This book is dedicated to my family, who have been very supportive in everything I have done. In particular, I would dedicate this work to my grandfather, Henry "Bud" Krueger, who died of cancer in December 1977. A facility such as the one presented here would have, I believe, benefited all of us.
My thesis year in the College of Architecture and Planning was to be a synthesis of what I had learned over the past five years, combined with the pursuit of a project which would either affirm or negate my interest in medical facilities specialization. Two of my major concerns were and are the interior spatial quality and overall image of the building to the user, and also on non-users passing by. I have confirmed my belief over these last nine months that there is no way that one can do their best on a project which lasts a few weeks as opposed to a few months. While I also realize that design never ends for an architect, a point is reached in which the designer can feel fairly confident about the outcome. It is with this, that I can say I feel confident of my accomplishments and discoveries about myself and what I plan to do for the rest of my life, even though I did no more than scratch a much larger surface than I have encountered in any previous endeavor.

At the beginning of the year, I expected to get to interior finishes. Although I have some concept of what is to occur with interior finishes, I have no firm commitment or knowledge with which to back this conceptualization. I do feel that with the time spent designing and carefully arranging the spaces, I would not compromise the design for something I felt I had no time to specify, especially since the selection is so critical to the image desired in the space. Thus, while the project grew, the detail which I thought would be reached is slightly shorter than anticipated. I should take this opportunity to also say that while I learned
alot about architecture and myself, I learned some other things as well (such as things I do not know). There is so much more to a building that needs to considered from the start i.e., zoning, codes, structure, systems, organization, context, psychology, etc., that must go on simultaneously rather than linearly in a process. Armed with this knowledge, or lack thereof, I have increased my capability to grow into the profession.

I have talked to many people in conjunction with research on hospice programs. The people I have talked with at this point, have been very helpful in my obtaining information. I have used their expertise, gained through experience, in order to evaluate successes and failures in facility design. Mr. Tom Dwyer, a principal at the architectural firm Archonics, in Indianapolis, has been very helpful in the design respect, as his firm designed the Saint Vincent Stress Center and the Ronald McDonald House in Indianapolis, Indiana; the former containing a hospice in-patient unit and the latter being a medical support residence. Both of these buildings are analyzed in the Building Type Analysis. Other professionals which gave preliminary input are those who work in the in-patient atmosphere. The range consists of professionals such as: doctors, nurses, social workers, and administrators. So far, I have talked to Ms. Kathy Colyer, Community Relations Specialist, Dr. Margaret Pike, Director of Human Resource Development, and President of the Indiana Association of Hospice, Sister Yvonne Thranow, Social Worker, and Dr. Lynne Valena, all of St.
Vincent Stress Center Hospice; Martha Lloyd, coordinator at Hospice of Bloomington; and Mrs. Ruth Cain, Hospice Volunteer Coordinator at Methodist Hospital's Hospice unit. Using their experience and comments on the needs, successes, and failures of current facilities, I hope that I have been able to overcome the problems that keep medical facilities from being more responsive to their psychological impact on its users.

Many have contributed their efforts, concerns, and encouragements into this project, and I would like to take this opportunity to acknowledge the great help that they have been. My professors Mr. Dan Woodfin, and Mr. Alfredo Missair, and many good friends and classmates have given much appreciated input and support when I needed direction and a push; I give all of you much thanks.
"If we approached planning with a more dynamic philosophy and less rigid rules, we might achieve a better environment."

Eberhard Ziedler, Architect
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The quality of spaces in medical facilities are, in general, lacking, as their institutional character gives off a cold, sterile, and impersonal feeling which effects the psychological and physical health of the facilities users. The effects of these images on the patient, family and staff can be damaging emotionally and can effect physical and mental health. The profound psychological impact of the character of space in medical facilities has been proven to have a devastating effect on the users of the facility. A hospice is a delicate atmosphere where attention to space quality is of utmost importance. The ambiance is to be one of relaxation, reflection, and social interaction; it is my intention to design a facility with the qualities above mentioned in order to provide a positive, interactive atmosphere to address the special needs of the terminally ill, and those close to them.
Studies have been done on the effects of the hospital atmosphere on human behavior. An article in *Science* magazine, I related such a study in which the physiological effects of surgery recovery patients were measured according to the effects of the ambiance of two distinct rooms. One room had a view of a small grove of trees, while the other had the view of a blank wall. The study brought up interesting facts such as the amount of pain medicine given to the patients in each room, and as you might expect, the patients in the room with the view of the blank wall received more medicine. The article concluded that the patients in a "room with a view" got out of the hospital an average of one day sooner than the patients with a view of a blank wall. Since this study does, in my mind, bring out serious implications about the influence of medical facilities design on the physiological and psychological well-being of a patient, then we as designers need to spend more time and energy designing facilities which are more conducive to healing. From personal observation and limited research, I have discovered that economy and function are too often the driving forces behind a medical facility design. Also adding to this minimalistic design, stringent code requirements, conceived to promote public safety, must be followed. I do not feel that this necessarily a bad thing if other humanistic concerns are considered in conjunction with this. Codes which are too stringent serve as more a deterrent to psychological, and consequently, physical health as they tend to dominate and control
possible design innovation (see definition of institutional p.29). My interest in medical facilities and the need for their quality design, has influenced my decision to do a medical facility for my final college project. I have chosen to do an in-patient unit for a hospice program, which by virtue of the delicate environment associated with the terminally ill (see definition of hospice p. 7), should be a valid approach to test my thesis which states: The quality of spaces in medical facilities are, in general, lacking, as their institutional character gives off a cold, sterile, and impersonal feeling which effects the psychological and physical health of the facilities users. The effects of these images on the patient, family and staff can be damaging emotionally and can effect physical and mental health. The profound psychological impact of the character of space in medical facilities has been proven to have a devastating effect on the users of the facility. A hospice is a delicate atmosphere where attention to space quality is of utmost importance. the ambiance is to be one of relaxation, reflection, and social interaction; it is my intention to design a facility with the qualities above mentioned in order to provide a positive, interactive atmosphere to address the special needs of the terminally ill, and those close to them.

The hospice philosophy is concerned with the psychological, physical, spiritual, and medical support of terminally ill patients and their families. This supportive atmosphere, in terms of the in-patient unit, suggests that the architecture be a backdrop
which subconsciously manipulates and promotes social interaction and community. In order to accomplish this, overall image and spatial quality are of utmost importance. Through the understanding of the concerns of the terminally ill, and staff concerns to make the time left for terminally ill patients quality time, I hope to create a positive atmosphere, as opposed to the negative aspects touched on previously. This project brings with it the challenge and complexity of a medical facility with its various functional needs such as circulation, distribution, and nursing care and access, without the programmatic constraints of a hospital which requires medical gases, elaborate systems integration, and emergency and surgical facilities. Designing with these concerns as well would, I feel, be the next step for my growth in the design of medical facilities. Creating psychologically positive medical facilities which would require more of the aspects which I have considered institutional to be used would definitely create a challenge; if indeed the hospice in-patient unit is successful, the problem of more complex medical facilities design is the next step. If nothing else, at the conclusion of this thesis project, I hope to have an understanding and sympathy for the needs of patients in the medical setting to better serve their needs.
"The least a hospital can do is no harm to the patient."

Florence Nightingale, Nurse
Hospice: a program which provides palliative and supportive care for terminally ill patients and their families, either directly or on a consulting basis with the patient's physician or another community agency such as a Visiting Nurse Association. Originally a medieval name for a way-station for pilgrims and travelers where they could be replenished, refreshed, and cared for; used here for an organized program of care for people going through life's last station. The whole family is considered the unit of care, and care extends through the mourning process. Emphasis is placed on symptom control and preparation for and support before and after death, full-scope health services being provided for by an organized interdisciplinary team available on a 24-hour-a-day, seven-day-a-week basis. Hospices originated in England (where there are about 25) and are now appearing in the United States. As one example of their human and cost-saving effects, 61 percent of one Hospice's patients died at home (compared with the 2 percent of all American deaths which occur at home). 2

To summarize, a Hospice is a program of care, not a place, which provides terminally ill patients and their families with medical, psychological, physical, and spiritual support. 3 Both the in-home and in-patient care models are "total-care" systems which attempt to combine and cope with the mental and physical effects of the patient's disease. There are four phases of care in this program: 1) in-patient care, 2) patient and family education, 3) home-care support,
and 4) bereavement follow-up with the family. Integral with this is the idea of a primary care-giver, which may or may not be a member of the patient's family. This person is the one who cares for the patient both at home and in the in-patient setting. They administer medicine, keep track of when the patient is to take these medicines and help the patient with the routines of daily life. The goal of the hospice program then, is not only for patient comfort (although a primary function), but also for as a break for the care-giver from the constant care necessary for the patient, which can be difficult both mentally and physically. The staff's role then, becomes one of assisting the care-giver in the care of the patient and in the counselling which they receive. In some cases, a patient does not have a care-giver. In these instances, the patient is put into a room with another patient in the same situation. There may be a person brought in to serve as the care-giver, or the staff may have to devote more time to those special patients than ordinary.

In most cases, releases are signed by the patients which specifies that no life-saving measures will be applied in the event of death. The rationale behind this are; 1) that the patient will eventually die from his disease, as the case has been diagnosed as untreatable, and 2) patients are admitted to the hospice program in order to learn about their disease, what to expect, and hopefully to cope with the eventual outcome.

The primary goal of Hospice is to allow the patient to die at home, in dignity, among

Dear Mr. Hahn,

I was going to wait until our situation was more settled to write this, but I have decided it is so important I need to do this now.

My husband, Rene', is a patient in the Hospice Unit - he has been there since last Wednesday. Never in my entire life have I witnessed such love and care for patients and families as in this past week.

You can hear someone say this, and read about the benefits of Hospice Care, but until you are actually in need of the facility, it's value can't be truly measured.

Cancer is not only a devastating disease of the body - it invades the spirit and emotions of everyone involved. We came into the Hospice Unit totally exhausted from my husband's weakening condition and the weary, unceasing home care he needed. Within the first hour we both received such love and care on the Hospice Unit, we couldn't believe it was for real.
The nurses, aides, volunteers - entire staff - is just a top notch group.

As one of many families who will benefit from this program, I want to thank you. I will never be able to stop praising Methodist Hospital for providing this Hospice Unit. It is helping us cope with a great tragedy in our lives in the most special way.

Sincerely,

Mrs. Karen Bichey
familiar surroundings. Although some patients do die at home, there is still a high percentage of patients which die in the in-patient setting. According to Ms. Jude Magers, manager of the St. Vincent Stress Center Hospice in Indianapolis, Indiana, approximately 50 percent of their patients stay in the facility to die for several reasons; 1) because of their preference to die in this atmosphere, 2) the pain and symptom control necessary in the degenerative part of their disease, or 3) the inability of the family to deal with the death process at home. Since "Hospitals are associated with prolonging life...the decision to die at home means that life is essentially over, an extremely difficult decision to make. It has been found that some doctors have trouble coming to grips with this as well since it is their vow to keep patients alive, and their referral of patients to such a program admits their defeat. The average in-patient stay is 17 days (may consist of several visits) and most patients die within 40-45 days after admission to the program.

The Hospice movement is a relatively new idea here in the United States. It is becoming a popular way of dealing with inevitable death. These facilities have been used for many years in England, and the aspect of care-giving has been going on for centuries in other cultures. Here, social stigma on death has forced nearly 80 percent of the American people to die in the hospital environment. This occurs for the three reasons previously mentioned: 1) patient preference, 2) disease degeneration, or 3) family preference. The reason, therefore,
why such a higher percentage of hospice patients die at home is the result of the total-care system which educates and counsels the patient and family.

The Hospice movement is a retaliatory move against the institutional atmosphere to which patients are often subjected. A Hospice does not heal, but it does provide the pain and symptom control for the patient, and psychological and spiritual support for the patient, family, and staff. The in-patient unit provides an added bonus of rest for family members when the pressures of taking care of a sick person becomes a mental strain.

Since hospice programs are still a new idea in the States, most are home-care centered, which means that an interdisciplinary team goes directly to patient's homes to provide necessary care. This team consists of nurses, doctors, therapists, social workers, religious personnel, volunteers, and possibly other specialists, in certain situations. This satisfies the goal of patients dying at home, but does little to give the family a break from the constant care necessary for the patient. To respond to this problem, hospitals have zoned areas to facilitate the use of the Hospice philosophy which differs from normal hospital procedure. Few regulations exist, as a more home-oriented atmosphere is desired. This is accomplished by trying to minimize the institutional stereotypes associated with hospitals such as uniforms, furniture, artwork and impersonal patient rooms, to name a few. Also important is a stress on nature and a patient's view to
nature. It has been found that dying people often gain an appreciation for nature, and that somehow being able to observe the natural process of continual change somehow makes death easier to cope with; as the patient can associate themselves with the natural process. The drawback is that although the program is different from standard hospital procedure, the facility contains the same disadvantages created by the "foreboding, scientific image still present." 9 Few free-standing facilities have been done as of yet because of the large capital expense of starting from scratch, and although the inpatient unit is not the center focus of Hospice care, it is seen as potentially contributing to the image and quality of Hospice care. "Perhaps the main advantage of the independent Hospice lies in the ability of the architecture to contribute to the Hospice program of care, as well as the "image."" 10 The independent Hospice, although expensive initially, can provide what the parent-based Hospice lacks, including an "entirely different sort of public image." 11

The Hospice inpatient unit must function, not as a fortress removed from the rest of society, but as a house of life, a place where dying is seen as a natural part of our human pilgrimage and where death received consecration and celebration appropriate to this view. 12
"Grief is the price in psychological pain for having loved."

Dr. Paul Riley, St. Vincent's Hospital
Physical illnesses can and do produce emotional symptoms such as anxiety, depression and fatigue. 13 The patient's reaction to this can range from mild anxiety to psychosis. 14 Some patients are restricted by their disease and others by the perceptions of their diseases and their dying. 15 This would depend on each individual's ability to handle fear, uncertainty, family relationships, material possessions, and whether the person has done all they intended to do in life. 16 The inter-turmoil created is bound to create crisis situations which can include depression, anger, manipulation and frustration, 17 to an extreme, which in some cases leads to suicide. These crises are usually brought about by a change in situation, be it family concerns, the patient's mental picture of the situation (loss of strength, mobility, weight, and physical change which affects self-image 18, metabolic changes, or stage of anxiety. 19

The hospice interdisciplinary team, composed of nurses, doctors, therapists, social workers, and volunteers, try to support the patient and family as much as possible to make the inevitable changes easier by providing a loving, supportive environment. The team meets weekly to discuss each case "to compare notes." This serves a useful purpose in that the care is indeed comprehensive, and they are able to discover where a certain patient needs more attention depending on the stage of the disease. The staff provides comfort in pain control, counseling, listening, and in being
available to the patient at all times (24
hours a day, 7 days a week) to make the
patient feel secure. The staff tries also to
allow the patient to be as self-sufficient as
possible, as a person's sense of self-esteem
and self-worth are negated when not allowed
or able to perform simple daily tasks. At a
certain point, however, the staff does have
to do more for the patient, as they become
less and less able to do anything for
themselves.

A community feeling is important in the
hospice program as well. It is important
because in addition to the support the
hospice staff is able to offer, another layer
of support is needed; that of the
understanding from others in the same
situation. This is where the idea of
interaction and its promotion are derived.
The staff helps this along by planning
community activities such as birthday and
holiday celebrations, or cookouts. The
architecture of such a facility can
facilitate this by views from patient rooms,
crossing points for people to exchange
greetings, and community spaces where a
variety of activities can occur, to name a
few.

Since it is the intention to promote a
home-like, relaxed atmosphere, the building
itself tries to use home images through
symbolism. The building is merely a backdrop
which subconsciously induces certain feelings
and actions in different spaces. Three rules
of physical design are prescribed by Debra
Allen Carey in Hospice Inpatient
Architecture:
1. the physical environment and social rules work together at all times to give direction and meaning to our interchanges.
2. there are no neutral designs but rather symbols which may encourage or discourage certain behaviors whether agreement is evident or not.
3. many of the signs or symbols found in the designer's palette will be unconscious rules of order (just as the behavioral signs are unconscious) thus the designer has responsibility to the client and culture to try to understand and make assumptions and their physical forma in order to control their effects.

A partial list of needs and considerations are also included in order to understand a few of the thoughts and symbolisms which are sought.

1. a variety of bedroom accommodations and decor (not stamped out, repetitive designs as often found in hospital rooms)
2. more square feet per patient room than traditional hospital hospital rooms (allow personalization, artwork, and other important material possesions to be displayed as they would be in the home)
3. family rooms including one large gathering area (promote social interaction and community activities)
4. kitchenette (convenience, economy, special diets and tastes)
5. indoor gardening (gardens, terraces, fountains, fireplaces, and courtyards represent air, fire, water and earth)
6. considerable amount of artwork especially
of nature and representational scenes
7. a separate and specially designed nurse's station (minimize institutional feelings)
8. a separate and distinctive entry for the unit, building, or both (create sense of identity; smaller facilities-residential, larger facilities-hotel)
9. outdoor areas for hospice use (community activities)
10. dining room which may convert to other uses
11. multi-purpose room (multiplicity of function makes home adaptability 23)
12. an average overall of just under 30 beds
13. family overnight accommodations

Specifically, patient rooms are given the following list of considerations: 24

1. generous space allowance
2. zoning of beds to personal items
3. visibility to out of doors, nursing station, or hallway
4. connection to outdoors
5. convenient sink and generous storage
6. multi-functioning group area
7. modification of all institutional equipment
8. encouragement of personal involvement and space

The above architectural concerns are the tangible things which can be done to help create a comfortable atmosphere for the facility's users. The important thing to remember is that the program's guidelines and intentions, and the commitment of the staff are the important aspects to the success or
failure of a hospice program. The true function is to make patients and families as comfortable as possible medically, psychologically, physiologically, and spiritually through the progression of the disease process.
"Architecture must primarily serve people's needs through environmental enhancement."

Richard Neutra, Architect
User Needs/Priorities

Medical:
1. Patient—The range is from children to elderly obtaining medical, psychological, physical, and spiritual support. They are diagnosed as terminally ill, having a life-expectancy in terms of months, weeks, or days. It will be a melting pot of users, coming from a variety of social, economic and cultural structures. There will also be differences in the diseases represented, the particular stage the patient is in, and the length of stay required. The Hospice is to be a facility where pain and symptom control are the medical concerns and more specialized treatments are handled by more specialized facilities. The environment created should be one of security, relaxation, reflection, and anxiety free as much as possible. Social interaction is encouraged through the use of community commons areas. The environment should also provide the opportunity for personalization by the user.

2. Patient family—The primary care-giver may or may not be related to the patient. They assist in medical supervision, providing a loving environment for the patient, and will be receiving psychological counselling along with the patient. The number of people staying with the patient may range from the primary care-giver, to several members in a family on a weekend. This will also be a diverse range of people brought together by virtue of their situation. Here, there will also be a range of ages; from children to elderly, hence, it is necessary to provide facilities for them as well as patients. There should be a social interaction promoted
between patient families in order to enhance the therapy already being provided; the tie of experience is very important in being able to trust someone enough to tell them your troubles. Conveniences are important to family members staying in the Hospice, as it is to be a respite for the family, activities need to be present in order to get away. Community commons areas will be provided for these activities to happen. There will also be encouragement to enjoy Bloomington and Indiana University amenities. Another necessity is the ability of the family to stay in close proximity to the patient. Additional facilities, in the form of apartments are to be provided for the transient families expected, having been referred to the Hospice from I.U. hospitals from all over the state. The facilities should be home-like in character for them just as they must be for the patients.

3. visitors-They may or may not be family, and the environment should be one in which these users will not be inhibited to visit. These users may be other family members or friends and may also stay in the Hospice for a night. They may or may not help administer supervision to the patient.

4. administration/secretary-They are responsible for admission of hospice patients, and management of the facility. Although they should feel part of the total community, their role should be de-emphasized. It is possible that private indoor and outdoor areas are provided for them, in addition to the use of community
areas.

5. social workers / psychologists / religious personnel—Their primary activity is to counsel families and patients. This staff may consist of a single professional from each discipline and student aids to assist. The people working in this area will be ones with experience or actively working on college level work in order to gain experience. They will be spending time with patients and families on a personal level in order to serve them in the best way possible without the institutional feeling of counselling in an office environment. These activities may occur in a variety of places such as patient rooms, family apartments, commons areas, and on walks around campus and the town in order to acquaint them with the area, hence, they may use the town amenities to the fullest potential. Although offices may or may not be used for counselling, these areas are needed for paperwork and for the staff user to be isolated.

6. doctors—They may consist of one on staff with medical student assistance and private doctors coming in to check on their own patients. Counselling and supervision will probably be done on much the same level as that of social workers, religious personnel, and psychiatrists. Offices and a private staff lounge will also be provided for time away from patients.

7. nurses—They will provide medical supervision of the patient with much more personal care than hospital; one nurse for 3-4 patients. There will need to be a
variety of backgrounds to interface with the variety of patients and families expected. It is also important that the nurses selected have experience in psychology or sociology to better understand patient and family needs. A small cluster of patient rooms may be desired as well to create a smaller family unit. A nurse's station, drug storage facilities, clean and dirty linen storage areas, a private lounge and possibly private greenspace are a few of the necessary facilities.

8. volunteers-They will help assist in medical supervision, doing things with the patient, and listening to problems. Often they are family members of former patients. The diversity of volunteers is expected to be as diverse as the of patients, which is important in interfacing with the patients in the same way the nurse's must. They will be on a part-time, unpaid basis, generally for a few hours a week. Areas for these users will be the same as permanent personnel.

9. physical therapist-These personnel will administer and oversee the therapy of the patient. They may be assisted by students and family. It may be set up like an exercise class, where everyone participates so as to break down barriers and get everyone involved.

10. janitor/maintenance-They are responsible for maintenance of the facility. Storage areas, mechanical areas, and other functional areas are necessary for these behind the scenes users.
11. dietician/cooks—They will provide menus, and prepare special diets for patients. Family members have the option of eating with the patients. A dining room may be provided in order to promote this interaction.
1. provide interactive, home-like environment for patients, family and staff through the promotion of community activities.
2. provide psychologically positive environment through minimization of anxiety, institutional feelings (see institutional), by being careful about what patient’s see (patients being taken out of room, ambulances, etc...). These things are affected by image, staff attitude, and environmental context.
3. provide conveniences to make space more like home; comfortable, secure, liveable (kitchen, laundry areas, storage areas, recreation areas, sleeping areas, etc...)
4. maintain character of residential area
5. maintain the in-home program as the main goal of hospice; allowing people to die at home, in dignity, among familiar surroundings
6. provide a wide variety of spaces, spacial qualities, and visual activity to allow for a variety of interaction, gathering areas and crossing points help to promote this interaction.
7. provide separate recreation areas for teen-agers, and children to allow self-expression, and not as to disturb others.
8. see that staff, nurses in particular, escape the hospice environment regularly, and provide areas within the environment in which to escape, as the atmosphere in which a person works, affects their work quality and quantity (compensatory rewards can be monetary, psychological or environmental)
9. a patient/family apartment that is not a "typical" hospital cubical which we have
grown to expect.
10. provide opportunity to interact with community/campus, and take advantage of the surrounding amenities such as I.U. recreation facilities and open spaces, shops, and restaurants; walks should be promoted as well for relaxation, counseling, and time alone.
11. involve university students in work in terms of first-hand experience, in terms of economic feasibility for running the hospice.
12. provide areas for reflection and contemplation i.e., gardens, chapel.
13. encourage family members to participate in the care of the patient and to remain in-patients as long as medically or psychologically necessary.
14. view and access to outdoor activity and nature.
Imagery is an important issue in this project, as it serves as a backdrop for a positive environment encouraging psychological health, which in turn, effects medical, physical, and spiritual health. The first impression of the buildings exterior will set the tone for the rest of the stay. Thus, if a negative image is perceived at the outset, the resulting quality care, will be hard-pressed to dispell the negative image conveyed, which may have created feelings of fear and anxiety. Consequently, a positive first image can enhance the excellent care given in an in-patient program. The major concept of this project is to be residential in appearance, in which to enhance the hospice home-care centered approach to a logical extreme; to create an identity which is recognizable and comfortable to the program's users. The residential identity strived for is the rationale for choosing a site in a residential neighborhood. Important obviously, is the image the neighborhood itself casts. The existence of strong, understandable symbols is important in promoting the desired home-feeling for the hospice participants. An older, established, quiet neighborhood with a majority population which is mostly students, has people moving about the site at all hours, all times of the year, creating the possibility for interaction.

Perceptions of what a home should be range from person to person from their own personal experience. On the interior, flexibility, personalization, and a variety of opportunities for recreation, relaxation, isolation, social interaction, and freedom, are ways to help make a positive image happen. The way to facilitate this, as
previously stated, is to provide a variety of commons spaces from which a user can choose. The idea behind this is to create on the inside, as well as the outside, individual houses, with which several families can associate, can become a micro-community within a larger macro-community. Private spaces provide opportunities for personalization of which the user can manipulate in a variety of ways.

Certain elements and conveniences in this type of building could hurt its residential character if not thought out carefully. One of these concerns are the extra-wide doors necessary for the movement of a patient and equipment much easier. One way to "hide" this function is to put in double doors as used often in Victorian architecture. By doing this, the room can opened or closed to several degrees, which by individual choice, can be opened or closed for visual or acoustic interaction or privacy.

Wide, double-loaded corridors also create a negative image. A way to remedy this is to eliminate single-function circulation corridors, and make them useable "activity links," where congregation and interaction can take place.
Isolation--This feeling may be amplified if alone or disoriented. Patients, families, and visitors need to feel like part of a larger community. Visual access to medical staff, nurse's area, connection to community commons area (visual or physical), and stress on the promotion of patients spending time outdoors and in the commons areas are all ways which help to alleviate a feeling of isolation. Connection of a family area to the patient sleeping area (perhaps a shared living area for family relaxation) may be a positive way to make the patient and family more at ease. Visual access to the outdoors for patients to observe street activity and nature in the neighborhood should also not be left out.

Stark/Sterile--Medical facilities often end up this way because of the preoccupation with function and economy. Although these issues are important, the choice of materials may have made the difference in viewer perception. Slick and shiny surfaces should be avoided, while fabrics, warm colors, brick, and wood could be alternatives. Care should also be taken in the selection of wall hangings and objects displayed. Furnishings should be "normal" furniture, not hospital furniture, except those things such as hospital beds which would be more comfortable, versatile, and convenient for patient use.

Administration Oriented--Although the administrative personnel need to feel part of the total community, their function should be de-emphasized. Admission of patients into the hospice may be accomplished by nurses on a one-to-one basis in each "house". Professional staff areas like those of social workc.s., doctors, etc., could be inconspicuously placed
along activity links.

Ominous or Overwhelming Presence—This problem can create anxiety of the unknown because of interior and exterior image, equipment, or uniforms on the staff; this may create a whole different realm of experience never before realized by the patient. Exterior image in the home-centered approach may be residential in character in order to continue the concept of home-like image. This facility is able to carry this through on the interior since no major equipment will be needed. Most equipment necessary will be things such as oxygen and other smaller items which could be stored on a cart in a readily accessible storage area. The major issue will be zoning, scale, and context in order to make what could become a large facility, a series of smaller buildings which would not seem so overwhelming.

Non-Personal Care—This is often a problem in hospitals where one nurse may take care of as many as 15 patients. This does not allow time for the patient and nurse to develop a friendly relationship. The hospice program deals with this by limiting the number of patients per nurse to no more than four. A smaller number of patients per wing or "house" may be a way to create smaller groups or families to create a closer, community feeling.

Low Social Priority Placed on the Terminally Ill—This occurs because of the circumstances which the patient is in. Nothing medically can be done to save this patient, so people try to avoid the obvious, denying its existence. The hospice program is the integral factor in making patients and family secure, comfortable and unalienated. The staff is the human
factor which makes this possible and the architecture serves as a backdrop for this event to happen through its image.

Sophisticated Technology to Sustain Life--In this instance, sophisticated technology, such as radiation therapy, will be done in a hospital or other specialized facility, so the presence of modern, overwhelming equipment will not be as much of a problem here. Smaller equipment, such as oxygen, can be wheeled around on a cart and stored in a closet.

Functional, Utilitarian (minimal), and Economical Design--This does not always translate into an acceptable solution. This refers to the stark/sterile environment previously described. Examples of this include double-loaded corridors and repetition of spaces. The use of these may indeed be cost-conscious and truly functional, but can be disorienting, and cause undue stress. Patient rooms often tend to be stamped out, and should be eliminated. Variety and manipulation of spaces and elimination of corridors are two ways to accomplish this. Patient rooms could be clustered around a family living area, much like that at the St. Vincent Stress Center. Patients will not have their choice of room, but if each room has its own "personality," then users may make it more personalized as well.

Socially or Psychologically Correct Solution--This is not always a top priority in medical facilities. This relates back to the previous problem of functional, utilitarian and economical design dictating and stating a negative image. This problem is that of hospice staff trying to educate the family and patient of the mental and physical effects of the disease in order
to become more at ease. Attention should be paid to those ideas already suggested in order to provide a backdrop for these activities to occur.

Larger Facilities—These are often necessary just to break even. This is true more often in large hospitals because of large capital expenditures for equipment and building maintenance. The money needed to run a hospice is mainly employee wages and building upkeep which should theoretically be less than that of a hospital. In Britain, the cost of hospice stay is approximately 85% that of a hospital stay and 80% of this is employee wages. According to Ms. Jude Magers, manager of the hospice program at St. Vincent’s, the cost is comparable to that of a stay at St. Vincent’s Hospital; however, the stay is usually shorter. With donations of time, money, and support from university sources and other medical sources, being a test facility for I.U., this figure could be driven down in actuality.

Lack of Natural Light, Air, and Views Afforded to Client—This often happens because of sanitary restrictions and economy of plan, which includes double-loaded corridors, inoperable windows, and lack of windows in centrally-located rooms. Special care should be taken to keep this from happening. Views to the outdoors, operable windows, skylights, and sunrooms are just a few of the ways this can be accomplished to establish a connection between users and the natural environment. This is important in the hospice philosophy which stresses views and connection to nature.

Outdoor Access Limited if Not Impossible—This is another staff issue. The opportunity for
access to the outdoors only works if people use the space. The opportunities here range from private patio areas to views from the patient room to larger community outdoor areas. Since there are fewer patients per nurse, volunteers, and primary care-givers on hand, this should not be as big a problem as in larger hospitals.

Lack of Accommodations for Family Members--Hotels are costly and can be impersonal. Family members would, in most cases, like to be as close to the patient as possible. Not being able to be at the patient's side can create anxiety in both parties because of this separation. Family apartments or sleeping/living areas of some type should be included so that they could be shared with the patient areas; this would further promote the family-centered environment. At St. Vincent Stress Center, fold-out beds are provided in patient rooms and in commons areas. It is found that these are not often used because of the close proximity of the users to home. Since the proposed patient population in the proposed thesis project is more transient in nature, the need is much greater for on-site accommodations.

Visiting Hours--In-patient hospice facilities generally do not practice this. This flexibility makes it much more convenient and less stressful for everyone to have the freedom to come and go.

Regulations--Often those things which are most important to patients are not allowed in, such as children or pets. Private entrances, the small scale of the project, and the philosophy of the program allow admission to these things.
Sensory Perceptions--Sounds, smells, and visionary perceptions often create an institutional feeling. Active ventilation systems to cycle fresh air, green plants and natural sunlight for air purification, operable windows, and acoustic privacy are some ways to minimize this.

Confusing Corridors--Corridors often seem never-ending and create anxiety when one cannot find what they are looking for. If corridors are necessary at all, natural light should be admitted, and there should be breaks and resting points along the way so that it does not get too long.

Room Arrangement--Privacy for patients in a double-occupancy room may be disturbed depending on when visitors come for their roommate. Private rooms are necessary for most patients, although accommodations should be made for those patients who do not have primary care-givers; these patients could be doubled with others who do not have care-givers either. The room plan needs to be sympathetic to the state of physical and mental deterioration of the patient. Specifically, bathroom facilities should be a short distance from the patient bed. There should also be ample room for congregation of family members and visitors, and for a fold-out bed.

This definition is based on my perceptions of medical facilities, those perceptions of Debra Allen Carey in her book, Hospice Inpatient Architecture, and an article by Rhoda Weiss printed in the Jan./Feb. 1980 issue of Hospital Forum (p.25).
St. Vincent Stress Center
Indianapolis, Indiana
Archonics, Architects

The St. Vincent Stress Center is composed of four distinct departments: a chemical dependency unit, a mental health unit, and Hospice all operated by St. Vincent's Hospital; and Tri-County Mental Health Center operating on a county level. The Hospice unit, which is the basis for this analysis, is one of the few free-standing facilities in existence. Because of their initial cost, the free-standing facility has been avoided and spare beds in a hospital wing are often converted for this use.

Located in a suburban setting, the center is located conveniently adjacent to St. Vincent's Hospital in order to use their specialized facilities without the institutional character associated with hospitals. Other amenities such as hotels, eating establishments and shopping areas are also close at hand.

The design is a low-lying, horizontal structure in order to fit contextually in the natural surroundings. It is very pleasant to look out the windows of the Hospice unit to see nature, and must be appreciated even more by those who have little else to do but look out the window. Being able to look outdoors is an integral part of the Hospice philosophy as it provides impetus to reflect and observe the natural process. Outdoor areas and views to these areas are also important to the success of the design in patient rooms. Patient rooms all have views to the outdoors, and most rooms have a pleasant view. Patients are given the opportunity to look out the window and go outside. These areas are
located off the two commons areas and the family room. With the importance of nature in the Hospice philosophy, these areas seem somewhat neglected; they contain little outward focus. Extra-wide doorways are integrated into the design to accommodate this, however, the landscaping and view out to these areas are not well delineated. The commons areas themselves, although dark, are nice and achieve a home-like character. One problem these areas seem to have is that although they are arranged along these areas to eliminate the double-loaded corridor effect, patient rooms are organized opposite each other which gives a clear view of the patient room across the unit; this hinders the thought and care eliminating the corridor approach. There are two of these areas, each with six patient rooms off of them; the nurse's station separates these two areas and by proximity, is within close distance to the patient rooms. In addition to these two commons areas, there is a family room, complete with T.V., stereo, fireplace, rocking chairs, and a piano. A kitchen is adjacent to this space which is handy for family members to cook for themselves without having to eat out all the time. An outdoor area is adjacent to these areas and is used for community events such as cookouts. One thing which seems to be missing is interior greenspace. Although views to the outdoors are provided here, the same problem occurs as in the other two commons areas; lack of outward focus, and no provision for inclement weather which an interior space would provide.

Within the patient room, the bathrooms are well-planned, convenient, and are thoughtful to the user. A subtlety provided here is the tinted mirrors which provide a psychological lift to users by giving them the
"color" that they lose when sick. The location of the bathroom within the room is adequate for patients to reach; it is important to watch the distance of the patient bed to the bathroom as distances can seem very long when motor-control is minimized. To accomplish this, the furniture arrangement in the room could be different, but the small size of the room does not leave much room for change.

Fold-out beds are provided in the rooms and lounges for family members to spend the night. The center finds that these are not used that frequently. In the project I propose, this would definitely be more of a concern for a more transient population. To further minimize institutional feelings in the patient rooms, "plug-ins" and medical gases are left out. By nature of the facility, these are not needed. Portable carts carrying oxygen and other supplies are used when necessary. This not only subtracts the institutional feeling, but also is economical in incorporating systems into the structure.

As one of the first free-standing facilities for Hospice built in the United States, the St. Vincent Stress Center does a good job of accomplishing a home-like, comfortable atmosphere. Hints at institutionality are present because of its size. This facility serves as a transition between the hospital environment and "de-institutionalization," which the proposed thesis suggests. With a few minor design considerations, the Center's Hospice unit could better serve the users of the environment. Additional analysis in notation form on floor plans p.

Observations supplemented by interview with Ms. Kathy Colyer, Community Relations Specialist, St. Vincent Stress Center, Indianapolis, Indiana, and Mr. Tom Dwyer, principal, Archonics, Indianapolis, Indiana.
warm, brick exterior and low horizontal stress minimizes institutional image although some may still be present

informal lobby minimize institutional feeling

bodies can be seen being wheeled out

entry to hospice

auditorium nice for community activities


administration of facility de-emphasized by virtue of its played down location

chapel nicely placed to serve whole facility, yet closer to Hospice users who are likely to use it more frequently

receiving area, bodies taken out here

nice location for outdoor area for community activities because of location near to family room and an shaded north side of building

Ancillary & Support

child play area nicely located for supervision by adults

formerly teen area now office which needs to be more behind the scenes

home-like family room with t.v., stereo, couches, rocking chairs, fireplace (mis-placed, in circulation path)

HOSPICE

kitchen convenient for staff, patient and families

community dining area could be nice for increasing social interaction

1st FLOOR

extra-wide doorways provided for moving patients in beds anywhere in building

nurse's station

clean storage/laundry

office

Kichenette

dirty storage

patient rooms too small, not enough congregation room, or sleeping room for family members

commons areas achieve a home-like flavor although a little dark and lacks interior greenspace for the winter months, and a weak outward focus to the natural areas surrounding

need more intimate areas in addition to these commons areas

majority of patient rooms are opposite each other same institutional effect as double-loaded corridors

some views from patient rooms not as good as others/view to activity area, but when not used view of a blank wall

t.v. monitors in room can view chapel at any time if physically unable to get to chapel

interior image is informal and pleasantly minimizes anxiety

majority of patient rooms look into one another, same inst. effect as double-loaded halls

both rooms nicely layed out, size sufficient, location in room is adequate
This is the house that provides the home
That cooks the meals
That sleeps the people
That dries the tears.
This is the house that love built.*
Ronald McDonald House  
Indianapolis, Indiana  
Archonics, Architects

The Ronald McDonald House is different from a hospice only in that ill people do not stay here; it is for the parents of ill children being treated at Riley Children's Hospital, located down the street. It is useful to compare this building with St. Vincent Stress Center because they are both designed for users who need social interaction with other families who can understand their problems. It is also useful because one building operates as a house (Ronald McDonald), while the other tries to convey a home-like image yet run smoothly as a medical facility. This comparison will serve as a learning tool to see what can really be done to accomplish the goals outlined.

The positive interaction strives for in both instances starts with image. Image is important to users because what the building looks like can instill anxiety and fear by materials and their application. At Ronald McDonald House the image cast hints at Victorian precedents by geometry, scale, and fenestration. At the center of the house is "the great room," a dynamic, two-story activity space surrounded by the guest rooms. It is equipped with T.V., stereo, soft furniture, and recreation space which is to promote interaction.

The house's location in relation to Riley Children's Hospital is convenient, but slightly dangerous, since it is necessary to cross four lanes of traffic to get to the side of the street where the hospital is located.

An important internal problem in the house is the relation of the great room to the
outdoors. There is an outdoor area provided, but its relation to the indoor activity area is minimized which makes it a less dynamic, open environment.

The Ronald McDonald House does a very nice job of providing a home environment for persons who are preoccupied with problems. One of the things which may have been left out were smaller, intimate areas for small group gatherings. These areas should be in the form of lounges, smaller dining areas and outdoor areas. Additional analysis in notation form on floor plans.
balcony nice for people-watching without participation
smaller secondary kitchen

2nd FLOOR

quiet reading area

nice, can sit alone or in small groups, intimate area

could be more outwardly focused, maybe outdoor would be used more, interior greenspace needed for winter months

1st FLOOR

booths may be better for private calls rather than a row of phones

location of office for reception/security nice, non-administration oriented

nice entry/transition space, inviting, home-like, use of wood, plants, quarry tile
doors shut for more privacy

fireplace at center of the house, family oriented

each group of two rooms shares a bathroom and a storage area economical

exterior and interior image use home-like symbolisms; works well

convenient adjoining rooms for larger families

one bath for two rooms is a good idea for economizing, each room has its own sink which makes this work

nice sized storage rooms conveniently placed to store items such as extra fold-out beds, luggage, etc...

large recreation area for interactive community events or single family activities

possibility of kitchen being split into smaller units instead of four kitchens in one, however, nice for promoting social interaction

private alcoves for more private family dining would be nice
Both facilities have addressed the needs of the user, and are successful in most respects. Both provide an image on both the interior and exterior which is refreshing in providing an architecture which is more sympathetic to its users. The only apparent problems they have, and share, is the lack of focus to the outdoors, and the lack of (or too few in the case of the St. Vincent Stress Center) of smaller intimate spaces for congregation of family or other small groups.

In the hospice environment, I feel that a warm, home-like environment is necessary. A neighborhood context, programmatic requirements, and integration of hospice goals suggest a more residential setting with a home-like image as opposed to a new unknown language or symbolisms unreadable to the facilities users. The possibility of a series of bungalows connected to a common core containing community areas and support areas is an avenue to explore to begin to test its validity in proving the thesis. The small scale of the bungalows, I hope, will provide the individuality, stability, and anxiety-free atmosphere, through image, that users of this special facility require.
The proposed project site is located in Bloomington, Indiana; a community of approximately 40,000. The Indiana University student population increases this number by approximately 34,000. The community is located in the south-central portion of the state 45 miles south of Indianapolis on state road 37. Historically, Indiana limestone was quarried here. This provided many jobs in area. Today, the city's main employers are Indiana University and the small businesses which serve the town and the university community. There are few industries serving the town currently. Other communities and amenities close to Bloomington are: Columbus, rich in architectural character; Nashville (Brown County), a nice wildlife and forest area very popular in the fall; and Monroe Reservoir, also popular for I.U. students in the spring and summer. These areas provide activities for young and old alike which make the project's location, along with its affiliation with I.U., a plus.
The rationale for the project's location is associated with Indiana University and its schools of medicine and psychology. The medical school at I.U. is for first year medical students who, after this, go to Indianapolis, and the other I.U. hospitals throughout the state to complete their education. The facility in this location would be beneficial to the students and the hospice program as an introduction which could increase awareness and potentially do a lot of good in the education of those who can make a difference in the medical world. Terminally ill patients from all over the state (primarily from I.U. hospitals), would be brought here for two reasons; 1) their comfort in an atmosphere created exclusively for their special needs, and 2) as a matter of observation and research to understand the needs, problems, concerns and environmental influence on their condition. From a medical standpoint, students could participate in observation and procedure of the disease process. Psychology students could observe the behaviors of terminally ill patients and the things which influence their behavior as well as counsel patients as practical experience or internship. Architecturally, such a facility could be beneficial for the Ball State College of Architecture and Planning in studying the qualities of space and their influence on the users of the facility.

The association with education medically, psychologically and architecturally, is the only way a project such as this could ever be done. The initial capital expense is too great to be economically feasible unless some
other end is achieved in the process. Patients would be charged on a per day basis as any other facility, and the remaining expenditure is to be paid by donations and state assistance in association with the university.
The first site under consideration was located across the street from Bloomington Hospital, on the corner of Rogers and Second Street. It seemed at the time to be a good site by virtue of its location across the street from the hospital, and its proximity to other medically related activities such as doctors, pharmaceutical businesses, and the like. After further analysis, it seemed that the image cast in that area would be more a detriment to a patient's mental health than the convenience merited. I began by analyzing the advantages and disadvantages for this location. The only advantage seemed to be convenience. Image of the surrounding context seemed to outweigh the importance of convenience in the scope of things. I reasoned that terminally ill patients do not need to be adjacent to a hospital unless they are receiving urgent, specialized medical help, in which case, it would be necessary for them to be placed in an acute care facility. Medication such as chemotherapy, for pain and symptom control, can be administered in the hospice in-patient setting. This freed my decision in selection of a site to a certain degree; the site could be almost anywhere as long as it was accessible by family car or ambulance. Life-saving facilities such as an emergency room are not necessary because of the nature of terminal illness which deteriorates the body slowly.

The next step was to set up a list of criteria, or issues in which to begin thinking about site location. Following is a
Main Entry, Bloomington Hospital

First Site Looking Northeast from Hospital Parking Lot
list of what I felt to be the most critical issues in this selection:

1. image-Negative, institutional images evoke feelings of fear, anxiety, impersonal care, bureaucracy, and isolation. A more quiet, relaxing image is strived for to instill more positive feelings; tranquility, confidence, community, family and feeling comfortable in one's surroundings make this possible. (see definition of institutional p. ;).  

2. amenities-These consist of activities for family members, patients, and visitors; things which keep younger people busy while others are pre-occupied. These activities allow the users to get away from the hospice community to relax alone. Opportunities for hospice community events and activities should be provided such as; recreation areas for reading, television viewing, and playing games. There should be encouragement to participate in Bloomington and I.U. community events, restaurants, shops, and athletic and recreational facilities, and walks through campus and downtown.  

3. activity-This refers to the level of activity surrounding the patient in order to give them something to do, and maintain the ability to perform normal activities of daily life. Some patients will not be able to actively participate in some activities, as their stage of illness is too advanced. In some cases the activity can be brought to the patient, such as parties or celebrations. Special attention needs to be given to visual perception, such as the opportunity to people watch. Pedestrian traffic allows this to happen and can provide the opportunity for visual or physical interaction with others.
This could consist of watching college students walking to and from class.
4. home-like setting—This could be a residential neighborhood which provides a community image, offers the opportunity for walks, relaxation outdoors, and a home-base identity even though temporary.
5. walking distances—This is important in providing the opportunity to use Bloomington and I.U. amenities. It is also important in making the hospice accessible to students working in the hospice for practical experience and school-related activities, and residents who may be volunteers or employees. Student participation will occur in the areas of social work, psychology, therapy, and volunteer services.
6. ease of finding the building to minimize the stress associated with the unknown.
7. distance to hospital

After weighing these issues, a site was chosen in the area at the northwest corner of the university. It is a half-block already owned by the university, with the rest of the block and surrounding neighborhood being a quiet, older area still in very good shape. In choosing the site, I planned to use only half the block which would require the removal of one university owned building in bad shape. At one point, I considered using the entire block for my site, requiring the removal of several houses. I decided fairly quickly that not only would I destroy much of the existing, desirable fabric, I would be creating a building which was much too large for its users; possibly adding the overwhelming aspect of institutionality. Buildable area (on half a block including the alley) measures 144'x 276'=39,744 sq. ft.