How should the connecting doors be placed?

The answer to the second question is clear. Since cross circulation will reduce the effective area of the individual spaces, the doors should be placed asymmetrically, at the edge of room walls - as shown in the drawing. As far as the size of individual rooms are concerned: the idea of free combination and recombination of rooms demands that the rooms be as small as they can be, without inhibiting the effective functioning of groups.

As far as size goes, there is some evidence from Japan that the most common size of work-groups is 5 (though this may be peculiar to the organizations studied). [See T. Takano, in documents from Kensetsu-Sho Eizen-Kyoko Kenchiku-Ka, referred to in Pilkington Research Unit, op.cit., pp. 41-42.]

We conjecture that a work group of five persons can work comfortably in two rooms with an open connection - but probably not in three. On the other hand, a single office for a director of a small working group will rarely need to be larger than 200 square feet.

These considerations suggest a model size of 16' x 12'. However, there is no need for each room to be the same size. Indeed, it seems clear that the system of rooms will be even more flexible if the rooms are of many different sizes; this will provide an even richer variety of possible accommodations and re-groupings. We do not, at the moment, have any sound basis for deciding on the range of suitable room sizes, nor on the statistical distribution of these sizes. Let us say quite simply, for the moment, that any rooms from 8' x 10' up to 16' x 20' can be useful.

TOWN MEETING.

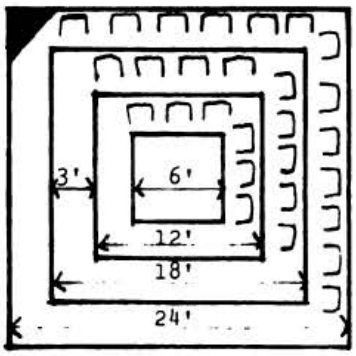
41

PATTERN

IF: Any space where more than 20 people are to meet for face to face discussion,

THEN:

1. The meeting room contains concentric tiers of seats - the plan may be circular or square.
2. Seats in succeeding rows are staggered.
3. There is a fence, just above knee height, along each row of seats.
4. Each tier is ten inches above the one before it.
5. One corner in the top row is reserved for visual exhibits.



A two tiered room will have a capacity of 36 (less circulation).

A three tiered room will have a capacity of 72 (less circulation).

A four tiered room will have a capacity of 120 (less circulation).

PROBLEM

When there are more than 15 people in a meeting, the meeting only rarely has the face to face quality of smaller groups. Large meetings usually turn into lectures, or end up being controlled by a handful of people. Yet the problems being discussed in large meetings often require this quality too. They require the equal involvement of all members; they require the honesty and openness characteristic of small group meetings.

What are the reasons for the breakdown of large groups?

1. People are further apart. As distances increase, it becomes harder for people to sustain deep involvement with one another. In open discussions a great deal depends upon seeing a person's face, as he speaks. If you cannot see his face the chances are great that you will misunderstand him.

This feeling is aggravated when people cannot see over one anothers heads. Yet, if the room is given a slope, to overcome this difficulty, as it is in a lecture room, the discussion then becomes one-sided.

2. When more than 15 people gather the meeting begins to have a "back" and a "front". The people in the back can't see, they are less likely to participate, and the people in the front are given undue prominence: it is most likely that they will control the drift of the discussion. The ideal shape for meetings requiring full participation is simply a circle, with everyone looking at everyone else. When meetings occur informally, with this aim, they almost always tend to arrange themselves into a circle. [See, for instance, Paul Byers, "The Idea in the Middle of the Table", Columbia University Forum, Summer, 1967, p. 20-25.]

Both reasons hinge on the spatial layout of the room; and especially on the flatness of the floor. In order to overcome the problems mentioned, a meeting room requires the following spatial characteristics:

1. Each person must be able to see each other persons face.
2. There should be no "direction" to the room, and no distinction between "back" and "front".

This means, essentially, that the seats must be arranged concentrically, in tiers. Under these circumstances, even a small room, 24 feet square, can hold more than 100 people. Each person can see nearly everyone else face to face: there is no direction to the room.

The dimensions for a row and seat size are derived from Time Saver Standards, Fourth Edition, McGraw Hill, 1966, pp. 1107-1110.

Note: The closer the tiers are to circles, the better: this will increase the number of faces a person can see. Even then, a person sitting in the back top tier will not be able to see the face of someone sitting directly below him...and a person sitting down in the front will have to turn to see anyone sitting behind him.

SLEEPING OK.

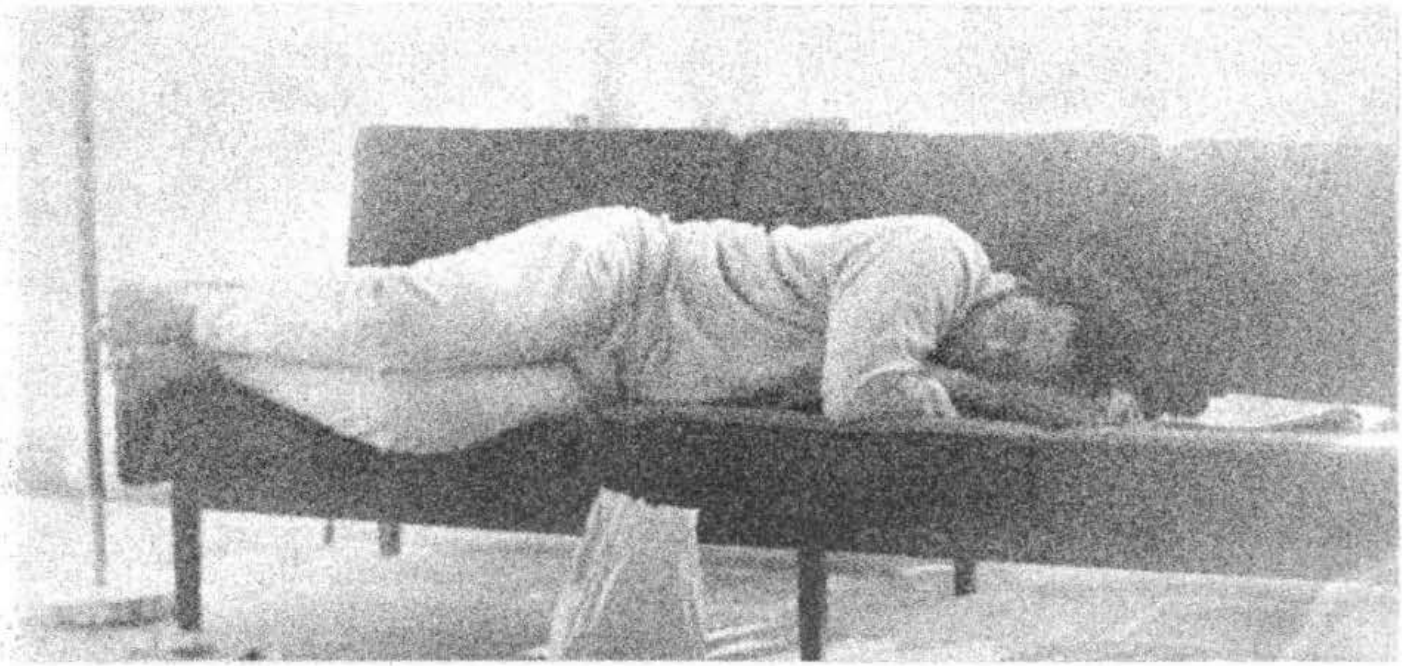
42

PATTERN

IF: There is a community service center which has areas within it permanently open to the public (a community lounge or arena, for example),

THEN: Some part of the area that is to be open must have the following characteristics:

1. There are soft, upholstered chairs and sofa-like benches within this area. The benches to be 6'6" long, with backs.
2. The area to offer some kind of "subordinate involvement" to the people sitting there (like TV, newspapers, checkers, coffee).
3. Parts of this area to be faced away from the business of the center, and hence, partly secluded.
4. There are no reception stations between this area of seats and the public streets.



Note: The size and character of this part of the building will depend to a great extent upon local conditions. In communities like New York's Bowery, for example, where the demand for such a place is high, a substantial part of the building should be devoted to this area. In communities where there are very few homeless people this area might be nothing more than a corner TV lounge - the size of a large living room.

PROBLEM

If parts of the building are to remain open to the general public, it is probable that jobless and homeless people will come there to rest and sleep.

This creates the following conflict. On the one hand, to have people loitering and sleeping around the center is highly desireable: it gives the service center the chance to meet a real need in the community. However, wherever there is a homeless population, there is likely also to be a section of the community that considers these people to be bums and a disgrace to the community.

If the "respectable poor" find drunks and homeless old people sleeping in the service center, they will feel that their own relationship to the building is being degraded. This is a serious conflict. Obviously, it cannot be resolved by simply excluding "undesireables" from the center.

It must be possible to keep the center's doors open to these people, and yet not let their presence become offensive to the respectable poor. How can this relationship be achieved?

First of all, the people looking for a rest must be able to enter the building unobtrusively; they must be able to find a place to sit and remain there without being asked questions by intake workers and receptionists. Furthermore, there must be some kind of subordinate involvement offered so that it will not look like people have come there <u>just</u> to sleep. [See for example, E. G. Love, <u>Subways are for Sleeping</u>, New York: Harcourt, Brace & World, 1957, p. 28.]

The kinds of involvement that work best are those that let people regulate their relationship to it. Examples are: a newspaper and magazine lounge, a TV and radio lounge with soft volume, a checker table with seats for spectators; the essential thing is that people be able to maintain the "look" of involvement: i.e. reading the paper, watching TV, heckling the checker players. Once people feel safe with their involvement, it becomes possible for them to doze off to sleep without fear of interruption. [For a discussion of such involvements as a social obligation, see Erving Goffman, Behavior in Public Places, New York: Free Press of Glencoe, 1963, pp. 50-63.] Goffman also reports on involvements which help to cover the fact that individuals are slipping "out" of a social situation, and into a personal reverie:

> As was suggested in connection with lolling (Pattern 9), individuals develop many untaxing activities as covers behind which to go into a reverie. The coffee-and-cigarette break when taken by oneself is an instance of this. Public eateries have underwritten this practice by placing seats for lone eaters in front of a running mirror, thus enabling the patron to facilitate the away process by covertly looking at himself. Persons who find themselves disenchanted with the whole system of situational obligations in society may seek out those places where reverie is likely to be tolerated. As one very literate patient in Central Hospital is recorded to have said:
>
> 'To avoid gossip I began to frequent dives of every type, where I thought no one would see me. I merely sat there for hours thinking and looking off into space, entertaining a confused set of ideas.' [Ibid., p. 72.]

To keep the respectable poor from objecting to the reveries of the old and homeless, the sleeping area must be away from all main activity zones in the building; it must turn away from agencies and receptionists, and be, in part, concealed from them. Thus people who are in the building "on business" must never have to walk through the sleeping area.

WAITING DIVERSIONS.

PATTERN

IF: There is a large waiting area, where Pattern 14 holds,

THEN: The waiting area contains a number of "waiting diversions". These diversions will very likely be housed in the activity pockets which surround the waiting space (see Pattern 20). The diversions may include:

Child care station
Board games
T.V.
Pool table
Table tennis
Magazine and newspaper reading
Coffee and gossip
Jukebox or piano

Each of the diversions is surrounded by seats for watchers.

PROBLEM

From Pattern 14 we know that waiting areas should be furnished with a number of "waiting activities". Waiting activities, though primarily oriented toward users of services, should also be open to non-users. This is important in helping to make the multi-service center community property (see Pattern 4).

Also there is some danger that the activities provided will seem artificial in the context of waiting. Nobody will take a pool table seriously if there is no time to finish a match. The activities will seem less contrived if they include people who are not waiting, people who are involved in them for their own sake.

Since people of all ages should be encouraged to come to the service center, the activities must vary to appeal to the old, the middle-aged, young adults, teenagers, and children. They should also vary to appeal to different groups in the target area.

We have been able to identify the following activities as potential waiting diversions:

T.V. watching and reading magazines, newspapers and paperbacks; and drinking coffee and gossiping with a friend, are all common waiting diversions for adults.

Some type of child care is appropriate for populations which include young families.

At least one kind of board game should be provided:

> In the afternoon the street is also a place of recreation for adult men and recent migrant boys. Various groups sit here and there over a game of checkers, cards, or dominoes. The corner of Second Street, for instance, is a spot where young American Negro men stand watching passers-by and a game of checkers in which American Negro players participate. On Fifth Street there is a spot next to an alley where Puerto Rican men play cards or dominoes. Down Avenue B a group of old Italian men play checkers next to a restaurant, where one can see aged Italian immigrants meeting for coffee. Other games also run on during these hours of the day and beyond: for example, in some bodegas - Puerto Rican grocery stores - games of dominoes are played continuously for hours and hours, even late into the night. [Elena Padilla, Up From Puerto Rico, New York: Columbia University Press, p. 17.]

Pool and billiards, and ping pong are other possible waiting diversions.

Most age groups would probably enjoy a piano, and teenagers will certainly like a jukebox.

ELEVATOR-RAMP.

44

PATTERN

IF: There is any public building in which members of the public have to negotiate a change of level,

THEN: It must be possible to negotiate each change of level by means of ramps, or elevators, or some combination of the two.

PROBLEM

Everyone, including the old, and the handicapped, must be able to use all the public parts of any public building. Thus, no public space must be accessible only by stair.

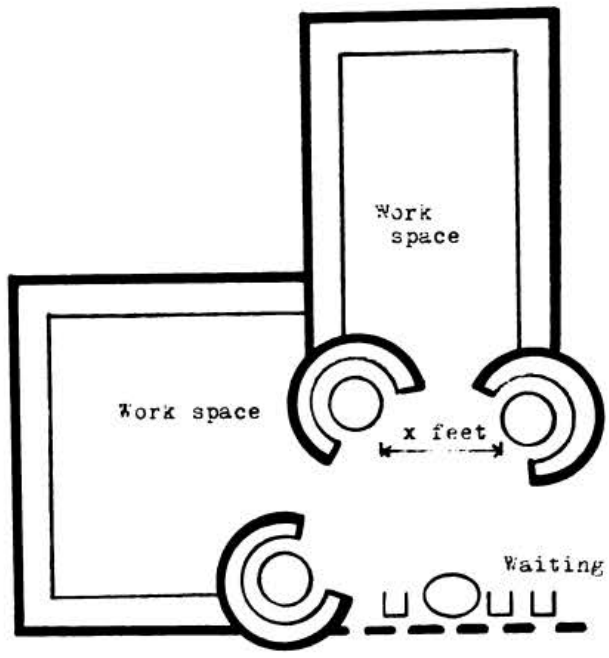
BLOCK WORKER LAYOUT.

45

PATTERN

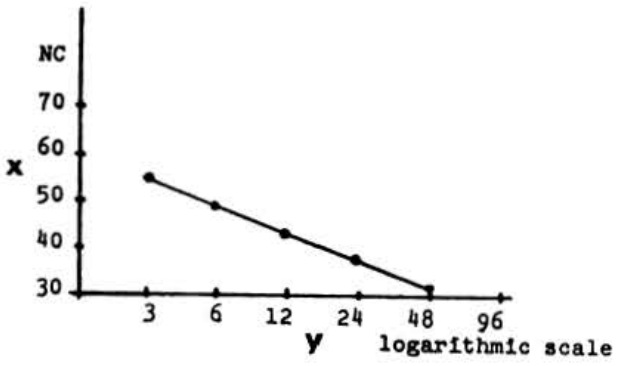
IF: A multi-service center has any outreach program, where field workers (block workers, contact workers, community organizers, etc.) are stationed in the center, but spend most of their time in the field.

THEN: The field workers should be accommodated as shown below:



1. There should be M interview alcoves, where M is the largest number of field workers who will ever be on duty at any one moment.
2. The rooms behind these seating alcoves, are reached through doors between the alcoves.
3. The total length of desk space provided in these rooms is 3N feet (where N is the total number of field workers).
4. The alcoves are directly open to public circulation, as shown.

5. If the background noise level is y db, then no alcove table may be closer than x feet to any other alcove table, nor to any chair in the waiting area, where x is given as a function of y by the graph below:



PROBLEM

The problems of accommodating field workers in the multi-service center, stem from ambiguity surrounding the field workers job. They occur whether the field workers are "contact workers" as defined in the Hunts Point Multi-service Program, Hunts Point, Bronx, or "community organisers" as defined in the Western Addition Area Office of the Economic Opportunity Council, San Francisco.

The following tendencies conflict:

1. The field worker probably spends most of his time in the field, organising the community, or going door to door.
2. Each field worker does, however, require some workspace in the center which is his - where he can store records, leave half worked papers, and where people can leave messages for him, and where he can have access to a phone.
3. He also spends some time on duty in the center, during which people from the community can come to see him.
4. If there are many field workers, as is usually the case, the center cannot afford to give each one of them a full-size office suitable for interviews. We are therefore led to the conclusion that there should be a small number of interview places, in addition to minimal workspaces for each field worker.

5. However, if the interview places are separated from the individual workplaces, a new problem is likely to occur:

Suppose that a field worker spends an afternoon in the center. Where should he spend it? Should he spend it at his private workplace, or should he spend it at one of the interview places. Neither is quite satisfactory. Suppose he spends it at the interview place. We know that visitors and clients only come in sporadically. He will therefore want to fill in the gaps between clients, with phone calls or paper work. In this case he will often want access to the material stored in his private workplace.

Suppose on the other hand, that he spends it in his private workplace. A member of the community who comes to look for him will come to the interview place, and it is probably undesirable for him to come to the private workplace area. Even if he does, there is then no natural place for the two people to sit and talk - yet it would be extremely unnatural for them to go all the way back to the interview place, just to sit and have a chat.

The one remaining possible solution - that the client comes to a receptionist, who pages the field workers in their workplace, directly contradicts the need for easy access to the field workers, described in detail in Pattern 28.

We therefore conclude, that the field workers private workplaces must be directly accessible to the interview place. Although the arrangement shown, with doors to the workplace, between interview alcoves, is not mandatory, it does seem to be the best way to give the alcoves their requisite acoustic separation, at the same time as having easy access to the workplaces, and direct frontal access to both from the outside.

Detailed reasons for the booth form of the interview alcoves are given in Pattern 50.

The separation between alcoves, and between waiting seats and alcoves, as a function of background noise level, is based on figures taken from A.P.G. Peterson and E. E. Gross, Handbook for Noise Measurement, Fifth Edition, General Radio Company, New Concord, Mass., 1963.

RADIO/TV STATION. 46

PATTERN

IF: Any community service center in an urban area,

THEN: There is a TV and/or radio broadcasting station located in the center and broadcasting locally to the community. The station is located on the public face of the building, where people can loiter and watch a broadcast in session.

PROBLEM

A TV/radio station in a multi-service center would greatly enchance the image of the MSC as a community nerve center. The studio may be used to broadcast community information, service center news, educational programs, political speeches and interviews, festivals, in-home job training, etc. - all bi-lingual if appropriate. Community events would probably not take up more than a few hours of broadcasting per day; the rest of the day's program may be filled with the usual TV fare: city, state and national coverage.

The following tendencies make the idea of a TV/radio station at the MSC seem very potent:

1. Most families use TV sets about three hours per day. [Richard L. Meier, A Communications Theory of Urban Growth, MIT Press, 1965, p. 130.]
2. Seeing familiar community faces and places on the TV screen would help destroy the sense that the center is foreign territory.
3. TV is the most effective way of getting new information into the homes of improverished families. [A result of studies undertaken in Japan and Puerto Rico, Richard L. Meier, personal communication.]
4. Everyone likes to watch a broadcast in session. If the studio is visible from the street, people will linger to watch and discuss the broadcast. The studio will highlight the fact that the center is a source of action.

At first sight, this proposal seems hopelessly expensive. However, TV broadcasting from the neighborhood does not raise any insuperable technological difficulties. It can be done at a reasonable cost: especially if cable-TV is used. [This is laid out in detail in Harold J. Barnett and Edward Greenberg's, "The Best Way to Get More Varied TV Programs", Trans-action, May, 1968, pp. 39-45.]

If TV is not feasible, the local radio station should be invited to broadcast out of the center.

MEETING ROOMS CLUSTERED.

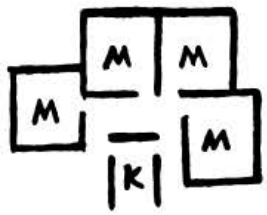
47

PATTERN

IF: Meeting rooms, classrooms and seminar rooms are provided in a public building,

THEN:

1. These meeting rooms, classrooms and seminar rooms should be clustered around a central circulation core and near a kitchen.
2. If the building is a multi-service center serving a population of N persons, it should contain (1 + .00005N) meeting rooms, and .00003N classrooms.



PROBLEM

Meeting rooms should be clustered for the following reasons:

1. It is easier to find a particular meeting when they all occur in one place.
2. It is convenient for people who have to attend several meetings in one night.
3. Each room is close to the kitchen for coffee breaks.
4. Most of the services and community groups in the multi-service center conduct occasional conferences. A typical pattern for a conference is the following: First, registration, then a mass meeting with speakers, explaining the purpose of the conference; this mass meeting then breaks up into

workshops or discussion groups of various sizes; then a closing mass meeting where summaries of the workshops are presented. Very often conferences are all day affairs with lunch or some kind of refreshments served at some point. They need the kitchen nearby. And since many people hop from workshop to workshop, so as to take in everything that is happening, it is most convenient if the rooms are clustered.

Appendix 1: The agenda of a typical multi-service center conference (held by the Hunts Point Multi-service Committee at P.S. 5, Jackson Avenue and 149th Street, Bronx, New York, October 6, 1967) contained workshops on health, social services, housing, manpower, addiction, education, small business and economic development, early childhood, community action, legal services, youth, and culture and recreation.

Appendix 2: If the community center is a multi-service center, we may estimate the number of meeting rooms and classrooms that it requires, as follows:

At present, many of the meetings associated with multi-service centers do not take place in the center. According to directors of four multi-service centers in Oakland, there are three reasons for this. [Interviews by Gene Bernardi]:

1. Lack of space for large meetings.
2. The multi-service center closes at night.
3. The administrative policy prohibits some kinds of meetings.

As already argued in Pattern 3, it is important for the MSC to accommodate all meetings associated with it. Benny Parrish, Community Organizer, formerly from the California Committee for Community Development, says: "...The multi-service center should have a large enough room for group meetings - i.e., large enough to accommodate 75 to 80 persons. Our lack of a large enough room really hampered us. We needed to find a meeting place every time we wanted to meet".

In Oakland, the total number of MSC-related meetings held per month either in the MSC or elsewhere were:

	Population	Meetings in:		Total Meetings/Month	Meetings/Month/head of Population
		MSC	Schools & Churches		
West Oakland	57,000	4	60	64	1/900
Fruitvale	31,000	8	18	36	1/870
North Oakland	29,000	13	9	22	1/1316

It seems clear from the above figures, that the number of meetings per month depends on the size of the target population: it is approximately N/1000. We know from Gene Bernardi's interviews, that there are more small meetings than large ones. The occasional meetings which draw 50 to 100 persons will be adequately accommodated in the arena and the town hall. The rest of the meetings have 10 - 30 persons attending. There are 20 week-day evenings in a month. If the .001N meetings were perfectly spread out over the 20 days, this would require .00005N meeting rooms. To take care of occasional doubling up, we add one extra room. The building therefore requires 1 + .00005N meeting rooms, which can hold 10 - 30 persons.

Besides meeting rooms, the MSC must also have classrooms for classes sponsored by individual services: i.e. job training, small business, real estate, consumer education, child rearing, weight watching, etc. It is difficult to estimate the number of classes which services will sponsor. The best guess we can make, is that each service will sponsor at least one class and that each class meets twice a week. We know that an MSC serving N persons, has .0005N interviewers (Pattern 3), and that the number of interviewers per service ranges from 1 to 4, with an average of 2 (Pattern 5). The MSC therefore has .00025N services; and there are therefore .00025N classes in any given week. If classes are held five nights a week, and any one classroom can hold two classes per evening, this means the building requires .00003N classrooms.

BARBERSHOP POLITICS.

48

PATTERN

IF: A community multi-service center in an urban area that has, as one of its main tasks, community organization,

THEN: The center has at least one of the following enterprises woven into its public face:

1. Barbershop.
2. Laundromat; lunch counter.
3. Stall for small business; such as cigar store, paper and magazine stand, paperbacks.

PROBLEM

If a service center takes on the task of community organization it faces the following problem: First of all, it has to reach the people of the community and get them involved in defining and acting upon various community issues. This is difficult because people have the tendency to resist such discussions when they are approached by community organizers. Resistance is probably due to the fact that people are usually approached in their homes when they are doing something else, perhaps when they are just relaxing, and thus when they don't really want to be bothered by organizers.

And yet, community organizers must go to people in their "natural" surroundings; they cannot depend upon people coming to meetings to discuss local conditions.

Where can organizers meet people in a natural way, at a time when people are receptive and willing to participate in issue oriented discussion?. The places in the community where discussion can most naturally arise are the following:

1. Barbershops.
2. Laundromats and lunch counters.

3. Small, street-oriented businesses, like news racks, cigar stores, and small grocery stores.

4. Corner hangouts around pool halls and bars.

5. At places where people must wait to get unemployment checks, welfare checks, job interviews, and so on.

See any typical reports on neighborhood life in low-income communities. Thus, M. Kaplan, Leisure in America, New York: J. Wiley and Sons, Inc., 1960, p. 101:

> Urban activities center on the street corner, poolrooms, and barbershops.

And Elena Padilla, Up From Puerto Rico, New York: Columbia University Press, 1958, p. 18:

> When fall comes with cooler days, some of the old Puerto Rican women of Eastville, as on similar days of spring, watch the strollers in the streets with a towel draped around their arms like a stole. Gradually, the crowds grow thinner as the weather grows colder. Winter keeps Eastvillers more to their homes. Fewer people congregate on the sidewalks and stoops. But they do run down to the stores, which become the bad-weather centers for informal visiting with neighbors.

And again, W. F. Whyte, The Streetcorner Society, Chicago: University of Chicago Press, 1943, pp. 150-152:

> The Cornerville Social and Athletic Club grew out of the barbershop gang. One morning Mike, Joe, Dick, Guy, and Chichi came up to Carlo's house to have coffee with him. Feeling that frequent visits of this nature would add too much to his wife's housekeeping responsibilities, Carlo suggested that the boys rent a room and start a club. They agreed to hold a meeting that evening in the barbershop to discuss plans. At that time Mike proposed his plan of organization. He wanted to have ten original and regular members who would pay a three-dollar initiation fee and twenty-five cents a week dues and have complete control of the club. All others were to be associate members, paying a dollar a year and having no powers. The original members would handle the sale of wine and beer in the clubrooms and would collect a small fee for card games played by the associate members. As Mike later explained to me: 'I wanted to get about two hundred members to that club. Then we can approach some politician and get something - maybe favors or he give us money. That was all my idea.'
>
> In order to make the club a success, Mike would have had to draw the lunchroom and barbershop cliques together. The two cliques differed in several significant characteristics. The lunchroom clique was considered more Americanized, and, on the average, its members had gone further in school. Only one of the lunchroom boys spoke English with an accent, and he stood at the bottom of his group. On the other hand, Carlo, Mike, and Joe - the three most prominent of the barbershop boys - all spoke with pronounced accents. The lunchroom boys were more active in sports; the only baseball players and the best bowlers were in their group.

It seems clear that the center's community organizers should spend a good deal of time in the kinds of places listed.

Why should any of these places be physically located in the center? If the center emphasizes community organization, it must also provide a base for the process of organization. All the work that goes into a strong community campaign should have one foot in the center (see Pattern 1). People discussing matters in the barbershops, etc., will be more ready for organization if they see the products of action all around, not just talk. This indicates that at least some of the natural centers of community political life should be physically associated with the service center.

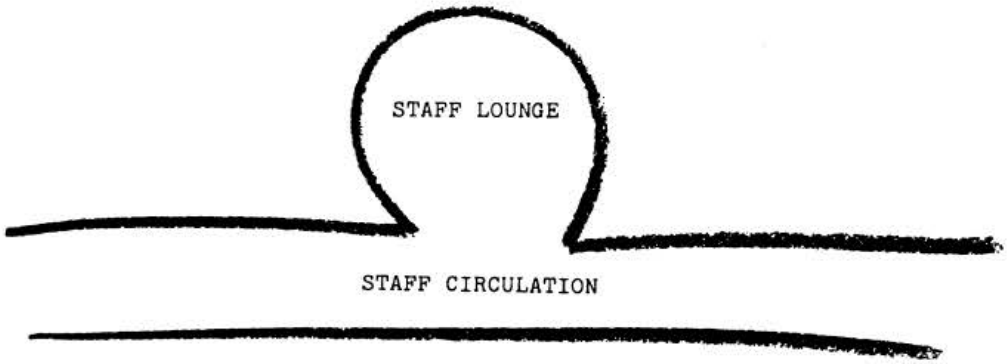
STAFF LOUNGE.

49

PATTERN

IF: Any organization where informal interstaff communication is desired,

THEN: There is a staff lounge, away from public areas, but open to the main staff circulation path. The staff lounge contains a kitchen.



PROBLEM

In many organizations, informal daily contact between staff members is highly desired. But as the staff becomes increasingly specialized, each person with his own unique interests and problems, it becomes less likely that good communication will be sustained by normal work procedures.

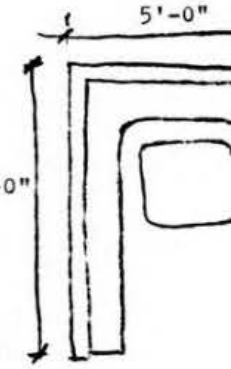
[Thus, in the Western Addition Area Office of the San Francisco Economic Opportunity Council, the community organizers often complained about the fact that they did not know "what was going on" (specifically what the program developers were working on), and thus were unable to discuss current program developments confidently with their clients. Again, in Alfred J. Kahn, et al: Neighborhood Information Centers, School of Social Work, Columbia University, 1966, p. 61: "...Agency personnel are often ignorant of the services provided by other agencies in the social service system". See also extensive evidence on the need for coordination among staff members, cited under Pattern 13.]

Further, the kind of informal contact required cannot occur between staff members in the presence of clients. The most logical place for communication between staff members is where breaks are taken, in the hallways, near the coffee machine, etc.

In order to maximize the chances for such communication these informal meeting places should be centralized in a staff lounge-lunchroom. Furthermore, the lounge should be open and adjacent to the major staff circulation path, preferably close to the staff entrance.

INTERVIEW BOOTHS.

PATTERN



IF: Any office chiefly used to conduct interviews,

THEN:

1. The office is a booth, entirely enclosed, with a ceiling.
2. The door to the booth is a bit wider than the usual office door; wide enough for two men to enter the booth simultaneously.
3. The booth contains a table, not a desk, that is either round or roughly square, and a continuous sofa-like seat wrapped around half of this table. The booth walls are immediately behind the wrap-around seat. The seat is about 12' long, and part of it extends along the wall away from the table.
4. The table is never more than 3-1/2' across.
5. The floor of the booth to be carpeted.

PROBLEM

Interviews sometimes fail because of the settings in which they take place. For a number of reasons people may feel uncomfortable during interviews and avoid revealing their real difficulties. Let us examine some of these reasons, as they are related to the interview.

1. The traditional office setting: People never feel quite at ease in offices for two reasons. First, the space clearly belongs to someone else; you are in the space on "the owner's time" and the burden is on you to make your point and get out. Second, from the moment you step into an office there is the feeling that time is ticking on, that it's already time to leave. Although a setting that gives such impressions may be appropriate to corporation business, it is hardly the place for interviews that touch deeply into the private lives of people.

2. Talking over a desk: It is difficult to get anywhere talking over a desk. The immediate feeling it creates is one of "we" and "they" -- the person behind the desk if from officialdom, and, consequently, not to be trusted. The feeling is magnified when, upon entering an office, the staff member is already there, behind his desk.

3. Eavesdroppers: People will simple refuse to reveal their problems if privacy is in doubt. If there is any possibility that others may overhear, the interview can be wrecked; and any chance of establishing trust or an aura of "confidential business", is ruined.

4. Uncomfortable chairs, different chairs: Often hard, straight-back chairs are the only seats for clients during interviews. In such cases it is hard not to become restless and anxious for the meeting to end. Even when folding contour chairs are provided, clients are faced with an interviewer, rocking away in a cushioned, tilt-back executive chair. Once again the "we" - "they" impression is established.

5. No barriers between interviewer and client: In an effort to create an informal setting, some interviewers try to seat their clients next to them or in front of them, with no barriers in between. In such arrangements desks are usually behind the interviewer or at his side. At first glance this seems ideal for natural talk, but the fact is that many clients, women in particular,

resist being seated totally and immediately out in the open. Faced with this arrangement people will fidget about with their legs and hands, women will tug on their skirts.

One or any combination of these conditions can destroy an interview. The problem of setting is compounded when people come to interviews with a problem, looking for help. They are feeling awkward to begin with, and any friction created by the physical setting can only make matters worse.

We now derive the requirements for a good interview setting directly from the problem statement:

1. The area must be acoustically private; there must be no feeling that passers-by or other workers can overhear the conversation.
2. People should be sitting at angles to one another, with a desk corner between them, or such that an easy adjustment of seats puts a desk corner between them.

A study by Robert Sommer shows that there is more frequent interaction between people sitting across the corner of a table, than between people seated directly across the table, or side-by-side. In exploring this further, he found that people entering a cafeteria to have a talk consistently chose the "across-the-corner" position. [Robert Sommer, "Studies in Personal Space", Sociometry, 22, September, 1959, pp. 247-260.]

3. Interviewer and client should sit in similar seats, equally comfortable.
4. Interviewers want the professional equipment they need, phones, desk files, forms, etc., instantly at hand.
5. Client and interviewer should approach the interview area at the same time.
6. The area should have a sense of neutrality, like a park bench or a restaurant booth.

> ...since good rapport and relaxation are desired outcomes of the interview, it is essential that the interview be held under friendly conditions. A choice of seating should be available. The client can then decide how he wants to sit in relationship to the counselor. The seating should be arranged so that 'across the desk' interviewing need not be necessary unless desired by counselee. [Clifford E. Erickson, The Counseling Interview, New York: Prentice-Hall, 1950, p. 53.]

> The immediate impression that the client receives when he opens the counselor's door is also going to affect him...He should be able to sit down without having a desk get between himself and the counselor. [Dugald S. Arbuckle, Counseling: An Introduction, Boston: Allyn & Bacon, 1961, p. 265.]

7. Interviewer and client are, at most, 5 feet away from each other with the possibility of getting closer. [Person-to-person distance for conversation creates a voice level appropriate to the degree of intimacy desired. Edward Hall suggests distances associated with the transition from one voice level to the next. Though they have not been precisely determined, observation reveals the following distances:

a. 12" to 20"; indoors soft voice, outdoors full voice;

b. 20" to 36"; confidential voice, low volume, personal subject;

c. 4/1-2' to 5'; full voice, information of non-personal nature.

[Edward Hall, The Silent Language, New York: Doubleday, 1959, pp. 163-164.]

A similar point is made by Robert Sommer in "The Distance for Comfortable Conversations: A Further Study", Sociometry, 25, 1962, pp. 111-116:

> The present study is an outgrowth of the previous investigation of the distance for comfortable conversation. In that study, pairs of subjects were asked to go into an attractively furnished lounge and sit on two couches that faced one another and discuss a given topic. They had a choice of sitting side-by-side on the same couce or across from one another on different couches. ...We found that when the couches were less than 3-1/2' apart, the subjects sat across from one another on different couches, but at a distance greater than this, the subjects sat side-by-side on the same couch. Since our previous work had shown that people preferred sitting across from one another rather than side-by-side, we felt that the point at which subjects first started sitting side-by-side on the same couch indicated the distance at which the couches were too far apart for comfortable conversation. Under these conditions, the distance for comfortable conversation would be 3-1/2 feet between couches or 5-1/2 feet between people (since people's heads were approximately one foot behind the front of each couch).

We can now give the characteristics of a good physical setting for interviews. A continuous, sofa-like seat wrapped around a table allows for the correct right angle position, abolishes any sense that the seats are different, and allows a desk corner to be pulled up between the two participants or pushed back a few inches for more leg room, greater informality, etc.

The table and seat can be approached and entered from both sides through a wide door; and no one can ever be sitting behind such a contraption. Thus, the setting seems less owned, and lets the interview get started on an equal basis.

The table with wrap around seat is called a booth. Each booth is outfitted with the materials an interviewer needs to carry on his business; these materials are never on the table, but always off to the side or just behind the interviewer. Thus, the interviewer can carry on his business competently, creating an air of professionalism but not alienating the client with irrelevant symbols of officialdom.

To create the confidential atmosphere required, the booth must have a ceiling and the floor of the booth should be carpeted.

The nearest thing to the interview booth which now exists, is the kind of booth found in restaurants. Though some of the characteristics of the booth have proven themselves experimentally, (i.e., the need to talk over a corner) the booth as a whole is untested.

It is important that we not fall back on the typical office with partitions and ceiling to solve this problem. Although such offices often solve the privacy problem, they completely fail to meet the more subtle demands of the interview situation.

STAIR SEATS.

51

PATTERN

IF: There is any public place, where people are waiting, or likely to gather together,

THEN: The place should contain raised areas with the following characteristics:

1. The floor level of the raised areas should be no more than 4 feet above the main floor level.
2. The raised area should be equipped with informal seats, balustrades, or other parts which can function as seats - the dimensions of such a seat should be: height 16", width at least 16", depth at least 13".
3. The raised area should be immediately accessible from below. (Like stairs with seats, a stepped terrace, or a stoop. A railed balcony will not do.)

PROBLEM

When people are waiting in places where there are many other people, many of them have the following tendencies:

1. On the one hand, they seek a vantage point from which they can take in the action as a whole.
2. On the other hand, they still want to be part of the action; they do not want to be mere onlookers.

Of course, these tendencies do not hold for everybody; but they do hold for a substantial number of people in any crowd.

For a person looking at the horizon, the visual field is far larger below the horizon than above it. It is therefore clear that anybody who is "people-watching" will naturally try to take up a position a few feet above the action.

The trouble is that this position will usually have the effect of removing a person from the action. Most people want to be able to take it in, and also want simultaneously, to be part of it. This means that any places which are slightly elevated to meet tendency 1, must also be within easy reach of the action, hence on circulation paths, and directly accessible from below, to meet tendency 2.

There is a simple kind of evidence, both for the reality of the tendencies, and for the value of the pattern. When there are areas in public places which are both slightly raised, and very accessible, people naturally gravitate towards them.

Cafe terraces, steps surrounding public plazas, stoops, porches, statues and seats and other perches, all give examples. The photographs show typical cases.

WINDOW SIGNS.

52

PATTERN

IF: A multi-service center with large windows on the street, intended to promote drop-in traffic,

THEN: The windows, especially those near the door, should have signs and notices pasted on them.

PROBLEM

People who pass by the multi-service center, may be curious, but they may also be shy. If their shyness overcomes their curiosity, as it often does, they will walk past without going in.

In order to resolve this conflict, signs and notices pasted on or inside the window, give people a "legitimate" excuse to stand and look into the center - once they have had a chance to look and see whats going on, they will often venture in.

The following informal observation in the Berkeley MSC will make this clear: "The service center is a storefront, with the windows all along the front. A man walks past the door. As he does so, he looks into the center, but only turns his head for a second - apparently unwilling to show too great a curiosity. He then sees a notice on the window, stops to read the

notice. As he stands reading it, he looks past the notice to see what is going on inside. After a few seconds he retraces his steps, and comes into the center."

A similar process is described by Innes Pearse and Lucy Crocker in their explanation of how people come to accept and use the Peckham Health Center:

> The relatively few people who pass that way wonder what (the center) is ....'They say it has a full-sized swimming bath, a gymnasium, a theatre, a cafeteria - where you can get a beer'; dancing goes on there and moving figures can be seen on the floor of the main hall at night when the whole building is lit up attracting the attention of the passers by - if they have not already been led to pause by the strains of the band or singing filtering through the night air. What is the reaction of these passers by? Too often it is the normal reaction to novelty; they pass by without enquiry. There are relatively few questing and adventurous individuals in modern society, and this is a general characteristic, not one peculiar to any local populace. So the growth of membership of the first 'Centre' is likely to be slow. Circulars announcing its opening and advantages will for some long time be little more than convenient firelighters. Perhaps a passing couple will see the notice board - 'Queer sort of place that; you have to have a medical overhaul; wonder what goes on there?' - for they know few people in the neighbourhood and have never seen or heard of the place before. Or - 'Let's enquire at the gate' - and at once an invitation follows to come in and look round and to ask for the Secretary on reaching the first floor. Once inside, the atmosphere strikes them as friendly; the process of familiarisation has begun. 'Is it a Club? How do we become members?....'
> [Innes Pearse and Lucy Crocker, The Peckham Experiment, New Haven, Yale University Press, 1947, pp. 71-72.]

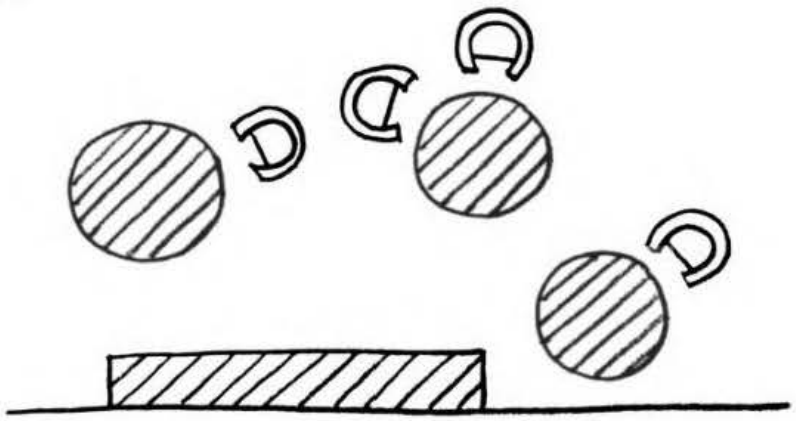
FORM-FILLING TABLES.

53

PATTERN

IF: Any institution where people are required to fill out forms, with an average of W people waiting,

THEN: A number of tables and/or counters are provided in the waiting area. The total perimeter of these counter/tables must be at least 6W feet. They must be within view of aides or receptionists, and between 10 and 20 feet away from them.



PROBLEM

1. People need a writing surface when they fill out forms. They should not be expected to write forms out on their laps.
2. People often need room to spread out several pages of paper. They don't want to have to gather up their belongings to make room for someone who comes and sits next to them.
3. Also people want privacy when filling out forms. They do not want to sit right next to someone else while they fill forms out. At about 6 feet it becomes impossible for people sitting at a table to look over one anothers shoulders.
4. People may need help in filling out forms; yet they do not want anyone to be standing over them. They want to be able to get help if and when they need it.

5. When people go to aides for help they do not want other people to be listening. Barry Poyner gives 10 - 20 feet as the range, of distances which are far enough to be out of earshot, yet close enough to make inquiry easy. [Barry Poyner, "Relations for an Office Entrance", in The Atoms of Environmental Structure, Directorate of Development, Ministry of Public Buildings and Works, London, 1968, p. 118.]

6. In general, people filling forms out seek quiet and a setting away from noise, activity and distraction. In addition some people become nervous and tense filling out forms; they may want a cup of coffee or a cigarette.

ACCESSIBLE BATHROOMS. 54

PATTERN

IF: Any building which provides public services, and requires its clients to wait for these services, in an open public waiting area,

THEN: Public bathrooms opening directly off this waiting area

PROBLEM

People will be in the waiting area for two reasons. Either they will be waiting for their appointments to begin, or they will be making use of the waiting area facilities for their own sake. In either case, they will want access to rest room facilities from time to time. Bathrooms will, of course, be scattered through the building to serve the staff, but if the public is forced to use these facilities they will be wandering through open, unattended office pools to get to them. Inevitably an occasional theft will result, and relations between staff and community will be strained.

Yet a community service building cannot deny the use of rest rooms to the general public. The public rest rooms must therefore be located immediately next to the waiting areas, so people do not have to walk through the interior of the building.

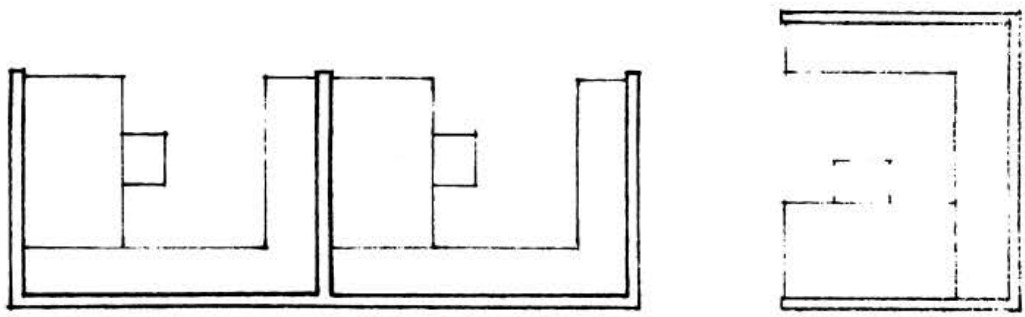
SECRETARY'S WORKSPACE.

55

PATTERN

IF: There is a pool of secretaries or typists,

THEN: Each secretary is accommodated in an alcove; the alcoves side by side; inside each alcove, the desk to one side, filing and shelves against the opposite side and the end; the alcove partitions are slightly higher than head height of seated secretary or about 4 feet.



PROBLEM

In typical secretarial pools all girls work within sight and sound of each other, and when one stops work to talk to somebody, everybody stops work. It is nearly impossible, under such conditions, to maintain a smooth, steady work effort; interruptions are sporadic, girls are always trying to find where they left off. For the most part, these interruptions are of a purely visual nature; when visual privacy is insured the interruptions fade away as background noise.

The following tendencies occur:

1. When secretaries are within sight and sound of each other, interruptions for one are interruptions for all. [Phone calls, conversations with staff members, etc., will interrupt individual secretaries throughout the day; in open, pool arrangements these interruptions disturb everyone.]
2. Secretaries try to keep a smooth work pace for any particular job, e.g., typing a letter, organizing files. [It is annoying to have to restart a task over and over again.]

To solve the problem, secretaries - at their work stations - must be given some degree of visual privacy. However, they must not be visually sealed off to the extent that they feel trapped, stuck in a box. The alcove idea places secretaries in their own work station, with visual privacy when they are seated at their desk. To avoid the "trap" feeling desks are placed against a side of the alcove, never against the back. Thus a girl can become involved with someone outside her work station, if she chooses to, by sinply turning her head or sliding her chair. To complete the work station, the usual equipment is placed against the side opposite the desk and at the closed end of the alcove.

INFORMAL RECEPTION.

56

PATTERN

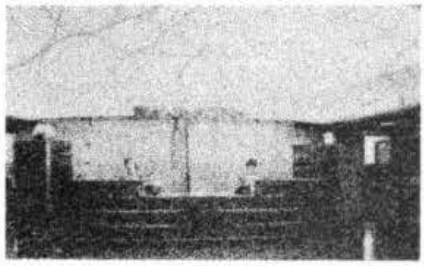
IF: A service in a public agency has any receptionist that meets the public, confirms appointments, and so on,

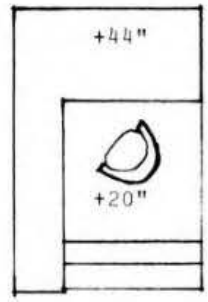
THEN: The receptionist sits on a platform 20" above ground level.

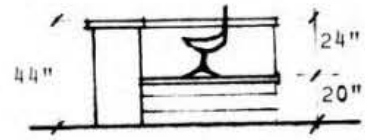
On one or two sides of this platform there is a counter/desk, 24" above the platform. It is desk height from the platform side, and counter height (44") from the far side.

On one side the counter/desk is approximately 1 to 2 feet wide, and functions as a counter. This side faces towards the client's approach.

On the second side, the counter/desk is 2 to 3 feet wide, and functions as a typing desk.







PROBLEM

This pattern is addressed to the client-receptionist interaction:

1. The best kinds of public interactions of this sort are at eye-to-eye level. Since a client approaching a receptionist is on his feet, the receptionist should also be standing or on a high stool. If the receptionist is working behind a typical desk, the client has to bend down to speak to her; and the receptionist has to crane her neck to reply. This is an unnatural position, and establishes an air of formality to the meeting. The client could sit down, across the desk from the receptionist, but this too is unnatural, considering

the fact that he is only going to be there for a moment: The length of the transaction is roughly comparable to the amount of time spent at a bank teller's window. Therefore, we specify that the receptionist should meet the client at standing eye level. The most concrete evidence for this is the case of Kaiser Health Clinic in Oakland, California. There are about 40 reception stations at Kaiser; recently these stations were changed from desks to counters to accommodate eye-to-eye interaction between receptionist and client.

2. It is also important that there be something between the client and receptionist. There may be a form to examine, or a card to fill out; and a writing surface is required.

Also,receptionists prefer to have some kind of barrier between themselves and the client. We know already that this barrier cannot be a desk. Thus, some kind of counter is required; it is both a surface for transaction and a barrier between standing people. The counter should be slightly above waist height - around 44" - and not more than 2' across - the comfortable distance for conversational tone.

3. We know also that the receptionist will be working between client calls, probably at clerical chores. She will be typing, taking calls, etc., and must be seated at a typing desk. But, from 1 above, we know that she must meet the client at his standing eye level. The eye level of a woman sitting at a desk is around 44" and the eye level of a man standing is around 68" [for the 97.5% tile, see Henry Dreyfuss, The Measure of Man, Whitney Library of Design, New York, 1959, Charts A and L.] There are two ways to reconcile this situation: Either the receptionist rises from her desk and meets the client across the counter - there may be a stool at the counter for her; or she stays seated at her desk, but the desk and chair are on a platform, raised about 20" so that she meets the client eye-to-eye. Since, in the former case, there will be a tendency for the receptionist to stay seated when a client approaches, we specify the latter as the preferable solution.

CHILD-CARE CONTENTS. 57

PATTERN

IF: An irregularly used child care space for preschool children (e.g. a child care corral in a market, department store, or museum - any child care area that a child does not use on a regular basis).

THEN: The child care space to emphasize two or three of the following in its contents:

1. Hard surfaces like asphalt.
2. Soft surfaces like grass.
3. Climbing equipment like bars or trees.
4. Water play: ponds or falls.
5. Small places like play houses or caves.
6. Nature - plants and shrubs.

The selection of two or three items to be made as follows: Establish the boundary of the community which contributes children to the facility. Assess the experience of the children of that community according to the six items listed (i.e. which items are most prevalent and accessible to children, which items are missing). The child care space should provide the items which are least well represented throughout the rest of the community.

For example, a child care space for a service center to be located in Hunts Point, Bronx: Hard surfaces, small places and climbing equipment are available to children throughout the Hunts Point Community. However, the other items - soft surfaces, water play, and nature - are almost non-existent. Therefore the service center child care space should emphasize these three items in combination; together they suggest a tiny "jungle".

PROBLEM

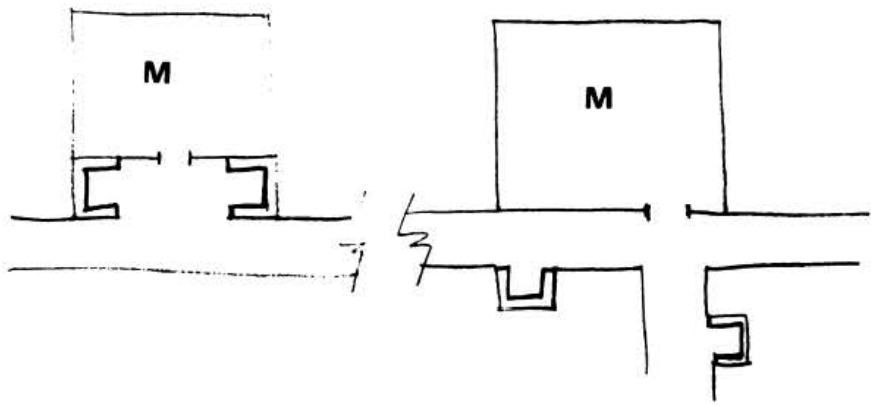
The problem is clear. Since children do not use the care station every day, or even once a week, there is no need to make the activities comprehensive. Besides, building funds are always short for child care space. The child will only experience the space as a small part of his entire community. Therefore the space should augment the range of activities that are daily available to the child. The breakdown of items listed here comes from literature on the play of preschool children. [See H. Page, Playtime in the First Five Years, New York: Lippincott, 1954; or A. Gesell and F. Ilg, Child Development, New York: Harper & Bros., 1943.]

SEATS OUTSIDE MEETING ROOMS. 58

PATTERN

IF: There are any meeting rooms where political meetings, seminars, or classes, are held,

THEN: Outside of these meeting rooms, just off the circulation path, there are several sitting alcoves; each alcove seats four or five people.



PROBLEM

People linger and talk in small groups, after meetings. In fact, a great deal of important business is transacted in these small groups - often more than in the meeting itself.

It is essential then that these kinds of groups have the chance to take hold. Once a meeting is over, people leave the room in clusters: some go off to their cars or the subway, some go off to a bar or cafe, and some stay on to talk a bit. The groups that stay on need a place: There should be small places where people can sit and chat, just off the circulation path where the meeting room spills out.

SQUARE SEMINAR ROOMS.

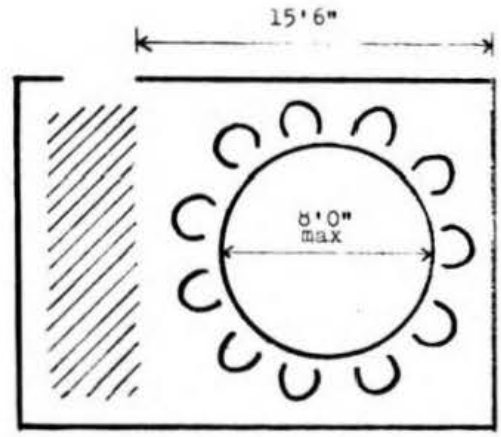
59

PATTERN

IF: There is any room where face to face group meetings, discussions, or seminars are to take place,

THEN:

1. The room should be about as broad as it is long. It may be square, or round, or irregular or slightly off square.
2. The room should be large enough to contain a disc of diameter 15'6" (if the room is to hold 12 persons; otherwise a correspondingly smaller disc), and a small area tangent to this disc, with the door to the room in this second area.
3. The room should contain a circular table of diameter between 6 and 8 feet, with upright chairs (if writing surface is required) - otherwise a circular arrangement of informal seats, sofas, etc.



PROBLEM

Small group discussions do not function well unless the members of the group can all see each others faces, unless they are close enough together, unless the group is small enough, and unless the atmosphere is fairly informal.

1. If the members of a discussion group are all speaking participants, they will try to arrange themselves in a circle.

This is common sense. Empirical evidence supporting the assertion, has been presented by Margaret Mead ["Conference Behavior", Columbia University Forum, Summer 1967, pp. 15-19], and by Paul Byers ["The Idea in the Middle of the Table", Columbia University Forum, Summer 1967, pp. 20-25].

One of the reasons for the circle, as opposed to the square and other forms, is the fact that people prefer to sit at an angle to one another when they talk, not side by side. [Robert Sommer, "Studies in Personal Space", Sociometry, 22, September, 1959, pp. 247-260.] In a circle, even neighbours are at a slight angle to each other.

2. The maximum eyeball to eyeball distance for comfortable group discussion is somewhere around 9 feet.

This figure is derived from the following argument: It should be possible for the members of the group to communicate with one another in a personal fashion.

This means:

a. They should be able to talk casually, without having to raise their voices.

b. They should be able to see details of one anothers facial expressions.

c. They should be able to pass objects backwards and forwards among themselves.

d. They should be close enough so that clear vision includes one head, but not two, of the people furthest away, thus focussing on person to person communication.

Edward Hall has established the following facts:

a. The upper range for casual full voice is about 8 feet. Above 8 feet people have to use a loud voice. [The Silent Language, New York: Doubleday, 1959, pp. 163-164.]

b. A person with 20/20 vision can see details of facial expression such as lip movement, at distances up to 12 feet. [The Hidden Dimension, New York: Doubleday, 1966, pp. 118-119.]

c. Two people whose heads are 8 or 9 feet apart, can pass an object back and forth if they both stretch. [Ibid., pp. 118-119.]

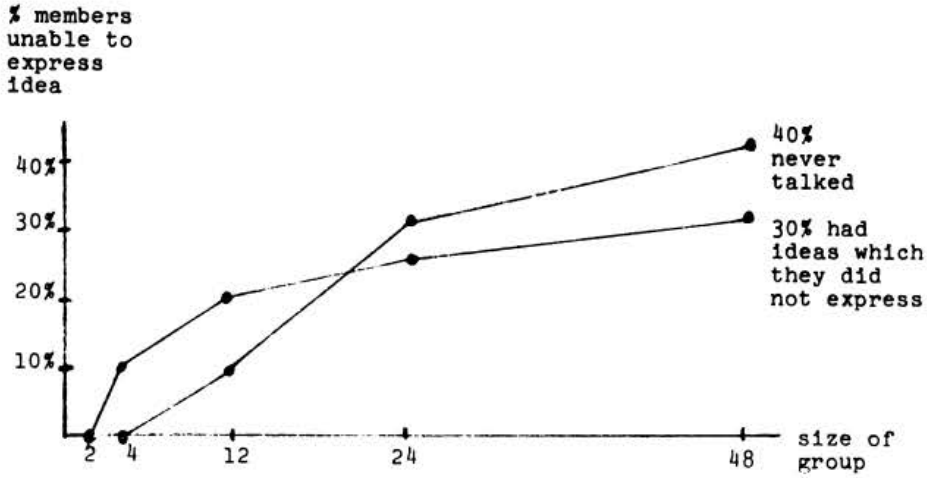
d. Clear vision (i.e., macular vision) includes 12 degrees horizontally, and 3 degrees vertically. This includes one face but not two, at distances up to about 10 feet. [Ibid., pp. 118-119.]

It is therefore established that a small group discussion will function best if the members of the group are arranged in a rough circle, with a maximum diameter of 8 feet.

3. The number of people in a face to face discussion group should not exceed 12. At the diameter given, the maximum circumference of the circle will be 25.1 feet. It is known that people seated at a table, require 27 inches each for comfort. [Time Saver Standards, Fourth Edition, p. 15.] At this spacing, there can be no more than 12 people round the circle.

This figure gets additional support from an experiment reported in Bernard Bass [Organisation Psychology, Boston: Allyn, 1965, p. 200]. It has been shown that the number of people in a group influences both the number who never talk, and the number who feel they have ideas, which they have not been able to express.

The results of this experiment are shown in the following graph. There is no particularly natural threshold for group size; but it is clear that the number who never talk climbs very rapidly. In a group of 12, one person never talks. In a group of 24, there are six people who never talk.



4. The quality of discussion in a small group improves if the arrangement of chairs is informal.

The following quotation from Byers [op.cit., p. 23] gives evidence for this view:

This conference was later divided into small workshop groups of about 15 people each. Some groups met in small lounges furnished for relaxation in a social setting. One group, however, was given a large classroom where student desk chairs had been arranged in a circle. The groups meeting in the lounges reported having warm, interesting, fruitful discussions. The group that met in the classroom and had to sit in the desk chairs reported, on the other hand, that they had difficulty keeping the discussion alive.

The two photographs at the top of the opposite page show the group in the desk chairs. The other two photographs are of different groups meeting in lounges. One can see at once that the variation of posture is far greater in the lounges than in the classroom. In each case the identity of the group and the quality of the participants is signaled by the circle, the basic arrangement. But in the lounges the circle is one that allows individuality: coats may be on or off, shirts may be worn with or without ties, sleeves may be rolled up or not, postures may be erect, relaxed or slouched. In the lounges the participants felt free to move chairs around, and as their relation to the group or the discussion changed over time, they could and did change their postures and positions.

For the group in the circle of desk chairs, however, the spacing of people in relation to one another was dictated by an exact placement of chairs in a circle, and the postures of the participants were, in turn, dictated by the chairs. The close-up photographs clearly contrast the relative freedom of posture possible to those meeting in the lounge with the narrow range of variation possible in desk chairs. The arrangement in the classroom was so rigid that the participants did not even try to create a more informal atmosphere by rearranging the chairs.

There is some doubt about the validity of this result. In the photographs of the two groups, it looks as though the people in the lounge have arranged themselves 2 deep, with the result that the diameter of the lounge circle is about 9 feet, while the diameter of the classroom circle seems to be about 15 feet. On the basis of the argument above, this alone would account for the success of the lounge group, and the failure of the other.

In any event, it will not always be possible to put lounge type furniture into discussion rooms, partly because institutional constraints may not allow it, partly because the members of the group may need a table to write on, in which case they will need upright chairs.

Finally, there are the following points to be made:

5. Although, in theory, a long narrow room could house the kind of group which has been described, in practice such a room will invite a long narrow table (many available tables are long and narrow) - especially since people may tend to use the biggest table which the room can hold. It is therefore important that the room be near to square, as specified.

6. The chairs will stick out 15" from the table edge; and 30" will be required beyond that, for circulation. An eight foot table therefore requires a disc of diameter 8'0" + 2(45") = 8'0" + 7'6" = 15'6".

The smallest table which could be useful for such a room would be a 6 foot table (capable of seating 8 persons). In this case the minimum diameter circle required would be 6'0" + 7'6" = 13'6".

7. There should be an area at one end of the room which has space for groups of two and three to stand and talk after a meeting, for people to take off coats, scarves, etc., in cold weather, and which contains the door(s).

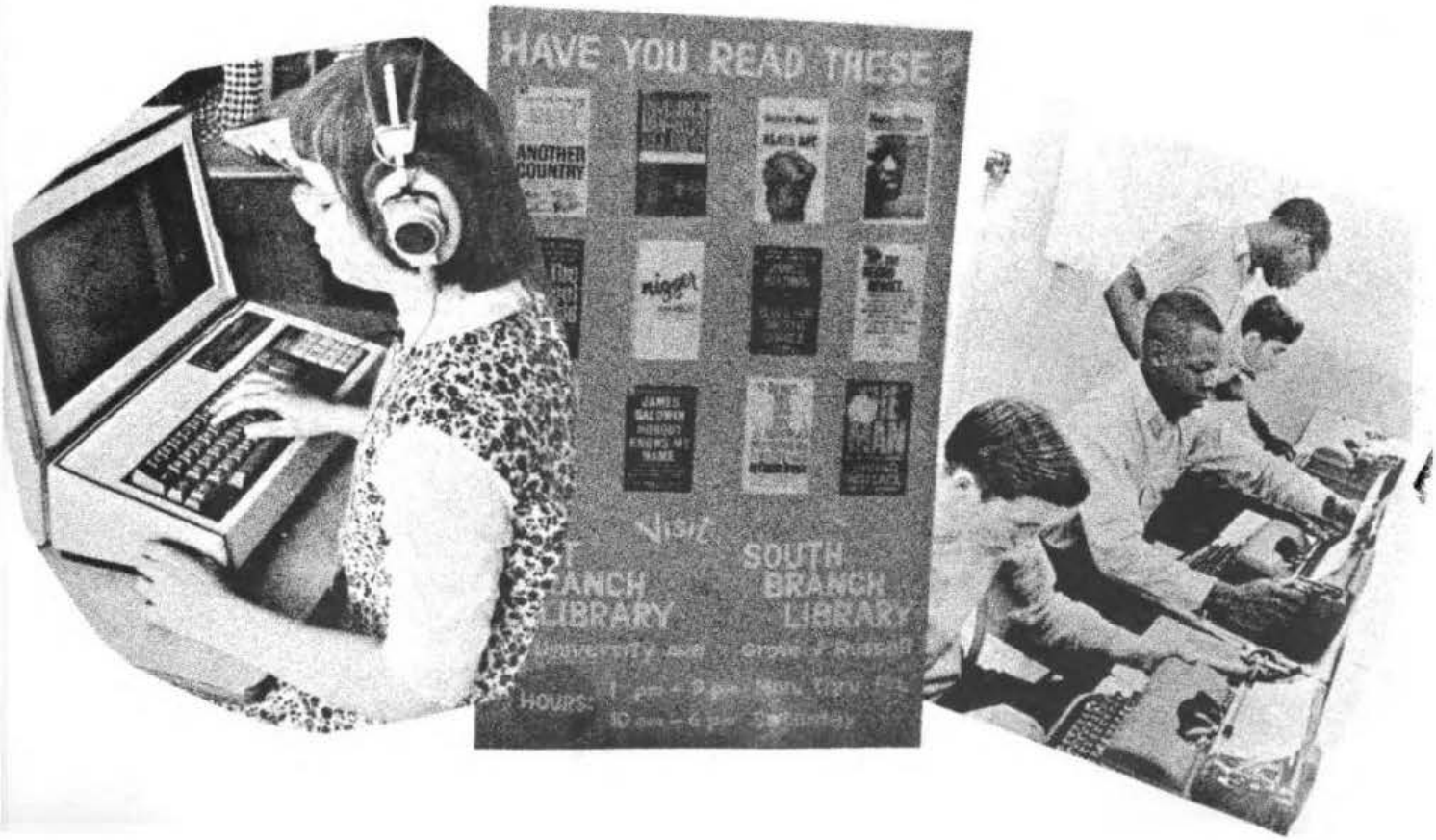
SELF-SERVICE CONTENTS.

PATTERN

IF: A community service center which has a self-service program (as defined by Pattern 21),

THEN: The self-service should contain at least the following items:

1. A library.
2. Language laboratories (in the case of bi-lingual communities).
3. Up-to-date job listings.
4. Up-to-date housing information.
5. Teaching machines, especially for children.
6. Typewriters available for practice.
7. Information about welfare rights, housing rights, in the form of displays.
8. Direct tie-line phones to all those services in the larger community which are not represented in the multi-service center.



PROBLEM

It will be extremely hard to get self-service to work. There is a good deal of evidence to show that the poor work best in personal situations, and are reluctant to enter into the rather individualistic attitude required by self-service.

Thus Frank Reissman says:

> While desiring a better standard of living, he is not attracted to a middle-class style of life, with its concern for...individualistic methods of betterment. A need for 'getting by' rather than 'getting ahead' in the self-realization and advancement sense is likely to be dominant. [Frank Reissman, "A Portrait of the Underprivileged", in Robert E. Will and Harold G. Vatter, (Eds.) Poverty in Affluence, New York: Harcourt, Brace & World, Inc., 1965, p. 75.]

Elena Padilla in Up From Puerto Rico [New York, Columbia University Press, 1958] describes the family-centeredness rather than self-centeredness of Puerto Ricans:

> ...while individuality and interest in doing things just for oneself are discouraged as being of no value. Success and achievement on the part of the individual are encouraged only as ways by which he can help his family. In turn, the individual who does not succeed can expect to receive help from his family. Doing things for oneself is just 'not right', but to do things for others and to recognize this as an obligation are characteristics of a virtuous person. Individuality and self-assertiveness are not as highly prized socially as are dependency and reliance through mutual obligations.

That this is inculcated from an early age is suggested by the following:

> Independence and self-reliance are not to be encouraged in a child, and disobedience due to school, street, or community influences that work against family authority are considered threatening to the welfare of the child. Yet a child is to learn how to 'defend' himself, that is, to protect his own interests, so that he can also help and protect his family.

Richard A. Cloward and Irwin Epstein, in their article "Private Agencies' Disengagement from the Poor" [in Mayer Zald (Ed.), Social Welfare Institutions, New York: John Wiley and Sons, 1965, p. 640.] state:

> ...Those (persons) coming because they had found the agency listed in the phone book were highest in social status...Clients coming because of what they had seen or heard through the mass media were predominantly from the middle or lower-middle-class groups...Over half of those coming on the informal advice of friends or relatives, on the other hand, were from the lower class.

Yet in spite of these difficulties, there are powerful arguments for trying to create a "self-service" situation in the multi-service center (presented in Pattern 21).

However, for the present we do not know which kinds of self-service are acceptable and useful to the poor.

The list of contents given above is merely a list of possibilities. So far they are entirely tentative. Proper statement of the pattern will require detailed empirical evidence which shows which of these items work, and why.

ARENA STORAGE.

61

PATTERN

IF: Any permanently open public space of X square feet, occasionally used for large seated meetings,

THEN: There should be .07X square feet of storage space, close to this public space.

PROBLEM

If the space is always open, and only used occasionally for large meetings, the seats cannot be bolted down. (For instance, a courtyard used for concerts on weekends - seats must be taken up and locked away after every performance.) This means that there must be lockable storage space immediately adjacent to such places.

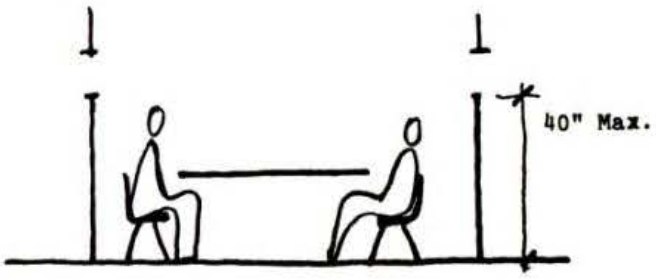
We assume that the storage must hold as many folding chairs as would fill the public space when laid out for a meeting. A public space of X square feet, can hold about .11X chairs for a meeting. Since folding chairs require about .64 square feet of storage space per chair, the storage area requires a total of .11 x .64 x .11X = .07X square feet. (Figures are taken from Graphic Standards, Fifth Edition, p. 456.)

WINDOW HEIGHT IN MEETING ROOMS. 62

PATTERN

IF: Any seminar room or meeting room with windows,

THEN: All windows in the seminar room must be at least 40" above the ground.



PROBLEM

When a number of people are sitting around a meeting table the following problem comes into play.

1. Each person is constantly scanning the facial expressions of those around him; each person wants to make eye contact with every other person during the course of the meeting.

2. But it is impossible to keep eye contact with someone who is silhouetted against a bright window. We have all had the disconcerting experience of being unable to make out a person's expression, and hence the meaning of his remarks, because the contrast makes his face so dark that it is hard, even uncomfortable, to look at it.

If eye to eye contact and the reading of facial expressions are inhibited by lighting conditions, the meeting is made more difficult. Clifford Erickson, in his book The Counseling Interview, New York: Prentice Hall, 1950, p. 53, specifies:

Since good rapport and relaxation are desired outcomes of the interview, it is essential that the interview be held under friendly conditions.

1. The client should not have to face bright lights.
2. The counselor should eliminate any eye obstructions that prevent eye contact with the client.

Time Saver Standards, Fourth Edition, p. 877, has this to say:

...critical and prolonged seeing is encountered at times in most (meeting rooms) and the lighting level should be adequate for the most difficult, commonly occurring task. The illumination should be designed to minimize shadows on the faces of persons sitting around the table. Undesireable reflections should be avoided.

To overcome the problem, all windows in the room must be above the head height of a seated man.

Dreyfuss gives this figure as 38.5" (97.5% tile). [H. Dreyfuss, The Measure of Man, Chart M, Whitney Library of Design, 18 E. 50th Street, New York 22, New York, 1959.]

POOLS OF LIGHT.

PATTERN

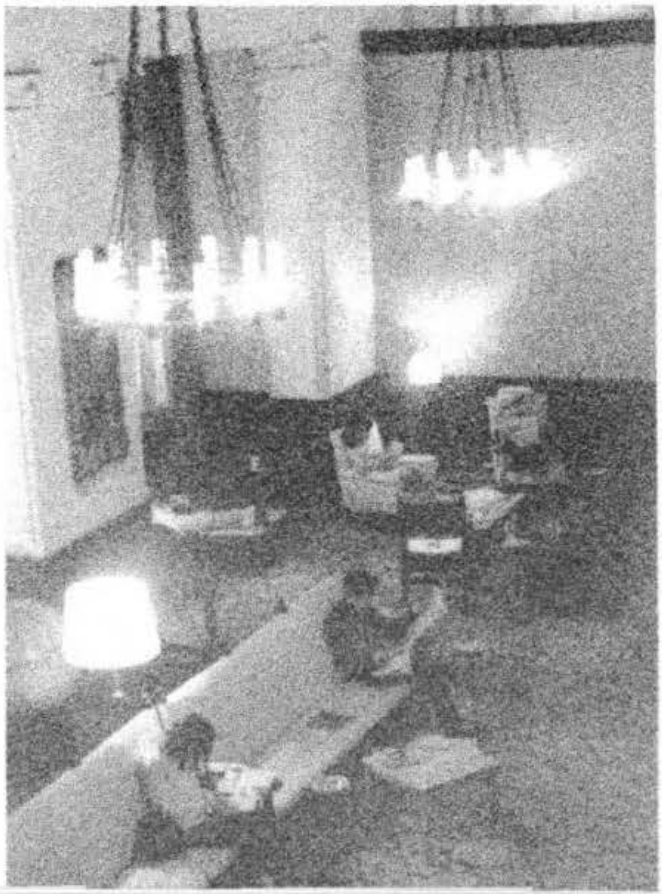
IF: There is any area which requires artificial illumination, and in which people are to be stationary - i.e., sitting, working, talking, resting - and where the average diameter of social group in the space is D feet,

THEN: The light level should vary in such a way that there are discernible "pools" of light.

These pools should have the following characteristics:

1. The perceived diameter of any given pool should be of the order of D feet.
2. The pools should be spaced at distances at least equal to the diameter of the pools.
3. The brightness ratio of pools/background should not exceed 40:1.

There is an unfortunate, but for the moment necessary, vagueness in these definitions. We do not know what stimulus properties correspond to the perceived "boundary" of a pool of light. It must depend both on absolute brightness, and on the brightness gradient. Until this is determined, the definitions cannot help being vague.



PROBLEM

Evenly distributed light fails to support the characteristics of a space as "social" space.

In any given space, at a given moment, there are social groups of well established dimension and definite social groups. These groups may involve 1, 2, 3, 5, 10, or 100 persons - according to the occasion.

We conjecture the following:

1. If such a group is within a "pool" of light, whose size and boundaries correspond to those of the group, this will enhance the definition, cohesiveness, and even the phenomenological existence of the group.
2. If such a group is in an area of uniform illumination, so that there are no light gradients corresponding to the boundary of the group, then the definition, cohesiveness, and "existence" of the group will be weakened.

We know of no experimental evidence which supports this conjecture directly. However, everyday experience bears it out in hundreds of ways.

Every good restaurant keeps each table as a separate pool of light, knowing that this contributes to its private and intimate ambience. In a house where family members live, a truly comfortable old chair, "yours", has its own light, in dimmer surroundings - so that you retreat from the bustle of the family to read the paper in peace. Again, house dining tables often have a single lamp, suspended over the table - the light seems almost to act like glue for all the people sitting round the table. In larger situations the same thing seems to be true. Think of the park bench, under a solitary light, and the privacy of the world which it creates for a pair of lovers. Or, in a trucking depot, the solidarity of the group of men sipping coffee around a brightly lit coffee stand.

One on-the-spot observation supports this conjecture: At the International House, University of California, Berkeley, there is a large, dark room which is a general waiting and sitting lounge for guests and residents. During winter, at a time when the room was half dark, just dark enough for the lamps to be lit, we counted the people who sat near lamps.

There are 42 seats in the room, 12 of them are next to lamps. At the two times of observation we counted a total of 21 people sitting in the room; 13 of them chose to sit next to lamps.

These figures show that people prefer sitting near lights ($X^2 = 11.4$, significant at the 0.1% level). Yet the overall light level in the room was high enough for reading. We conclude that people do seek "pools of light".

One possible explanation for the phenomenon, is suggested by the experiments of Hopkinson and Longmore, who showed that small bright light sources distract the attention less than large areas which are less bright. These authors conclude that local lighting over a work table, allows the worker to pay more attention to his work than uniform background lighting does. It seems reasonable to infer that the high degree of person to person attention required to maintain the cohesiveness of a social group, is more likely to be sustained if the group has local lighting, than if it has uniform background lighting. [See R. G. Hopkinson and J. Longmore, "Attention and Distraction in the Lighting of Workplaces", Ergonomics, 2, 1959, p. 321 ff. Also reprinted in R. G. Hopkinson, Lighting, London HMSO, 1963, pp. 261-268.]

It is also known that uniform lighting tends to obscure texture gradients and other visual cues, and may in this way also act against group members efforts to communicate with one another. [See for instance, Elektisk Lys I Klasserum, Kommission Hos Teknisk Forlag, Copenhagen, 1958; H. L. Logan, Lighting and Wellbeing, Holophane Company, 342 Madison Avenue, New York, 1961; H. L. Logan and E. Berger, "Measurement of Visual Information Cues", Illuminating Engineering, 56, 1961, pp. 393-403.]

One word of caution. It might be possible to object to this pattern, on the ground that pools of light, and the consequent brightness gradients, will create glare. The subject of glare is complex; since glare depends on many factors, including not only the ratio of source brightness to background brightness, but also on their absolute brightnesses, the size of the source, the angle subtended at the perceivers eye, and the angle of viewing.

Detailed treatment of these subjects may be found in the series of papers by Hopkinson and others in Hopkinson, op.cit., pp. 201-290, especially the first paper, R. G. Hopkinson and P. Petherbridge, "Discomfort Glare and the Lighting of Buildings", Transactions of the Illuminating Engineering Society, 15, London, 1950, pp. 39 ff.

For the time being, it is enough to note that brightness ratios as high as 40:1 or even 80:1 are perfectly acceptable. [W. H. Kahler, "Visual Comfort in the Plant", Industrial Medicine and Surgery, 27, 1958, pp. 556-557.] There is no reasonable basis for insistence on perfectly uniform lighting.

WARM COLORS.

PATTERN

IF: There is any space where people spend more than a few minutes at a time,

THEN: The primary sources of illumination, in combination with the colors of floors, walls, ceilings, and furnishings, should be chosen to give a warm light, throughout the space. Essentially, this must be achieved by the dominant use of floors, walls and ceilings, in the red-brown range.

In detail: Suppose we choose an arbitrary small surface with arbitrary position and orientation at any point in this space.

Under fixed illumination conditions, the light incident on this surface has a fixed spectral energy distribution. (We may obtain this spectral energy distribution either by direct measurement with a spectro-radiometer, or by calculation based on the known energy distribution of the primary light sources, and the reflectance characteristics of the surrounding surfaces).

Define this spectral energy distribution as $p(\lambda)$. Now any given $p(\lambda)$ may be plotted on the two dimensional chromaticity diagram, for the 1931 CIE standard observer, by means of the standard color matching functions given in Gunter Wyszecki and W. S. Stiles, Color Science, New York, 1967, pp. 228-317. The coordinates of a plot in this color space define the chromaticity of any given energy distribution.

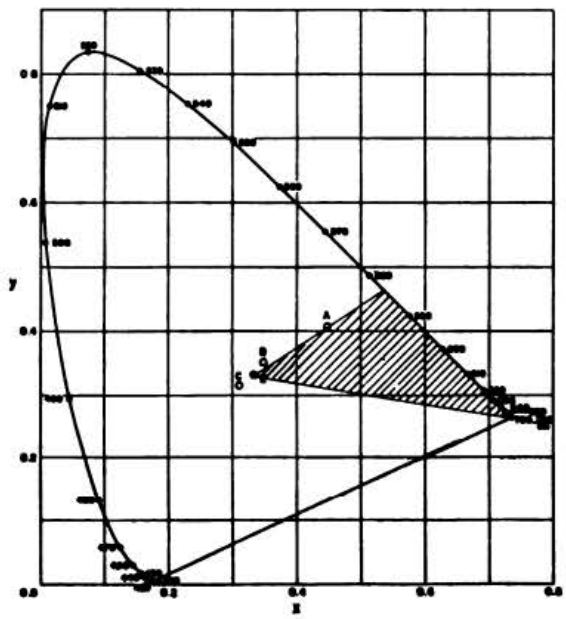


Fig. 3.10. 1931 CIE (x, y)-chromaticity diagram with spectrum locus, purple line, the chromaticity points of CIE standard sources *A*, *B*, *C*, and the equal-energy stimulus *E*.

We may now identify a region on the chromaticity diagram, which we shall call the warm region. It is shown hatched on the drawing.

We require that the light incident on any plane surface, at any point within 5 feet of the floor, in the space defined, have chromaticity within the warm region.

In order to meet this requirement, it will be necessary for the floor, and most of the walls, to be in the red-brown range. Detailed computations on any given surface to estimate the chromaticity of the light in the room, as a function of the spectral distribution of the primary sources, and the reflection characteristics of floor, walls, and ceiling, may be made according to the methods described in P. Moon and D. E. Spencer, Lighting Design, Cambridge, 1948, and summarised in Warren B. Boast, Illumination Engineering, New York, 1953, pp. 197-221.

PROBLEM

Typically, people like the inside of redwood houses, wood-panelling, the interior of a sunlit courtyard, especially towards evening.

Typically, they dislike the interior of offices equipped with fluorescent lighting and standard steel furniture.

We know that people have a clear subjective impression of the relative warmth, or coldness, of different spaces. See, for instance, Committee on Colorimetry of the Optical Society of America, The Science of Color, New York, 1953, p. 168.

Individual observer stability in such judgements is high. Thus, one study gives reliability coefficients of 0.95 for warmth and 0.82 for coolness - N. Collins, "The Appropriateness of Certain Color Combinations in Advertising", M.A. Thesis, Columbia University, New York, 1924.

The most obvious origin of "warmth" is in the spectral characteristics of the light sources. There has been considerable study of the spectral characteristics of different light sources - and it is now accepted that these light sources should have fairly "warm" spectra. However, even when "warm" light bulbs and tubes are used in offices and factories, subjective judgements of coldness seems to persist. Apparently, the warmth of a space depends on other characteristics of the space beyond the light sources. [See F. J. Langdon, "The Design of

Mechanised Offices, Architects Journal, May 1 and May 22, 1963. Amos Rapoport, "Some Consumer Comments on a Designed Environment", Arena, January, 1967, pp. 176-178. Pilkington Research Unit, Office Design: A Study of Environment, Department of Building Science, University of Liverpool, 1965, p. 51 and 89. Peter Manning and Brian Wells, "CIS: Re-Appraisal of an Environment", Interior Design, May-June, 1964.]

We make two conjectures:

1. The perceived "warmth" of a room depends directly on the spectral distribution of the light incident on various things in the room (particularly faces, hands, clothes, work surfaces, etc.). The perceived color of each of these things, regardless of its own reflectance characteristics, is transformed by the spectral characteristics of the incident light. Since the various things in a room are all subject to these transformations equally, it is reasonable to suppose that the perceived warmth or coldness of a room depends on the nature of this transformation, i.e., on the spectral characteristics of the light in the room, as reflected from the walls and other surfaces.
2. Human comfort requires that the perceived chromaticity of the incident light, fall within the region shown on the diagram above.

Since the region shown as warm on the diagram, has been defined by guesswork, it is certain that it will need to be modified. The crucial part of this conjecture states that there exists such a region (whether or not it is the exact region defined above).

One study which attempts to identify the objective correlates of perceived "warmth" is S. M. Newhall, "Warmth and Coolness of Colors", Psychological Record, 4, 1941, pp. 198-212. This study revealed a maximum for "warmest" judgements at dominant wavelength 610 millimicrons, which is in the middle of the orange range. However, the study concerned colored chips; we cannot be certain that the result would be the same for light.