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**LARUE D. CARTER MEMORIAL HOSPITAL**

Clare M. Assue, M.D.,
Superintendent/ Medical Director

Takuya Sato, M.D.,
Director of Children's Services

Patricia Sharpley, M.D.,
Director of Adult Services

**ARCHITECTURE CONSULTANTS**

Alfredo R. Missair, Architect U.N.B.A.,
Assistant Professor of Architecture

Bruce F. Meyer, B. Arche., M.S., Ph.D.,
Professor of Architecture

**PSYCHOLOGY CONSULTANT**

Michael D. Pisano B.A., M.A., Ph.D.,
Assistant Professor of Psychology

**FACULTY ADVISOR**

John E. Wyman
Professor of Architecture

**RESEARCH GRANT**

Undergraduate Research Grant,
Ball State University

**OTHER SUPPORT AND ASSISTANCE**

Larry and Lanette Miles

Lyn P. Baird
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STATEMENT OF PURPOSE

The purpose of this project is to determine the psychological and physiological needs of staff and psychiatric patients at Larue Carter Memorial Hospital. The study focuses on the dayroom and bedroom, which are the primary spaces for the patient. Based on the proposition that the environment can influence the patient's desire and ability to interact, this study proposes to identify means of creating an environment which reinforces the patient and which assists the staff and patient care. The main objective if this project is to assist the staff of Larue Carter in restructuring the environment so as to be beneficial and conducive toward the normalization of the patient.

BACKGROUND INFORMATION

My interest in Larue Carter began with a study developed at the request of Larue D. Carter Memorial Hospital in the spring of 1983. Through the Success Steering Committee of the State Department of Indiana, Assistant Professor Alfredo R. Missair and his studio of fourth year architecture students, of which I was a part, were brought in to conduct this study. We worked with the hospital staff in a research design study including analysis, methodology, program, and student proposals for the renovation of the hospital facilities.

I then continued working with Larue Carter in this thesis project. I studied more specifically the activities and needs of patients and staff in the day areas and bedroom areas of the units. The findings and program specifications resulting from this study are recorded in the following report.
INTRODUCTION TO LARUE D. CARTER MEMORIAL HOSPITAL

A statement summary of Larue Carter, including the physical facility and the scope of its purpose as a treatment and education facility, has been made by Alfredo R. Missair and Bruce F. Meyer concluding the research done by Missair's studio and presented here as background material.

Larue D. Carter Memorial Hospital is an intensive-care psychiatric teaching hospital with professional and non-professional staff who are trained and educated to serve the needs of mentally-ill children, adolescents and adults.

The hospital is a tertiary care center located on the Indiana University Medical Center campus that provides resident and out-patient care for a remarkable variety of patients from all over the State of Indiana. It serves a unique role in training psychiatrists, residents, medical students, nurses, psychologists, rehabilitation therapists, social workers, attendants, hospital administrators, chaplains and others. It is administratively responsible to the Indiana Department of Mental Health and maintains a close cooperative relationship with the Indiana University Department of Psychiatry.

The design of the existing building was completed in 1948 by an Indianapolis architectural firm. The first patient was admitted July 28, 1952. Since then very little has been changed with the exception of a two-level octagonal building addition (Constructed 1969) actually used for dietary and dining service.

In general, the facility represents a clear example of hospital design of the immediate post-war period. It can be viewed as an adequate response to the type of mental care prevalent and acceptable in that era. While the structure is still sound physically, it no longer fulfills the functional or environmental needs of the patients or staff.

The original design was developed with strong emphasis on the 'custodial model,' with direct dependence on a general hospital nursing unit plan. Efficiency in practical functions, cleanliness of the building, and patient custody, were the primary concerns of the then current management practice and organizational structure.
The 'medical and custodial model' was the standard for mental health settings when the building was designed.

Hospital officials and the Space Utilizations Committee of Larue D. Carter Memorial Hospital, recognizing the actual deficiencies of the facility, established goals for improving the environment as follows: 'to recognize and expand the organizational structure for services to adults and youths, and the research services. This will involve relocation of services and appropriate remodeling of areas for the efficient treatment program.... planning for a program of repair, remodeling, and redecorating that will result in maintenance of the sound physical structure, more efficient utilization of personnel space, expansion of services and research, and an overall integrated therapeutic milieu with a warm ambiance of the exterior and interior of the facility.'

Originally Larue Carter treated patients from throughout the state for first episodes of psychiatric illness through intensive short term (maximum of 90 days) treatment techniques....In the last 10


years with the development of the community mental health center system, and the improved treatment of the acutely disturbed patient at all other state facilities, Carter Hospital has become the treatment facility for the most chronic severely impaired, treatment resistant patients in the state of Indiana. The patients are referred when they cannot be stabilized or maintained in the community mental health centers or the other state mental illness hospitals, can't continue private care, or when they require electroconvulsive treatment.'

Presently, Larue Carter has five adult units and three youth units. The adult units are divided into two male, two female, and one research unit. This study deals only with the adult units and with the youth units.

2 Clare M. Assue, M.D., Memo to Director, State Personnel Department. September 7, 1982.
ADULT SERVICES

One each of the male and female units is a closed or admission unit and the other is an open or discharge unit. By 1985 the hospital plans to have converted the adult units into coed units. The open units aim at giving the patients more responsibility and helping them become comfortable making decisions. Patients in open units are allowed more liberties than in the closed units. In the open units patients are monitored less closely. In closed units more care must be taken with furnishings and procedures to assure that the patients do not harm themselves or others.

YOUTH SERVICES

Larue Carter presently has two children’s units and one adolescent unit. The children’s units are divided into one boys’ unit and one unit for girls and for younger boys. The hospital takes children 5 years and older. Around 11 or 12 years of age the children are transferred to the adolescent unit. The adolescent unit is a coed unit. The area is divided into a common lounge area, a bedroom area and lounge for boys, and a bedroom area and lounge for girls.
INTRODUCTION

It was my intent to gain information from staff and patients as to how they felt toward the facilities they presently have. The goal was to learn what occurred in the units, what did and did not work well in the units, and what should be included in the units. Interviews, models, and drawings were used to gain this information.
INTERVIEWS

Interviews were conducted with staff of the youth units. One registered nurse and one attendant from each of the youth units were interviewed individually for fifteen minutes. Questions from each of the following groups were used:

A. Familiarize me with your day. Start with the beginning of your day. Where do you go? What do you do?

B. How much time do you spend with the patients? Are you satisfied with this amount of time? What would you prefer? How could unit redesign help?

C. What do you do while with the patients? What are the patients doing among themselves while they are together? What hinders interaction? What helps it?

D. What activites occur in the dayroom? What activities would you like to add or remove? Why?

E. What activities occur in the bedrooms? When are they used? How often? How much privacy should be provided?

F. Play architect for me. If you could redesign the dayroom anyway you would like, what would you do? What would you do about the bedrooms?

The interviews assisted in understanding what the staff do and how they interact with the patients. Frequently the staff suggested giving the areas a softer, less institutional feel; the addition of carpeting, for example. Also they leaned toward giving the patients more responsibility, such as providing plants or fish for them to care for. Most but not all of the staff felt the bedrooms should provide more privacy.
MODELS

It was hoped that by use of models more information would be provided than by interviews. Models were chosen to show how the people view spaces and activities within them.

A model was constructed of the existing dayroom with one change being made. The porch area was enclosed as part of the lounge. Model furniture was constructed. The furniture included couches, chairs, floor pillows, tables, tennis tables, pool tables, shelves, planters, opaque dividers and screen dividers, bulletin boards, cubes for sitting or writing, desks, and televisions. Another model was constructed of a four-person bedroom. The furnishing for this model included beds, desks, bulletin boards, closets, cubes, floor pillows, chairs, opaque dividers, and screen dividers. Staff and patients were to arrange these models as they felt the rooms should be. Photographs were taken of the final solutions and conversations were recorded as participants worked on the models. Staff from the adult and youth departments and patients from the open and closed adult units worked with the models. Not much difference was observed between what the staff and patients did. Both groups gave each activity a specified area that reflected the activity's needs. In the bedrooms most of the staff and patients used the dividers and furniture to give some privacy to the patients.

It was felt that the models succeeded in providing information about how participants would like to see the unit arranged. Useful information was also revealed through recorded conversations.
DRAWINGS

A drawing exercise was conducted through the recreational therapy department to obtain information from the youth patients at the hospital. Youth ages 7 through 17 participated in the exercise. Instructions were as follows:

A. Draw what you would like your bedroom to be like.

B. Draw what you would like your lounge to be like.

Half of the youth were given a list of suggested activities to consider for the lounge and half were not. The list consisted of table tennis, pool, television, stereo, cards, crafts, reading, and visiting.

The most useful information obtained from the drawing was about bedrooms. Plants, windows, and carpeting were frequently drawn. Lots of room was frequently implied in the drawings and most of the time only one bed was shown per room. The older children sometimes divided the lounge into activity areas. Carpeting was often shown in the lounge.

The use of drawings was successful in showing what items and activities the youth feel are important.
INTRODUCTION

In doing this research it was felt that privacy, territory and interaction are three primary issues that need to be understood and provided for when designing a hospital setting.

"Privacy is the respect or anticipated respect for the boundaries of either personal space or territory." Privacy is a lack of interaction with others by choice. It is a positive phenomenon and is important for maintaining a sense of identity and for emotional well being. Privacy is needed for reflection, planning, personal activities and simply for freedom from observation by others.

Various levels of privacy are needed by the staff and patients. The staffs need privacy for thought, work activities, and some personal activities. Because patients are at the hospital 24 hours a day, they should be allowed some privacy despite the severity of problems.

In establishing a sense of privacy for the patient, visual privacy would be most important. The patients should have some level of visual privacy within the territories of their bedrooms. Privacy would be needed for relaxation, reflections, personal grooming and other activities.

TERRITORY

Territories are perceived areas of control. A person has influence over his territory. It is his place. It provides a sense of identity and importance.

Territory is important to every individual. We all have territories. Our behavior is affected by territories, both ours and others'. How we behave, where we go, and what we do are often defined by the territories around us.

Territories have limits and confines. Markers are used to designate a territory. The markers might be owned or appropriated by the person. Coats, magazines, or furniture can all be used as markers. These markers will also designate a territory even when the person is not present.

In addition to personal territories, groups can also have territories. These can be equally as strong and important as the personal territories. It would be important to establish a group territory within the patient units. This would give the patients a sense of belonging without their having to stake out a place.

Territories have a negative side which can not be overlooked. At times, territories will inhibit interaction. When people become protective of areas they become hostile and withdraw. To prevent this, group territories should be established in the day areas. Territories can be long term, of moderate length, or short in duration. Short term individual territories could be allowed in the day area, but the longer term should be restricted to the bedroom area.
INTERACTION

Interaction is essential to the daily life of everyone. At every moment of the day we are interacting with others, or with our environment. Many of the patients at Larue Carter have a difficult time interacting properly with others and act passively toward their environment. To learn to interact is an important step in their healing process.

The patients need opportunities for active and passive interaction with others. For some, the opportunity to watch others interact is a step forward. Gradually, they might start participating in small ways with the activity, interacting at will and then withdrawing. Others need and are ready for active interaction with others.

The environment can encourage or discourage interaction. The textures, materials, lighting, acoustics, size, shape, and arrangement all give clues to its inhabitants. Presently, the environment of Larue Carter does not encourage but discourages interaction. Learning to interact with their surroundings can be equally as important as learning to interact with others. Patients must start noticing the environment and making decisions about it.

Larue Carter has to provide patients with the means to start making decisions and taking action. The following was written by a schizophrenic girl. It gives a good example of how important these small forms of action can be.

"To the stupefaction of the nurse, for the first time I dared to handle the chairs and change the arrangement of the furniture. What unknown joy to have an influence on things; to do with them what I liked, especially to have the pleasure of wanting change...that night I slept very well."

An environment needs to be created in which patients are encouraged to act on the environment. This should not be the the surprising, but the expected, behavior.
INTRODUCTION

The section of conceptual specification and programming explores the essence of what the design of the units should contain. The major areas of each unit have been separated and analyzed. Some of the subjects which have been considered are the uses of the space, its zoning, its acoustical and visual relationships, and its lighting and furnishings.

In the following section, these ideas will be combined into conceptual solutions. At that time the separate areas of the unit will be combined to show their relationships with one another.
PATIENT PATH

STAFF PATH

VISITOR PATH

BARRIER

PENETRABLE BARRIER

FIELD OF VIEW

180° VIEW

SOUND

INTERACTION

PERSON AS SEEN FROM ABOVE

OUTDOORS

PATIENT OUTDOOR RECREATION AREA

TELEVISION

TABLE AND CHAIRS

POOL TABLE

TABLE TENNIS
INTRODUCTION

This is a place where patients visit with their friends and relatives. Many of the patients are from distant areas of the state. Their friends and relatives live too far away to visit often. The environment should assist them in settling down and becoming comfortable with one-another. Feelings of security and freedom from observation are keys in accomplishing this. They should feel that whatever is said or done takes place in privacy.

EXISTING

Presently the patients have no designated space for a visiting area. Whatever space that can be found is used for visiting, whether it is in the snack bar, lounge, bedroom, or outdoors.

PROPOSED

More than one visiting area would be needed for each unit. These visiting areas should be located within the public zone of the unit. In addition to these, visiting areas should be provided outside the units - in the main body of the hospital and outdoors.
USERS OF SPACE

Patients and visitors would be the primary users for which this space would be designed. Staff could use this area during non-visiting hours for sessions with patients and other staff members. The nurses would need to have ready access in case of a disturbance.

ZONING OF SPACE

The visiting area would need to be located in the public zone of the unit. Visitors should not have to go through a private zone such as the bedrooms to get to this area. It should likewise be buffered from the surrounding activities of the unit. Disturbances from outside the area should be avoided. Visual privacy and acoustic privacy would be important to the space. People should not have to worry about being watched or overheard. For treatment reasons one exception to this might exist, as explained in a later section. Within the visiting area of each unit there should be several visiting groupings. Often during visiting hours more than one patient in a unit would have visitors. Each of these groupings would need to have privacy from the other groupings.
ACOUSTICAL RELATIONSHIPS

The conversation areas should have acoustic privacy. Slight background noises from other zones could help muffle conversations. These noises should not be loud enough to call attention to themselves. The nursing station should be located so that the nurses could tell if they were needed. The acoustic privacy allowed would vary somewhat with the type of unit. In open units total privacy could be provided. In closed units the visiting groupings might need to be more open so that nurses could better tell if they were needed. All units should be provided with enough privacy for the users to feel comfortable.

VIEWS

Visual privacy would be extremely important to the functioning of this space. The users should feel free from observation. As with acoustical relationships, the amount of privacy would vary with the type of unit. In the open units the visiting area could have total privacy. In the closed units the nursing station might need to have some visual access to the area.
OBSERVATION

For treatment reasons, observation facilities might need to be provided adjacent to one of the visiting groupings in a unit. The facility should allow visual and acoustic monitoring. Such facilities might not be needed in all of the units.

SEATING

The seating relationships would need to be comfortably close. Space need only be provided for the seating, for access to it, and for visual comfort. The seating should be in a sociopetal arrangement.

LIGHTING

The lighting should be soft. Incandescent lighting would be best. The incandescent lighting would accent textures and would give a warmer tone to the space. It would create a more familiar atmosphere for visiting. Floor lamps and table lamps would be assets in this space. They would add details and markers which would help to break up the space.
INTRODUCTION

The nursing station is central to the patient unit and its users. It is home base for the staff, the focal point from which patients receive their care, and the center from which visitors receive their information, directions, and assistance.

EXISTING

The present nursing station conveys a strong sense of separation from the unit. In most of the adult units a high bar divides the station from the unit. In each of the children's units, the station is in a room with windows onto the units. In all of the units the nursing station is not near the entrance. This creates an inconvenience for staff, patients, and visitors.

PROPOSAL

The station should provide for an openness among the staff, patients and visitors. It should not create a barrier. The station would also need to be closer to the entrance. From their station, nurses should be able to easily monitor traffic.
LEVELS OF ACCESS

The nursing station should have various levels of access for visitors, patients, and staff. Visitors would be at the nursing station primarily for information and direction. They would only need to come to the perimeter of the station. Some of the patients' hospital activities would be performed within the nursing station. For this reason, the patient would need to enter the open zone of the nursing station. The nursing station would be the work base for the staff. They would need to continue through the open zone into a private work zone.

ZONING OF SPACE

The nursing station should consist of two zones: a private zone (A) for staff for record keeping and other business activities, and an open zone (B) easily accessible to patients and visitors. Direct access to therapy rooms should be provided for the staff.
TERRITORY

The nursing station would need a defined territory, but this territory should not become a barrier. The open zone of the nursing station should be marked in a non-restrictive manner. The zone should invite people to ask questions and to interact with the staff. Patients and visitors would need to feel at ease approaching the nurses in this area. The territory could be marked by lighting changes, changes in materials, or even changes of floor level. Barriers would not be necessary to create this territory. The private zone of the nursing station should be less accessible and less open. Barriers would be appropriate here.

MARKERS AND DIVIDERS

Comfortable sight lines and ease of communication would be of primary importance for the nursing station. In order to provide these, the types of markers and dividers used in the nursing station should reflect the needs of the patients and of the staff. An example would be the counter seen commonly at nursing stations. Although adults could communicate over such a counter, many children could not see over the counter and would be thus hindered.
VISUAL AND AUDITORY RELATIONSHIPS

For the safety and well being of the patients, the nurses would need to keep track of the patients and be aware of what would be happening in the unit. To assist in this, the nursing station should be open acoustically and visually to the rest of the unit. The nurses should be able to visually monitor the entrance, lounge, bedroom areas, and outdoor areas. They should be able to converse with the patients. They should also be able to hear if they are needed anywhere in the unit. The private area of the nursing station should be buffered but not isolated from the sights and sounds of the unit.

APPLICATION TO UNITS

The concept of an open, accessible area and a closed, private area of the nursing station is applicable for all of the adult and youth units.
INTRODUCTION

This is an area where quiet activities such as reading, writing letters, looking outside, or just thinking would take place. Some activity would occur here as people talked and moved about.

EXISTING

Presently, no space is set aside for quiet activities. A patient must attempt to read or write in the midst of lounge activities and a blaring television.

PROPOSED

A space should be set aside for quiet activities. This area should be located so that other day area activities would not adversely affect it.
ZONING

The quiet area should be defined and should be perceived as an area for quiet activities. This space would not require acoustical or visual buffering. The borders of this space could be somewhat flexible. Multiple access to this area should be provided, as freedom of movement is important to this area. This freedom would help to encourage people to move furniture around and to be comfortable.

INTERACTION

A sociopetal arrangement would be important for this space. A relaxed atmosphere would be needed to help patients interact with others around them.

ACOUSTICAL RELATIONSHIPS

Acoustic privacy would not be needed. Patients should be allowed to hear what is happening in adjacent areas.
VISUAL RELATIONSHIPS

Views to other day areas would be desirable. This would allow patients to keep in touch with the unit. Views outside would also be important here. The patients need to observe people and activities beyond the hospital grounds.

LIGHTING

Lighting fixtures such as table and floor lamps should be used to help in de-institutionalizing the space.

FURNISHINGS

In addition to chairs and couches, more flexible furnishings would be needed such as bean bags, pillows, and cubes. The patients should be able to create their own seating arrangement. This would help them to make decisions, and to interact with their environment.
INTRODUCTION

This is an area designated for playing pool and table tennis.

EXISTING

Presently, the pool table is located in the lounge areas. Table tennis, in most units, is played in the hall. Frequently the players have their game interrupted by surrounding activities.

PROPOSED

The pool and table tennis would need an area designed to minimize interference from surrounding activities.
ZONING

The pool and table tennis tables should have a defined territory to help ensure that players have the required room to play. This should not be an isolated area. People should feel free to come and go in this space.

FUNCTIONAL

One pool table and table tennis table per unit would be sufficient. In a common area (A) a board for posting tournament scores and a storage space for equipment should be provided. In the closed units the playing equipment might need to be kept at the nursing station or other secure places. Directional lighting onto the table surfaces would focus attention on the game and enhance eye comfort for players.
POOL TABLE

Seating for at least four people ought to be provided near the pool table. Both spectators and the players would need this seating.

TABLE TENNIS

Barriers around the table tennis area would help to prevent balls bounding into adjacent areas. Where adjacent areas would not be affected, no barriers would be needed.
INTRODUCTION

This area would be used for games, cards, crafts, meetings, and parties.

EXISTING

Presently, tables are provided in the lounge area of the units.

PROPOSED

This area should have a designated space.
ZONING

The activities area should have a defined territory containing two sub-areas. The first sub-area (A) would contain a permanent setting of furnishings. In an expandable area (B), additional tables and supplies could be set for temporary use, such as recreational and occupational therapy and other large group activities.

ACOUSTIC RELATIONSHIPS

This zone would, at times, be a sound-producing zone. However, there would be no need for special treatment to avoid noises, incoming or outgoing.

VISUAL RELATIONSHIPS

Activities of other areas should be observable from this area. People like to watch the activities of others.
INTERACTION

Interaction would occur as people participate in various activities around the table. For a more passive level of interaction, spectator seating should be provided. Many patients enjoy watching others interact. This watching can frequently be a beginning step toward their own participation.

LIGHTING

The table surface should be brightly lit with the surrounding areas dimmer. In this manner the lighting would highlight the area of activities.

FUNCTIONAL

Two tables with accompanying chairs should be set up in this area at all times. An additional two tables and chairs should be accessible for special activities. Storage space (C) should be provided for games and craft supplies. A cabinet top and sink would be needed for crafts. The storage areas should be lockable, but should remain unlocked during the day. In the closed unit and younger children's units some games and craft supplies should not be directly accessible to the patients, but rather should be in the nurses' care.
INTRODUCTION

This space would be used by the patients for physical fitness and release of energy.

EXISTING

Presently, a punching bag, located on the porches of most units, is the only exercise equipment in the units. Furniture is moved to form a space in the lounge for group exercises.

PROPOSED

An area should be set aside containing a variety of physical fitness equipment.
USE OF SPACE

This space would be used for group exercise periods and by individuals during their free time.

ZONING

The exercise area should be secluded but not enclosed. It would not interact with surrounding activities or areas. This area would, however, need to be monitorable from the nursing station. Views to other areas and outdoors would not be necessary, and acoustic constraints need not be placed on this space.

FUNCTIONAL

The exercise area should have mats, punching bags, bicycles, weights, and other exercise equipment.
INTRODUCTION

Each unit should have adjacent grounds where the patients can enjoy the outdoors.

EXISTING

Presently, there are not accessible outdoor areas adjacent to the units. Patients have to obtain a grounds pass in order to be allowed to use the grounds.

PROPOSED

Each unit should have adjacent, accessible grounds where the patients can freely come and go. These grounds should be secure areas with access only through the units.
USE OF SPACE

The outdoor areas would have a variety of uses. Patients would be the primary users, using this area for relaxation or visiting with friends and relatives. Staff might choose to meet with the patients outside on nice days.

ZONING

These areas would provide the patients with a way to enjoy being outside. The outdoor area should be an extension of the unit. For security reasons, the unit should be the only entrance and exit to this area. Patients should have the freedom to use this area except in severe situations in which a patient temporarily could not be allowed to do so.

MONITORING

The outdoor areas should be secure. If the nurses were to expect a patient would try to leave the grounds, the patient would not be allowed to use the space. Nurses should be able to easily monitor this area.
CHARACTERISTICS OF SPACE

The outdoor areas should provide a variety of settings. Areas for sitting, walking, and games, as well as both sunny and shaded areas would all be needed. In the children's area play equipment should also be provided.
NON-GROUND LEVEL UNITS

Units on the second and third floors would not have ground level outdoor areas. However, these units should still be provided with enjoyable outdoor areas. Shaded and sunny areas, sitting and walking space could still be provided for these units.

TYPES OF ENCLOSURES

To secure an area, tall wire fences would not be required. Trees, shrubs, berms, and brick and wood fencing would be used to enhance the area and still secure it.
INTRODUCTION

This is an area providing television entertainment for patients.

EXISTING

Presently, a television is mounted on the wall in view of the entire lounge and nursing station of each unit. It dominates all activities in the unit.

PROPOSED

In order to avoid the television's domination of all the activities in the unit, the television should be in a separate area.
ZONING OF SPACE

The television area should be located in the public zone of the unit. In order to avoid the television's domination of other activities this area should be relatively isolated. The television would provide enough incentive to attract people to this area.
ACOUSTICAL RELATIONSHIPS

This would be a noise-generation area. As such, it could interfere with adjacent areas. Sound from the television should be muffled so as to minimize the distraction to other zones. Buffering of the sound could be done by using walls, panels, plants and other sound-adsorbent materials. Buffering would also help to minimize sound distraction from other areas into this area.

VISUAL RELATIONSHIPS

In order not to distract people, views of the television screen from other areas should be prevented. Views could, however, be allowed into the sitting area.
FURNISHINGS

In addition to chairs and couches, more flexible furnishings would be needed such as bean bags, pillows, and cubes. The patients should be able to create their own seating arrangement. This would help them to make decisions, and to interact with their environment.

LIGHTING

The lighting should be a soft backlighting. Incandescent lighting would be better than fluorescent lighting. The seating area should be lit so people could do other activities, such as crafts, while sitting there. Glare off the television should be avoided. Eye strain should also be avoided.

APPLICATION TO UNITS

This would apply to all the adult and adolescent units. However, in the children's units the television could be part of the lounge. The view of the screen should be more open both for the children's playing and for monitoring from the nursing station.
INTRODUCTION

Each unit should have a kitchenet. It would allow patients to prepare snacks and would be useful for therapy sessions.

EXISTING

None of the units presently have kitchenets.

PROPOSED

Each unit should have a small kitchenet. It should be located so that nurses can easily monitor it and so that patients have access to it.
USERS OF AREA

Patients would use the area for storing and preparing snacks. Staff and patients would use the area for therapy and training in food preparation. At times visitors and patients might want to prepare foods together.

ZONING

The nursing station should be located so that the kitchenet can be easily monitored. Views to other areas and outdoors would not be necessary, and acoustic constraints need not be placed on this space.

FUNCTIONAL

The kitchenet should contain basic kitchen equipment such as a stove, a refrigerator, and cooking equipment.
INTRODUCTION

Seclusion rooms are places to isolate patients who have become belligerent and uncontrollable. Patients are placed in these rooms until they have become calm.

EXISTING

Presently, single person bedrooms are being used for seclusion rooms in the units. They are located on the halls and are surrounded by other bedrooms. The rooms are stripped of all furnishings. What fixtures, the rooms have, such as lighting fixtures, are recessed to prevent patients from hurting themselves.

PROPOSED

The seclusion room should be located near the nursing station for ease of monitoring. To avoid disturbing the patients and visitors the room should not be located on the hall or near the lounge. Providing two types of seclusion rooms would be best. One along the lines of the existing rooms would be used for extreme situations. For less serious situations, a second type of room having some fixtures and furnishings would be available.
ZONING OF SPACE

The room would need to be close to the nursing station. The nurses would check on the patient at regular intervals. The room should be located so that activities and noises from the room would not interfere with the patients and visitors.
VISUAL

The staff should be able to see all the interior of the room without entering it. Patients and visitors should not be allowed to see into the room. It is traditional for the patients to have no views out. However, outdoor views might help calm the patients.

ACOUSTIC

Some noise should be allowed to penetrate into staff areas as an aid in monitoring secluded patients. However, noise from the room should not be allowed to interfere with activities of other patients.
SECLUSION ROOM (A)

This room should be used for patients who are out of control or are dangerous to themselves and others. No furnishings should be in this room. No part of any fixture should penetrate into the room. The patients should not be able to tear out fixtures or hurt themselves on them. Windows should be such that they are difficult to break. Surface materials should be chosen which are difficult to damage.

SECLUSION ROOM (B)

This seclusion room would be for less serious situations. It could be used as an intermediate room after the other room (A), or used to isolate a patient before use of the other room were to become necessary. This room would have fixtures and furnishings. Chairs, tables, magazines, and carpeting could be used here. What is used should be sturdy, difficult to throw, or to damage.
INTRODUCTION

Laundry facilities are provided so that patients might care for their own laundry needs.

EXISTING

A laundry facility is located at the entrance of each unit.

PROPOSED

The laundry facility of each unit should be located adjacent to the unit's bedroom zone.
ZONING OF SPACE

The laundry facilities should be adjacent to the private zone of the unit. For privacy reasons, the patients should have direct access from their bedrooms to the laundry without passing through the public zone. The facilities should be located to avoid excessive acoustic disturbance to other areas of the unit.

FACILITIES

The facility should be a complete, small-scale, self-service laundry. Enough washers and dryers should be provided to meet the needs of the patients. Baskets, drip-dry facilities, and fixtures for hanging clothes should be provided for the patients' use.
INTRODUCTION

This area is for patient sleeping accommodations and bathroom facilities.

PROPOSED

Four-person rooms should be eliminated. Only one and two-person rooms should be provided. Provisions should be made within the space for the patients to create their own territories. Partitions or furnishings should be provided for visual privacy. The walls should be of a softer material. Floors should be carpeted. Adjacent baths should be provided.

EXISTING

The bedrooms are one, two, or four-person rooms. They presently offer no opportunity for privacy or for creating territories. The area is totally open both visually and acoustically. It has a very institutional atmosphere. The walls are either brown or green tile. The floors are terrazo. None of the rooms are equipped with bath facilities. The community bath is located next to the nursing station and in front of the lounge. The environment is very overbearing and has a dehumanizing affect. Patients tend to lose their identity in these surroundings.
ZONING

The bedrooms would be located in the private zone of the unit. The patient's rooms should consist of two types of areas. A private area (A) would be provided for each patient. Personal territories are important for the patients. They help to improve personal identity and reduce anxiety, defensiveness, and the withdrawal of patients. This would be their space. They could decorate and move furniture to make it comfortable for them. Although personal areas would be provided, interaction between the patients should occur also. The interaction should occur on mutual agreement, invited by the patient, not forced by circumstances. To provide this opportunity a neutral common area (B) would be a part of the room.

RELATIONSHIP TO BATHROOMS

Preferably, a bath (C) would adjoin each room. This bath could be shared between two rooms. If this were not practical, one bath should be provided for a small cluster of rooms. The bath should not be far from the bedrooms, and the patients should not have to pass through a public zone from the bedrooms to the bath. Restrooms should be provided in the public areas for daytime use.
VISUAL RELATIONSHIPS

Visual privacy would be critical to the personal territories. Visual privacy both from people in the corridor and from other patients in the room would be needed. The lack of this privacy would be dehumanizing. This privacy would be necessary whatever the unit. The amount of privacy could vary per unit, but some privacy should be provided for all patients. This would not mean they should be walled in. Dividers and furniture could be used to break lines of sight without blocking the whole area. Nurses would need to be able to check patients without difficulty. Views outdoors should be provided for each patient.

ACOUSTICAL RELATIONSHIPS

Although acoustic privacy is important, it would be impossible within the same room. Dividers and furnishings could be used to help dampen the sounds.
FURNISHINGS

All the furnishings and dividers should be movable. This would allow the patients to create their own areas within the room. They would have the opportunity to decide what they like and want. A bed, side table, desk, pin-up board, storage areas for clothing and personal items and a mirror should be provided for each patient.

LIGHTING

Individual lighting for each patient area should be provided. Each patient should be able to adjust the lighting in their area. Natural lighting should also be provided for each patient's space.
ADULT OPEN UNITS

Areas specified for these units are as follows:

<table>
<thead>
<tr>
<th>Visiting Area</th>
<th>Outdoor Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Station</td>
<td>Television Area</td>
</tr>
<tr>
<td>Quiet Area</td>
<td>Kitchenet</td>
</tr>
<tr>
<td>Pool / Table Tennis</td>
<td>Seclusion Room</td>
</tr>
<tr>
<td>Activities Area</td>
<td>Laundry Facilities</td>
</tr>
<tr>
<td>Exercise Area</td>
<td>Bedrooms</td>
</tr>
</tbody>
</table>

The central purpose of the open units is to provide patients the opportunity for more interaction and responsibility. To assist with this a common day area for the units would be provided. This common area would be an addition at the connection point of the wings and would house the activities area, pool / table tennis areas, and the outdoor recreational areas for both units. Two television areas, one exercise area, and one kitchenet would be shared by the units. Each unit would have its own quiet area, laundry facilities, and nursing station.
ADULT CLOSED UNITS

Areas specified for these units are as follows:

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The closed adult units would provide more security and less responsibility for patients. The day areas of the units would be placed adjacent to the nursing stations to allow for easy monitoring. The outdoor areas would use exterior porches. These porches would use the roof area of the addition to the open units below, making them larger than the existing porches.
ADOLESCENT UNIT

Areas specified for this unit are as follows:

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</table>

The adolescent unit would be a coed unit. For the enhancement of the outdoor area of this unit, grading would be done to provide access to ground level.
ADOLESCENT OUTDOOR RECREATION AREA

The wing below the adolescent unit does not require outdoor access. This allows ground to be graded up to connect with the porch of the adolescent unit, thereby creating recreational grounds that better meet the needs of the patients. In order to avoid enclosing the children's recreation area, this grading should occur in the back portion of the area between the wings.
CHILDREN'S UNITS

Areas specified for these units are as follows:

Visiting Area          Television Area
Nursing Station        Play Area
Quiet Area             Seclusion Room
Pool / Table Tennis    Laundry Facilities
Activities Area        Bedrooms
Outdoor Recreation

The children's area would have a large play area. It would not have a separate exercise area or a kitchenet.
OUTDOOR RECREATION ACCESS FOR CHILDREN'S UNIT

The Children's unit located on wing 2F would share the outdoor recreation area with the children's unit below it in wing 1F. Vertical circulation would provide access to the recreation area. This circulation would be accessed from an exterior porch adjacent to the children's unit.
EXISTING ORGANIZATION

1E- ECT/ Cafeteria
1F- Unused Unit
2E- Female Closed Unit
2F- Female Open Unit
3E- Unused Unit
3F- Youth Department

1A- Male discharge unit
1B- Adolescent Unit
2A- Male Closed Unit
2B- Research Unit
3A- Boys' Unit
3B- Girls' Unit

Five adult units are in use: two female units (2E, 2F), two male units (1A, 2A), and one coed research unit (2B). One each of the male and female units is used for closed or admission units and the other is used for open or discharge units. Most of the adult units are located on the second level.

The youth department has three units: one girls' unit (3B), one boys' (3A), and one adolescent unit (1B). The adolescent unit is a coed unit located on ground level. Outdoor access for these two units are basketball areas on the third level, one adjacent to each unit. The school is located in the connecting hall on the third floor. The youth department is located in wing 3F.
PROPOSED ORGANIZATION

1E- Cafeteria
1F- Children's Unit
2E- Adolescent Unit
2F- Children's Unit
3E- Youth Department
3F- School Classes
1A- Open Discharge Unit
1B- Open Adult Unit
2A- Adult Open Unit
2B- Adult Closed Unit
3A- Research Unit
3B- Research Unit

The adult services would be concentrated in wings A and B. The adult units would become coed. Two of the units would remain open units and two of the units would remain closed units. Two additional units would be used for research units. The open units would be located on wings 1A and 1B. These units would share day areas for the patients. These units also would have a shared outdoor, ground-level recreation area. The closed units would be located on wings 2A and 2B. These units would function independently of each other. The two research units would be located on the third floor in wings 3A and 3B.

The youth services would be concentrated in wings E and F. One children's unit would be located in wing 1F and the other children's unit in 2F. The adolescent unit would be located in wing 2E. A vertical circulation would connect all of the youth units to the third level, where the department offices (3F) and school would be located.
CONTROL POINTS FOR ADULT UNITS

To unite the open units and assist in their operation as a whole, only one control point would be used. This control point would be located at the junction of the wings and the main body of the hospital. Since the closed units would operate separately, two control points, located at the entrances of the units, would be used.
YOUTH SERVICES CIRCULATION

The youth department units, offices, and school would be linked to one vertical circulation system. This system would have controlled access points at the entrances of the units and between the circulation area and the rest of the hospital.
Often thesis projects do not have existing clients. I felt it was beneficial for me to work with an existing client instead of an imaginary client. I worked with real needs, restrictions, and desires.

This project is a conceptual programming project and does not include a final design stage as do most projects. Several aspects of the project were therefore unusual learning experiences for me. Planning and organization were challenges and required much time and thought. Research proved to be involved and led me to deal with many people in new ways. In compiling the results, the demand for communication required that I explore new ways of both graphic and verbal communications.

The combination of working with an existing client and of focusing on conceptual programming made this thesis a challenging growth experience for me. I see it as a good alternative for student theses.