A Plan for Metropolitan State Hospital:
Imagery as a therapy for an institution

by
Sterling James McMurrin
Bachelor of Arts
Environmental Sculpture
University of Washington
Seattle, Washington
1974

Submitted to the Department of Architecture
in partial fulfillment
of the requirements for the degree of

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Signature of Author

Department of Architecture
4 May 1988

Certified by
Maurice Keith Smith
Professor of Architecture
Thesis Supervisor

Accepted by
Bill Hubbard, Jr.
Chairman, Department Committee for Graduate Students

JUN 9 1988

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But wise men pierce this rotten diction and fasten words again to visible things; so that picturesque language is at once a commanding certificate that he who employs it is a man in alliance with truth and God. The moment our discourse rises above the ground line of familiar facts and is inflamed with passion or exalted by thought, it clothes itself in images. A man conversing in earnest, if he watch his intellectual processes, will find that a material image more or less luminous arises in his mind, contemporaneous with every thought, which furnishes the vestment of the thought. Hence, good writing and brilliant discourse are perpetual allegories. This imagery is spontaneous. It is the blending of experience with the present action of the mind. It is proper creation. It is the working of the Original Cause through the instruments he has already made.

*Nature*, Emerson
Acknowledgements

For help in preparation of this thesis I owe a debt of gratitude to a large number of people who contributed to my understanding:

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Sarah Harkness for her kindness, concern, and detailed advice on many projects; John Habraken for being so clear, steady, complete and resolute; Dennis Frenchman for infusing me with an enthusiasm for urban scale and politics; Roger Simmonds for being a very good friend and teacher; Lois Craig for her caring interest and advice.

My thesis would not be what it is without the help of all my friends at school. A special thanks is extended to Dan Krynitzky, Denise Henrich, Greg Nowell, Heidi Johnson, Kathryn Ludwig, Robin Berry, Kevin Tornton, and Harold McDonald.

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Richard Hestekind who taught me about form emerging from the earth.

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My Masters Committee for Sculpture at the University of Utah who, when faced with my choice of finishing my thesis work at Utah or drop it in favor of a degree at MIT, supported my departure from The Valley: Angelo Carvagglia, Robert Olpin, Tom Kass; their friendship, caring instruction, and personal philosophies I carry with me always. Thanks to Judy McDowell and Kevin Hansen for all their thoughtfulness. Deep appreciation goes to the staff of the Veterans Administration Psychiatric Hospital, Seattle, Washington.

This inquiry does not reflect the methods nor policy of the Division of Capital Planning and Operations or Department of Mental Health of the Commonwealth of Massachusetts.
The intellectual and the active powers seem to succeed each other, and the exclusive activity of the one generates the exclusive activity of the other. There is something unfriendly in each to the other, but they are like the alternate periods of feeding and working in animals; each prepares and will be followed by the other. Therefore does beauty, which, in relation to actions, as we have seen, comes unsought, and comes because it is unsought, remain for the apprehension and pursuit of the intellect; and then again, in its turn, of the active power. Nothing divine dies. All good is eternally reproductive. The beauty of nature re-forms itself in the mind, and not for barren contemplation, but for new creation.

*Nature, Emerson*
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A Plan for Metropolitan State Hospital: Imagery as a therapy for an institution

by

Sterling James McMurrin

Submitted to the Department of Architecture on 4 May 1988 in partial fulfillment of the requirements for the degree of Master of Architecture.

Abstract

This thesis is both text and illustration to describe the process of transforming a state mental institution from an outdated, outmoded, conventional hospital into a living community. The goal of the project is to develop an institution not restricted by rigid forms or designs – a flexible, responsive environment of the type required by rehabilitation therapies and medical practices that are constantly evolving. Emphasis is placed on environmental factors that impact the personal daily life on campus, including facilities for work, communication, learning, recreation, and enjoyment of the wider landscape environment. The project is to transform Metropolitan State Hospital in Belmont, a Boston suburb, into a therapeutic transitional and educational community.

This work is a diary from a journey of discovery through moral, political, and economic territory. It is a guidebook to help in the process of architectural form making. The images are suggestions and questions.

Thesis Supervisor:

Maurice Keith Smith
Professor of Architecture
Out of our debate with each other we create rhetoric.
Out of our debate with ourselves we create poetry.

Yeats

Design is of the world.

For me to prepare this thesis is a journey of discovery through unknown territory. The results are suggestions and questions. I approached it at first as a planning and development exercise, since I was hired to do that. I saw the land and institution from above, from the "omnipotent" position of campus designer, with maps, themes and diagrams, options, efficiencies, charts, memos and guidelines. Then I took a turn suggested by my association with the artist Michael Singer that led me into a personal process of healing and learning, changing my fundamental outlook.

I began working with Professor Smith, using this large scale site, with its forbidding buildings and evolving program to explore a more objective and thorough understanding of how and why to make form. I continued to see this discovery as a method of transformation of existing forms of land and architecture. This exploration reflected my concern for the meaning and methods of development and ultimately led me back to the transformation of the institution. Here the journey came upon rocks, with many canyons, trails, springs, slides and dead ends. Parts of the work flourished, some languished and other parts disappeared, personal ego and misunderstanding stopped me short, successes blinded me, a deep sorrow for the people who are trapped in the mental health hospital wards or on the streets, mentally ill with no where to find help, ground work to a halt. I attempted to write. Much of my anger came out in my writing. I have cut as much as possible. What can be seen here is only a begining of a proposed way of seeing this site, searching for answers, approaching this institution. By the time it came to production of the thesis and graduation, too much work had been started to finish any. Many of the drawings possess only the base information, the rudiments of territorial understanding and form. See it as a notebook to remind and guide me.

The fundamental meaning of forms we make can be clearly read. It is not in their decoration, juxtapositions or symbolism, all are types of intellectual meaning, personalized and sophisticated. The deepest meaning comes in the emotional and spiritual act of making. The physical act of forming and building, nurturing and growing have a meaning more basic than intellect. It is read in a more spiritual, almost physical way. Building and nurturing unite people through touch, and association, a holistic approach; symbolism and sophistication unite people through labeling, and differentiation, a subdivisional approach. To nurture is to care.
The transformation of the institutional physical form proposes at its outset the fundamental changes that result from modified behavior and perception within that new environment, beyond those dictated by a changed program or operational technique. New form can be the root cause of new techniques. Just as the psychology of the behaviorists says that to change the symptom can effect the cause, to put it bluntly, the architect must believe that to change the form effects the institution. William James suggests (supported by centuries of previous action and subsequent scientific study) that to change one's image of the self or institution sets up an automatic, internal and spiritual direction and self drive toward the fulfillment of that image. The self fulfilling power of the physical picture or model of the world-that-could-be ways heavily at this moment as I grope for a new, fresh, personal understanding of my own making of form. The images that follow are a personal search. Armed with certain facts of life, form, economics and politics, I have begun to find much that touches me. I hope that it reaches out to you.

Seeing is believing in what you see;
Loving is believing in who you love.
(unknown song)

Sterling James McMurrin
1 May 88
M. I. T.
Cambridge, Massachusetts
This thesis is both text and illustration to describe the process of transforming a state mental institution from an outdated, outmoded, conventional hospital into a living community. The goal of the project is to develop an institution not restricted by rigid forms or designs—a flexible, responsive environment of the type required by rehabilitation therapies and medical practices that are constantly evolving. Emphasis is placed on environmental factors that impact the personal daily life on campus, including facilities for work, communication, learning, recreation, and enjoyment of the wider landscape environment.

The project is to transform Metropolitan State Hospital in Belmont, a Boston suburb, into a therapeutic transitional and educational community. It is expected that approximately $100 million will be spent over a 25-year period by a public and private partnership to provide these facility changes. Twenty million dollars has been allocated for Metropolitan State by the Commonwealth of Massachusetts, and masterplanning architects have been appointed to prepare long-term plans.

The thesis takes as its point of departure this commitment by Massachusetts to the future of its mental health facilities. The agencies concerned currently believe that the funds allocated will go a long way to humanize the existing facilities. Though I am sure that the money will be well spent, I believe that a larger commitment of funds over an extended period of time can remove endemic problems in the old facilities while taking advantage of unique opportunities that could be lost, if ignored at this time. The attraction of more funds in the future from state, private and federal sources and the attraction of more high quality professional staff requires planners and local authorities to set their goals high while showing real success in each phase.

My interest in this project began when I first saw the hospital grounds and sensed its possibilities. It is a large "underdeveloped" area with three hills, in the suburbs near a growing metropolis. The issues related to land development, conservation and architecture within this suburban setting are central to my current concentration on architectural design and land development. The project became real for me when I was asked to be part of the Mental Health Masterplanning Team for the Division of Capital Planning and Operations of the Executive Office of Administration and Finance, Commonwealth of Massachusetts (See DCPO Team 1987). On this team, which dealt with seven mental health hospitals, I took responsibility for studying two hospital campuses, the Medfield State and Metropolitan State Hospitals, to examine major public and private development priorities, find reconstruction possibilities, and determine inherent problems and opportunities. Beginning with the Governor's Special Message One, on the state mental health system, we put together the research and site analysis necessary to achieve a $340 million capital commitment from the Legislature and the Governor to rebuild the mental health system. This overall process began over five years ago and it will take at least five more years to complete this first phase of design and construction.

Since the commitment of funds in the summer of 1987, our team has tripled in size and many score meetings with mental health care professionals have been conducted to formulate questions, gather data and opinions, make proposals and firm up directions for the administration of the funds. While in school, my role has been to provide support in the area of transitional housing. This housing is intended to be a temporary yet stabilizing environment for those who are currently cycled through the hospital system and out onto the streets several times a year. It is the last step from the campus back to the community (Housing Team 87-88).
At the same time, I have been working with DCPO on a project to provide new autopsy and laboratory facilities to the State Medical Examiner. During this project, I was confronted with the reality of street people who were found dead on the street, bodies given numbers and stored for months until identification could possibly be made. The realization of the connection between the lack of transitional housing, community housing and effective support programs for mentally ill and the deaths of some mentally ill who live on the streets was a clear shock to me. The proposal for the Tomb of the Unknown Homeless at Metropolitan State began with this realization. The numbered bodies reminded me of the numbered grave stones in the small graveyards at the older mental hospitals.

The value of this experience with DCPO to my thesis is very great. This project has come to life through research in the form of reading books, papers and articles related to health care and architectural design methods and philosophies, meetings with public and private health care professionals who are advising on environmental and policy issues, discussions with the masterplanning management team and private contacts with therapists and patients, and tours of many existing facilities. Throughout this thesis process I have attempted to synthesize the ideas that appeared to form the most practical, long term solutions to this social problem. In doing this, I have credited whenever possible the clear ideas of others. But it would be impossible to credit many of the ideas that are held as common knowledge or procedures by many groups of care-givers. I have generally noted ideas that tend to run counter to standard methods or that are re-emerging from the past as improved methods. And to simplify and focus, I have discussed only those care issues that have direct environmental impact or sensitivity.

The value of my thesis is in exploring possible directions and opportunities. I have applied design methods in an attempt to see this site and the existing structures as a more supportive and nurturing environment. The focus of my work has been in the area of housing design. With a large variety of housing needs on the campus, the form of housing offers a fortunate opportunity to explore the varied application of a design philosophy that puts the individual person at the center. This exploration or design journey can only be viewed as a beginning in a search for appropriate forms for a therapeutic environment.

The factor that has kept me interested in this project has been a sincere desire to contribute something to the solution of the problems of homelessness. I have concerned myself with a group that will be the most difficult to help, the portion of the homeless who are mentally ill, who play such a prominent role in the future of the state hospital system. This is a situation that touches my sense of morality and justice in a way that I cannot ignore.

The issue of providing care and shelter for mentally ill touches on many moral and civil rights issues. Central to the debate is the idea that the freedom to starve or freeze to death on the streets is a civil right. Close to this issue is the universal moral right to dignified shelter that many believe should be a guaranteed civil right. To make the debate almost impossibly negative are the economic and spiritual realities of the moment that blind us from the long term economic and spiritual needs for the continuity of our culture. These ideas have polarized all conversation about the methods and possibilities for the Mental Health System in Massachusetts. They have pushed and plagued my inquiry. The solution of this massive debate will not be found in this thesis, though this debate has had more than a passing effect on the discoveries, proposals, frustrations and images found within.

What is of note, and has suggested my proposal to invest in new housing at the hospital site is the economic and therapeutic information about longer term, transitional type housing functioning at Medfield State Hospital, McLean Hospital in Belmont, Massachusetts, and Sheppard and Enoch Pratt Hospital in Baltimore, Maryland. Information that has come directly from experienced care givers who have worked in staffed houses of 6 to 12 persons indicates that those people who come into the cottage programs for a longer term of 1/2 to 4 years, were less likely to re-enter the hospital in the future, spent no nights sleeping on the street during their program and spent less time in acute care wards. The alternative has been to cycle people off the street into the acute wards during acute attacks of mental illness and return them to the street in a few months, sometimes cycling them through the system and out several times. The personal gain in dignity to the individual person in the cottage program, combined with their reduced nights on the street and the total reduction of cost (one year in a cottage program is less than 1/4 year in an acute ward with 3/4 year sleeping on the street) add up to a firm direction toward a housing program.

What is proposed in the following work is a small portion of a very large program of housing. It is a small group of cottages and collective living buildings that form a transitional, educational environment, where the long process of healing can take place. It is seen as a first step in the system that supports housing in the community for all those who can learn to take care of themselves. This total cure for the system is seen by a majority as the solution. There is a debate raging however, over the need and type of hospital and transitional housing that should be provided and who should pay for it. My early attempt to corral enough information on this subject pointed out the serious lack of hard scientific data to support any point of view. So I turned to primary sources of experience and information in the form of interviews, tours and meetings. From these sources came the questions, proposals and directions.

To accept the existence in society of a small mentally ill population whose humane treatment is essentially a collective social process is fundamental to understanding the mental hospital. These people can be cared for by groups of mutually supportive, collectively trained and cooperatively functioning professional staff.
We understand the need for this collective form in satisfying our educational needs, governmental functions and medical needs as a matter of course. To suggest, as some have, that the need for effective mental hospitals will "wither away" with the advent of new drugs, electrical techniques and massive public housing supports is possibly naive. Centralization of staff to take care of a changing clientele is an accepted form of functioning. To think that most of the medical and psychiatric needs of the patients will be provided in the comfort of their own homes ignores the reality of home health care that currently provides minimal support and help for many lonely people, trapped in their homes and many lonely, unsupervised caregivers, trapped in their cars going from house to house. What is needed is a full range of services in a range of environments, support by a balanced approach of public and private cooperation. Only through a complete system that employs some centralized facilities can specialized rehabilitation services and therapies be provided: the sheltered workshops and specialized therapy programs where people learn the dignity of cooperative work, search their own spirit in art, movement, theatre and music therapy, and regain control of their bodies in physical and recreational therapy. The dependence on group therapies and group staff consultations is dependent on centralized facilities linked with community programs.

The economics of the health care industries and the capital investments that are necessary to support the efforts has been looked at in a realistic, long term manner (though the dry, detailed explanation is not included). The conclusions that I have drawn to allow me to begin this study include the fact that health care investments of capital and operational funds provide good, steady, high paying jobs for taxpayers and people who by goods, services, stock, bonds, real estate and who vote. Supporting the industry as a growth industry is therefore a good idea. The "products" of the industry are more productive people in many cases and a generally more caring society. Well publicized studies at M.I.T. during the beginning of the Star Wars debate indicated that far more long term productive and profitable spin-offs come from investment in research and development of the health industry than ever emerge from military research and development. There is a very low capital and maintenance investment in the mental health field to support the work of the professional staff (and their continuity of buying and voting power) in relation to other fields of investment that a government can make. In many fields of investment, a government literally gives away land (a perpetuity, a resource) to developers to get what they need for a limited time (20 year set aside, management). There is a good deal of opportunity for the government to make public-private partnerships to provide rehabilitation services to these individuals that does not include giving the land away to developers to provide housing kickbacks to the state while extending the suburbs even further into the surrounded campuses. The campus resources are such that a better environment can be maintained through the retention of the agricultural land and conservation land within the growing and crowding suburbs. But at the same time, the built environment on the campuses, that one third or less that is used actively for buildings, could be intensified through a mixed usage of housing, therapy, and small cottage services and industries. Private companies can be attracted to the campus to provide low pressure job programs for transitional housing residents. In these programs the residents can mix with the other employees in a useful activity and begin the slow process of rehabilitation.

The image of a living, working community has come to mind.
Method of the journey:

The work is gathered in an alternating series of separate short hikes: illustrations then text. Some understanding of the adjoining parts (in either direction of reading) can be gained by seeing their physical position as a significant association and series, with each having an effect on the other. Toward the beginning there is a development of some specific ideas that drive my understanding, toward the end there is an attempt to synthesize some of the more separate material with the construction of architectural forms or tokens that can be built together with each other to make architectural space.
Taunton State Hospital for the Insane; begun 1851

Lunatic Hospital at Northampton; begun 1855

Worcester Lunatic Hospital; begun 1870

State Lunatic Hospital at Danvers; c.1873

Medfield Insane Asylum; c.1892

Metropolitan State Hospital; 1930
Patient Churn Characteristics

Department of Mental Health
Community Mental Health Centers
There's no dignity in death for Nos. 1155-87 and 1138-87

By Sean Murphy

Western Affront

Policies challenged at Westborough mental hospital

By Châu Phan

They were lucky and many who were robbed on the street.

Contributing Reporter

Authorities know little about either. Unfortunately, no one picked up these two. People have to be willing in order to get help. And sometimes people who live on the street die on the street.

VICTIMS

Mental-illness newsstands beyond 30 miles from Boston ended up in a state hospital in Massachusetts. The best judge of mental health care is the patients themselves.

cases in hospitals, reducing access to recreational and rehabilitative facilities and other ancillary hospital services.

Mental Health Services

Mental illness is a common mental health problem, affecting 1 in 4 people at some point in their lives. It can range from mild to severe, and can affect every aspect of a person's life. Mental health issues are not just about mental health issues, but also about understanding the causes and prevention of mental health problems. Mental health issues are not just about mental health issues, but also about the ways in which people can reduce the risk of mental illness and improve their mental health.

End of a mental health burden

An important initiative has been launched by the Department of Mental Health with the effort to end overcrowding of its hospitals. Success, even though it cannot be achieved immediately, should mean better treatment for all patients in the system, including those who are inappropriately in mental health hospitals now and deserve care elsewhere.

Reducing overcrowding imposes unfair burdens on both long-term and short-term patients in hospitals, reducing access to recreational and rehabilitative facilities and other ancillary hospital services.

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Dukakis promises no DMH dumping

G. Dukakis promised yesterday "there will be no dumping" of mental health patients on communities. Dukakis announced that the state planning agency's prototype for developing housing for all state mental hospitals is "that program will be forward only if we're absolutely convinced that the support is there in the community. There will be no dumping of patients in communities. We've had no consultation with the communities that are impacted by this facilities."

By John Diamond Associated Press

The Dukakis administration is considering 115 community sites as possible sites for construction of group homes for the mentally ill. The sites were chosen to accommodate up to 10,000 or more square feet of housing, which would accommodate between two and five patients, each having more than 75 square feet of space.

Dukakis promised yesterday "there will be no dumping" of state mental hospital patients on communities. Dukakis commented that the site selection process is being conducted to ensure that the sites are suitable for the needs of the patients.

The sites were chosen following a report that the state was considering an "inpatient" facility to accommodate state mental hospital patients. The report stated that the state was considering a "statewide" facility to accommodate state mental hospital patients.

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Do you think you can take over the universe and improve it?
I do not believe it can be done.

The universe is sacred.
You cannot improve it.
If you try to change it, you will ruin it.
If you try to hold it, you will lose it.

So sometimes things are ahead and sometimes they are behind;
Sometimes breathing is hard, sometimes it comes easily;
Sometimes there is strength and sometimes weakness;
Sometimes one is up and sometimes down.

Therefore the sage avoids extremes, excesses, and complacency.

_Tao Te Ching_, Lao Tsu, 29
The indescribable innocence and beneficence of Nature—of sun and wind and rain, of summer and winter—such health, such cheer, they afford forever! and such sympathy have they ever with our race, that all Nature would be affected, and the sun’s brightness fade, and the winds would sigh humanely, and the clouds rain tears, and the woods shed their leaves and put on mourning in midsummer, if any man should ever for a just cause grieve. Shall I not have intelligence with the earth? Am I not partly leaves and vegetable mould myself?

Solitude, Thoreau, 389
This is a delicious evening, when the whole body is one sense, and imbibes delight through every pore. I go and come with a strange liberty in Nature, a part of herself. As I walk along the stony shore of the pond in my shirt sleeves, though it is cool as well as cloudy and windy, and I see nothing special to attract me, all the elements are unusually congenial to me. The bullfrogs trump to usher in the night, and the note of the whippoorwill is borne on the rippling wind from over the water. Sympathy with the fluttering alder and poplar leaves almost takes away my breath; yet, like the lake, my serenity is rippled but not ruffled. These small waves raised by the evening wind are as remote from storm as the smooth reflecting surface. Though it is now dark, the wind still blows and roars in the wood, the waves still dash, and some creatures huff the rest with their notes. The repose is never complete. The wildest animals do not repose, but seek their prey now; the fox, and skunk, and rabbit, now roam the fields and woods without fear. They are Nature's watchmen—links which connect the days of animated life.

Solitude, Thoreau, 380
The spirit of the valley never dies.
This is called the mysterious female.
The gateway of the mysterious female
Is called the root of heaven and earth.
Dimly visible, it seems as if it were there,
Yet use will never drain it.

_Tao Te Ching_ by Lao Tsu, VI
Between birth and death,
Three in ten are followers of life,
Three in ten are followers of death,
And men just passing from birth to death also number three in ten.
Why is this so?
Because they live their lives on the gross level.

He who knows how to live can walk abroad
Without fear of rhinoceros or tiger.
He will not be wounded in battle.
For in him rhinoceroses can find no place to thrust their horn,
Tigers no place to use their claws,
And weapons no place to pierce.
Why is this so?
Because he has no place for death to enter.

_Tao Te Ching, Lao Tzu, 50_
The first steps in Agriculture, Astronomy, Zoology (those first steps which the farmer, the hunter, and the sailor take), teach that Nature's dice are always loaded; that in her heaps and rubbish are concealed sure and useful results.

*Nature*, Emerson, 57

Smile O voluptuous coolbreathed earth!
Earth of the slumbering and liquid trees!
Earth of departed sunset! Earth of the mountains misty-topt!
Earth of the vitreous pour of the full moon just tinged with blue!
Earth of shine and dark mottling the tide of the river!
Earth of the limpid gray of clouds brighter and clearer for my sake!
Far-swooping elbowed earth! Rich apple-blossomed earth!
Smile, for your lover comes!

*Leaves of Grass*, Whitman 45
The inhabitants of cities suppose that the country landscape is pleasant only half the year. I please myself with the graces of the winter scenery, and believe that we are as much touched by it as by the genial influences of summer. To the attentive eye, each moment of the year has its own beauty, and in the same field, it beholds, every hour, a picture which was never seen before, and which shall never be seen again. The heavens change every moment, and reflect their glory or gloom on the plains beneath. The state of the crop in the surrounding farms alters the expression of the earth from week to week. The succession of native plants in the pastures and roadsides, which makes the silent clock by which time tells the summer hours, will make even the divisions of the day sensible to a keen observer. The tribes of birds and insects, like the plants punctual to their time, follow each other, and the year has room for all. By water-courses, the variety is greater. In July, the blue pontederia or pickerel-weed blooms in large beds in the shallow parts of our pleasant river, and swarms with yellow butterflies in continual motion. Art cannot rival this pomp of purple and gold. Indeed the river is a perpetual gala, and boasts each month a new ornament.

*Nature*, Emerson, 44

Crossing a bare common, in snow puddles, at twilight, under a clouded sky, without having in my thoughts any occurrence of special good fortune, I have enjoyed a perfect exhilaration. I am glad to the brink of fear.

*Nature*, Emerson, 38
What is the pill which will keep us well, serene, contented? Not my or thy great-grandfather's, but our great-grandmother Nature's universal, vegetable, botanic medicines, by which she has kept herself young always, outlived so many old Pares in her day, and fed her health with their decaying fatness. For my panacea, instead of one of those quack vials of a mixture dipped from Acheron and the Dead Sea, which come out of those long shallow black-schooner-looking wagons which we sometimes see made to carry bottles, let me have a draught of undiluted morning air. Morning air!

To the body and mind which have been cramped by noxious work or company, nature is medicinal and restores their tone. The tradesman, the attorney comes out of the din and craft of the street and sees the sky and the woods, and is a man again. In their eternal calm, he finds himself. The health of the eye seems to demand a horizon. We are never tired, so long as we can see far enough.

Nature, Emerson, 43
Space, time, society, labor, climate, food, locomotion, the animals, the mechanical forces, give us sincerest lessons, day by day, whose meaning is unlimited. They educate both the Understanding and the Reason.

Nature, Emerson, 55

We are like travellers using the cinders of a volcano to roast their eggs. Whilst we see that it always stands ready to clothe what we would say, we cannot avoid the question whether the characters are not significant of themselves. Have mountains, and waves, and skies, no significance but what we consciously give them when we employ them as emblems of our thoughts? The world is emblematic. Parts of speech are metaphors, because the whole of nature is a metaphor of the human mind. The laws of moral nature answer to those of matter as face to face in a glass. "The visible world and the relation of its parts, is the dial plate of the invisible." The axioms of physics translate the laws of ethics. Thus, "the whole is greater than its part;" "reaction is equal to action;" "the smallest weight may be made to lift the greatest, the difference of weight being compensated by time;" and many the like propositions, which have an ethical as well as physical sense. These propositions have a much more extensive and universal sense when applied to human life, than when confined to technical use.

Nature, Emerson, 55
It has already been illustrated, that every natural process is a version of a moral sentence. The moral law lies at the centre of nature and radiates to the circumference. It is the pith and marrow of every substance, every relation, and every process. All things with which we deal, preach to us. What is a farm but a mute gospel? The chaff and the wheat, weeds and plants, blight, rain, insects, sun—it is a sacred emblem from the first furrow of spring to the last stack which the snow of winter overtakes in the fields. But the sailor, the shepherd, the miner, the merchant, in their several resorts, have each an experience precisely parallel, and leading to the same conclusion: because all organizations are radically alike. Nor can it be doubted that this moral sentiment which thus scents the air, grows in the grain, and impregnates the waters of the world, is caught by man and sinks into his soul. The moral influence of nature upon every individual is that amount of truth which it illustrates to him. Who can estimate this? Who can guess how much firmness the sea-beaten rock has taught the fisherman? how much tranquillity has been reflected to man from the azure sky, over whose unspotted deeps the winds forevermore drive flocks of stormy clouds, and leave no wrinkle or stain? how much industry and providence and affection we have caught from the pantomime of brutes? What a searching preacher of self-command is the varying phenomenon of Health!

Nature, Emerson, 59

As when the summer comes from the south the snow-banks melt and the face of the earth becomes green before it, so shall the advancing spirit create its ornaments along its path, and carry with it the beauty it visits and the song which enchants it; it shall draw beautiful faces, warm hearts, wise discourse, and heroic acts, around its way, until evil is no more seen.

Nature, Emerson, 81
"In the individual, integration and the power of adjustment may be developed, physically, by coordinated activity, and mentally, in the doing of purposeful tasks. By the doing of tasks, mental attitudes are developed, and they, together with inherited tendencies, determine behavior."

Burnham's text "the Normal Mind" 1924, Pg. 677
(Serrett, 1985, pg 13)

THE CHRONIC MENTAL PATIENT

Who, then, are the patients that might benefit from the special environment of a long-term inpatient hospital, and what are their unique problems? It would be prudent to begin by clarifying the concept of the "chronic mental patient" (Bachrach, 1976). In general, this seems to be a euphemism for process or nuclear schizophrenics, often with an overlay of substance abuse and/or antisocial features. However, the term also includes a wide variety of other diagnostic groups, including chronic bipolar patients, schizoaffectives, mildly organic patients, and severe character disorders. Because the characteristics of such a disparate group are so diverse and their needs so different, programs must focus on a particular subgroup in order to succeed. There may be several quite different approaches to each of these diagnostic groups, each of which could justify intensive inpatient implementation in a long-term hospital. In this article, I will discuss only chronic nuclear schizophrenic patients and the problems they pose for rehabilitation.

The chronic schizophrenic patient presents us with many problems in addition to the usual psychotic symptoms (hallucinations, delusions, formal thought disorder, and impaired impulse control). These include a set of "regressed behaviors" typical of chronic deterioration, as well as a host of so-called negative symptoms such as anhedonia, poor motivation, and loss of basic self-care and social skills. Also, they often demonstrate cognitive impairments such as concreteness, inability to plan, and even grade school level reading and math skills. These patients show a degree of impairment which is so global and pervasive as to be reminiscent of the functional level of brain-injured patients, even though they are clearly different in terms of neuropathology and phenomenology. Despite such multiple deficits, many of these patients do make a successful transition to outpatient aftercare programs. However, there is a group of patients that fail modern outpatient dispositions because of fundamental incompatibilities between them and the treatment delivery system. Such patients do not get out of bed to go to their programs; they do not take their medications; they wander off and get lost or mugged; they become even more paranoid at a treatment setting, etc. The majority of these patients who fail are caught up in the so-called "revolving door" (although not necessarily in the doors of the same hospital), with little attention paid to resolving the deeper incompatibilities between the patients and the health care system. A few are ultimately kept in state hospitals for the long term. An even smaller group are referred to private long-term hospitals for more intensive treatment. It is safe to say that in 1985 almost no one with schizophrenia is referred to private long-term hospitalization as the first treatment intervention of choice. Instead, it is precisely because of their failure to succeed within the context of their local private or public outpatient programs that long-term hospitalization is considered as an alternative. Thus, the population is skewed towards a particularly recalcitrant subset of an already difficult diagnostic group.

It is useful to consider the specific behaviors and symptoms that cause these patients to fail in outpatient dispositions. Problems can be roughly classified into three groups: (1) the presence of overtly bizarre or odd behaviors which interfere with normal socialization in the community (positive symptoms); (2) the absence of adaptive behaviors which are normally necessary for such socialization (negative symptoms); and (3) the disorganization of basic cognitive processes. These divisions are admittedly arbitrary, but they do convey the variety of obstacles to independent functioning.

Positive symptoms lead to the most noticeable of behaviors, but they are not necessarily the most difficult to treat. They often respond to medication and are amenable to environmental manipulation. For example, nonsense talk (formal thought disorder) is commonly an indicator that the patient has stopped medications. It can often be reduced by restarting medications or by behavioral responses such as alternative reinforcement or simple ignoring. Episodic maladaptive behaviors such as outbursts of yelling or assaults are particularly dramatic examples of behaviors incom-
compatible with many outpatient dispositions. These may in turn often be reduced to (or derived from) positive symptoms such as hallucinations (e.g., yelling at the "voices") or delusions (e.g., striking a person who is "attacking").

Another category of behaviors which often preclude successful outpatient aftercare can be described as bizarre or regressed. Whether these behaviors reflect positive or negative symptoms is a matter for research, but their impact on successful socialization—which is a sine qua non of outpatient care—is obvious. They include polydipsia, urinary and/or fecal incontinence, peculiar manners (touching, rubbing, rocking, chewing, grimacing, posturing, grooming rituals), odd appearance (in dress, make-up, hairstyle), hoarding, stealing, spitting, vomiting, gorging, starving, malnourished eating, and manifest negativism (i.e., predictable refusal to participate in most requested behaviors). Although such symptoms may coexist with more classic psychotic symptoms, they often spell the difference between a psychotic patient who can manage discharge in spite of his hallucinations or delusions and a patient who is functionally disabled by them. It is not the voices or the fears alone that preclude discharge, but these associated behaviors which alienate the public and require more highly supervised living situations.

Negative symptoms can often pose a more intractable, though less colorful, obstacle to successful outpatient care. Daytime hypersomnia, with or without a reversal of the normal nighttime sleeping pattern, leads to patients who either sit slumped in fetal position trying to sleep in the day hospital lounge chair, or who oversleep and miss the bus in the morning also. Disregard of basic hygiene can cause patients to smell strongly and look like skid-row characters. This, combined with other (related?) deficits in social skills such as vacant facial expressions and impoverished communications, naturally distance patients from other people who might ordinarily be supportive and helpful. A certain emotional emptiness makes it hard for these patients to enjoy normally pleasurable activities, and spontaneously initiated activities of any kind are rare. They convey a sense of not caring by their failure to show external behaviors which are responsive to the spirit and the deeds of the outpatient program they attend. These patients' failure may be facilitated by the feelings of boredom, disgust, frustration and rejection which they arouse in the staff. These are the patients who are so easily "lost in the woodwork," especially in systems designed to respond to acute problems on a priority basis. Few aftercare programs aggressively and actively address the negative symptom patient.

Anthony (1979) would go further and define these negative symptoms as the absence of a host of basic verbal, social, cognitive, and vocational skills which the patient has never learned or has forgotten. In addition to whatever apathy and emptiness which might appear intrinsic to the illness, there is also a secondary handicap of deprivation from normalizing life experiences which provide most of us with opportunities to learn age-appropriate skills.

What we consider "growth" or "maturation" cannot be taken for granted as a spontaneous process. Patients whose illness has derailed them from the mainstream course of social development may appear "burnt out" in part because of never having learned alternative, adaptive, pro-social skills. This notion is a modern variation on the older concepts of institutionalism (Wing & Brown, 1970) and social breakdown syndrome (Gruenberg, 1967). Presumably there is a less bleak prospect for treating negative symptoms if such skills can be taught.

Finally, patients may be unable to achieve outpatient status because of what appear to be gross cognitive limitations. These can include such deficits as persistent functional disorientation to date and time, impaired memory for daily events, decreased ability to learn new material (e.g., a schedule, a bus route, or a name), specific limitations in a particular sensory modality (e.g., over-reliance on visual, tactile, or verbal cues), concreteness (e.g., the inability to abstract from a route taken on foot to a map), and generally poor verbal and arithmetic skills. Such patients are forever getting lost, misplacing things, and forgetting appointments. The level of disorganization, even in the absence of prominent positive symptoms, can preclude successful outpatient management.

Thus, a composite patient who would be appropriate for long-term rehabilitation in an inpatient setting would: talk back to his voices in public; have angry outbursts; be difficult to understand; be dirty, smelly, and incontinent; appear bizarre because of some weird, repetitive behavior like neck-wringer; refuse to attend treatment; walk away when approached; not know his roommate's name or the date; not remember when his favorite activity occurred; and get lost when going from one part of the hospital to another. While this description may seem extreme, even to be a caricature of the chronic schizophrenic, it nevertheless conveys the nitty-gritty problems which the treatment team faces. Too often our professional writing, replete with jargon and abstractions (like "chronic mental patient"), tends to sanitize the patients' problems and reduce them to vacuous generalities. "Socially inappropriate" hardly conveys the feelings of the public or outpatient staff when an unshaven patient suddenly starts laughing and gesticulating wildly on a bus! And yet it is those feelings which we intuitively consider whenever we decide whether or not a patient is ready for discharge from an inpatient setting.

GOALS FOR INPATIENT TREATMENT

Given this rather daunting clinical picture, what might inpatient programs realistically expect to accomplish? Within a custodial framework, it would seem reasonable at the very least to halt a further progressive decline in the patient's functioning. For the patient who has gone from being an average high school student to a middle-aged mute in a state hospital who eats with his hands, it is enough to hope that he does not regress to nudity and forced feedings. Beyond mere prevention of decline, however, a custodial facility should strive to optimize functioning within the confines of the patient's and institution's limitations. Indices of such improvement would include less use of seclusion and restraint, lower doses of medications, more use of recreational opportunities off the unit, less staff turnover, and the like. These are very tangible objectives to which even seriously understaffed state facilities can aspire.

(Gibson, 1986, Pg. 3)
Massachusetts has had a long and successful history of state hospitals, having been a leader in the 19th century both in treatment methods and hospital environments, experimenting with many different plans and programs. These include fine examples of the expansive "Kirkbride Plan" of buildings, at Worcester, Taunton and Danvers, and the more adaptable town square, or Harvard Yard, approach that can be seen at Medfield and in a modified version at Metropolitan State (Pilkington 85). During the late 1950's another addition to many of the campuses was the blocky, inflexible, "airplane" shaped, acute care hospital buildings. These buildings look the most like prison facilities of all the buildings. It is now time to look back over these and their successes and failures to determine which direction to go in the future.

In the past, these hospitals operated much like the "poor farms" or welfare farms from earlier times, where the mentally ill and indigent could live and work, having no other means of livelihood. This method of dealing with the social problems that surround mental illness has evolved through periods of more and less humane treatment. During this century the care given at the state facilities has been in question, with notoriously bad conditions and numerous lawsuits. This situation led to the deinstitutionalization of the sixties, supported by the invention of effective drug therapies and the beginning of the community mental health system. This shrinking of the large institutions in favor of smaller ones has provided a better life for some patients, but it is commonly believed that a large portion of the former patients are now homeless, living on the streets, or dead from exposure.

The current state of affairs in the mental health hospitals in Massachusetts is one of great flux. Many positive changes have recently occurred, allowing for a complete reassessment of the past and future hospital environment. A sense of rebirth pervades the system, with a great deal of anticipation and hope and a desire for experimental programs as well as a re-emergence of ideas of the past that may help with some of the most intractable problems. A shift in the population that is cared for, both in age and needs, has come about through other, external forces of demographics, economics and pharmacology. There is now a large population of older people with no other means of assistance. There are people who have failed to respond to community administered chemical supports, who need a more nurturing environment to survive, and there are those who were considered impossible to help who were simply incarcerated in the past. There is now an active movement within the public and private realms to develop a more dignified life within the social boundaries of the asylum while providing the possibility of success and hope generated through the eventual placement into halfway houses within their communities (Gibson 86).

A strong point in favor of the strengthening of the hospital program is that it can provide an efficient central system for the development of alternative methods of treatment, the treatment of the most intractable problems, and for the post graduate training of staff. The fact that it is centralized is a plus when dealing with many of the problems of mental illness strictly from a management point of view, not to mention the social value of a large peer group of staff and patients. Many decisions that make critical changes in the patient's life can only be made through a group effort. But the weakest aspect of the system comes from this very fact, that since it is centralized but usually in a more isolated place, physically and socially, the hospital becomes a place that is separated from the main stream and is therefore a place where most patients can never realize their own full potential. For this reason only a small minority of mentally ill people will spend any of their time on the state hospital grounds.

With the realization of the limited yet specialized and important value of this centralized isolation it is this very nature that marks the character of the new asylum. It is removed from the community yet closely surrounded by the suburbs that it is distinctly different from, as a town is different from its fields. There should be no programs on the campus that do not flourish in nor take full advantage of this climate (DCPO 87). This highly specialized climate should be preserved to support the old notion of the hospital as a learning environment, separated from the community for the support and nurturing of specially challenged individuals who may be able to return to the community once they have sorted out their needs and goals and regained their dignity. This college type structure and use can be currently understood and supported by a wide range of community and government advocates. It is the only positive future for the hospital. And like the suburban colleges, much of the open land that surrounds them should be preserved to support the specialized nature of the institution. The hospitals are becoming a valued island of underdeveloped land in the suburbs.

One of the purposes of the state hospital is to take care of those who have no insurance or whose insurance has run out, as well as those who have no access to other assistance. In this way the state picks up where the profit drops off. But in doing so the state must look for modes and methods already proved to be successful. One of these is through the development of residential programs or quarterway houses on the campus, called transitional housing. This quarterway house is different from the halfway houses in the community because of their location on the campus near the centralized hospital programs. These quarterway houses are for people who need continual assistance to maintain their lives, yet can also learn slowly to help maintain themselves. They can assume some responsibility and lead a more dignified life in a more domestic residential setting than is possible in the old institutional buildings with open wards. They have the advantage of the many programs available on the campus for their personalized therapy and daily activity. And they can be placed in this residential setting earlier because it is on the campus near the core staff population who can monitor their progress or regression. The programs that have been tried at Medfield State Hospital and in private hospitals at
THE PATIENTS

An adequate portrait of the misery and anguish of mental illness, a tragedy that strikes a very large portion of our population and knows no boundaries of class, age or creed, is beyond the scope of this thesis. The types of patients within the system are extremely varied, but some groups stand out as very sensitive to the environment and it is the environment and their relation to it that concerns me. These groups include not only the mentally ill street person, but also the aged and the handicapped. Some of the patients are severely drugged during certain portions of their treatment and find it difficult or impossible to do many of the normal, day-to-day activities of living. Many are in extreme need of a warm, domestic, nurturing social structure, the kind that cannot be adequately supported within a large, institutional and impersonal building (Sheppard and Enoch Pratt Hospital, Baltimore).

One clear message received from the hospital staff is that they are not intentionally in the business of incarceration. Though many of the patients arrive under force and are kept in a locked ward in the beginning, the majority (70-90%) soon earn some form of grounds privileges as their antisocial or psychotic behavior is modified (Medfield 87). Few patients wander off once they have been on the campus a month or so and to incarcerate them is neither necessary nor therapeutic. What seems to have worked best at the hospitals is the formation of close, therapeutic relationships with staff and with roommates who can give help through unpredictable times of trauma. A domestic environment that supports a social order among patients and staff which promotes this form of "milieu therapy" is a vast improvement and is a clear goal worthy of achievement. Many patients come to the hospital for a short stay, only to return again and again to this or other hospitals until they are recognized as a candidate for a longer term program. The proposed environment and program offers many of the patients the possibility of learning what well help with long term success in community halfway houses or home health care programs. This milieu therapy within a continuity of different care environments can be successful in helping patients to find more rewarding lives.
TRANSITIONAL HOUSING

Transitional housing refers to the homes on campus that are provided to the mentally ill while learning the social skills needed to enter into halfway houses in the community. It is a relatively new term for an old concept, designed to fill a need for breaking the cycle of homelessness of many of the mentally ill. The probable length of stay will be in the six months to five year range. The concept of transitional housing is based on the idea of a continuum of care that begins with a crisis and entry into the hospital and ends with permanent housing and help in the community (DCPO 87). Both ends of this system are currently suspect. It seems unwise to wait until people are carried into the admissions unit strapped to a stretcher and locked up, until they receive help. But if there is no crisis or compelling referral, there is no ticket into the system. On the other end, the permanent housing is almost nonexistent. Even though community housing has been a priority since the beginning of deinstitutionalization, very little of it has been developed. The single room occupancy (SRO) hotels in the cities used to hold many mentally ill and indigent, but they have been developed and sold as condos for the "yuppie" generation, exacerbating the homeless situation. The Commonwealth of Massachusetts has allocated $15 million for the purchase of permanent housing in four-person homes or units, though restrictions and community reactions are such that there may be no success without massive court battles. Currently, there is a call for rent subsidies for those who manage to maintain their health within a community mental health outpatient program. This will help to stop homelessness at the beginning of the cycle.

Transitional homes, as places of nurturing and learning, have been functioning in the state and private systems for years. Most patients begin to act more responsibly, more "normal," as soon as they are out of the institutional wards and into a more homelike environment. The fact that there is acute care help nearby, in the main hospital, is enough to lower their fears of complete collapse and regression, helping to end the cycle of discharge and readmission.

The economics of the transitional housing method sets up a program of care that is less expensive than the alternatives, with a day in the transitional home costing less than 25% of the cost of a day in an acute care ward. If the patients are allowed to stay in a transitional home rather than be discharged, there is a continuing cost for their stay. But, during the first two years of the program, it is projected that the normal recurring acute care hospital stays will be avoided. This more than makes up for the cost. The real monetary gain is that for the next few years and possibly for life, the cycle of readmissions is probably broken, saving the cost of hospitalization in the future. This simplification does not account for the federal reimbursements for acute care that currently do not exist for transitional housing. But these reimbursements might be applied, in the future, to successful, money saving programs in transitional housing.

There is great concern over the concept of transitional housing. Many believe that it is simply another way to incarcerate more street people. Others believe that it will not work, will become over crowded, run down, a "mental ghetto," and worse than the problems we have now. Poor management or the lack of housing in the community to eventually move into could justify many of these fears. Some believe that transitional housing should be placed in the community and staffed in a decentralized fashion, following the visiting nurses associations model. Still others hold that we should not build good transitional housing because "...if it is too nice the patients will never leave". And finally there is the argument that to force these people to keep moving (even after a year or three) is an unnecessary shock that will send them into an acute episode, resulting in re-admission to the acute care ward. Others maintain that when faced with a choice between freedom on the streets and transitional housing on the campus people will chose the street.

These arguments have been addressed with success by many programs in private and public settings (Gibson, 1986; Lipton, 1988). The problems are real, though most of my research suggested that the majority of patients could be adequately treated if the environment provided a full range of settings, institutional through domestic. One common denominator in all of the programs is that those who receive care at the hospital all live on the grounds. The living environment type is seen as very important to the success of the therapy and should therefore provide the widest range of possibilities for the staff to choose from. This is born out in discussions with staff who indicate that it can take up to 35 or 40 staff members to make treatment recommendations and the environmental placement decision for each individual patient. This depth of care needs a maximum variety of environments available to support a milieu that is just right for each individual person.

The idea that we must provide a substandard environment so that the patient will want to leave is absurd and cruel and cannot be taken seriously. We must engender in our society a minimum environmental standard that is suitable and dignified for all. The therapists must determine when the patient is admitted and when discharged. All transitional homes must meet a minimum standard of dignity as determined by middle-class standards of living. In fact, many of the patients come from middle-class homes.

Moreover, the idea that patients should never be moved once they have found a comfortable, nurturing environment is also unacceptable. Permanent housing on the campus runs counter to the fact that the hospital is a finite resource to treat a continual influx of patients. Also, patients need to enter, change and leave, to grow fully. And many of the "changes" are so painful that no one would be able to remain in the place where those changes took place and be able to successfully improve. The situation is not unlike the learning and maturing process that happens in colleges throughout the country. Through a gradual improvement of understanding and self control, mixed with new social skills, an awareness of a desire for independence is fostered, tempered with a continuity of nurturing.
Graduation is both traumatic and helpful.

Finally, I question that the quality and intensity of care that is needed by the "hard to treat" individuals can be accomplished in suburban homes and urban apartments. This argument has not been born out by substantive studies. Although there has been some success with such programs, the majority of the state patients cannot fully benefit by this form of program, since they are generally not capable of full self-medication or holding down even a part time job or schooling to structure their day. Also, much of the training and growth can accomplished only under the direction of a group of very experienced people. These professionals need a small, socially dynamic, service-rich environment in which to work and a steady supply of new and different patients to help. A nurturing environment is as necessary to the professional staff to avoid "staff-burnout", isolation and lack of adequate supervision as it is for the patients to keep up their sense of belonging, of hope and an awareness of their own growth. A quality environment, with a number of working options and enough staff to form friendships and working teams is essential to attract good professionals. It is the staff that supplies the care and the environment attracts the staff and supports them in their work. This helps to explain the reason why so many of the successful transitional homes are on hospital grounds, both in the public and private sectors. Home health care has been shown to have some major flaws, especially for those individuals that have advanced to a more intractable phase of mental illness. And professional staff are not readily attracted to traveling home health care treatment settings or isolated halfway houses.

To help convince the public in the surrounding communities of the possibility of future success with a half way house in their neighborhood, a full continuum of care on the hospital campus must be maintained. They should see that the mentally ill are not kept in huge prison-like buildings with bars on the windows until suddenly let out. People who are not dangerous to the community should not be kept like criminals. If halfway houses are to be created successfully, the public must see real evidence that there is a concerted effort on the part of the state to fully re-educate the patients on how to get along in society through the method of domestic style transitional houses.

Transitional housing must be viewed as a permanently available learning environment for those who cannot at first adjust to halfway houses in the community. There must be a place that is similar to the conditions faced in the community that is still within the service-rich environment of the hospital campus.

A PLACE OF HEALING

At the present time it is the common thinking among rehabilitation professionals that the total campus needs substantive changes to make it an adequate facility for the currently projected 500 patients and 500 staff. The major opinion supports an educational village social structure. In this community, people who require rehabilitation can live for a time in a manner which is dignified and conducive to personal friendships and inner growth.

This therapeutic village or "place of healing" can only succeed as a more intimate community that supports the troubled persons in a nurturing, personal manner and helps them learn to live with their different challenges. In this separated, special community, the focus will be on creating programs that respect the individual's personality and rate of learning and adjustment. The goal is to allow the residents to leave permanently, to return to a wider, less personalized community outside the institution, to eventually live in homes provided by the communities from which they came and to continue their self-nurturing process in a normal setting. This image is accepted as natural for college dwellers and is used here as a model. And as in the case of college, many of the residents will need to stay for an extended period of time.
I believe a leaf of grass is no less than the journeywork of the stars,
And the pismire is equally perfect, and a grain of sand, and the egg
of the wren,
And the tree-toad is a chef-d'œuvre for the highest,
And the running blackberry would adorn the parlors of heaven,
And the narrowest hinge in my hand puts to scorn all machinery,
And the cow crunching with depressed head surpasses any statue,
And a mouse is miracle enough to stagger sextillions of infidels,
And I could come every afternoon of my life to look at the farmer's
girl boiling her iron tea-kettle and baking shortcake.

Leaves of Grass, Whitman
To begin at the beginning:

It is Spring, moonless night in the small town, starless and bible-black, the cobblestreets silent and the hunched, courters'-and-rabbits' wood limping invisible down to the sloeblack, slow, black, crowblack, fishingboat-bobbing sea. The houses are blind as moles (though moles see fine to-night in the snouting, velvet dingles) or blind as Captain Cat there in the muffled middle by the pump and the town clock, the shops in mourning, the Welfare Hall in widows' weeds. And all the people of the lulled and dumbfound town are sleeping now.

Hush, the babies are sleeping, the farmers, the fishers, the tradesmen and pensioners, cobbler, schoolteacher, postman and publican, the undertaker and the fancy woman, drunkard, dressmaker, preacher, policeman, the webfoot cocklewomen and the tidy wives. Young girls lie bedded soft or glide in their dreams, with rings and trousseaux, bridesmaided by glowworms down the aisles of the organplaying wood. The boys are dreaming wicked or of the bucking ranches of the night and the jollyrodgered sea. And the anthracite statues of the horses sleep in the fields, and the cows in the byres, and the dogs in the wren-nosed yards; and the cats nap in the slant corners or lope sly, streaking and needling, on the one cloud of the roofs.

You can hear the dew falling, and the hushed town breathing.

Only your eyes are unclosed to see the black and folded town fast, and slow, asleep.

And you alone can hear the invisible starfall, the darkest-before-dawn minutely dewgrazed stir of the black, dab-filled sea where the Arethusa, the Curlew and the Skylark, Zanzibar, Rhiannon, the Rover, the Cormorant, and the Star of Wales tilt and ride.

Listen. It is night moving in the streets, the processional salt slow musical wind in Coronation Street and Cockle Row, it is the grass growing on Llareggub Hill, dewfall, starfall, the sleep of birds in Milk Wood.

Listen. It is night in the chill, squat chapel, hymning in bonnet and brooch and bombazine black, butterfly choker and bootlace bow, coughing like nanny-goats, sucking mintoes, fortywinking hallelujah; night in the four-ale, quiet as a domino; in Ocky Milkman's lofts like a mouse with gloves; in Dai Bread's bakery flying like black flour. It is to-night in Donkey Street, trotting silent, with seaweed on its hooves, along the cockled cobbles, past curtained fernpot, text and trinket, harmonium, holy dresser, watercolours done by hand, china dog and rosy tin teacaddy. It is night
neddying among the snuggeries of babies.

Look. It is night, dumbly, royally winding through
the Coronation cherry trees, going through the grave-
yard of Bethesda with winds gloved and folded, and
dew doffed; tumbling by the Sailors Arms.

Time passes. Listen. Time passes.
Come closer now.

Only you can hear the houses sleeping in the
streets in the slow deep salt and silent black, bandaged
night. Only you can see, in the blinded bedrooms, the
combs and petticoats over the chairs, the jugs and
basins, the glasses of teeth, Thou Shalt Not on the
wall, and the yellowing dickybird-watching pictures
of the dead. Only you can hear and see, behind the
eyes of the sleepers, the movements and countries and
mazes and colours and dismays and rainbows and
tunes and wishes and flight and fall and despairs and
big seas of their dreams.

From where you are, you can hear their dreams.

Under Milk Wood, Dylan Thomas
The form of perfection, control, self fixation, isolation.
Sauntering the pavement or riding the country byroads here

Then are faces,

Faces of friendship, precision, caution, sauvity, ideality,
The spiritual prescient face, the always welcome common benevolent face,
The face of the singing of music, the grand faces of natural lawyers and judges broad at the backtop,
The faces of hunters and fishers, bulged at the brows . . . . the shaved blanched faces of orthodox citizens,
The pure extravagant yearning questioning artist's face,
The welcome ugly face of some beautiful soul . . . . the handsome detested or despised face,
The sacred faces of infants . . . . the illuminated face of the mother of many children,
The face of an amour . . . . the face of veneration,
The face as of a dream . . . . the face of an immobile rock,
The face withdrawn of its good and bad . . . a castrated face,

A wild hawk . . . . his wings clipped by the clipper,

A stallion that yielded at last to the thongs and knife of the gelder.

Leaves of Grass, Whitman
There was a child went forth every day,
And the first object he looked upon and received with wonder or
pity or love or dread, that object he became,
And that object became part of him for the day or a certain part of
the day .... or for many years or stretching cycles of years.

The early lilacs became part of this child,
And grass, and white and red morningglories, and white and red
clover, and the song of the phebe-bird,
And the March-born lambs, and the sow’s pink-faint litter, and the
mare’s foal, and the cow’s calf, and the noisy brood of the
barnyard or by the mire of the pondside ... and the fish
suspending themselves so curiously below there ... and the
beautiful curious liquid ... and the water-plants with their
graceful flat heads ... all became part of him.

And the field-sprouts of April and May became part of him ....
wintergrain sprouts, and those of the light-yellow corn, and of
the esculent roots of the garden,
And the apple trees covered with blossoms, and the fruit afterward
.... and woodberrics ... and the commonest weeds by the road;

Leaves of Grass, Whitman
I lie abstracted and hear beautiful tales of things and the reasons of
things,
They are so beautiful I nudge myself to listen.

I cannot say to any person what I hear . . . . I cannot say it to myself
. . . . it is very wonderful.

It is no little matter, this round and delicious globe, moving so
exactly in its orbit forever and ever, without one jolt or the
untruth of a single second;
I do not think it was made in six days, nor in ten thousand years,
nor ten decillions of years,
Nor planned and built one thing after another, as an architect plans
and builds a house.

Leaves of Grass, Whitman
Where the mockingbird sounds his delicious gurgles, and cackles and screams and weeps,
Where the hay-rick stands in the barnyard, and the dry-stalks are scattered, and the brood cow waits in the hovel,
Where the bull advances to do his masculine work, and the stud to the mare, and the cock is treading the hen,
Where the heifers browse, and the geese nip their food with short jerks;
Where the sundown shadows lengthen over the limitless and lonesome prairie,
Where the herds of buffalo make a crawling spread of the square miles far and near;
Where the hummingbird shimmers... where the neck of the long-lived swan is curving and winding;
Where the laughing-gull scoots by the slappy shore and laughs her near-human laugh;
Where the band-necked partridges roost in a ring on the ground with their heads out;
Where burial coaches enter the arched gates of a cemetery;
Where winter wolves bark amid wastes of snow and icicled trees;
Where the yellow-crowned heron comes to the edge of the marsh at night and feeds upon small crabs;
Where the splash of swimmers and divers cools the warm noon;
Where the katydid works her chromatic reed on the walnut-tree over the well;
Through patches of citrons and cucumbers with silver-wired leaves,
Through the salt-lick or orange glade... or under conical firs;

Leaves of Grass, Whitman
To walk up my stoop is unaccountable . . . I pause to consider if it really be, 
That I eat and drink is spectacle enough for the great authors and schools, 
A morning-glory at my window satisfies me more than the metaphysics of books.

To behold the daybreak! 
The little light fades the immense and diaphanous shadows, 
The air tastes good to my palate.

Hefts of the moving world at innocent gambols, silently rising, freshly exuding, Scooting obliquely high and low.

_Leaves of Grass_, Whitman
William James:
Does it make a difference?
Can the query be answered by experience?
The willingness to act on belief sometimes creates the fact.
(James, 1948)

Adolph Meyer:
The human organism can never exist without its setting in the world. All we are and do is of the world and in the world. The great mistake of an overambitious science has been the desire to study man altogether as a mere sum of parts, if possible of atoms, or now of electrons, and as a machine, detached, by itself, because at least some points in the simpler sciences could be studied to the best advantage with this method of the so-called elementalist. It was a long time before willingness to see the large group of facts, in their broad relations as well as in their inner structure, finally gave us the concept and vision of integration which now fits man as a live unit and transformer of energy into the world of fact and makes him frankly a consciously integrated psychobiological individual and member of a social group.
(Lief, 1921)

A Healing Community

A PHILOSOPHY of NEW ENGLAND

This place of healing must be built within the traditions of New England. Concern for the local environment as well as political and social demands must be supported by the fundamental philosophical principles of the local people. This tradition is manifest in the philosophical movements of Transcendentalism, Personalistic Idealism, and Pragmatism that developed in the Boston-Cambridge-Concord area in the nineteenth and early twentieth centuries. In conjunction with these developments, and also in New England, new psychiatric rehabilitation theories were evolving, achieving success in nurturing the mentally ill. During the same period, the New England design traditions of the Arts and Crafts movement sought to develop environments in which these philosophical ideas and therapeutic methods could flourish as a total lifestyle.

Within the philosophical tradition of the transcendentalists, the Unitarian leader William Ellery Channing and the essayist Ralph Waldo Emerson were the most influential. Of the personalistic idealists, Josiah Royce of Harvard and Borden Parker Bowne of Boston University were preeminent. Of the pragmatists, William James of Harvard and John Dewey of Columbia, a misplaced New Englander, are of special interest. James held a medical degree and Dewey was a social psychologist as well as a philosopher. Their writings were important not only for their ethical content, but also for the understanding of human nature and the relation of the individual to society and the world (James, 1948, 1983).

The moral principle which should be the ground of all public policy in a democratic society is the intrinsic worth of the individual person (Dewey, 1926). Every decision and action by public agencies should respect the maxim of Immanuel Kant that every person is to be treated as an end in himself or herself and never as a means only. It is the faith of democracy that whatever in the long run contributes to the well-being of the individuals, ministering to their mental and physical health and economic needs and opportunities, and providing for their intellectual, moral and spiritual growth will bring added strength to the social institutions and will enhance the quality of the culture. These three must be the object of concern: the individual person, the society and the culture. But the quality of the culture and the strength of the society depend on the well-being of the individual person.

It is of more than passing interest that major developments in philosophic thought relating to the emphasis on individuals, the meaning and importance of "person," and the relationship of the individual person to social groups and the social order are historically identified with the greater Boston area. It seems especially fitting therefore, that a public project which is grounded on the principles which are identified with the creative era in American moral philosophy should have its setting in the home territory of Channing, Emerson, James, Bowne and Royce. For these and their colleagues among the transcendentalists, idealists, and pragmatists, value resided in the individual person.

It was especially William James who championed the particular individual, insisting on the common-sense view that the world is not an absolute entity but is a pluralistic composition of individuals who are ultimately real in themselves (James, 1948). Borden Parker Bowne, more than any other American philosopher, placed personality at the core of reality. Only in the assumption that it is basically grounded in personality, insisted Bowne, can the world and its processes be accounted for. And Josiah Royce, a transplant to Harvard from California, constructed a massive idealistic theory that describes a community of selves related to one another and to the Divine Self.
REHABILITATION THEORIES

While researching this project I discovered that the people contacted were working under the assumptions of this philosophical tradition. The training of the rehabilitation professional is grounded in this American tradition. The philosophy of Transcendentalism and Pragmatism is not only appropriate for the professionals who give care to the suffering, but it provides valuable personal, moral and spiritual insight for the design professional as well.

During the same era, as James and Dewey, methods of rehabilitation for the mentally ill were being developed at Worcester State Hospital in Massachusetts by Dr. Adolf Meyer and his wife Mary Brooks Meyer, who became the first psychiatric social worker. During the 1890’s, their work in the holistic health methods of “psychobiology” developed the scientific groundwork for the professions of rehabilitation (Serrett, 1985). Their work was based on the foundation of the moral therapy practiced in small agrarian-based institutions and influenced by the philosophical fundamentals of Transcendentalism and Pragmatism. It is of interest that the Meyers were friends of William James and John Dewey.

To the Meyers, mental illness was not simply a set of discrete diseases but a collection of maladaptive behavior that could be modified through habitual training and occupation. They were searching for a general field theory of psychiatry and human behavior. Facts about patients’ lives, described in the person’s own sense and personal meaning, were used to develop the “life story” method of understanding, as opposed to the analytical method of seeking something behind or beyond experience. This went against the then current and still powerful scientific drive to cure the mind through purely analytical, biological or chemical processes. They proposed effecting “cure” through the changing of habits. Based on the study of the mind and body together, within a real living situation, rehabilitation was seen as a restructuring of a person’s whole life toward achieving an understandable daily routine and a dignified existence.

This pluralistic, painstaking, slow and undramatic working method was slowly lost in a psychiatric world looking for the quick fix. The world of immediate solutions of the nineteen twenties and thirties was the time of the building of Metropolitan State Hospital. During the post-war years the mass conversions of professionals to this “religion” of technology helped to suppress many of the theories of the Meyers. Though a great deal has been developed in methods of subduing patients with drugs, electricity and surgery, the stabilizing of moods and activities through drugs, and the treatment of organic brain disorders, the more pragmatic, long term, arduous and intuitive solutions could still retain their old value. And much has recently been developed in the fields of rehabilitation therapies to give hope to most patients who, after having some form of surgical, chemical or electrical therapy, still need to develop a total, dignified, full life beyond the occasional doctor-patient activity.

At Boston University the movement for rehabilitation of mental patients within the larger community is gaining wider support. Boston University has been since the time of Bowne the chief center for the development of personalistic philosophy and is today a major center of concern for this philosophy in the professions of rehabilitation. From the Boston University Center for Psychiatric Rehabilitation there is a clear call for monetary housing supports and permanent mental health housing, serviced by personally designed rehabilitation programs that help the people remain in their homes in their own communities. Some hold that the state hospital system perpetuates itself through engendering a constant state of homelessness, that what is needed is permanent housing for the mentally ill in the wider community with easy access to caregivers. This idea, though very attractive and well supported by my investigations, does not fully address the value of the hospital campus as a healing community resource. It fails to face the problems of transportation and ignores the problems engendered by
ARTS AND CRAFTS IN NEW ENGLAND

During the time of James, Dewey and the Meyers, the Arts and Crafts movement in design throughout Europe and America was searching for a return to the communal and wholesome creative activities of daily living. Work, “the art that is life” to William Price, became the central theme, placing more emphasis on the quality of process rather than on the economy or quality of the product. This interest in the beauty and romance of the normal daily life of the individual was seen as a healthful antidote to the life of the factory worker (Kaplan, 1987).

The ideas and actions of Ruskin, Morris and Ashbee in England and Joseph Hoffman and Koloman Moser in Vienna stimulated a revolution in design and production in New England. In these movements, the process of production and the reverence for the daily life of the hand crafter became far more significant than the object. Through the purchase of the object, the middle and upperclass craft collectors were making a personal statement about what they considered important in their own lives. The process of a good life was held as a goal in itself.

The Boston Society of Arts and Crafts was organized in 1897 with Charles Eliot Norton, Harvard's first professor of the fine arts and friend of John Ruskin, as its first president. The influence of the European movements was strongly felt in Boston, including their concern for reforms in aesthetics and craftsmanship, a quest for the simpler life and dreams of social reform. This embracing of a more personalized, useful art form and way of life was a symptom of a coming of age of the industrial revolution; a way of reestablishing values that had been virtually lost during a time of intense quest for wealth and power, not unlike our own time.

The Boston Society of Arts and Crafts was central to promotion of teaching handicrafts to the poor and indigent as a way of overcoming the tragic effects of the industrial revolution. Daily, social gatherings for the production of goods that could very well be made by machine supported the human needs of contact between people and the delight in physical achievement. Support for group work was revered. Some of the processes of handicrafts like quiltmaking demand the ultimate degree of teamwork and selfless cooperation. The traditional process of quiltmaking requires that all participants sit around a room, facing each other, and then spend weeks with their hands all on the same object, reproducing the design of each one of the team in order. Each quilt is designed by one of the team in turn, and in turn they all work on each other’s product, spending whole seasons together. Many crafts such as glass blowing and stained glass, or furniture making and architectural construction can take real advantage of this democratic method that promotes the creative delight of group design and work.

While the communities based on the simpler life flourished for a time, they experienced the harmony of the Greek platonic triad in the relationship of truth, beauty and goodness. Ashbee wrote about the importance of the transcendentalists, Thoreau, Emerson, Walt Whitman, of Frank Lloyd Wright, and Charles Sumner Greene and their contributions to the understanding of the fusion of life, work, the machine and hand labor. Bernard Maybeck, with his family and friends, lived this life to the fullest in Berkeley, California.

Supported in the beginning mostly by a large contingent of uppermiddle class women and some rehabilitated artisans, the movement continues today in the form of the rehabilitation professions and craft artisans. The Boston Society, stimulated by Ashbee's move to Chipping Campden in the Cotswold Hills of England, moved its handicraft shop into the rural town of Wellesley Hills, to take advantage of the simpler life of the countryside. Norton focused much of his energy on a model village for the poor. And the call for art for life’s sake could also be clearly felt within the rehabilitation community that had been growing up as a result of concern for the welfare of the blind, retarded and insane.
A fundamental principle of the Arts and Crafts movement was the early Greek notion that you can't have a full life that is not an aesthetic, beautiful, romantic one. They suggest that within the life of the human being there are three facets of making a full person that need to be cultivated:

1. cognitive (truth), understanding, reason, gaining and disseminating knowledge
2. affective (beauty) feeling, art, appreciating, sensitivity, passion
3. volitional (conative, goodness, conation) decision, action, will, getting things done

The full development of the individual person calls for all of these in harmonious relationship. Within each facet is a portion of the other, affording the potential for a truly spiritual, almost musical harmony when the person is active in a balanced manner. Another way of looking at personality indicates four ways that an educational process can be developed. Through the development of an understanding of:

1. science (intellectual): knowledge
2. morals: the good and the right
3. art: the beautiful, ugly, sublime
4. religion (spiritual): sense of purpose, meaning

So, if this place of healing is to be a place for learning how to have a harmonious life, these facets of that life must be fully addressed, in a balanced, relaxed atmosphere. Elements of all must be found within the environment to quietly support the activity and relationships that exist within it.

Architecture, a process of amalgamation that supports more than simple subsistence living, is an intuitive art form. It is a process that is first the support of personality and second the use of the culture and society, to criticize them and perpetuate them in an acceptable physical form. It is an instructor of the culture and its social institutions. The architectural process is the weaving together of art, engineering, public policy and public and private morality. In this way, it speaks from more areas than any other discipline. It combines theory and practice, principles and specific action, art and engineering in the development of public policy to advance the general good. Because of this special position in society, those who practice the planning and deployment of architectural works have a special responsibility to the values of the culture in which they work.

This is a construction about healing. Healing is a state of mind. The environment can help nurture this state of mind if it supplies all of the necessary physical ingredients. This hospital needs to become a place of healing: a place that embodies the elements of healing, that satisfies the need of those in crisis and rehabilitation. It is those in pain that do the healing, but it is the place, the people, the spiritual components of human energy and belief that help to empower the individual person.

The place of healing must have a strong and complex image demanding many different nurturing places and activities. The image of a small, bustling village, set in the forest, near fertile fields and grassy wetlands, first comes to mind; a place of cooperative activity, seclusion, fermentation and change, a place of learning and knowing, joy and pain, touch and separation, planting and harvesting.

While healing from a crisis or chronic condition a person emerges through many stages of sensitivity, pain and awareness. The environment must be designed to support this process. The most intense healing must take place in an intense environment, at the "place of healing". But the longer term, personal reassociation with the outer world must take place within the wider context of the community from which the patients have come.

HISTORY OF A PLACE OF HEALING

Epidaurus in Greece was the center of the worship of the god of healing, Asclepios, the son of Apollo and a human female, from the end of the 6th century BC to the End of the 5th Century AD. During this time, toward the end of the age of Aries through the beginning of the Age of Pisces and long after the reign of the Minoan empire, the change from the age of egalitarian legends, with a full compliment of gods and goddesses, to the age of the Olympians, with much gods and macha goddesses, was complete. Asclepios (his legend is older than that of Apollo) was a benefactor, an understanding friend of the people. He was a human-like god, much like Dionysos (the god of wine and theatre), and, unlike the new Olympian gods, more accessible to the common person. Asclepios became the god of medicine and "nootherapia", mind-healing, purifying reform for the entire human being, using exclusively mental means and the spiritual power of the divine.

Nootherapia: "think only pure and harmonious thoughts and the body will maintain itself in a purified state." Plato, in his dialogue Symposium, speaking through the physician-philosopher Eryxiamachos, said, "Medicine must, indeed, be able to make the other elements of healing, purifying reform for the entire human being, using exclusively mental means and the spiritual power of the divine.

Asclepios, the savior, had the power to free people from every evil, illness or suffering. He used harmony and rhythm in music, dance and poetry for their immediate healing of the mind and body and developing of the human spirit of courage, cooperation and love. Tragedy and comedy, epic and lyric poetry were valued because they increased the spirituality and purification of the soul,
saving it from the destructive passions. Gymnastics and athletic
games were also utilized at Epidaurus and other healing sites,
because they disciplined the movements and the inner rhythm of the
body, and finally the artistic creation, the contemplation of the
beautiful, through masterpieces of architecture, sculpture and
painting to bring the spirit fully in tune with the divine.

Healing was clearly accomplished through non-medical
means through much of the city’s history. Those needing help took
a long journey to Epidaurus to bathe in its beauty, experience the
great theatrical events and be visited at night by the god. This
journey helped them to develop a more committed belief in their
eventual cure. Those who stopped believing turned back and those
that had not begun the journey soon enough perished on the trail.
They stopped in wayside temples and outdoor altars along the way
to give sacrifices and contemplate on the next day’s journey. Their
last sacrifices, before entering the compound, were made in view of
the city at the mountain shrine of Apollo-Maleatas (two gods
merged) on the hill overlooking the city, and the healing was
attributed to the trio: Apollo, Maleatas, and Asclepios. When the
pilgrims came into the compound, they bathed, rested and dressed
for the theater, where they would see a comedy and a tragedy staged
in the finest theatre anywhere in the world. The shows were played
by many of the most accomplished artists of the age, since they too
found great healing within Epidaurus. The afflicted would then go
to sleep near the temple in the long building called a “stoa,” with one
wall open to the weather, knowing that in the night, they would
dream of the visit of the god of healing, with his two intertwined
snakes symbolizing rebirth. Upon awakening they would be healed
and give thanks to the god Asclepios at his altar. They could linger
at the hotel (the building that is shaped like the mandala or Greek
cross) to continue to strengthen their convictions and health while
attending the theater and participating in the physical games and
ritual baths.

These mind-healing methods coupled with journeys and
the healthful and spiritual communion with nature have been major
forces in preventive medicine and mental health throughout history.
In further development of these healing ideals the Arts and Crafts
Movement in architecture and design added therapeutic work and
creation of the beautiful as a part of this utopian theory. The natural
environment at Metropolitan State allows a great deal of
contemplation of beauty. If the wetlands were enhanced more
completely with a lake and a more natural entrance, contrasted with
the agricultural lands and gardens, the landscape itself could become
a natural form of therapy.
MEANS and ENDS

A critical component of any program is the relationship of means to ends. It is important to ensure that not only are the means not to dominate the ends but that the ends are defined in a realistic fashion and are capable of achievement. Means and ends cannot be considered independently, but the ends must be determined by humane considerations and not simply by technology, capital, or existing conditions. It is important to continually focus on the goal in both humane and economic terms in determining the means for achieving it, and to test the entire enterprise by comprehensive and iterative feasibility studies. But at the same time, the means that are currently available should be fully utilized when appropriate since believing that future means will soon become available has caused the destruction of many programs and systems. The general failure of deinstitutionalization, for instance, can be seen as partially caused by too much belief in the power of drugs to heal, dependence on self medication, and too little focus on available human resources that support functioning, long term, low profile programs that rebuild peoples lives.

Much oral and written discussion has taken place on the complex problem of providing homes and institutions for the mentally ill. But with all the writing and talk, there apparently has not been an unemotional, long term economic assessment of different alternatives or models. From my limited perspective, it is clear that such a study must be done. Demand for humane, flexible, and easily accessible facilities which support personalized therapy programs is very strong. And one thing is also clear: clustered, small cottage programs are much less expensive to build and operate than large institutional ones, particularly on the campus of large institutions. As stated before, a person could live on a campus within a cottage program for less cost to the taxpayer as the person who lives on the street 60% of the time and in the acute care ward of the state hospital 40% of the time (Lipton, 1988). This is a real comparison, about the real lives of real people. It is also a real example of the type of program decisions that must be made. And to extend this study further to assess the total cost of housing supports in perpetuity to the mentally ill in standard, easily maintainable homes in decent communities instead of motels and shelters, one would probably find the same economic value structure.

In the same way, the cost of the development of capital facilities (and their maintenance) to provide space for these programs must be examined. There is no question that new, high quality construction of smaller, more efficient, easily maintainable buildings that fit the new programs are both more attractive to highly sought after staff. They are also less expensive in the long run than the renovation of most of the older hospital buildings. Quickly spending a few million dollars to patch up the old buildings is a formula for economic failure. This formula will also negatively affect the quality of care in both the short and long run. In the light of the need to keep ends and means more closely aligned, the perpetual attraction of investment into the mental health care system is a major goal, and to do "patch up" with no long term supports or relief on the way will simply perpetuate the lack of interest in both the public and private sectors.

The idea of developing a healing village at Metropolitan State Hospital should be seen in this light. There is only a portion of the money available to do the right thing, whatever the planned goal. Actually, there is just enough available to fail if it is not seen as part of a careful test, an experiment with constant re-evaluation. The attraction of more funding to this problem is a very sticky political issue, but the success of any work at the hospitals could
and should mean more support in the future. To allow a chance for success we should focus on the development of more congregate housing, cottage programs, sheltered workshops, and public/private cooperative programs (DCPO 87). These cooperative programs, such as a staff teaching center, an arts therapy center, workshops for light manufacturing and indoor and outdoor agriculture, nature study, and physical therapy should be encouraged, instead of focusing all of the capital dollars on the rebuilding of the old hospital buildings. There is no consensus that suggests that the old hospital buildings can help much in their present form to solve the problems of the 20th century which will be over 7 years after their rebuilding is complete. There is a consensus for building homes in a healing community for those who might otherwise never be able to live outside an institution, other than on the street. These homes need to be built, but programs to help guide people to success within them and later in new homes in the community are needed on the campus. It will take time and money and homes on campus and more off campus for the village and related programs to flourish.

The voting public can find good steady jobs in a humane field through the development of new buildings and programs in the support of their friends and neighbors.

The central location of the hospital allows people from throughout the district to come and visit their family members. It is easily reached by Rtes. 128 and 2, but direct bus service is non-existent. For the village to function as a learning and working village, a public transit connection directly to each town must be set up. It should include Waltham, Lexington, Belmont (including the commuter rail), Arlington, and Watertown. There should also be a direct bus link to the subway at Alewife.

Development of this village simply reinforces the closely linked village nature of the existing suburbs. It is one of several institutions in the area, including McLean Hospital, Bentley College and Fernald State School, a natural part of the pattern of open conservation land, institutional land and suburban homes that blankets the area.

The campus of 375 acres is situated at the conjunction of three town lines. Much of the land is in fallow, either as woodlands or wetlands, but has very good potential for active and passive recreation. A portion of the 750,000 square feet existing indoor space is in each of the three communities, Waltham, Lexington and Belmont. The bulk of the structures were built in the late nineteen twenties, with several additional buildings from the fifties and sixties. The existing plan is a very symmetrical, static "town" structure that used to hold approximately ~1000 patients and 400 employees. It is now the common thinking of mental health rehabilitation professionals that the total campus needs substantive changes to make it an adequate facility for the currently projected 500 patient and 500 staff.

The buildings are of bearing brick with slate roofs or flat roofs. All patient buildings are marked by windows that have small glass panes and metal frames that act as security bars. The outdoor balconies have strong metal fence-like coverings from floor to ceiling for security. The overall impression on the first visit to the
Department of Mental Health
Hospital Campus and
Community Mental Health Center
Planning Sites

- Regional Service Center
- State Hospital
- Community Mental Health Center
Metropolitan State Hospital

Half way from Boston to Concord
3 miles to Lexington Center
2 miles to Waltham and Belmont Centers
Metropolitan State Hospital

375 acres of land
750,000 square feet of building
Population:
425 patients
400 staff (250 daytime)
To Belmont

To Rte. 2

To Concord

To Rte. 128

Concord Ave.

Hospital

Belmont

Wetlands

Metropolitan State Hospital

Existing Land Use

Scale: 0 200 400 600 800 1000 ft.

Gaebler Childrens Center

Fernald School

Suburban Development

To Waverly

To Concord

To Rte. 2

Suburban Development

Metropolitan State Hospital

Existing Land Use

Scale: 0 200 400 600 1000 ft.
site is a dismal sense of being at an aging prison. Most of the buildings are in a state of decay that will need a complete renovation. Even the newest one is at the end of its life cycle. The major value to the buildings is that they have among them some fine examples of spaces that are still useful on the campus. The gymnasium is a very good size, with a stage and projection room for a theatre. The laundry, which has been partially turned into a social space and library has a delightful (if dilapidated) interior space, with good light, high ceilings and a great view of the forest. The cafeteria, though unfortunately placed to fully block the entrance to the Continuous Care Group (CTG) is a large enough space to be used currently as the rehabilitation program space. Many of the activities and all of the sheltered workshops are conducted here in a temporary space. The CTG has an enormous courtyard that is large enough to enable one to feel alone when out in the middle. This building is also very sensitively designed to maximize natural light and fresh air. This could be taken even more effective if the windows and balconies were redesigned. I took a tour there on the shortest day of the year, at noon, and showed a group of planners and therapists how the shadow of the buildings do not block any light from the building behind. The buildings designed as dormitories for the staff are perfect for professional offices. There are numerous other possibilities for reusing many of the structures.

One opportunity that should not be overlooked at this juncture is that the patients are not occupying much of the CTG at present. This is a perfect time to redesign one half of the present structure for an acute care hospital. With the patients from the Furcolo building resettled, it would be a perfect time to tear it down, so that no more money will be wasted on it. The same could then happen to the Medical building when the transitional housing has been completed. In this way, the problem of having too many aging buildings can be turned to an advantage.

MASTERPLANNING

The purpose of masterplanning is to meet the values of the governing body and to find an economical approach to providing water, power, transportation and sewer. This is best accomplished through the arrival at an understandable concept that incorporates common knowledge and implicit understanding. This thematic concept must then be expressed through a compelling physical and economic diagram. Once this is achieved by the central administration and their planners and architects, a set of "parts" that adhere to the theme can be designed. These parts can then then be used when and where the local administration can afford them and finds them useful (Russell, 1949). This "kit of parts" approach to the solution makes it possible for sensitive, individual programs to develop independent of the total planning process. Opportunities for spontaneity must be designed into the systems (Habraken, 1985).
Potter Pond
A planned community replacing the golf course to the North of Metropolitan State

Hospital agricultural land with the hospital (CTG) on the hill in the background
Back toward the entrance

Up stream to Waltham
Continuous Treatment Group
(CTG) 1928
9 Buildings
320,000 square feet
Original capacity 840 people
Buildings connected by continuous corridors on four floors
In general, flexibility comes through movement of people, not movement of walls. With the careful use of simple, locally effected building methods, certain walls, doors, etc., can be optionally installed. But in most cases the space should have a lose fit to a general function that makes it possible for most people and activities to be comfortable. It is bad to make things fit tightly or to provide complete flexibility. In the tight fit, those who move away or change their methods or moods find that the old clothing they thought was architecture is no longer at all satisfactory and was only fashion; and in the open plan of ultimate flexibility, the inhabitants are constantly eating up all of their capital and energy refitting their space to their narrowly perceived but changing needs. This marginal utility is of great concern to good architects. The forms that pay homage to the basic and continual needs of long term habitation will outstrip modern methods of fit by allowing some personalized changes within a understandable continuity of light, access, and containment.
PUBLIC-PRIVATE COOPERATION

One method that has not been fully explored is the idea of sheltered workshops on the campus. There are some successful models throughout the country and at Medfield State Hospital. A new set of workshops is being implemented now at Metropolitan State. The opportunity for the hospital to supply space and support for small companies that supply job programs as an activity therapy should be fully explored. Small businesses that do a great deal of easy, repetitive tasks could be encouraged to move into some of the buildings that are of less value as residences.

A successful method of long-term rehabilitation would be a commitment to a very large scale greenhouse and farming program. This could be developed through a private/public cooperative contract. The farmland is currently being farmed. The area where the Medical and Furcolo buildings now sit would be an excellent site for a greenhouse operation of this type. It is a flat hill, with utilities, good sun exposure. Many rehabilitation professionals have mentioned that greenhouse work was the only type of work that interested and helped many of the schizophrenic patients.
Continuous Treatment Group (CTG)
Interior courtyard
250 feet by 450 feet
Plan of all three floors of the eight residents wings
Furcolo Building
1957
81,000 sf
Original capacity 100
PLANNING ISSUES

The Gang of Five:

Five issues range across all design boundaries, controlling environmental decisions for the total continuum of care. They affect each decision concerning the total range of facilities. If design decisions are not considered within this context, many of the economies of scale and bare facts of an evolving professional care culture will not be adequately addressed.
1 Treatment continuum
   population characteristics
   group size
   treatment methodology
   group "treatment culture"
   dependence on support services
   who moves from one treatment site to
   another and when: staff or patient

2 Staff
   level (staff : person) ratio
   type
   cost
   group size
   treatment methodology
   attractiveness of work environment to
   quality staff how many professionals
   of a given type are available nationally
   and locally

3 Space allotment and ratios
   minimum types and sizes of spaces
   space / patient, net and gross
   common : private
   gross square feet of total facility / patient
   ratio proximity, adjacency

4 Location in "community" and to services
   how rich is the service environment
   transportation time and reliability
   proximity, distances
   adjacency

5 Contracting
   treatment
   food
   laundry
   repairs
   transportation
   how much of what quality of contracting
   service is available to the Department
   of Mental Health reliability and
   continuity of service
Village Structure and Nantucket

The existing Metropolitan State Hospital is similar to that of the typical New England town (69). All of the elements are there, commons, church, "town hall", and with them are placed a gymnasium, a cafeteria and a laundry. But the arrangement is not typical. The cafeteria and medical building, the two major structures, square off across from each other, with the church in between. The town hall is down the road by the entrance. What is most odd about this rearrangement is that the commons is inside a large building complex, the CTG (Continuous Care Group) 69, totally cut off from the outside by a system of four story high hallways (to allow easy movement by the staff from one ward to another). This creates a security compound like an ancient garrison or prison.

I searched for a New England town as a model that would give me insight into a village form that was more appropriate. I wanted to find a place that felt cozy and friendly to be in. A place where personal interaction was encouraged. Nantucket was the best example of a town that had the small scale, warmth and interesting spaces that could work well for the new village.

Nantucket is on the edge of the land, with piers out into the bay for commerce (127). As a New England town it lacks the commons as an actual built place, though the harbor acts as the communal place, the bay is the open commons. There is a commercial street that is the other communal place, on land (128). (It is curious that the commercial street and the piers are approximately the same length.) Within the town itself, the sizes of buildings, walks, roads and yards have attracted people from all over the world to come and experience their beauty. It is the town in the United States that most closely resembles old European villages.

Small enough to walk to everything, the town grew as an organic, unplanned whole, with personal responses to the environment seen in the placement of the houses. The structures are of similar, harmonious design and materials (by convention for over two hundred years, then by legal decree) but the way in which the spartan materials and methods are used creates an environment of enormous diversity and character (123, 125). It is the embodiment of the personalistic philosophy in support of the communal whole that originated within the Quaker families that first settled the island.

In Old Nantucket there is a very large range of built environments created out of a few very simple systems. The homes: the fish shack (126), the cape cod house in either full (135), three-quarter (134), or half cape versions (133), the captain's homes, in Greek Revival wood or brick, the occasional Victorian. The access (125, 136): streets with the large, directional ones following contours; the narrow streets, reaching up hills between contours when convenient; the walks: part street and part yard; the landscape: gardens that are outdoor rooms with their tree ceilings.
Each system has its own set range of sizes, with a multiple of small variations, but within the prescribed range that comes with the territorial experience of living in a village.

Within the house system, not only is there a small range of sizes available but the doors and windows are all very similar and the detailing is within a narrow range of materials and expressions. Though the walls are fairly impermeable to light and air, there is a conscious effort to increase the light around the front door. The room sizes are fairly generic with some larger, all-purpose rooms on the ground floor and the smaller, more private rooms on the second floor. The kitchens, having been moved out of one of the main rooms in front, now extend back into the garden, defining outdoor space, sometimes with pantries and mudrooms as part of their smaller bulk, in gable or shed configuration.

The street is a very intense spatial experience. This is accomplished by the buildings being only two and a half or three stories tall and the width of the street being near to the height of the buildings (125, 130). This not only brings the top of the buildings within easy human association (since the 30 ft distance is easy for people to feel as part of their territory) but also brings the two sides of the street together in association with each other through defining a dimensionally self-stable zone of association and exchange. This allows the street to appear as a linear room between (outside) the walls of the buildings. This linear room is further defined into understandable blocks. These blocks range in size from 100 feet to 400 feet in length, averaging 200 feet, with the large commercial streets and piers in 500 ft sections and smaller blocks within. The streets with a more "room-like" quality are 300 ft or less, with a stop or turn at each end, and 30 ft to 50 ft between buildings (the height of the facing buildings). Within this access area between the buildings, all of the public activities take place. The walks are part of the street, stairs are part of the walks, porches are raised platforms, a semi-private vantage point. Gardens are semi-public outdoor rooms, breaks in the uniformity of the street. Each block is built up out of buildings -- 21', 24', 28', 32', 38', 42'-- and side gardens. The houses rarely line up more than three at a time without a garden between them, and almost never are the same distance from the street, allowing the building to be read as separate yet connected. The street-level gardens appear as alternating, reciprocal space regularly between each two or three homes. Because of these regular spaces in the block, the blocks have the characteristic of being built up out of 30' and 90' pieces of building.
In the use of the landscape the houses describe quite clearly a territorial nature of building. Not only are the houses placed on streets generally not wider than the buildings are high, the fronts or sides of the buildings are also very close to the street, with the space between the fence at the walk and the front wall usually "people sized," about four to eight feet. This space (or territory of exchange) between the wall and the street is planted intensely as a third element, privatising the home and intensifying the street experience, allowing the narrow roadway-walkway to feel more spacious. At some homes the territory of exchange is the sidewalk itself, with the porches reaching out into it half way in a reciprocal fashion and the first floor privatized by rising 3' to 4' from the walk.

The most compelling fact of the arrangements within the landscape is the size of yards in relation to the homes. They appear to have been built as outdoor rooms with similar measurements to those of the room just inside the walls. This is probably a point of building stasis in the quest for the density of a village (an upper and lower limit to the habitable density). This is a literal doubling of the usable space with allowing alternate occupation of either the inside or outside. The most personally associative density seems to be that of about one square foot of floor space inside the structure for every square foot that was on the original bare ground. The indoor space is built by "stacking up" the outdoor space, allowing the outdoor rooms and the streets to appear. With the conscious use of all the outdoor space for some normal, daily living activity (leaving none for ceremonial space) the town "feels" totally alive to be in, even when not completely occupied. The sense of cooperation and sharing is exhibited in the close proximity of each indoor and outdoor room and the delicate detailing between.

Most of what is desirable in Nantucket has been built by optional local deployment of rigidly designed traditional systems. These systems have been developed as independent solutions to territorial and economic needs of people who live with an efficiency of energy and in close personal association. But it is through the tension between this rigidity of traditional methods and the freedom of optional personal choice in their placement and use that the most personal nature can be gained in livable design within a tight efficiency.

The narrow, twisting nature of the streets and cobblestone paving makes the traffic slow to a crawl, making the town seem more the realm of the pedestrian. Added to this is the small size of the town, making it easy to walk or ride a bike or horse anywhere. This small size makes it more understandable as a place that is made for people, not for cars; for "us" not "them."

In an attempt to keep the same personal and attractive feeling in the form of the new healing village at Metropolitan State, the following methods of "design" will be used as they are in Nantucket: the range of sizes of the built and open spaces; the relationships of the built and open spaces; the nature of the street; the access system; the use of a consistent building system with optional uses of the parts; the density; the mix of commercial and residential.
Though the natives work with a fairly rigid, regular method of construction, with a very detailed set of rules and regulations controlling it, they manage to reach up and out into the light in a bold and vigorous manner. The bold porches and the exterior corridor in the air that links the fish shacks are of curious interest. They create distance between buildings yet closeness between those who travel to them and have a special personal statement to make about space.
NAME of the VILLAGE: Brooks

After Mary Brooks Meyer, the first psychiatric social worker, researcher and practitioner at Worcester State Hospital and wife of Adolf Meyer.

Major streets to be named Meyer, James, Dewey, Pierce, Bowne, Emerson, Thoreau, Whitman, Tao.

THE STORY

The story of the place of healing is a journey of discovery. The taking of the journey is not by choice but the time and place of risk is: risk is discovery, anticipation and fear, departure and arrival, hope, touch, the unknown, the underneath, below and behind. This journey flows from within and is within. The place unfolds insitu. We are the place. The place of healing is the journey where the shadows, sun and the breezes, open, closed, the moon, distance and aloneness, pain, release, rhythm and belief are found. The life is in the light, the warmth is in the touch, the person is in the journey.

(Gibson, 1986, Pg. 24)
THE LAND

The landscape is a unique set of hills surrounding a wetlands and farmland. The boundaries of the developed areas will be fixed as they are now, with no growth, except for two areas for more homes. One will be on the east facing hillside in Lexington and Belmont near the existing buildings, in the forest. This is the site for the new transitional housing. The other will be facing southeast on the hill near the current dormitories in Waltham, for permanent elderly housing. The farmland will continue to be tilled, with the use of horses for a more relaxed and therapeutic milieu. The balance of the land will become conservation land as part of the Beaverbrook Reservation.

The open land is a major addition to the nearby towns and the new healing village and must be a protected open recreation space. Currently, the boundary of the state hospital is seen as a barrier not only to keep the patients in but to keep the neighborhood out. There is an uneasy peace in the community over the existence of both the reservation land and the hospital. (There is something in a suburb that distrusts any disturbance in its continuous fabric, and something in an institution that is jealous of its boundaries.) This barrier must be reduced through building an active, usable boundary of nature trails and jogging paths throughout the wetlands, farmland and forests. There is no reason why the suburbs and the hospital should be afraid to share the wealth of conservation land. Neither hospital nor suburb is a prison.

To complete the image of the healing village, a close, symbiotic relationship with the forest, farmland and wetlands must be strengthened. Whatever is built in these areas must be appropriately chosen and sited to enhance the simple beauty of the land. It is the place and not the architecture that is to dominate.

THE VILLAGE PROGRAM

The value of a program lies in setting up the basic ranges of elements necessary to ensure that the habitation fully satisfies human needs. The idea of a range is to give the individual person an ability to choose what and where and why. Programs usually list definite amounts and hierarchies, giving the general and lieutenant different office sizes, locations and associations. This program will not. It will focus on providing for a much longer term solution than perpetuation of some hierarchy of administration with deans and drones, haves and have-nots.

One thing that the program can do very well is tell the ranges of sizes and associations possible and set some territorial limits on the encroachment of the buildings on the landscape. The qualities of light and air can be defined as well as the personal needs of everyone to control the natural light, air, temperature as well as all the engineered varieties.

I propose a program of building at Metropolitan State Hospital based on methods learned from studies with Maurice Smith, Michael Singer and John Habraken, using readings of William James, John Dewey, Lucien Kroll, Herman Hermzberger, Aldo Van Eyck, and A. E. Bye, among many others. The fundamental design idea for this place of healing is that of a "generic habitation", with all of the functions of any village or other live-in institution. It must provide all the living, working, resting, recreation, and institutional spaces, inside and outside, of the normal large-scale institution. There is no substantial difference between the hospital needs and those of a college, monastery, or small town. The specific activities may vary somewhat, but the generic spaces and their relationship to each other need not.

With this in mind certain design-related assumptions should be stated:

1. The requirements of each individual person comprise the fundamental engine that drives the successful design. The highest number of justifiable personal interests is the test.
2. Function is transitory, adaptive, directly affected by form.
3. Large-scale inhabitations are made up of small groups of spaces reflecting standard human activities and needs, where substantive change only appears to happen. This appearance is the changing trappings of fashion.
4. Adaptability is far less expensive when it involves a state of mind or easy personal move instead of a high-tech building system.
5. Sustainability is accomplished through the flexible prioritization of needs over time, the development of "slack" (or a generously loose fit) in the mechanical and maintenance systems, and the development of an image that is spiritually and economically attractive and energizing to people from all walks of life.
6. Pruning is as essential to a healthy built development as it is to a fruit tree.

It would take another thesis to fully address these assumptions. But whether they are respected or not determines whether planned constructions succeed or fail. The inability of many new structures to be quickly adapted to changes in function is more a symptom of their lack of normally sized and regularly distributed spaces than their lack of specially designed spaces or
POPULATION and USE PATTERN

The following are summaries of the basic programmatic information regarding population and use:

<table>
<thead>
<tr>
<th>Total size of land=</th>
<th>375 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>conservation and farmland=</td>
<td>200 acres</td>
</tr>
<tr>
<td>Net developable land=</td>
<td>175 acres</td>
</tr>
</tbody>
</table>

Population if this were a suburb:

<table>
<thead>
<tr>
<th>Net developable land=</th>
<th>175 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>15,000 sf/unit as per zoning</td>
<td></td>
</tr>
<tr>
<td>508 units</td>
<td></td>
</tr>
<tr>
<td>5 people/unit average</td>
<td></td>
</tr>
<tr>
<td>= 2,540 people</td>
<td></td>
</tr>
</tbody>
</table>

2 Cars per unit:

| = 1,014 cars |

Building Demolition:

The following timetable is suggested to balance the building life cycles:

<table>
<thead>
<tr>
<th>Medical-Surgical Building</th>
<th>age at demolition</th>
<th>60 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTG Cafeteria</td>
<td>age at demolition</td>
<td>72 years</td>
</tr>
<tr>
<td>CTG Buildings D and E</td>
<td>age at demolition</td>
<td>77 years</td>
</tr>
<tr>
<td>Furcolo Building</td>
<td>age at demolition</td>
<td>53 years</td>
</tr>
</tbody>
</table>

These six original assumptions when put in motion form the inertia of the village program.

up-to-the-minute architectural/engineering/marketing gizmos. The old buildings that are constantly being remodeled and drafted for new uses are adaptable even though many of the functions of their rooms are no longer needed. Adaptability is moving of people and furniture. The range of sizes, privacy and distribution within the structure can usually take care of most of our requirements when we understand the fallacies in our “immediate return,” purely quantitative concepts of efficiency. (Many businesses have a temporary love affair with vast quantities of the low-grade, industrial-revolution-type weaving room apparatus now referred to as “office landscape.” It places the worker in a space with no natural light or ventilation, and forces them to listen to the tapping of terminals and the buzz of telephones. It is a fad that may go the way of the “flexible classroom school” that gives nothing but monetary efficiency -- until the sensitive teachers all quit.)

These six original assumptions when put in motion form the inertia of the village program.
Existing buildings = 750,000 gsf
Standard:
GSF/Patient = 850 gsf
= 882 patients
(This includes all staff and support spaces)

With this in mind there is no need to build new space based on population alone. This hospital was originally built to accommodate 1000 patients and house 250 staff full time.

Population as a hospital:

<table>
<thead>
<tr>
<th>Patients:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Care</td>
<td>120</td>
</tr>
<tr>
<td>Extended Care</td>
<td>120</td>
</tr>
<tr>
<td>Transitional Housing</td>
<td>380</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>120</td>
</tr>
<tr>
<td>Children</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>860</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff to patient ratio</td>
<td></td>
</tr>
<tr>
<td>Total 1:1</td>
<td>860</td>
</tr>
<tr>
<td>Highest shift</td>
<td>450</td>
</tr>
</tbody>
</table>

Total Day Population 1,310

Cars at highest shift change (3 pm) includes visitors 700 cars

The patient units will be the following:

<table>
<thead>
<tr>
<th>Acute Care</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 wings of the CTG:</td>
<td></td>
</tr>
<tr>
<td>ground floor</td>
<td></td>
</tr>
<tr>
<td>support and activities spaces</td>
<td></td>
</tr>
<tr>
<td>1st floor each</td>
<td>20</td>
</tr>
<tr>
<td>2nd floor each</td>
<td>20</td>
</tr>
<tr>
<td>3rd floor each</td>
<td>offices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extended Care</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 wings of the CTG:</td>
<td></td>
</tr>
<tr>
<td>ground floor</td>
<td></td>
</tr>
<tr>
<td>support and activities spaces</td>
<td></td>
</tr>
<tr>
<td>1st floor each</td>
<td>20</td>
</tr>
<tr>
<td>2nd floor each</td>
<td>20</td>
</tr>
<tr>
<td>3rd floor each</td>
<td>offices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transitional Housing</th>
<th>380</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 buildings of 32 each</td>
<td></td>
</tr>
<tr>
<td>21 houses of 8 each</td>
<td></td>
</tr>
<tr>
<td>21 houses of 4 each</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elderly</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 homes</td>
<td>8</td>
</tr>
<tr>
<td>people each</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Children</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Gaebler</td>
<td></td>
</tr>
<tr>
<td>60 in old building</td>
<td></td>
</tr>
<tr>
<td>20 each in 3 new buildings</td>
<td></td>
</tr>
</tbody>
</table>

| **Total**                           | 860  |
DENSITY

The range of density for the total village should be from the open wetlands with no structures other than gravel and wooden walks to the gymnasium that can hold 500 people. The full range of spaces between these two densities must exist both inside and outside. The personal experiences of the persons in the village will be built out of their perceived ease of access to this full range of spaces and the people within.

Only one third of the total land surface should be intensified with structures, including roads and parking lots. The balance should be kept as agricultural and recreational land. With each architectural intensification of a large landscape, the open landscape (in an understandable system of positive form, not simply bushes around the foundation) on any scale must be equal to at least twice the architectural closure. In this way a person's understanding of architecture as an intensification of a landscape is preserved and the landscape is not simply left over space in between what is seen as valuable. Architecture must not be the destruction of space, but rather the intensification of the spatial experience through the addition of the range of interior and exterior, public and private spaces. But within the large architectural component, or village, the density should not be higher than a floor to area ratio (FAR) of 1:1. This allows an indoor floor area equal to the total land surface area (including roads) within the village boundary. Anything denser would not be a village; less dense would not be a strong counterpoint to the surrounding open, natural area.

QUALITIES

Many special qualities are required to provide a suitable space in which the patients are to live. The key quality in all the rooms is the amount of natural light and air. The light should be as continuous as possible helping to provide a feeling of continuous connection of spaces. Not through the use of continual glass, but through the careful use of additional glass near the ceiling in private spaces, near the doors, at the end of hallways. The use of glass in walls that face each other, to provide a light, permeable sensation to the space will help give a more pleasant atmosphere, more sense of the outdoor, changing, natural environment. This closeness to the seasons and the continuous internal space and the need for warm, well placed containment need to be balanced. The patients should be able to move through a building that is in touch with nature, grounded yet in the light, in the trees. This building must provide them with places of security and privacy and places of spontaneous group interaction and should support plant life and human life without the extra use electric power. The patients should monitor the temperature and air flow in their spaces (within safe limits). This will engender a sense of control over the environment and is, along with access to natural light, outdoor environment and the breezes, is an essential ingredient in the curative process.

MEANING

The variety of personal meaning given to architecture and the landscape by the inhabitants can only be achieved through providing a large variety of different spatial types and statements covering the obvious and subtle range of public and private, indoor and outdoor, focused and relaxed. The rooms must be adaptable to various uses, with no singular, specialized formal use controlling the design at the expense of the other possible uses. Thus, for example, the kitchen becomes a use area within a larger room that provides for eating, relaxing, crafts work, storage, and access to a number of other spaces. This room then takes on meanings associated with nurturing, expression and communication rather than simply cooking and cleaning.

Personal meaning and achievement can be developed through environmental changes controlled by the residents. Methods like indoor and outdoor gardening and simple methods of changing artwork displays to allow the residents to put up their own work or posters that they like can have a substantial impact on the personality of the home. Change must be seen in the environment to be felt as possible within.
SAFETY and SECURITY

Some special issues for the acute care and extended care wards must be addressed. These include the need for security and personal safety that are unique to mental hospitals. Much has been written and attempted in the form of security and safety but there are inherent contradictions in the literature. Briefly, the security issue can only be enhanced by the architecture if it allows the staff to have visual and auditory control from a number of key areas: the nurses station, lounges and offices. These areas should be placed so that during a normal work night the staff can move from one space to another and still have good coverage of the ward. It is impossible to expect the staff to be on their feet, walking the halls all night. At the same time, the nurses station cannot be the only place to do business, since moving from one to the other space will make it possible to cover the area from a number of angles. The issues of personal safety for the patients can be helped by the design and layout of the restrooms. It is in these areas that most of the suicide attempts occur. The restrooms should be such that they are only entered from the hallway and in view of the nurse's station. The main door to the ward must be in view of the nurses station as well as the lounge, since some of the patients help monitor each other's security.

PUBLIC and PRIVATE

Rooms completely open to the corridor which allow for easy visual and physical access are necessary for an open social milieu. These rooms should be only partially contained, with at least visual access from two sides, should be on the same level and immediately adjacent to the pedestrian access system. There should be no confusion visually as to the ease of entry, even to the point of having the room simply a wider portion of the access system. With this public, open room defining one end of the public/private spectrum, the bathrooms and closets define the other. There must be a complete set of private, semi-private, semi-public and public spaces at all room sizes. With a number of different relations to the access system, a complete range of personal associations and meanings will be achieved.

ultra-private - bathroom, closet, dresser
private - bedrooms
semi-private - entrances, balconies, thresholds
semi-public - collective rooms, porches
public - streets, gathering places, wetland, fields, woods

SIZES

The range of sizes making a complete village are listed below:

continuity - a collection of "towns" and "landscapes"
town - 1 mile square
landscape - collection of sites larger than 160 acres
village - collection of sites smaller than 160 acres
site - collection of buildings, outdoor rooms, to 4-acres
building - 22'-24' wide, 3 stories high
access - 4' to 12', 150 ft long
activity room - 20' x 30' to gymnasium size
collective room - 12' x 12' to 20' x 30'
small room - 6' x 6' to 12' x 12'
bed room - 10' x 10'
personal - from person size to double arms reach
threshold - 3' x 6' to 6' x 12'
material - various, simple, repetitive, off-the-shelf, standard, modular, handy, sensual
finger - small material, intimate and sensual
SYSTEMS

There must be a system for each architectural motive or engineering action. In planning for an institution it is impossible to make each individual decision in advance. And it is neither economical nor desirable to plan everything down to a fine detail. What is possible and advisable is to devise a full set of systems that can take care of all the normal needs as they arise, including all the little personal ones. Each system must have a territorial integrity of its own, not constantly battling for the same space, each one having a wide range of permutations to multiply the possible options and combinations. These systems need connectors to each other. These must be easy to manipulate and territorially self-stable in themselves as a system to multiply the range of the associations between the systems they connect. Then the systems can be deployed only as needed, based on local, in-the-field decisions, without overtaking each other’s territory.

A complex, personally meaningful, built form habitation is simplified through arriving at a full deck with which to work. Once that full deck of systems and connections is created, the decisions that are needed for the use of the systems can be made locally and optionally.

The following are the basic systems:

continuous light
air
access
partial containments
utilities distribution
structure
garden walls
collectives
landscape

gardens
ruins = the bearing wall brick in all of the existing buildings can be partially taken down with the inside and the outside of this structure alternately reoccupied

MATERIALS

The materials must range from hard and bright through heavy and dull to soft and sensual.

Concrete to hold up new ground
Wood screens 4x6 or larger to hold up roof
to roof structure, 4x6 or larger
window frames
Slate shingles
slack in screens
Brick garden walls, low, loose semi-separation walls on
any ground form, can hold up ground form
occasionally and optionally
Glass built light
Water built light
Grass nearest thing to water
Stone walk outside, threshold inside
Architectural Form
Screen
Habitable Structure
Thirty spokes
Share one hub.
Adapt the nothing therein to the purpose in hand, and you will have the use of the cart. Knead clay in order to make a vessel. Adapt the nothing therein to the purpose in hand, and you will have the use of the vessel. Cut out doors and windows in order to make a room. Adapt the nothing therein to the purpose in hand, and you will have the use of the room.
Thus what we gain is Something, yet it is by virtue of Nothing that this can be put to use.

Tao Te Ching, Lao Tsu, XI
THE STOA

I searched for a more appropriate building form than what exists now at the hospital. My interest was in finding a building type that was not symbolic. I wanted a form that was clear and easy to read and could be used for a number of different activities without confusion. I needed a form that gave maximum exposure of the inside to the natural environment while still allowing for easy privatization of some spaces. What I found was the simple stoa, a building made up of a row of private and public space, one third private to two thirds public. One side of the building was private, the other, public. The building allows for all spaces to have contact to the outside, including the access.

The stoa was the essential ancient Greek transactional public building. It was the marketplace, the center of social life, the forum of learning and democracy. And was the form used for the ancient Greek house of healing, where the patients slept, to be awakened reborn by the god of healing. In this ultimate transaction, the simple, intensified edge is the strongest form of expression. This form provides for the the maximum of flexibility for people yet provides a one-to-one relationship between private, public and outdoors. This singularity simplifies and strengthens the space and edge relationship. It can also become the simplest form of the intensified agricultural step, the fertile token of renewal and growth.
231 Stoa of Attalos at Athens (c. 150 B.C.): (a) section (details of upper inner capital and upper outer cornice enlarged three times); (b) part elevation

232 Stoa at Perachora (c. 300 B.C.): (a) section; (b) part elevation

233 South Stoa at the Argive Heraion (c. 460–450 B.C.): (a) section; (b) part elevation

234 Stoa Basilios at Athens (sixth century): (a) hypothetical section; (b) part elevation

235 Stoa at the Amphiaraion, Oropos (c. 370–360 B.C.): cross-section
"Moral treatment consists of the wholesome discipline of the well-regulated household, regular hours for food and for sleep, manual employment, reading, lectures, and other intellectual exercises and entertainments, and various recreations and amusements, both within and without..... The great object of the treatment is to procure a healthful exercise of the body, to abstract the mind from its delusions, to win back the patient to the regular and useful habits and practices of his former life."  
Butler (Serrett, 1985, Pg. 9)

A basic premise in the field of occupational therapy is that humans are intrinsically motivated to engage in, and master their environments. Individuals participate in activity, not because of the expectation of external rewards, but rather for the rewards inherent in performing activity.  
(Gibson, 1986, Pg. 65)

BUILDINGS

The picture of the moral therapy, as seen from our perspective, brings to mind large homes in a relaxed, rural atmosphere, where the domestic routine is reinforced by the domestic scale and needs. The cooperative group home, where each individual can have an immediate value and find personal meaning in living, requires an environment that is domestic and nurturing. Unfortunately the total hospital environment cannot easily be adjusted meet the needs of the domestic treatment units.

The space needs of the campus demands various types of structures, some of which already exist. Offices can be made in the dormitory buildings and some old ward spaces with very good results, because there is a high level of privacy required in the offices that the small, repetitive rooms provide. There are several opportunities in these buildings for larger meeting spaces and good access to the outside. Distances between offices and other activities can be seen as a healthful short walk, even in winter.

Traditional exteriors could be seen as appropriate for corporate offices though much of the isolation and stuffiness felt on the campus could be relieved by some radical remodeling of the exteriors, opening up the upper levels for sun spaces with views and solar heating. Shading devices for the summer as well as natural ventilation could also brighten up the surfaces. More attention to the zone of exchange of the inside-outside makes a more livable office environment.

There are a number of larger buildings that could be modified to form the nucleus of a rehabilitation area; large, flexible spaces with good ventilation and easy access to the outside.

Rehabilitation methods include a good deal of group work that is varied in activity and therapeutic method. Groups vary in size from 2 to 30 for anything from talking to sheltered workshops to organized physical games. They are so varied that many of them can be well met by the use of large halls with moveable partitions. Some of the rehabilitation specialists suggest that all of the activities should be in one building; some propose a region of the campus that is more dedicated to rehabilitation, with very well defined covered, outdoor walkways linking them, suitable for the handicapped. A central dining area should have more personalized place to eat than the normal cafeteria. Form it, there should be a view of some of activity, even if it is simply the main street of town.

OUTDOOR SPACE

The critical aspects of the outdoor space are access, definition and variety. Easy access for all patients including the physically handicapped is essential, with ramps and ground level entries, well integrated stairways, paths and bridges. Much of the institutional flavor of the existing buildings is derived from their separation from the ground through the high first floor and the small windows, the bars on the terraces, etc. Many of the outdoor spaces lack any form at all and are seen as spaces between the buildings where the patients are incarcerated. Away from the buildings are the forest, wetlands and unseen boundaries that separate the hospital from the world. A goal in design is to integrate the inside with the outside, providing outdoor rooms and connection to the space beyond.

Security is not a very important issue with respect to the outdoor space. Throughout the state system at any one time about 70% of the patients now have grounds privileges. This means that the total need for secure outdoor space is diminishing. But acute
care wards require more access to outdoor rooms that are secure, safe and easily monitored by the staff.

STANDARDS

The most important goal is to maintain an environment that supports the individual person's rights to dignity and self-respect as well as providing him or her with a close relationship to the natural environment.

At a mental hospital different buildings come under different standards categories. For federal reimbursement for living expenses, Medicare and Medicaid demand adherence to the 1985 and 1981 life safety standards. Construction within Massachusetts is subject to the 1976 building code. There are other codes established to by the Joint Commission on Accreditation of Hospitals (JCAH) which is a voluntary program to help with reimbursements and the attraction of quality staff. The role of the standards within this chapter is to guide the designer through the first phase of design in making general design decisions that affect all types of environments within the campus. Included within them are standards that are not addressed by any code, such as light and air standards, as well as suggestions on HVAC controls and the use of solar energy and earth sheltering. Much of the information available as well as many of the facilities toured and proposals made have shown a great deal of contradiction and a wide range of differences. But from this full range of examples it is possible to come to some basic assumptions of the general needs of a set of buildings for a continuum of care.

LIGHT

The buildings must be as permeable to light and air as possible, opening up the halls to the space, allowing the people to see completely through the building as much as possible. This will make the space less confining, more understandable, lighter and more accessible. Natural light should be provided wherever possible. Curtains and valences around windows, if any, should pulled back completely, leaving all of the window surface free for the light to come in. Ceilings should be of a very light color. Solid walls, wherever possible, should be placed perpendicular to the walls with the windows, reflecting the light into the rooms. Walls in the halls should be glazed wherever possible to allow light entry. Large open rooms should be preserved. Corner windows and bay windows should be developed as much as possible to provide for space that is mostly light, with the feeling of outside.

AIR

All the buildings should allow for local control of natural air flow at the window, summer and winter. Both glazed window panels and unglazed wall panels should open at different heights and placements throughout.

ENERGY

Energy savings can be achieved through simple passive solar control and earth sheltering. South and East facing windows with trellises and deciduous plants will help a great deal. The use of a of thermal mass walls and floors on the interior of the insulation envelope will give the building a more stable temperature without keeping it sealed tightly to the outdoor air.

ACCESS

Most floors must be accessible to physically impaired people, particularly those with public space. Many of the people, though not technically handicapped, find it difficult to climb more than a few stairs. Some treatment groups would do better in a horizontally organized structure, while some higher functioning groups may fit well in a home with two floors. The four floor buildings of the hospital should have elevator access to all floors. Some of the staff may be physically handicapped as well. The access system is an important socializing place. People not only meet in the hallways or walkways, but should be able to find large enough areas in these semi-public spaces within their own home to put a chair, plants, a desk or to do some exercises. The access areas near the bedrooms should become claimed by the nearest residents and used as part of the more public aspects of the bedroom.
ACUTE CARE STANDARDS

During the masterplan exercise we (DCPO 86) developed a set of "standards" based on our tour of facilities and talks with caregivers. We tested our standards against those of Sheply, Bulfinch and Associates, Architects, who were building a new state-of-the-art facility at McLean Hospital in Belmont. We looked at standards gleaned from code reviews and publications on hospital construction throughout the country and toured some older facilities at McLean Hospital, as well as those of the state system.

Since we knew that the budgets would be small and we are "building rich," new construction was ruled out for most of the work, though a thorough "gut-rehab" was not. The standards are a distillation from our transformation of existing buildings into the most ideal wards possible. It seems odd to work from the existing space toward the standards, but early on we faced two major facts:

1. The existing space was all we could afford; remodeling would save us roughly 35% over new construction in the worst-case scenario.

2. Treatment is not done by the architecture; it is done by the staff.

We saw that, once we were able to formulate an environmental diagram of care, the fairly loose fit between the program and the building became an advantage. (The history of these facilities since the last capital outlay has been a series of adaptations.) We chose not to demand "psychological performance" of the space that could not be fully justified. We have all had experience with "moral architecture," so a good bit of common sense informed our investigation. We did see at least one or two cases where buildings were too tightly fit to their program and had become obsolete, indicating that care can be hampered by the environment if it stands too much in the way of change. (In the case of two buildings specifically built for geriatric and medical care at Westborough, the offices of the staff are on the ground floor, most usable for geriatric care, and adolescents and acute ambulatory adults are on the second floor. The geriatric population had been moved to a building where it was virtually impossible for them to get to the ground and outside although this was intended to be part of their daily care.)

We worked up a number of proposed rehabs for several types of existing buildings. The following are the averages for different types of spaces found within the acute care wards, indicating the central range of possible sizes and relationships.

Persons per ward:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>large ward (2 separate night nurses stations)</td>
<td>36</td>
</tr>
<tr>
<td>regular ward</td>
<td>22.4</td>
</tr>
</tbody>
</table>

Persons per bedroom: suggested:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person 19% (20%)</td>
<td></td>
</tr>
<tr>
<td>2 people 46% (60%)</td>
<td></td>
</tr>
<tr>
<td>3 people 31% (15%)</td>
<td></td>
</tr>
<tr>
<td>4 people 5% (5%)</td>
<td></td>
</tr>
</tbody>
</table>

For territorial and management reasons, we attempted in each case to provide three lounge type areas, one near the front door and in the passageway so patients could be where the action is, one as a large, nonsmoking TV area, and one smoking area that is walled off for ventilation purposes, with a glass wall to the corridor. We also developed some models with dedicated occupational therapy space on the ward to supply programs for people who were unable to leave the ward because of temporary behavior problems. (In short stay acute care, people many times are not allowed off the ward for programs because of security considerations and lack of staff to deal with their specific behavior. This suggests some need for dedicated occupational therapy space on the ward.) This function usually is accomplished by taking over one of the lounges, usually the one associated with the kitchen if one exists.

We later went back and revised the three-person rooms so that it would be virtually impossible to put a fourth bed in them by moving the door to one end of the room. (On our tours, we found single bedrooms with up to 6 beds in them.) In our plan, we provided for a larger group of 2 person rooms than the 46%. (This is reflected in the percentages in parentheses.)

In the case of a bathroom, a "unit" is defined as a shower, a standard toilet and a lavatory sink. A bathroom unit is supplied for 1 person 22%, 2 people 46% (60%), 3 people 31% (15%), 4 people 5% (5%).

So the large toilet, shower rooms, with private showers, each with a small dressing area were chosen as the most manageable model for the acute wards. For territorial and management reasons, we attempted in each case to provide three lounge type areas, one near the front door and in the passageway so patients could be where the action is, one as a large, nonsmoking TV area, and one smoking area that is walled off for ventilation purposes, with a glass wall to the corridor. We also developed some models with dedicated occupational therapy space on the ward to supply programs for people who were unable to leave the ward because of temporary behavior problems. (In short stay acute care, people many times are not allowed off the ward for programs because of security considerations and lack of staff to deal with their specific behavior. This suggests some need for dedicated occupational therapy space on the ward.) This function usually is accomplished by taking over one of the lounges, usually the one associated with the kitchen if one exists.

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The following are net square feet per person of each type of room:

<table>
<thead>
<tr>
<th>Room Type</th>
<th>Net SF per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrooms</td>
<td>60 sf/P</td>
</tr>
<tr>
<td>Lounge space:</td>
<td>32 sf/P</td>
</tr>
<tr>
<td>Snack and kitchen:</td>
<td>12 sf/P</td>
</tr>
<tr>
<td>Ot-Rec:</td>
<td>25 sf/P</td>
</tr>
<tr>
<td>Terraces:</td>
<td>355 sf/P</td>
</tr>
<tr>
<td>Nurses' station:</td>
<td>13 sf/P</td>
</tr>
<tr>
<td>Office and meeting rooms:</td>
<td>12 sf/P</td>
</tr>
<tr>
<td>Quiet rooms:</td>
<td>6.5 sf/P</td>
</tr>
<tr>
<td>Support services:</td>
<td>15.5 sf/P</td>
</tr>
<tr>
<td>Circulation:</td>
<td>63 sf/P</td>
</tr>
<tr>
<td>Net Square Feet:</td>
<td>308 sf/P</td>
</tr>
<tr>
<td>Net rentable square feet:</td>
<td>400 sf/P</td>
</tr>
</tbody>
</table>

These figures are all net except the net rentable, which is the gross square feet for the wing dedicated to the ward. This is excepting the vertical circulation, exterior walls, and all non-ward activities and circulation. (The efficiency levels on the chart attached will show this. The total efficiency of net to gross for these buildings is somewhere in the range of 50% or less.)

We found that the generally accepted average for GSF/P in an acute hospital building was 650 GSF/P. The total GSF/P for the whole hospital, including all support services and offices was roughly 850 GSF/P. This was borne out in our discussions with Sheply Bulfinch, though their new building for McLean seemed to be on the 800 gsfp/P side, without the support services. This may reflect the large need for professional offices and ancillary spaces specific to the private hospital roll.

To help with unruly patients, furniture must be designed to be hard to throw. Light weight is not an advantage. Furniture must also be made sturdy enough that accidents from falling do not occur easily. The new furniture that has been purchased throughout the system is easy to throw and many of the front or back "feet" come off, allowing chairs to tip quickly and cause injuries.

Finish should be easily cleanable. Homelike warmth is not as necessary for acute care as are strength and cleanliness, since many of the people on these wards are not very aware of their surroundings. They are in an acute mental condition and may be heavily drugged. As they begin to stabilize, they are soon sent to a "step-down" extended care ward and then to transitional housing, their environment changing to better suit their state of mind.

The following standards reflect a desire to provide a domestic home environment that is both flexible and efficient. A strong concern for the special privacy demands of group living has been addressed, while attempting to provide a home that encourages interaction among residents and with the outdoors. Since the rehabilitation needs of the residences are very diverse, each home is intended to be part of a cohesive neighborhood. The homes described below are both four and eight person homes and the choice of home size depends on the type of therapeutic environment it is intended for. The eight person homes are the more common type of transitional housing, though the four person model is what will be provided in the community. A good mix of these two types on the campus will provide the staff with adequate variety.

**Entrances**

This area should have a closet and seat near the door making it easy to put on and take off boots and coats. A generous side window next to the door and a widow above for ventilation will make the entrance seem more open.

**Kitchens**

The kitchen is for occupational therapy, snacks and special occasions. It should have a stove top, an oven, microwave, dishwasher, double sink and a large pantry nearby. The kitchen-dining-den will become the traditional country kitchen derived from the old colonial cabin plan. This is the social core of the household and designed to make it possible for several people to comfortable "hang out" at one time. The sink and stove should be adjustable, with clearance for wheel chairs in the handicapped accessible homes.

The table should leave enough space for more than the
number of residents and staff at one time to eat or do craft activities. A large table allowing for visitors and special occasions will help stimulate these activities.

**Parlors**

This is the traditional visiting area for the home, small enough so that when closed off it can become a good, intimate visiting or therapy area, but well situated in the home to become an alternative activity area for more quiet times. The residents should have a place to be alone outside their bedrooms.

**Staff Offices**

The office should be limited to 150 sq ft. including a locked closet with a locked cabinet for medicine and records. The nature of the staff's work should not more than this amount of space and should be near the front entry for night time control, situated to provide for easy access to the residents and easy control for privacy. The idea of an open office that is used as a quiet space for the residents when not occupied by the staff works well in some existing transitional homes.

**Sun Rooms**

Sun rooms are a must to bring the outdoors in. They work very well as occupational therapy spaces for growing plants and doing crafts. They are especially useful if the glass can come out to have a screened porch for the summer. These spaces should have a ground level exterior access for easy indoor/outdoor association.

**Recreation Room**

A standard recreation room design from any decent suburban home would do, but the rooms must have easy access by the handicapped. These rooms could be in the back and incorporate the sun room at one end or side.

**Bedrooms**

Size the number of people per bedroom and the amount and type of storage are the subject of a great deal of investigation and speculation. In this regard, I am suggesting, after talking to scores of caregivers on this subject, that there be a range of occupants per room, from one to four, as in the acute care wards. But the distribution of these numbers should be weighted to two and one per room. The percentages should be as follows:

- one: 60%
- two: 30%
- three: 5%
- four: 5%

The value of having more than two is based on actual advice from caregivers that when some patients are given the chance to be in a single who have been sharing a four bed room, they opt for the larger room. Speculation runs from their need to be with someone to the fear of jealousy. We should provide single rooms for many of the patients, even with the speculation that if provided with single rooms, they may never want to leave.

- Each bedroom must have a closet of more than two feet depth and five feet width, a five drawer dresser or built in drawers, a chair, night stand, a 39" wide single bed and room for a table or desk for more personal use.
- The size of the room must be at least 120 sq ft for a single and 80 sq ft per person in a multiple person room. It must have a large window to the outside with a reasonable view of some natural environment. A corner window is preferred. In the case of multiple person rooms, it may be possible to combine the space of two single person rooms, 240 square feet, into a space that has two 80 S.F. sleeping/dressing areas and an 80 S.F. alcove on the access for a shared sitting and table area. This will provide more territorial depth to the system of privacies.

**Bathrooms**

Bathrooms must be designed for easy cleaning, personal storage of individual bathroom items in a lockable case and in the case of half the baths, easy access for handicapped. The baths are to have a toilet, sink and walk-in shower with a continuous tile floor in the room with a drain in the floor. Handicapped bathrooms are to have a continuous tiled floor and walls, a shower head on the wall, a drain in the floor and no shower stall.
Costs

Cost comparisons are usually associated with gross standards for residential work. The following indicate construction costs associated with state work including all project costs of design, management, contingencies and construction. The usefulness of this listing is to help generalize on the level of quality of workmanship and materials to be used in relationship to the average person’s experience.

Costs
New Hospital $250/sf
New MR/ICF 170/sf
New private home/condo 120/sf
Remodeled "condo" level 100/sf
Remodeled simple level 80/sf
(All new finishes, kitchen, electrical/mechanical)
Dignity minimum with operational elect/mech 60/sf

The following are standards developed to date for transitional housing:

Space Allocation
600 gross SF/person
300 net SF/person

Bedroom 120 SF
Closet 12 SF
Bath 25 SF
Lounge, OT, Rec 140 SF
Net 300 SF

THE IDEAL COLONIAL HOME

For those who participate in the legal, ethical and design battles centered on transitional housing, including sizes and costs, the colonial home is a commonly understood type. Each of us have knowledge of the size of rooms, their uses and relationship to each other. This is a housing type that not only pervades New England but can be found throughout the country. When advocates of the mentally ill call for domestic settings within the community it can be assumed that the model of this home in a standard, older suburb is the only common denominator. This gives us a method of speaking about standard space allocations, uses and relationships. In many of the older homes that have been converted into transitional housing there is a great reliance on the traditional form of country kitchen, shown in the open plan of the colonial cabin. These historical references have current value because they reflect the somewhat unchanging form of living found in residential settings. Even now many of the same spaces (with highly compromised access, window and ventilation requirements) can be found as the basis for new condominium developments. We have not changed a great deal in our group living patterns over the past several hundred years.

The following diagram is provided to show where the room size information above has been found.
Many problems faced by the existing hospital residents and staff are directly related to mechanical systems that are outdated and do not adequately work as designed. This is a critical point of concern for all new construction and renovation. Mechanical systems must be installed that are simple to operate, easy to maintain, and with access to replacement parts. These systems must not compromise comfort in all spaces when something in the system is not working and must have central monitoring and controls that make it possible to tell what is working correctly from a central support facility. This suggests that the systems should not be centralized, only centrally monitored. The efficiency of local mechanical systems should be considered. If the heat source is centralized, as in the case of this hospital, the building should have a control valve in parallel for each floor that effectively isolates its control from the balance of the central system. Air conditioning possesses the same problem. The efficiency of collecting a few of buildings or houses onto one system should be considered. But, as with heating, the long term advantage of having smaller, local systems that are easy to maintain on private contracts as in the normal suburban home should be highly desirable.

The following is a list of minimum standards for basic mechanical systems:

- Hot water heat, or slow moving forced air when required for safety.
- All spaces are to have separate temperature controls.
- HVAC must include air conditioning.
- Solar heating for hot water and for swimming pool should be considered.
- Generous outside makeup air should be provided to take care of cigarette smoke and can be afforded through passive solar heating and cooling, super insulation and high thermal mass on the interior of the building.
- One toilet, lavatory sink, shower for every four people, including private dressing area for each shower.
- All windows must be operable for natural ventilation (without compromising security level).
- Water fountains must be supplied on each floor.
- All spaces to be fire sprinkled, with smoke detectors hard-wired to security.

ORGANIZATION for LARGER BUILDINGS

Kitchen tables, lounges, occupational therapy and recreation spaces must be organized so that both large and small groups will form naturally. This is important to give residents both the opportunity for group activities as well as some peace and quiet. Smoking rooms and noisy, action type rooms should be separated from more passive, quiet rooms in such a way that territorial battling is reduced in the maintenance of order.

Staff areas should be spaced throughout buildings to allow staff to quietly monitor activities without being intrusive, as well as making them accessible for a variety of planned activities and spontaneous connections.

Some spaces should be building-wide functions and some should be repeated enough on each floor so that social groups of -2, -3, -7, -12, -24 can form easily throughout the building to help fulfill the needs for community.

Exercise space in a sunny area must be provided to make up for the long winters, with some communal areas that can handle 30-40 people.

Buildings should be built up on a model of groups of 4 people. Each group shares a bath and a common area. Two groups share a kitchen, two collections of 8 share a floor, four groups of 8 share a building. With this combination of numbers, spaces that are needed by the individuals for privacy and distance from centers of activity are assured and are territorially defined as part of their own space. To nurture interaction within a therapeutic group, space is shared in the eight person country kitchen. The more public activities of lounging, active recreation, occupational therapy and passive recreation of TV viewing or socializing can be easily generated within the immediate environment or occasionally along the walk through the village. Patients must be able to find people they can relate to and interact with in the public spaces. Only through learning and practicing of successful social interactions can
many of the patients find any relief from their illness and pain.

VISITING

Areas should be provided where people can have their families visit in private. This can be accomplished through placing the bedrooms around a common space that can be used by families to visit and can also be special alcoves that dot the access areas between buildings that extend through the natural environment. These rooms could then be occasionally used for other educational activities.

MAINTENANCE

Materials throughout the building should be easily cleanable though comfortable. What is easily maintained and what can become part of a persons home environment are sometimes at odds. Sometimes, the use of simple, easily cleanable materials is more readily accepted by the introduction of views outside the building into a fascinating natural environment. Simple colors and room for permanent artwork make the walls more easily maintainable. Easy of replacement of materials is sometimes the key to good upkeep.

EXTERIOR

Access to outside passive recreation should be easy and encouraged by the building layout. Balconies should be made safe while still retaining good visual and auditory access to the ground, making it possible to communicate with people on the ground. Gathering places should be near the entrances and away from bedrooms to help encourage community activity while not creating irritants for those who are trying to get some peace and quiet. Life safety requirements make it imperative that each exit either goes directly to the ground on the outside or down through an enclosed stairway to the ground. One way to solve this problem and add a great deal of character and natural environment to the structure is to use garden level patios connected to the ground as secondary egress. This can be accomplished on side hills only, where each level is easily attached horizontally to the ground. The addition of personalized gardening space attached to each common area will be greatly appreciated by the residents.

FURNITURE

Experience at the hospitals indicates that much of the new furniture that has been provided is not sturdy, safe, repairable or personable. Some furniture standards must be developed that reflects a homelike environment with repairable and easily replaceable items. What money and time is usually spent on bad new furniture could me more successfully spent on good used furniture like we find in all of our homes.

Furnishings in the hospital need to have some sense of 'home' as well as be comfortable and easy to maintain. What we saw and discussed with the locals at many of the institutions was new furniture that would not last, had no resemblance to anything that could be in one's home and in some cases was simply not safe for the people using it. It was only in those areas that had been remodeled in-house that we saw furniture that had been rebuilt or donated that could withstand rough use and lend some sense of individuality and hominess.

To provide cheap, replaceable, repairable furniture that lends a sense of hominess and individuality to the housing furniture should be purchased from thrift shops and used furniture stores throughout the state. A repair shop function, commonly located on the hospital grounds in the past, should be enhanced to take care of this furniture. A patient rehabilitation program might be set up to help in the purchasing, repairing and delivery of furniture. Through participation in the redecoration of new and remodelled facilities patients will fulfill a need to be useful and productive. This sheltered workshop could help other institutions around the area and teach valuable pre-vocational skills.

Each bedroom should have a 5 drawer dresser, a comfortable reading chair, and a 39 inch wide single bed. The bed should be the type with no box springs, simply a thick mattress above two drawers. There should also be a desk or table of some kind with a chair as well as a night stand. The closet should be more than two feet deep and five feet wide, with a lockable portion within it for valuables.

Furniture in lounges should be the type found in the family rooms of normal homes, with a sprinkling of large, over stuffed chairs, some captains chairs and a few folding chairs in storage. Couches should be 6' long or more with simple shape for recovering. Tables should be solid wood, simple construction and long enough to easily seat all of the residents and two staff members.

ARTWORK

The hospital and all of the homes should be decorated with original art from the residents. This can be accomplished in a number of ways, from temporary paper or pained murals on the walls to more permanent installations. The most permanent methods can be seen in the art on the Red Line MBTA subway in Boston and Cambridge. In the case of the subway station at Davis Square, tiles that were made from children's art and bricks that have imbedded in them words from poets approach the most easily produced and most effective public art forms.

The message that is accomplished by this distribution of residents' art is one of a large community of people suffering and dreaming, risking and discovering, hoping and succeeding in mastering their problems, turn down the intensity of their torments and move on in their own lives. The possibility that their own
expressions matter enough to the world to have them part of the walls permanently could be an overwhelmingly positive builder of self-esteem. It is certainly a method of experiencing growth to see one's own work from the past. The idea that we can have an effect on our own environment is invigorating to us all.

For the private rooms and smaller homes, a simple device for the easy hanging of less permanent artwork needs to be devised including mural painting areas. This is no easy task but is crucial to the personalization of each person's room.
Kit of Parts

Ground Surface

48" 48" 48" 0
24" 24" 24" 0
6" 6" 6" 0
Garden Wall
Channel

135°
Screen Windows and Shear Panels
Furcolo Transformation Park
East Elevation

Four Person Home #1

South Elevation

152
First Floor

Second Floor

Section A-A

Eight Person Home
Thirty Two Person Home
Main Floor Plan
Thirty Two Person Home
Lower Floor Plan
Conclusion

The architecture that has emerged through this inquiry is clearly not the norm for either the mental health industry nor the suburbs surrounding Metropolitan State Hospital. It does not reflect the formal intentions of previously designed buildings on campus nor the "normal" homes of the suburbs. The desire has been to follow thematic concepts taken from the philosophical context of the region through the development of forms and parts or tokens. These tokens not only provide for specific building functions but evoke basic spiritual responses themselves. Through this mix of poetic expression and practical considerations it is possible to reach an environment that is more supportive and nurturing in its formal characteristics. An environment where spontaneous life and growth, close association with nature, and the positive aspects of group living can be sensed in a non-intellectual manner throughout the intensified landscape and built space.

The sensory states of mental illness do not generally respond to fashion, except for some of the "in" maladies of the upper middleclass. Mental illness is a deeply felt incongruity with the currently acceptable forms of illusion and interaction. This set of personal images and the subsequent actions are not well understood nor do they respond to logically planned therapeutics. For this reason, I have attempted to build an environment that gets at the root processes of living collectively with others and with the land. The development of each of the parts for deployment and each of the suggested homes derives from a desire to remove standardized methods of separation, isolation, and an authoritarian order found self-imposed in New England architecture. At the same time, the layout of the buildings within the new village attempts to follow the well established and positive aspects of close association and interdependence found in the best New England villages.

This new environment is the process of collective living in a place that supports a close interaction with nature, its seasons, spontaneity and growth, its warm light, cold water, intricate smells, and soft and curious sounds. But within this environment the most critical ingredient cannot be seen in the drawings. It is the staff, those who spend their days and nights trying to reach the sufferer. Staff members who look at the plans will see the dependence placed on them. This is because I believe that more staff, with higher wages and better training must be placed in contact with the mentally ill. Through more highly staffed programs of work, recreation, and self expression, including more activities outside the village, patients can gain an understanding of how to live better on a daily basis. Through close personal relationships developed over a long period of time, the staff can help change and rebuild peoples lives. This happens every day, yet it could happen more effectively if the staff were more abundant, providing more role models and more chances to develop interpersonal understanding.

This built environment suggest more touch between patient and staff; patient and nature. It depends on some isolation from the community to provide slack in daily expectations so the mentally ill can collect themselves and heal. It depends on a constant flow of capital and maintenance funds to provide for this permanent collective social function.

Practical, positive, and perpetual responses to chronic social problems can only be achieved if all professions focus their energies in support of understanding and change. It is through a desire for understanding that this inquiry has been made.
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