
WELLNESS AND THE BUILT ENVIRONMENT:
An Exploration into Guerrilla Architecture, A Center for Positive Health, Anderson, S.C.

Traditionally the western health-care system has focused on disease, injury, and illness in a reactive manner. Its function and focus has inherently been towards treatment and cures on an individual case basis. Based fully on hard science, modern medicine centers on the scientific method of defining the problem and finding a solution that solves that isolated problem. As a result, settings and buildings for medical treatment have been traditionally designed around these same systematic principles. They are designed and planned around a medical delivery system that focuses on the delivery of curative science, which in turn results in health-care environments that disregard the patients and their families. Currently, planners, architects, and health-care administrators are reevaluating the approach to designing health-care settings and are looking toward new ways to create environments that will now support people, healing, and wellness while continuing to allow the science of medicine to be administered. This thesis proposes a new approach and attitude to the design and planning of health-care settings that focus on wellness services provided to under-served communities.

Dr. Leland Kaiser, a renowned health futurist, addresses the health-care system and points out that its focus should be redesigned “to concentrate on health and wellness for entire communities, for whole populations (Swan 32).” Kaiser goes on to say that hospitals and insurers are currently in the “sick” business and have a difficult time understanding a type of care that may not get paid for up front; but if it makes the community healthier, it will only help the bottom line. Dr. Kaiser alludes to the possibilities of a health-care system that is drastically different than the current system. It is a system that takes on an opposite personality to the current system by focusing on low costs, community involvement, opportunities to raise the health of populations not just individuals, being proactive, being flexible, and finding ways to educate people through the ideas of wellness. These qualities essentially should be reflected in the health-care physical setting.

Wellness as a State of Being

The World Health Organization categorizes health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Wellness Philosophy

Wellness can also be considered a philosophy or attitude that looks for ways to achieve a higher level of health. This philosophy can be found in the forms of programs and activities that focus on prevention and health maintenance.

Wellness Activities and Programs

Wellness activities and programs can be considered any activity that has the ability to promote, enhance, or raise health status. While broad in terms, these activities can be anything from educational classes, exercise routines, meditation, or maintaining a proper diet to walking up the stairs or attending a social function.

Economically Disadvantaged



1. *The economically disadvantaged are often found in poor health.*

Within the American society, the provision of health care has been historically geared to middle- and upper-class needs, values, and standards (Miller 115). However, there are many individuals with values, education and health habits quite different from these middle-class mainstays. This population group encompasses people of all ages, races, cultural groups, and sex. This group is the economically disadvantaged, more clearly known as the poor.

In most cases, communities that are at a low socioeconomic status tend to be at a lower overall health status. According to a study in *NJEM* in 1997, people who were young and healthy in 1965 and who had more economic hardship over a 29 year period had worse physical functioning in 1994 (Lynch 26). This suggests that illness was an effect of economic hardship rather than the cause. By focusing on areas and communities that are suffering from economic hardship, it could be possible to make a greater impact on the health of the individuals in that population.

While this is a different approach to health care as compared to the existing system, which is symptomatic in its approach, the population-focused approach can operate at a more basic cost-effective level (Rose 100). It seeks to ask why poor health occurs and then to find remedies for its underlying determinants to that particular population. The majority of the underlying causes of poor health are behaviorally related and activities such as eating, drinking, exercising, and smoking are socially conditioned.



2. *Healthy Cities Logo.*

To be successful, these settings must be programmed, designed, and built around similar philosophies of the worldwide *Healthy Communities* movement, which is attempting to create conditions that support and improve equity in health. Its appeal has been that it mobilizes community entities, individuals, and resources in new ways that respond to the need to promote the health of entire populations. These environments must be born from a collaboration between the community and local health providers, businesses, and governments. This grassroots collaboration is essential to the success of these programs and settings and must meet the true needs of the community, especially the poor. This new model must address the differing health needs of specific populations and communities through the combination of responsive wellness-oriented activities, programs, and settings.

A framework that personifies change is needed as an avenue to find creative, effective, and healthful ways to implement and create new programs, activities, and settings. As an analogy and an attempt to form a new attitude to this approach, this new model will be called *guerilla health care*, a community-based struggle that attempts to fight existing poor health conditions within the community and is based on basic guiding principles that outline the methods of achieving grand strategic objectives. In this case, the objectives are to raise the health status of a targeted population and make wellness and preventive care accessible to the economically disadvantaged.



3. *Guerrilla philosophies.*

Guerrilla Movements

Guerrilla movements are a type of action in which a small group of people seeks radical change in government or from military oppression. These movements take informal approaches to solving social problems, injustices, and inequities. The guerrilla movement is based on principles necessary to successfully wage guerrilla war, and should be achieved by intelligent, proactive, and

deliberate actions (Ney 2). These actions are low-cost, community-born, opportunistic, offensive, proactive, and nonbureaucratic. They are the basic principles that lay the foundation and structure that form the objectives of the movement *to create change*.

It is the proposition of this thesis that similar principles can be adapted and used as a pertinent strategy for proactive wellness and preventive based health care and the development of its concurrent setting. These ideas can help form the framework and strategies that can serve as guidelines to actions that then can be implemented by communities to target poor health. These strategies will form the basis for *guerilla health care* and result in *guerilla architecture*.

Guerrilla Health Care

There are many advantages to the guerrilla health-care approach. First, this framework ensures nearness of the center to homes in the community and facilitates visits to the health center by members of the community, bringing ease of access to wellness services, activities, and events. Also, by defining the area of responsibility or choosing the battleground, it is simpler to define the community in terms of its demography and other attributes that identify areas of focus for the health-care team. Finally, by having the ability to promote primary relationships between the community and health providers, it enables health-care services to proceed in the framework of an ongoing relationship between different members of the health-care team and the community. It is important to promote community involvement and the acceptance of responsibility for the health-care program by the community.

Guerrilla Architecture

Guerrilla architecture reflects by a built environment that attempts to be low-cost, efficient and effective, opportunistic, flexible, and community-based. It attempts to take into account broad issues such as site and building repair, its integration into the community, and its purpose and function. It seeks to project an attitude of change. It strives to inject new ideas about health to both people and communities.

Guerrilla architecture attempts to be low-cost. Using supplies and materials that are available can help reduce construction costs. Using straightforward construction methods can also be helpful in maintaining low costs, therefore making it easier to implement the plan for construction. Through this efficient planning and organization, the health-care programs that will be delivered from this setting can be quickly implemented.

Guerrilla architecture is flexible. Much like the guerrilla soldier, guerrilla architecture should be flexible in ways that allow it to respond to the changing environment. If the building can adapt to different activities and programs, it can be a more effective vehicle in providing health care and wellness activities. Populations and communities change over time and the building activities and functions must be able to adapt to these changes to maintain its programs.

Guerrilla architecture is community-based. For communities to embrace the ideas of guerrilla health care and its programs, the settings in which they are found must be community-centered. The architecture must attempt to integrate into the community it is serving, making it safe and inviting. It should be a place in which people feel comfortable, safe, and welcome.

To articulate guerrilla architecture in built form, five architectural objectives have been formulated that can be implemented through specific architectural tactics. Playing off of the principles of guerrilla movements as a means to set up framework, these tactics are the practical methods and means of achieving the grand strategic objectives of guerrilla health care; in particular, positive change in health status of targeted communities. They are formulated to facilitate and create supportive and healthful settings that are responsive to the needs of communities and their health. Through its placement and construction, this architecture can address opportunities to improve social and physical wellness of poor health areas and settings. The objectives were then tested and

articulated in an academic project that became the architectural conclusion to this thesis.

Architectural Objective One



4. Select Poor Sites.

When possible, recycle, reuse, and retake existing sites and buildings. Seek out buildings that are abandoned and in poor shape and attempt to restore and recycle them. This tactic is simple and essential to the ideas of guerrilla architecture for health. A fundamental characteristic of guerrilla strategy is finding ways to turn liabilities into assets. In this case, it is about converting and transforming underutilized or abandoned sites, properties, and buildings into productive and healthy settings in communities. These dilapidated unattended sites often undermine the visual and social health of communities. For instance, these abandoned buildings and sites can attract vandalism and even crime because they are unmonitored and provide hidden places for criminal acts. They serve as a nuisance to the community and can become unsafe over time due to the lack of maintenance and their vulnerability to crime and fire. Christopher Alexander, the author of *A Timeless Way of Building*, addresses this issue architecturally:

Normally when building a new building we look for the best site possible, where the grass is the most beautiful, the trees are most healthy, the slope of the land most even, the view most lovely, and the soil most fertile. It is only human nature, and for a person who lacks a total view of the ecology of the land, it seems the most obvious and sensible thing to do ... since people always build on the one-quarter which is the healthiest, the other three quarters, already less healthy ecologically, become neglected and unhealthy (Alexander 509).

Architectural Objective Two

Architecture must be flexible, adaptable and expandable to meet the changing needs and conditions of the community. A setting that is continually responsive to the changing needs of the community can better serve the community over time. In guerrilla principles, it is essential that the soldier and the guerrilla band be as flexible and adaptable as possible strictly to survive. It is impossible to predict the elements of battle and confrontation, therefore flexibility and adaptability are expected and often essential just to stay alive.

In health care, the buildings must have the ability to adapt to changing medical technologies, business practices, and program needs to remain useful over time. For instance, 20 years ago hospitals were designed around delivery of services to the inpatient. Today, hospitals must be able to accommodate the outpatient. Often it has been difficult and very costly to convert a hospital designed for the inpatient into a facility that is intended for the outpatient. In many cases, these inpatient hospitals were not originally designed in ways that could accommodate such a drastic change in function.

Architectural Objective Three

Architecture for the community should be designed in such a way that it is safe and defensible. Often public buildings for low-income communities are located in areas of high crime and vandalism. In these cases, it is important to create a setting that is safe for people to enjoy without the fear of being confronted by these crimes. The combination of crime, vandalism, and the unattended decline of buildings can lead to growing anxieties and expressions of fear on the part of people in declining communities. The fact remains that communities with a poor physical environment tend to have higher crime and overall poorer health. Many studies have been done that assert that the physical construct of the environment can elicit attitudes and behavior on the part of inhabitants that contribute in a major way toward insuring their security (Newman, 2).



5. *Safe and inviting settings*

Oscar Newman, author of *Defensible Space*, states, “Defensible space is not about fencing. It is about the reassignment of areas and responsibilities. ... The demarcation of new spheres of influence and activities.” (Newman1, 3) *Defensible space* is a surrogate term for the range of mechanisms, real and symbolic barriers, strongly defined as areas of influence, and improved opportunities for surveillance that attempt to bring an environment under the control of its residents (Newman 2, 3). Defensible space operates by subdividing large portions of public spaces and assigning them to individuals and small groups to use and control those areas (Newman 1, 2). This design process starts with an understanding of a hierarchy of spaces from strictly private to that of openly public areas.

Architectural Objective Four

Architecture should use common materials and construction methods that are inexpensive yet durable and readily available, comfortably modified, and easily assembled. Often buildings that are difficult to construct take longer to build and are more costly to erect. Using materials that are readily available and easy to manipulate saves cost and time. With materials and building systems that are easily constructed and manipulated, the building can be assembled efficiently and possibly save in labor costs. This can also lead to great opportunities to have the people in the community participate in the building process. This will give a greater sense of ownership to those in the community.



6. *Easy to construct buildings*

Considering and implementing simple building systems is essential to construction-cost containment and future building adaptability. The cost of labor is an important factor in determining construction methods. By choosing simple construction systems and methods, more of the building can be built effectively by lay people, as well as saving costs of labor when professionally built. The more specialized the design of a building becomes, the more specialized and expensive its construction. If specialized labor is required for construction, chances are it will be more expensive to build.

Architectural Objective Five

Buildings that house wellness activities must be healthful in design and supportive to the needs, activities, and events of its inhabitants. Often buildings can be detrimental to our health, especially when designed with no regard to supporting inhabitants well-being. The design and architecture must address a building's complex chemical, physical, and biological processes that will affect health and well-being of people. William McDonough sums it up:

As an architect and designer, I have come to realize that often the very stuff with which we make things and the systems we mobilize for their delivery causes us to destroy more than we create. Our pattern of designing, taking, making, and wasting is clearly beginning to cause terminal stresses in humanity and nature. I wonder if it must always be so. (Marberry 231)

Architecture should attempt to limit the use of hazardous materials and systems in an attempt to enhance health and well-being. Choices about materials, mechanical systems, daylighting, and incorporation of nature can impact whether a building supports good health.



7. *Healthful settings*

Project

A test case was chosen to apply the findings of this research and the proposed design objectives. The test case is a wellness and preventive care center intended to serve an economically disadvantaged area in Anderson, S.C. It is programmed to meet the health needs of the immediate community, bringing services and programs that focus on keeping people healthy. The project also provides a vehicle to explore the ideas and objectives previously proposed and the architectural response to these ideas.

Anderson, S.C. is a city of about 50,000 people. Originally a mill town, it has undergone many changes in the last 20 years and no longer can depend on the mills for jobs and significant economic impact. Consequently, many neighborhoods and communities that relied on the textile mills for economic support have become dilapidated and at times unsafe due to high crime and unemployment. As a result, there is fertile ground in Anderson for positive changes in the health of the environment and community.

The site for this project is an abandoned textile mill located four blocks from the historic downtown. It originally contained a complex of buildings, many of which have since fallen or burned. The remaining ruined structures are eyesores to the community and unsafe, unstable structures. The site is currently secured by a chain link fence that runs around the entire site. Some existing reusable structures include the main mill building, a smokestack, and a

warehouse. The existing mill structure was originally constructed in 1894 of heavy timber and masonry. It will serve as the main focal point of this thesis.

The site is also directly adjacent to an underserved, poor community. The community consists of neighborhoods that formerly housed the workers who served the textile mill. Since the closing of the mill, the neighborhoods have become poorer and cultivated higher crime rates and unemployment. The neighborhoods are not abandoned but have become dilapidated and worn with the downfall of the textile industry in the area.



8. Underserved Neighborhood, Anderson South Carolina

Architectural Conclusion

Through a semester of investigation and study, the following project has been proposed as the culmination of the ideas and theories behind guerilla health care and *guerilla architecture*. The site for the test case was chosen due to its proximity to an underserved community, the present unhealthy state of the site, its proximity to an existing city park, and its closeness to the revitalization efforts happening nearby in downtown Anderson. Through a proposed master plan, the following activities and areas are proposed for the site: a new soccer field, a small amphitheater, an outdoor walking path, picnic areas, parking, a community resource center, and the wellness center.



9. Architectural model

These different activities are intended to bring new life to the site and to bring people to this area who previously would not have visited. They are designed to overlap and offer opportunities



10. Architectural model detail

for unique social interaction between people and groups making the area nonintimidating, safe, and inviting. The existing abandoned textile mill building—a two-story structure of heart-pine timber and masonry, built in 1894—serves as the main architectural focal point of this project. It is about 700 feet long by 125 feet wide with a floor-to-floor height of about 18 feet. The timber posts and beams are on a 25x25-foot grid.

The architectural design weaves together new components with the existing structure, allowing more precise integration of old mill and new. This includes removal of the existing roof structure to install new systems, the grafting of a scaffolding-like structure and removal portions of the existing mill wall without disrupting the overall integrity of the building. This overlying strategy lays the groundwork for the necessary seamless integration of different building systems and strategies. Strong collaboration is an important philosophy in guerrilla

health care. These specific design moves shape the architectural character and make-up of the proposed architectural setting.

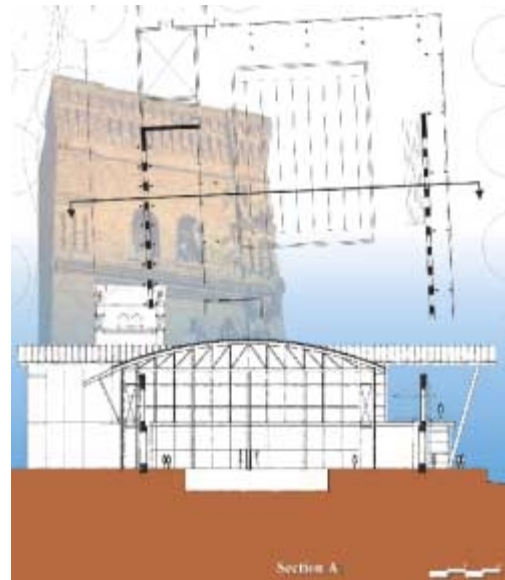
Conclusion

Christopher Day, architect and author, stated in *Places of the Soul*, “The built environment can have such powerful negative effects that we must think, can it, if consciously worked with, have equally strong positive effects?” While a healthful environment is essential and influential in health-care settings, it is understood that architecture is only one factor of many that can help determine the effectiveness of health-care delivery and programs. It must be remembered that other determinants—such as the quality of care providers, the availability of medical technology, and the access to services—can also play a critical roles in the quality and success of health-care delivery.

The architecture in this project facilitates the ideas of guerrilla health care and wellness promotion to communities. The built environment is an integral part of the health of people and communities. In this case, the building attempts to become an influential part of the community and its health and is always changing as the needs of the people around it change. Furthermore, it is the hope of this proposal that architecture can be more than just walls and roofs. It can be a provider and promoter of health.



11. Computer rendering



12. Project drawing, Section

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