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I, Jason M. Papa, hereby submit this work as part of the requirements for the degree of:

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Trauma Institute - Detroit Michigan: Community Realized Through Poetic Architecture

This work and its defense approved by:

Chair: Vincent Sansalone
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Trauma Institute - Detroit Michigan:
Community Realized Through Poetic Architecture

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Abstract:

Architecture is a language, which differentiates it from the greater built environment. It communicates meaning in two ways; through memory and by creating relationships.

Architecture communicates through memory by way of mental associations. An architectural environment is compared with similar environments in the mind, allowing for a transfer of meaning, as well as measured differences.

By creating relationships, architecture is also able to communicate more topically. This can be done with formal relationships, but also by establishing the nature of a user’s relationships with the environment. One of architecture’s unique qualities as a cultural product is its ability affect the relationships between users.

By critically communicating in these ways, an environment can be designed that engages its users, in action and perception, to impart a desired effect. As with any language, architecture can be distilled into a poetic form, allowing for a stronger effect and richer communication.
TRAUMA INSTITUTE
DETROIT MICHIGAN

COMMUNITY REALIZED THROUGH POETIC ARCHITECTURE

AS DOCUMENTED BY
JASON PAPA

MAY 2008 VOLUMES I - III
Preface

contained in this book are three volumes documenting the trauma institute in detroit michigan; an internationally renowned medical center dedicated to the research and treatment of physical trauma. compiled by the institute’s founding social engineer, these volumes attempt to describe not only the environment of the trauma center but also how it was developed. due to the difficulties of physically visiting the institute, this book is dedicated to illuminating the nature of that experience for those who take interest. specifically, the architecture and its effects are explored in detail. volume i: environment focuses on the contextual conditions existing before the institute was conceived. the culture of detroit, the site of the project, and various aspects of the medical community are all documented here. volume ii: traditions presents the theoretical foundations of the project and of its social goals. this section also contains a selective reference to the facility’s architectural precedents. volume iii: values lays out the goals of the project and illustrates the methods used and studies conducted to ensure that these goals were realized in the final product.
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Twelve years ago, when the Trauma Institute embarked on its plan to build an international research and medical center, Detroit presented itself as the perfect American city to establish a symbiotic relationship with. As a potential home for the Institute, Detroit set itself apart with repeated demonstrations of its resident’s commitment to trauma. Any doubts as to the credibility of this reputation where put to rest once the long term trends supporting this tradition where found to be maintained by both big industry and the government. Once considered the model city for progressive planning, the lesson of Detroit in now understood in another way. To provide a context as to why the Motor City and the Trauma Institute are so well suited to fulfill each other’s needs, a brief survey of the early feasibility research is presented here. It is intended to be a crash course in the history and current condition of the city and concludes with a series of paintings exploring Detroit’s poetic qualities.

The population of Detroit was approximately 285,000 in 1900. By 1950 it had grown to over 1.8 million, but before the turn of century it would shrink by nearly fifty percent, back to under one million. Detroit’s rise and fall are not only cataloged in the same century, but are generally attributed to the same cause. The twentieth century model of industry, propelled by the success of Henry Ford, figures largely into any understanding of the city’s current state. Detroit was ground zero of the Fordist model, emphasizing the modernist planning tenants of flexibility, mobility and speed. The headlong embrace of this model resulted in an industrial idea becoming the spatial reality of the city’s urban form. In 1909 the city became home to the first concrete highway in the United States, literally paving the way for the federal highway system that the city’s auto industry would soon support. This commitment to Fordism brought great success to Detroit as an urban industrial center but also led to its obsolescence.
Vertical Imagery and Horizontal Landscape:

During the early twentieth century, centralization was still a key concept in business and planning. Architecture was a natural medium to express the power imbued in this center and often emphasized it with a building’s vertical dominance over the surroundings. Concentrating resources into a vertical dimension provided both greater density and a clear top-down expression of order. This concept manifested itself in a multi-story factory model that started production with raw materials on the upper floors and fed the product down to completion on the ground floor. Eventually this building type proved to be too inflexible for the needs of industrial urbanism. To provide greater flexibility, the vertical orientation of the factory was abandoned in favor of the unlimited horizontal plane.¹

Here a semantic split occurred in Detroit’s landscape. The natural geography of the area was flat, and the city’s new nature, industry, also began to embrace this horizontality. Verticality, however maintained its role as a display of power. Now stripped of its functional purpose, verticality came to be used more exclusively as an expression of influence. The only remaining vestige of this at the factories themselves are the smoke stacks, which can be seen illuminated at night at the River Rouge Plant. [Fig. 1.4] The corporations who run them however create strong vertical images in their administration offices, ensuring that their dominance over the landscape is recognized. [Fig. 1.5]

The statistic given above that Detroit has lost half of its population since 1950 must be understood in relation to the city’s horizontally expanding stance. This is because, as a region, the Detroit area is still prosperous and growing. It’s neighboring counties had a population of 1,166,629 in 1950, com-
pared to Detroit’s 1,849,568. By 2003 these proportions had reversed in the extreme. Detroit’s estimated population at this time was 921,758, while the surrounding counties boasted a population of 3,164,966. Considering that the standard of living is also significantly higher in the surrounding areas, these numbers represent a massive redistribution of resources away from the city center. What this shows is that although Detroit’s embrace of the Fordist model brought it wealth in the short term, the city was unprepared for the long-term effects it would have on the urban form. The traditional model of the market city had been replaced with one that was devised on temporary utility and short term efficiency. The decentralization of big industry occurred due to numerous factors and it pulled the city’s resources outward with it.

From the outset, the sheer scale of production undertaken by the auto industry lent itself to a horizontal configuration. This can be seen even in the so called ‘vertical’ Model T Plant, shown in Figure 1.7. Horizontal organization allowed for a continual and fluid relocation into more profitable conditions. The single story factory, able to be expanded and reconfigured indefinitely was only the beginning of industry’s horizontal reorganization. Improved communication and transportation allowed not only for greater regional expansion, but also national and international competition. Besides the benefit of being able to relocate to cheap labor, moving out of urban areas was a way of fleeing the sometimes militant organization of unions there. During WWII, industrial decentralization also came to be supported by the federal government, a trend that would continue well after the war. Subsidies were awarded to industrial development projects in remote areas outside of possible urban air raid targets. The Federal Highway System was another ironic blow. Necessitated by Detroit’s primary industry, it would ultimately enable that industry to abandon the city. As Henry Ford II once said, “Obsolescence is the very hallmark of progress.”
Unitization and Division:

Despite being partially abandoned by its industrial fathers, the city’s genes were born of the industrial model, and these genes are very much present today. The serialization of production and division of labor that Ford promoted manifest itself throughout the city. It is evident in both the methods of construction and the city planning. Perhaps most striking is the result of widespread land partitioning that was calculated so as to not allow enough space for multi-unit residences.

This gets to the heart of Detroit’s unitization. It was fueled by the forces of economy, but enabled by two seemingly opposed ideals: individualism and corporate control. American individualism, paradoxically made possible by serialization, fed a culture of private ownership and unitized property. The automobile and the single family home are prime examples of this. The city’s corporate industries also favored unitized property. They considered Detroit’s working population as one of their assets, and unitization took this huge resource and broke it down into manageable parts. A suburban ‘community group’ made up of home owners rarely exercises the political unity of an urban ‘housing collective.’ Similarly, a motorcade of cars, with the ownership they imply, rarely does the damage of a mob of pedestrians. So, in Detroit, with the industrialists at the helm, the single family home and the road were promoted. This explains why, during the 1990’s, Detroit was still found to have a higher percentage of single-family homes than any other city in the U.S.9

Along with unitization comes another force that weighs heavily into Detroit’s history; division. Again, this concept has been embraced by both the residents and the leaders. By the residents, as a form of differentiation, and by the leaders as a further measure of control. For the residents, it comes as a natural reaction to the monotonous landscape created by serial production. This, and a myriad of other historical forces, created a tradition of social segregation strongly enforced along racial lines. Residential covenants restricting, among other things, sale or lease of property to blacks became commonplace in the years between the wars. One of the most infamous realizations of this culture of segregation was the 8 Mile/Wyoming Wall. [Fig. 1.11] Standing at six foot high, one foot thick, and one quarter mile in length, this concrete barrier was erected in 1943 by a real estate developer to quiet white hom-
owner’s concerns about blacks moving into their neighborhoods. This housing discrimination was also sanctioned by the federal government. Brokers and lenders, when determining eligibility for mortgages and home loans, used a map developed by the Federal Home and Loan Bank Board. The map was zoned from A to D based on a number of neighborhood conditions. The most important of these was the neighborhood’s racial, ethnic, and economic consistency. Any area with any African American population was given a “hazardous” rating of “D” by the federal appraisers, meaning there was very little chance of securing financial backing. Additionally, white neighborhoods that had covenants banning blacks from residence were given higher ratings than those without such restrictions. Even with Detroit’s vastly growing black population, segregation remained prevalent throughout the city through the 1960s. Today, the dividing lines are the city limits. Detroit’s population is approximately 80% black, and the surrounding area, 80% white. The surgical split between the affluence of the suburbs and the divestment within city limits can be clearly observed from above, as in the image of Detroit’s eastern boundary shown in figure 1.12.

The automobile provided the other great tool of control used by the civic leaders to divide the landscape. By privileging the automobile as the primary means of circulating the city, the demographic financially unable to own one was conveniently excluded. Multi-lane avenues and highways became a type of fortification in front of important government and corporate sites. They were also used to cut off other travel routes, limiting both pedestrian and vehicular travel across certain boundaries. During the 1950s Interstate 75 was located across a section of the city that planners deemed undesirable. Today, it still acts as a division between a residential zone and the inner city zone of corporate investment.
Voids and Blind Spots:

As described above, the decentralization of Detroit’s industry resulted in a city that could not sustain its infrastructure. Large areas of the city were abandoned. Industrial parks were rendered obsolete. Residents, no longer able to find work or threatened by changing demographics, simply left. Whole neighborhoods such as those dissected by I-75 now have the appearance of an abandoned rural settlement: only a few of the homes remain, without windows, standing in unkept fields showing signs of nature’s reclamation. Even the downtown suffered massive evacuation as can be seen in the timeline of figure/ground studies found in Stalking Detroit. [Fig. 1.13] So extensive is the abandonment of property that in 1990, Detroit’s Planning Commission released a plan to begin depopulating the most blighted areas of the city. The city’s tax base could no longer afford to provide civic amenities to these areas, so they were to be completely depopulated in favor of more viable neighborhoods. The plan was met with outrage, but it illustrates problems presented by the extreme drop in the city’s density.

Throughout the city, with or without the depopulation plan in action, there are voids. Michigan Central Station is one of the most observable examples. Approaching Detroit from the south on I-75, it is visible as a prominent building on the horizon. Upon closer inspection, it appears to be hollow, which it is, and the perspective from the road allows the viewer to see the sky piercing through the opposite side of the huge, now windowless building. Closer still, its history becomes clearer, written in aerosol propelled text over its entire facade. Viewed from the front on Michigan Avenue, its large, empty green lawn only adds to the power of its hollow image.
Abandonment is prevalent, but Detroit is also proactively involved in the creating of voids. During the 1990s the city lost about 1% of its housing stock every year to arson, a communal tradition that culminated each year on the infamous Devil's Night. The city publicly condemned the arson while simultaneously carrying out a vast demolition program of its own. These two efforts to address the city’s image problems allowed multiple communities to participate in erasing traces of Detroit’s failed urbanism by trading its ruins for voids.\textsuperscript{15} Perhaps the most astonishing void being created by the city’s expatriates is the one being opening in its municipal cemeteries. Each year, between 200 and 300 of Detroit’s corpses are disinterred and relocated to suburban burial sites.\textsuperscript{16}

In addition to voids, the landscape is peppered with blind spots, large areas off limits and cut out of view. The sunken highways contribute to this sensation, and even the Renaissance Center downtown, a beacon in the landscape, has an cloaked disposition. [Fig. 1.18] It’s mirrored facades are surrounded at ground level by enormous concrete bunker-like structures that give little clue that entrance is even possible.\textsuperscript{17} The quality of these blind spots is most palpable in the areas near the large industrial parks. The Conner Daimler-Chrysler assembly plant on Detroit’s east side is a prime example of this. First it is separated physically from its surroundings by multilane avenues. This is coupled with an eight foot high fence topped off with razor wire and electrified tops. In addition, earthworks are used to obstruct from view what it is that is being so heavily fortified.\textsuperscript{18} The hidden mass of these shrouded complexes lends a disquieting character to all of their bordering neighborhoods.

In the article “Line Frustration Detroit”, Jason Young argues that Detroit’s media has created another kind of blind spot:\textsuperscript{19}

“Detroit’s local media have been broadcasting clues to the emigrant (suburban) middle class for years: fill the emptiness with memories, order this unprecedented cityscape by remembering how it used to be.”... “In a certain sense, the mission of the media in Detroit has been to maintain a perception of order through constructing a nostalgic gloss. But why? The answer is simple; there is control in broadcasting nostalgia. It blunts the possibility of a serious rethinking of the city itself, and this blunting conserves.”

This mental blind spot, hiding the realities of Detroit’s current problems and opportunities may be the city’s single greatest challenge.
Vibrant and Flashy Images:

Detroit has been a city primarily populated by African Americans for about fifty years. This has perhaps contributed to its uniquely vibrant visual culture as a Rust Belt City. Color is used liberally in the built environment and advertising has taken on a noticeably bolder character. This is one of the visuals that compete with the clearly depressed economy, one of the signs that Detroit is very much alive. The images on the right are photographs of a project known as Object Orange. The artists used a distinct color to call out dilapidated building around Detroit. It has resulted in many of these buildings being demolished. This is similar to previous works by Tyree Guyton. His community aided, large scale installation is known as the Heidelberg Project; Heidelberg being the street where he grew up and the project’s primary site. The work was undertaken as a way of reclaiming the negative image created by the abandoned houses in the area. Figure 1.27 shows one of Guyton’s houses on Heidelberg street, many of which were, like the work of Agent Orange targeted for bulldozing in favor of the void.
1.26 Tyree Guyton, Heidelberg Project Concept

1.27 Tyree Guyton, Heidelberg Project: Dotty Watty House
1.30 Detroit Poetic: Unitization

1.31 Detroit Poetic: Division
1.34 Detroit Poetic: Vibrant

1.35 Detroit's Environmental Poetics
Beyond the existing conditions of Detroit, the Trauma Institute is set within the bounds of the medical community. As in the Detroit area, the medical field has a diverse and at times segregated population. The following section surveys the social and environmental needs of this group, as well as recent developments in medical architecture. It too, concludes with a series of paintings done to articulate the poetic qualities present in the trauma center environment.

One of the goals of the Institute is to act as a physical and mental nexus for the trauma-related medical community. It is an international place of gathering, for professionals and for ideas, but it also sustains a perpetual community of its own. This group consists of doctors, nurses, students, medical assistants, medical technicians, EMTs, kitchen staff, housekeeping staff, facilities staff, administrative staff, patients, visitors, researchers, research assistants and host of other support personnel. This group in turn, is joined by visiting doctors, researchers and lecturers creating a potentially messy situation of overlapping workflows and general congestion. Architects have long served the medical community by providing environments that allow hospital activities to be orchestrated efficiently. Architectural modernism’s tenants of transparency, compartmentalization, and efficiency can even be traced to developments in medical science. This need to spatially separate the operations of modern medicine is resisted by the Institute’s goal of sharing ideas between segregated fields of research and treatment.
Institutional Environment:

The Institute’s resolution to break from the strictly ‘institutional’ nature of most medical architecture was not only an idealistic goal, but a pragmatic one. Market forces, even in the medical field, favor brand identity, not only in attracting clients, but in the highly contested search for personnel. Commitment to a strong community by building an environment to support it became a bankable strategy.

The collaborative Dutch publication *The Architecture of Hospitals* proved to be an unsurpassed guide to achieving this end. The book’s editor, Cor Wagenaar, explains how it is that the architecture of medical institutions came to be so devoid of critical thought. In his view, institutions are created to defend and organize the interests of a professional group. If one institution (architecture) functions within another’s sphere of influence (medicine), the former’s goals are often overwhelmed in trying to satisfy the goals of their client. Considering the vast resources and political energy that circulate through the medical community it is not surprising that architecture was overwhelmed by its demands. Wagenaar writes, “Apparently it lacked the qualities to resist this path, and as a result it lost its inherently critical attitude. The architecture of hospitals thus perfectly illustrates the impact of institutionalized healthcare.”

One of the qualities of institutionalized healthcare that is currently being challenged is its tendency towards indefinite growth. The resulting medical centers sprawl and proliferate with little logic outside of administration. The Texas Medical Center in Houston is one of the most extreme. [Fig. 1.38] It is larger and has a more impressive skyline than most cities and it is the largest single employer in the state of Texas. In response to such complexes, and the market forces described above, establishing ‘Centers of Excellence’ such as the Trauma Institute has recently become a major trend in the United States. The rationale behind this is that by concentrating specialized knowledge, the centers can provide a better product.

More specifically to the building project, a trend making headway in reducing the institutional tone of healthcare architecture is called “evidence-based design.” This approach creates environments that can be evaluated performatively through data collection, similarly to the way medical treatments are evaluated. The effect of this is to shift the focus from institutional efficiencies to individual experi-
ences. Among patients, both ‘hard’ evidence such as recovery time and ‘soft’ evidence such as psychological states are being evaluated. Among staff, data such as sick days and staff retention rates are being measured to gauge positive responses to environmental improvements.

Evidence-based design focuses primarily on issues of stress reduction and positive mental stimulation. Beyond this, Charles Jencks argues that architecture carries the potential to evoke a ‘placebo effect.’ The positive effects of medically administered placebo are culturally and scientifically accepted, but recent tests of their effectiveness have yielded highly nuanced results. These tests have shown that everything from a doctor’s belief in the placebo, to its form (pill vs. injection), to its color, have significant effects on patient benefits - even though they are all chemically contributing nothing. The argument that Jencks makes is that if these variations can affect a patient’s health, then a belief that they are in a healthy or healing environment will also have an effect. He takes it even further by drawing a parallel with a study that showed ‘brand name’ placebo were more effective than ‘generic’ placebo, arguing that if a patient recognizes the (st)architect’s name, they will believe they are in a better building. As with evidence-based design, the benefits of the placebo effect can be applied to the staff as well as the patients.
User Groups:

With the Trauma Institute's commitment to supporting social interaction, each user group's needs in this area were evaluated, both within the group and in relation to others. The nature of the Institute's work means that many of these users are under extreme amounts of stress and often uncomfortable conditions. At a Level 1 trauma center, gunshot victims and drunk drivers are the daily patients. They are accompanied by hysterical family members and, all too often, death. Medical staffs work unusually long shifts with thirty hours being the norm for many doctors in training. Trauma researchers deal in the same subject matter, but are subjected to a different kind of stress. To do medical research, grants are needed, and the competition for these is extremely tight, often happening in house, with one team racing to publish results before the one next door.

The upside to this extreme environment is that it tends to create strong social bonds. Medical communities share unique experiences that set them apart from the outside world and tie them together. This community occurs at two scales. At the smallest level it is the team that they work with, and at the largest, there is a global bond between people who work towards a common goal and share common pains. The community at the Trauma Institute represents both of these scales and attempts to bring them closer together.
1.45 Medical Poetic: White Noise

1.46 Medical Poetic: Antiseptic
1.47 Medical Poetic: Death

1.48 Medical Poetic: Science, Compartmentalized Life
1.49 Medical Poetic: Inevitability, Trauma

1.50 Medical Poetic: Inevitability, Life Giving
The site of the Trauma Institute was chosen for its central location in Detroit and for its proximity to major transportation arteries. The location is about three miles north of the downtown area on I-75, just past the I-94 junction. The benefit of being located on the interstate is twofold; it both expedites ambulatory access and provides a public face to a relatively isolated site. The site sits within a primarily residential neighborhood that has suffered the divestment common to the city. The decision to build in this neighborhood was also supported by the benefits of the low property costs. They allowed the Institute to invest more of its resources into the social spaces of the program, and the site’s relative isolation ensures the use of these amenities, such as the garden and dining area.

Interstate 75 is the north-south route through the city, providing the site with five minute access to the Detroit Medical Center and connecting it to the affluent northern suburbs. Incoming patients from the freeway and the surrounding area can approach the Trauma Institute using the low traffic Chrysler Drive which parallels the I-75. The site’s primary exposure is the eastern side facing the Interstate, with view corridors from the surrounding low-density area being a secondary concern.
Notes

8. Ibid., p. 140.
15. Ibid., pp. 106-107.
18. Ibid., p. 290.
Architecture is a language, which differentiates it from the greater built environment. It communicates meaning in two primary ways; through memory and by creating relationships.

Architecture communicates through memory by way of association: An architectural environment is compared with similar environments in the mind. This yields associations as well as measured differences. A small stone fireplace is an example of an architectural image that can evoke memories which give the present environment its meaning.

By creating relationships within a given environment, architecture is able to communicate in a more topical manner: The Giza pyramids, for example, are set up next to each other, and offer architectural images that can be compared directly in this way. The body’s relationship to the environment is also conveyed in this way. Perhaps most powerfully, this operation allows architecture to affect the relationships between users, as in an intimate dining booth in the back corner of a restaurant.

By critically communicating in these ways, an environment can be designed that engages its users, in action and perception, to impart a desired effect. As with any language, architecture can be distilled into a poetic form, allowing for a stronger effect and richer communication.
If architecture is to be used intentionally, as a language, the challenge of communication must be addressed directly. Meaning and legibility in architecture constitute a large part of the postmodern discourse. To narrow the aim of this inquiry, the goal will be clear communication with the widest possible audience. Gaining an understanding of how architecture operates as a language is the first step towards being able to 'speak' it eloquently. This in turn will allow the 'message', or environment, to be communicated as clearly as possible.

In the essay “The Third Typology”, Anthony Vidler elaborates on the rise of an architectural language that has been handed down from the past and present. The premise of Vidler’s work is that, dating back to the Enlightenment, there have been two typologies guiding the mission of architecture. First, a return to the primitive ‘natural state’, and then, to the machine as the model of progress. His essay, written in 1977, was heralding the arrival of a new typology; its ‘locus’ being the traditional city. He writes, “no longer is architecture a realm that has to relate to a hypothesized ‘society’ in order to be conceived and understood; no longer does ‘architecture write history’.” The point is that architecture is no longer needed to represent external ideas, or to embody the spirit of its people. Built urban form is in its entirety, and in each fragment, the language of the new typology. To achieve a desired environmental effect, ‘fragments’ can be assembled and designed to maximize architecture’s already established potential to communicate.

The goal of this architecture is not metaphor; it need not represent anything it is not. Furthermore, it should not require specialized knowledge because this would only limit its potential influence. How then, does the built environment communicate, if not through metaphor or specialized learning? Here, phenomenology is useful in evaluating the message an environment sends to its users. Phenomenology’s direct analysis of the environment’s affect on human experience allows for a discussion of effects without a specific vocabulary or knowledge base. Gaston Bachelard’s definition of the ‘poetic image’ in architecture is also useful. He explains how an idealized space can be recognized in the built environment as a poetic image. It is further asserted here that the concept of a poetic environment can be related to poetic social settings.

To understand how architecture operates, it will help to first examine some more familiar languages. Human speech is the touchstone of our understanding of language. It is comprised of words, and these words are the tools that we use to expand our comprehension of the world. Words help us establish our relationship to the world and to reason its nature. Words have the ability to carry a very specific meaning that is understood by all who speak the language. Spoken languages are essentially coding systems, and because all humans can innately learn to both understand and speak them, they provide us with a medium with which to describe our world. Gesture is another form of human communication, but one that does not rely on arbitrary signs. A gesture of aggression can even be understood among animals across species lines. Gestures involve a physical display that is understood in relation to the body. The environment is sometimes read in a similar way. Cliffs are understood as dangerous, land near a water source more desirable. The important difference between human speech and the language of the environment is that, while people can speak or gesture back and forth, most cannot ‘speak’ the language of the environment. They are affected by it, but are environmentally inarticulate. Architecture is the human language with the capacity to speak environmentally. Instead of words, it is made up of environmental settings – forms and spaces perceived and remembered. The geographer Yi-Fu Tuan described this well in his book Space and Place Perspectives of Experience.

“Words contain and intensify feeling. Without words, feeling reaches a momentary peak and quickly dissipates. Perhaps one reason why animal emotions do not reach the intensity and duration of human ones is that they can neither grow nor fester. The built environment, like language, has the power to define and refine sensibility. It can sharpen and enlarge consciousness. Without architecture, feelings about space must remain diffuse and fleeting”.

2.1 Bigo, Renzo Piano, Genoa, Italy
As a formal language, architecture is rooted in our relationship to nature, but its current structure is informed by the entire history of the built environment.

Frank R. Wilson is a neurologist interested in how physical activity shapes the development of the mind. His book, The Hand gives a captivating account of the rise of human languages: “When people created formal languages, they created mechanisms for sharing knowledge and in so doing authenticated the existence of mutual awareness and cohesive purpose in their lives. The word we use for that arrangement is ‘culture.’” Spoken languages, music, and the visual arts are all part of ‘that arrangement’. As mentioned above however, mechanisms of communication can come in more than one form. This is well addressed later in Wilson’s book, in a section comparing music to speech. On the surface music and speech appear very similar, both expressive and comprehensible, both audible with accompanying written representations. We know them, however to be very different in nature. “A musical phrase does not convey the same sort of information that a verbal sentence does; it evokes feelings or emotions – patterns of body tension and release – rather than referring to specific ideas or objects.” Architecture, like music, is an evocative language, it speaks to all of us, but few are involved in the dialogue. It is rooted in instinctive human reactions to the environment and has been elaborated and maintained by specialists since its conception.

An understanding of how society comes to comprehend the language of architecture is helpful in determining how to best convey a message through it. Human literacy of the environment cannot be attributed to any one source, we draw from memories of various ages. To begin with, there seems to be a certain amount of literacy genetically programmed before birth. Tests have shown, for instance, that infants possess an innate fear of heights. There are also environmental preferences that are present across all cultural lines. These traits are most probably the result of years of evolutionary development. The most well-know pair of these ingrained preferences is prospect and refuge. The possession of these preferences must have been ‘survival-advantageous’ to our ancestors, and so they came to be dominant traits through natural selection.

Another source of our understanding of architecture is the environment that we are raised in. Childhood memories of these environments form strong impressions on the mind; important influences on how we perceive the built environment for the rest of our lives. These impressions often come from environments that we found especially comforting or even just familiar. They are contingent on the culture and geographic location of a child’s experience and as such form the basis of culturally based preferences. Architectural literacy continues to expand as long as new experiences are gathered from the environment, but it can also be expanded through other cultural mediums. Poetry, film, painting and photography all feature architectural subjects. The result of these subjects being depicted from outside of the architectural discipline is that they are primarily depictions of architecture in terms of experience. These environments, however fantastic, expand our understanding of the language of architecture.

There is something else that should be noted about architecture which sets it apart from many other forms of communication. As a language, architecture affects us through physical interaction – this is how it is learned. Climbing stairs, taking refuge from a storm, or sharing a meal by candlelight; this is how the language of architecture gains meaning. If an environment does not engage the body, it fails to reference or create memories that can only be accessed in this way. The strength of the language comes from its ‘environmental’ quality, meaning its ability to engage the mind and all of the body’s senses.

Now, with an understanding of how the language of architecture operates, methods of articulating it in the built environment can be explored. The language described thus far has remained generalized, giving it a high degree of accessibility. The challenge remains to find an effective way to ‘speak’ this language without clouding its clarity. Phenomenology can be helpful in formulating environmental questions and propositions. It is applied to the built environment in order to understand how it feels to be there, and why it feels that way. In the pursuit of a highly accessible language of architecture, phenomenological thinking is beneficial in two ways. Firstly, while subjective, it does not rely on symbols and so, is less culturally specific. Secondly, it analyses experience without relying on a user’s cognitive efforts, meaning that it focuses on perceptions that requires no previous knowledge. Incorporating phenomenological sensibilities into the design process can result in easily digestible environments because they are designed explicitly to appeal to the human senses and instincts. It is this quality that makes it useful when designing for a diverse audience.

Gianni Vattimo, an influential theorist and phenomenological thinker, describes this requirement of contemporary architecture in his essay “The End of Modernity, The End of the Project.” Speaking of the challenges posed by, “the current proliferation of communities and value systems”, he suggests that our built work must take on an increased ‘recognizableness’. To describe how this can be achieved, he uses a Heideggerian term; the German Ueberlieferung, or ‘a handing down’. What Vattimo suggests is that, like spoken languages, the language of architecture has been handed down to us and is always in flux. Its ability to communicate comes
from the past as well as the present. In order to retain this ability to communicate, and in the face of the global age, he believes that the cultural role of the architect must evolve. Evolve, to be less a ‘genius’ expressing humanity, and more of a “‘symbolic operator’ with a clear awareness of what he is doing.”

The work of another prominent phenomenologist illustrates the tools that these ‘symbolic operators’ have been endowed with. Bachelard’s book, *The Poetics of Space*, establishes the role of the poetic image in architecture. His thesis, expounded in the introduction of this book, is that when we experience a built environment that has assumed poetic qualities, the result is a meaningful resonance between the ideal and reality. The message Bachelard delivers is that, apart from the physical reality of our world, human beings experience environments of pure emotional value. Bachelard’s argument for this is strongly fortified through the use of poetry and anecdotes, which highlight a human experience deeply interwoven with a sense of space and place. The often-cited first chapter offers the most clearly architectural investigation. It contrasts the powerful psychological effects of being in a basement with those of being in an attic. He references the existence of two ideal, or poetic environments. These poetic environments are formed by our imagination but they are based on experience. They come from places we’ve been or places we’ve been told about; fantasy and the everyday. When we experience a space that reflects one of our ideal environments it is received poetically. It is meaningful because it is recognizable by our subconscious. This poetic quality goes beyond ‘legibility’; the environment is not only read – it confirms what is already known. The beneficial application of this idea is broad, but in the realm of theory it directly applies to architectural and urban legibility. Semantically, it takes the emphasis off of reading and places it on recognition. The poetic environment is a metaphysical ideal, and it can be used as a sounding board for built architecture.

When poetic environments are described in this way, the relationship between the language of architecture and the visual languages of the arts can be easily understood. One important difference between them is that the built environment has been the nexus of our social activity since its creation. This means that the associations that come with architecture’s language are often social in nature. They are based not just on an individual’s reactions, but also on group dynamics in response to an environment. The concept of poetic environments therefore, can also be applied to social settings. In order to encourage social activity among a society’s members, the built environment can be designed to present social settings that resonate with idealized ones. Just as Bachelard writes of idealized cellars and attics, each person has idealized social environments such as dinner settings, or meeting spots. By employing these poetic environments, an architectural message can be conveyed that has the ability to couple with a user’s social habits.
Peter Zumthor:

The work of Peter Zumthor perfectly illustrates how the language of architecture can create strong environmental experiences. In his buildings, each element contributes to a poetic environment that has no need for explanation because it references memories the users bring with them. These environments tend to be on the bare side, allowing users to project their own readings, and relying on rich materials and simple environmental pleasures to satisfy them. Zumthor’s simple schematic concepts lend themselves to easy phenomenological analysis; light, warmth, massive, fragile, etc., and the simplicity of the aesthetic prevents the effect of these themes from getting lost.
Architecture, as previously established, can communicate not only through associations, but also by creating relationships between its users. These relationships can be used to bring cohesion to a heterogeneous social group. The question asked of architecture today is: How can the built environment be employed to influence the social relationships of its users? More precisely in relation to a client, in what ways can this be done to strengthen the ties between these users and the environment their relationships occur in, i.e. schools, offices, resorts? Two familiar subjects will be addressed in an attempt to answer these questions: place and space. Specifically, how do these concepts affect a society’s social cohesion? Central to the topic of this essay is the concept of socialization, or the process by which humans learn to operate within a culture. It is asserted here that the built environment can aid a social group in developing community by placing its members in unique environmental relationships. Through these relationships, the social space created will be able to be shared by the society’s members irrespective of past traditions.

A developed concept of place is important to this topic because places provide the common ground for a society’s shared experiences. A concept of space must also be defined if we are concerned with the development of social space. Within the architectural discourse, space can be attributed to a wide range of meanings. While it is sometimes necessary to utilize the basic Cartesian, or volumetric concepts of space, it is Henri Lefebvre’s definition that best relates to questions of social space. In *The Production of Space*, Lefebvre describes social space as something that society produces, a secretion that results from social activity. This is the social space discussed in the following essay. It cannot be built because it isn’t a purely physical entity. The built environment both supports social space and results from it.

One of the cited difficulties of designing social space in the United States is a lack of shared history between its urban dwellers. Elsewhere, homogenous demographics, with long established formal and social traditions allow for a clear set of social rules and predictive behaviors. If even two distinct social traditions exist, the difficulty of satiating both in the same space grows exponentially. Clearly, when designing social space on the public scale a unifying approach is needed. If not universal, it can at least be more so than one based purely on a historic tradition or philosophical idea. The accessible benefits of phenomenological analysis previously described can be closely associated with developing such an approach.

If a social group comprised of varying traditions is to create a common social bond, it would require (re)socialization. Socialization, although most intensely experienced during early childhood, continues throughout our lives. It stands to reason that if the a heterogeneous social group had accessible but uniquely identifiable social situations, people of varying backgrounds could become intimate with these situations and in turn, would be uniquely socialized to the culture of that society. A society’s built environment can contribute to a unique social space, and this space in turn, contributes to the socialization of the society’s members.

Articulated places are fundamentally important to architecture’s ability to create relationships. By establishing a strong sense of place, a built environment can be used to localize, i.e. differentiate, its users. Additionally, if a social group is to have collective socialization in the built environment, articulated places serve to substantiate these interactions, and to root them in our memories and perceptions. Within the architectural discourse, the concept of place has been heavily influenced by the field of human geography and by phenomenological analysis. This line of thought has been strongly influenced by the writings of Martin Heidegger. His theories on what it means to ‘dwell’, and the nature of human existence still exert a powerful hold, although they have since been heavily extrapolated into various architectural discussions.

Dating from a rise in the 1970’s ‘place making’ is an area of architectural practice and research that descended from these discussions. The pursuit of this research is to gain an understanding of how the built environment can be employed to strengthen the ties between human existence and a ‘localized’ place. Often undertaken with the stated goal of ‘increased well being’, this pursuit is part mystic, part empiricist. It can be generally understood as a reaction to technological and global market forces that
continue to challenge our sense of location.

Globalization, although allowing for the transfer of people, products and ideas, also acts as a great homogenizer. By eliminating the factors of distance it destroys the value previously associated with one's location. Karsten Harries describes this condition in his essay “The Ethical Function of Architecture.” He argues that, “If the destruction of boundaries is welcomed by freedom, it also renders man's place arbitrary.” Harries is concerned with man's status in the world, but this also applies to a social group's position. He asserts that this lack of boundaries has resulted in a widespread lack of intimacy: If all things are equidistant, how does one locate ourselves, and how can one place be of greater value than another? Because physical presence has lost its power to localize, the built environment must engage the mind. If a place is able to impress on the mind a clear spatial memory, or in other words a poetic environment - one that has engaged the mind, senses, and body, then that place will be localized in the mind's global construct. By differentiating a build environment in this way, architecture allows users to assign that place value based on their experience there. Here again, Bachelard's description of the varied environments within one house, the cellar and the attic, serves to exemplify of the experience there. Here again, Bachelard's description of the varied environments within one house, the cellar and the attic, serves to exemplify of the experience there. Here again, Bachelard's description of the varied environments within one house, the cellar and the attic, serves to exemplify that the power of place to localize and differentiate. The presence of an opposite is shown to make the architectural experience of each more intense. It is an argument for the power of dialectal space that continues through his work.

This also provides a solution, to the previously mentioned weakness of using phenomenological thought in design; its inherently subjective nature. Because it is based on impressions and feelings, there are no absolutes. While it can be relatively expected that people will understand the 'language' of a basement and that of an attic, their preference between the two extremes cannot always be predicted. So, the presence of experiential opposites not only reinforce each other, they also provide a choice to satisfy varied tastes and situations. Beyond this, the result is often a more memorable place. The power endowed in this reciprocating effect is demonstrated by the renderings of Etienne-Louis Boullée. [Fig 2.7] As Anthony Vidler has asserted, by embracing the darkness and shadow of the sublime, Boullée was able to harness the political weight that enlightenment society had attached to transparency and light. Vidler explains; "the moment that saw the creation of the first 'considered politics of spaces' based on scientific concepts of light and infinity also saw, and within the same epistemology, the invention of a spatial phenomenology of darkness.”

The geographer Yi-Fu Tuan has written extensively about the effects of place and space on society, citing comparisons of cultures from around the globe. He describes place as a unique kind of object, “a concretion of value... an object in which one can dwell”. This 'concretion of value' can be contrasted with the process by which a place affects its inhabitant. Tuan demonstrates the existence of a process that is at times difficult to decode; dwellers affect place, and in turn, place affects dwellers. Henri Lefebvre examines this process with more clarity as discussed in the following section concerning 'space'.

To fully localize a group's social space, both their environment and the activities occurring in it must be considered. Just as articulated places can localize an environment in the mind's global construct through physical difference; articulated spaces can localize an environment through differences in activity. For a social space this means highlighting the social activities that differentiate it from others. The localizing effect of an environment being both physically and socially recognizable is exponentially higher compared to just one on their own. This can be compared the way people react to the sound of an alarm. When car alarms were first put into production, one going off warranted significant notice. It was an intrusion in the norm, and the public understood the implications of the alarm. Over time however, people began to realize that a car alarm going off rarely meant anything at all, and so today, they are largely ignored. This is similar to the effect of localizing an environment through an articulated place without localizing the activity of that environment; the strength of its effect will fade over time because the place holds no social meaning. Now consider the alarm used in Pavlov's experiment to signal a dog's feeding time. At first it was just an arbitrary sound, but connected with the activity of eating, it came to have a significant meaning over time. This accrued significance can be gained in an environment by producing connections between its places and its social activities.

Lefebvre's concept of space, especially social space, serves as a foundation for this essay. His work emphasizes both the political and cultural energies that are embodied within a society's social space. In order for a heterogeneous group to become a society of shared culture, that society must have its own social space. Lefebvre explains; "...social space implies actual or potential assembly at a single point, or around a point. It implies, therefore, the possibility of accumulation (a possibility that is realized under specific conditions)." The word accumulation is crucial. It reveals
that social space allows a society to project its future and accrue its past.

Of particular interest to Lefebvre is the question of how social space is produced and controlled. He uses a term, ‘spatial practice,’ to summarize how a society produces social space. This term seems to include everything from social customs to technical and aesthetic ones, but in essence, it just means ‘social activity.’ The following quote summarizes his model of this process: “The spatial practice of a society secretes that society’s space; it propounds and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it. From the analytical standpoint, the spatial practice of a society is revealed through the deciphering of its space.”

As a society’s customs and influences are always in flux, so too is the nature of that society’s space. “It (social space) is an outcome of a sequence and set of operations, and thus cannot be reduced to the rank of a simple object…Itself an outcome of past actions, social space is what permits fresh actions to occur, while suggesting others and prohibiting yet others.”

In Vattimo’s essay “The End of Modernity, The End of the Project?,” he surveys the role of the architect, here again, in relation to “the current proliferation of communities and value systems”. He asserts that this evolved role requires “…the ability to engage in building and in urban structure projects that satisfy these two ‘conditions’: an enrootedness in a place, and an explicit awareness of multiplicity.” For the purposes of this argument, an ‘awareness of multiplicity’ must be an assertive presence. The society in question must acknowledge the multiplicity of social spaces by producing it’s own. Separate from the concept of place, this is how a society can localize itself socially within the multiplicity of global culture.

Depending on conditions, more or less ‘production’ (spatial practice) may be needed to localize a given social space. For instance, various social spaces in dense urban settings are not likely to develop in isolation – the social space of the urban whole is likely to subjugate the others to some degree. According to Lefebvre, the production of space is not quantifiable nor can it be summarized by the location of its production. It is not directly fashioned by a social superstructure, more accurately, it is a precondition and result of social superstructures. A space is a social relationship – but, “one which is inherent to property relationships (ownership) and tied to the forces of production (imposing form)”. Though it is a product to be used, to be consumed, it is also a means of production, networks of exchange flow through it; raw material, energy, fashion, etc. Architecture alone will not produce social space but because of its ties to property relationships and its potential to influence spatial practices it can be a key component in influencing this production.
The summer 2000 Dunescape courtyard installation at PS1 by SHoP Architects illustrates how the built environment can be used to develop a social community by employing the language of architecture. They were asked by PS1 to build a space that would encourage public nudity and elicit activity. Programmatically, the courtyard was to be outfitted as a party space, but was also intended to funnel new visitors into the museum and to contribute to the gritty-fun reputation its summer parties reinforce.

SHoP’s solution demonstrated an acute connection between its evocative physical environment and the social activity of the space. The project’s material and formal presence references beach culture, immediately disarming ideas about proper attire, and the ‘cabana’ structure has an inviting opening that narrows down into intimate spaces, large enough for two or three people, but small enough to demand privacy if occupied. The installation perfectly accomplished the programmatic and social goals for the space by producing an environment with experiential qualities directly supporting them.
The Salk Institute:

The Salk Institute, designed by Louis Kahn, is a model environment for socialization, and one that employs a clear architectural language. Salk’s and Kahn’s goals for this project closely resemble those of the Trauma Institute, and the original master plan implements these goals even further than the project that was built. The work spaces and the project’s materials make an individual’s experience at Salk memorably different than at comparable research centers. Teak wood is used to highlight human habitation within the monumental concrete shell with the effect of adding a temporal element to the project’s otherwise timeless quality. At a larger scale, the central courtyard serves as the heart of the campus and a place for social gatherings. Similar to Zumthor’s work, relatively stark compositions ensure a clarity of message.
At a time when technology and market forces threaten to amalgamate human culture, efforts have increased to resist this trend. Social groups of every kind struggle to retain or create a sense of community, and the built environment is one medium that can be used toward this end. Employing architecture that is based on the built environment’s ability to communicate allows us to maximize its range of influence. Phenomenological analysis further allows us to hone its effects, with the ultimate gauge of success being poetic environments.

This architecture, speaking to the mind, the senses, and the body has the ability to create strong impressions. By creating places that form strong spatial memories, a society can be localized with the built environment. This identifies the experience of being part of that society as separate from others. This same bond is created socially if the places offer social situations identifiable with that society. Members of the group, all having grown accustomed to these social situations, would share relationships that were built in them, with the result of localizing and strengthening the community.
Notes

2. Ibid., pp. 292-293.
4. Ibid., p. 185.
7. Ibid., pp. 210-211.
14. Ibid.
18. Ibid., p. 38.
19. Ibid., p. 73. parenthesis added.
VALUES

INTENTIONS AND STRATEGIES

TRAUMA INSTITUTE - DETROIT, MI

APRIL 2008 VOLUME III
POETIC ENVIRONMENTS

The built environment is a cultural product. Architects have an obligation to remain conscience of its unique ability to affect the quality of its user's day-to-day lives. The practice of architecture must maintain a sensitivity to user experience, as users often have little input in its production. By formulating environments as poetic experiences early in the design process, architects can establish the desired atmosphere by which to gauge their decisions against.

In architecture today, there is a growing interest in ‘performative design.’ This can reference a number of things, from energy use to operational efficiencies to a building’s iconic value, but the common subject is economic benefit to the client. Performative design's benefit is undisputed, but the current discussion surrounding it is devoid of a broader critical stance. By focusing only on providing fiscally attractive design schemes, architects are losing sight of the experiential and social results of their work. This disregard for the meaning imbued in the environmental language of architecture has occurred because performative design favors economic over experiential benefits.

Performative design is architecture’s manifestation of the continually expanding reach of capitalism. A clear danger to this trend is surrendering all powers of cultural production to the economic establishment. This will lead to an overly conservative, and evolutionarily stagnant environment. Architects play a role in editing the range of society’s social and environmental interactions, and must realize that this responsibility is not exonerated by strictly conforming to a client’s goals.

As a cultural product, it is architecture’s environmental nature that sets it apart. Literature, visual art, music, and film are endlessly duplicated, and are consumed simultaneously everywhere in the world. Architecture on the other hand requires a physical presence to be experienced, it is inherently local, and it’s ability to elicit a mental and physical response is unique.
The poverty of content prevalent in postmodern architecture occurred because it came to be dominated by aesthetic instead of environmental ideas. These motifs could be read like a book, but had little relationship to the body. From a phenomenological standpoint, Venturi's 'decorated shed' hardly even registers as an experience. The language of architecture is most expressive when it goes beyond the visual and is experienced as it operates; environmentally.

Architecture has the ability to provide wide ranging, and socially stimulating environments, but this isn’t achieved without a commitment to do so. The emotive goals of an environment should be established at the programming stage, and developed with a specificity to its use. This will avoid arbitrary aestheticism and allow for a greater understanding of an environment’s poetic potential. This process will also ensure that the environment will be developed as a socially and experientially critical product.

Contemporary architecture related to the medical field has a poor reputation because of its failure to produce environments that are both up to the high performative standards of the field, and attractive at the same time. The goal at the Trauma Institute however, was to use the building to assist in developing a strong sense of community, requiring a felicitous social environment. The solution adopted to deal with this conflict is one that has come into hospital design via lessons learned from the successes of wellness centers, and that has already been largely adopted by the research community. The solution is to solve the problems of efficiencies and adjacencies as they traditionally have been, except for some additional programmatic requirements for circulation and social spaces. The design of these social areas, however, is subjected to the process previously described. They are designed to promote social interactions, and this can be done by identifying the environments best suited for these interactions and proceeding from their poetic qualities. Figure 3.1 is an early adjacencies study for the Trauma Institute in Detroit. Identified in red are the areas with the most potential to accomplish the Institute’s community building goals, and therefore, were the focus of its environmental studies.
METHODOLOGY

If communicating an experience through architecture is the goal, a methodology designed to accomplish it is needed. During the design process, resolving the pragmatics of a project can overwhelm architectural intentions. This leads to banal environments, devoid of emotional or social content. The design process must focus on carrying the project’s poetic goals through to the end. In *The Poetics of Space*, Bachelard illustrates the nature of environmental poetics by citing various literary descriptions of them until we can connect these descriptions to our own experiences. In the environmental design process, it is possible to work in the reverse order.

To begin, the environmental experience best suited for the project goals is identified from our own memory or research. The experience can then be translated into a written form, capturing its poetic essence. This distillation allows the design process to begin with a potent recipe for the environment’s desired effect. Precedent and image research can serve to augment an architect’s written descriptions. Studies and design explorations proceed from the poetic idea, and by working through various mediums, progress towards the desired poetic can be checked and reworked between them. This process is taken as far as possible until there is a need to establish another environmental goal. At this point, a new goal ‘branches’ out of the last one, poetic intentions are established, and the process continues.

This branching out naturally focuses the design process on the parts of the building most contingent to accomplishing the project goals. It also helps to ensure that each new goal is supported by and codependent on the previous one. In turn, each new study advances from the findings of the others, producing a resonant environment. The branches eventually lead to the building’s details, and yields the ‘foliage’ of the built environment. Figure 3.2 is a diagram of these branching goals in the form of a fruit tree. The goals are grounded in the context of the environment and rooted down by the traditions of architecture. Relating to this diagram, the program can be understood as the tree’s flowers, attracting its users which will yield the fruits of this process shared environmental experiences.
Methodology in Detroit:

The Trauma Institute in Detroit was conceived of as an environment that could uniquely socialize its inhabitants, and contribute to a rich social community. Design work was preceded by research into context, which can be found in Volume 1, and into the nature of the Institute’s community, with three areas being explored. First, community of practice in the medical field, or the way that the community shares knowledge. Next, the research community was examined to gain a better understanding of this relatively low profile member of the medical community. Finally, the relationship between clinical practitioners and medical researchers was examined to begin to understand what kind of interactions would most benefit them. Several words or phrases were selected to crystallize the nature of these various parts of the community. The plates that follow are visual manifestations of the poetic ideas these words captured. While not explicitly architectural, these studies contain the genetics of the project. Following them, the design methodology is illustrated with the step by step process taken in attaining the desired effect on the surrounding community.

Community of Practice:
- localized knowledge
- incidental
- proximity
- shared

Research Community:
- collaborative
- contributor/benefactor
- anti-death
- progressive
- dynamic

Research/Clinic Relationship:
- reciprocal
- give and take
- clinic is a resource for researchers
- researchers solve clinical problems
3.4 Community of Practice: Shared, Incidental

3.5 Community of Practice: Localized Knowledge
3.6 Research Community: Progressive, Dynamic

3.7 Research Community: Collaborative, Anti-Death, Progressive
3.8 Research Community: Collaborative, Contributor/Benefactor, Dynamic

3.9 Research/Clinical Relations: Reciprocal, Give and Take
3.10 Research/Clinical Relations: Reciprocal, Give and Take

3.11 Research/Clinical Relations: Researchers Solve Clinical Problems
While the previous studies arrived at an understanding of the community within the Institute, the relationship with the larger Detroit community was not yet understood. Upon consideration of this, the decision was made that the exterior of the Trauma Institute, overlooking Detroit’s major interstate, should be used to forewarn the community about the results of violent and reckless habits. The location’s ability to do this, and the high percentage of trauma patients admitted with violent or D.U.I. related injuries lent the building’s exterior a social agenda. The poetic intentions were establish with words, and two schemes, show below, were modeled to begin understanding them environmentally.

With a general concept in place, image and precedent research was then done in an attempt to gain perspective on how to best articulate the poetic message.

*Site within the Community:*
- black hole
- moat
- oasis
- hope

3.12 Site Scheme 1
3.13 Site Scheme 1
3.14 Site Scheme 2
3.15 Site Scheme 2
3.16 The Hajj at the Kaaba, Mecca, Saudi Arabia

3.17 David Adjaye, *Dirty House*, London, UK

3.18 David Adjaye, *Dirty House*, London, UK

3.19 Last Rights
VALUES

3.20 Carlo Scarpa, Brion Cemetery

3.21 Brodsky and Utkin, Untitled (Amphitheater)

3.22 Spring Grove Cemetery, Cincinnati, Ohio

3.23 Carlo Scarpa, Brion Cemetery, San Vito d’Alviole, Italy
With the lexicon gained from this research, another set of studies was done to evaluate the emotive qualities of various exterior schemes. Proceeding from the previous research, this phase began to depart from the poetics originally established. This direction required a comparative evaluation of the various modes of productions to determine which was achieving the most desirable poetic message. The original wording was found to be lacking, resulting in it being rewritten to better guide further production.
VALUES

3.28 Exterior Study E

3.29 Exterior Study F

3.30 Exterior Study G

3.31 Exterior Study H

3.32 Exterior Study I

3.33 Exterior Study J

3.34 Exterior Study K

3.35 Exterior Study L
At the conclusion of the exterior schemes study, successful qualities were identified and modeled into a composite. It was after this work that a new description was written to distill the goals of the exterior’s message. Finishing this ‘branch’ of investigation, scale monoliths were cast in a series of materials studies to aesthetically hone the desired message.

Site within the Community:
-the trauma center is a Warning:
  an Ominous Product of violence that feeds on the Prospect of Death
  its dark form Incites a Fear that pales when faced with its Formless Heart
-it is a Secretion of Death
-like a Black Hole it has the pull of a huge mass with an unknown center
  it destroys everything within its sphere of influence
-incomprehensible in logic, clear in message
  it is Not a Barrier to life, but an Embodyment of Death
Realization of Goals:

Each monolith was evaluated against the poetic goals for the exterior, and several were collaged into images to understand their cumulative effect. One of these, shown at right, was chosen not only for its adherence to the message, but for its poetic purity. At this point, the poetic message for the exterior had been articulated at the macro and micro levels. Establishing new goals, production work branched forward into other design problems.

The benefit of the methodology described in this volume is its adherence to clear goals while allowing them to evolve. By branching out from the main goal of the project, each step can be measured in its relation to this goal. Beginning design problems with environmental objectives instead of ideological or aesthetic ones ensures that the built product will be one that carries a palatable message to the users. By avoiding overarching metaphors, users are also able to project their own experiential memories into the environment. Above all, this methodology structures the focus of the design process to yield user experiences true to the design's intentions.
Notes

SOURCES

IMAGE CREDITS

Images by author unless noted.

1.0  "The City"

1.1  Detroit MGM Grand Casino
1.2  GM Renaissance Center
1.3  Street view, Detroit
1.5  Ford River Rouge Plant at Night
1.6  GM Renaissance Center
1.7  Albert Kahn, Ford Model T Plant
1.8  Street View, Detroit
1.9  Single Family Homes, Detroit 1940s

1.10  Ford Model T Automobile Plant
1.12  8 Mile/Wyoming Wall
1.13  City Limits, Detroit's East Side
    www.maps.google.com
1.14  Figure/ground Study, Downtown Detroit
1.16  Reformed by Author

1.17  Michigan Central Station
1.19  Detroit's Brush Park Neighborhood
1.21  Street View, Detroit
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1.23 Object Orange, 2006
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1.27 Tyree Guyton, Heidelberg Project; Dotty Wotty House
1.28 Detroit Poetic: Vertical Imagery
1.29 Detroit Poetic: Horizontal Landscape
1.30 Detroit Poetic: Unitization
1.31 Detroit Poetic: Voids
1.32 Detroit Poetic: Blind Spots
1.33 Detroit Poetic: Vibrant
1.34 Detroit Poetic: Division
1.35 Detroit Poetic: Voids
1.36 Detroit Poetic: Blind Spots
1.37 Detroit Poetic: Vibrant
1.38 Detroit Poetic: Unitization
1.39 Detroit Poetic: Horizontal Landscape
1.40 Detroit Poetic: Vertical Imagery
1.41 Detroit Poetic: Voids
1.42 Detroit Poetic: Blind Spots
1.43 Detroit Poetic: Vibrant
1.44 Detroit Poetic: Division
1.45 Detroit Poetic: Voids
1.46 Detroit Poetic: Blind Spots
1.47 Detroit Poetic: Vibrant
1.48 Detroit Poetic: Division
1.49 Detroit Poetic: Voids
1.50 Detroit Poetic: Blind Spots
1.51 Detroit Poetic: Vibrant
1.52 Detroit Poetic: Division
1.53 Detroit Poetic: Voids
1.54 Detroit Poetic: Blind Spots
1.55 Detroit Poetic: Vibrant
1.56 Detroit Poetic: Division
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1.58 Detroit Poetic: Blind Spots
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1.96 Detroit Poetic: Division
1.97 Detroit Poetic: Voids
1.98 Detroit Poetic: Blind Spots
1.99 Detroit Poetic: Vibrant
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2.01 Detroit Poetic: Voids
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