

## A Center for Arts and Crafts <br> Georgetown

Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University In fulfillment to the requirements for the degree of

Master of Architecture
in
Architecture
"Two great desires which are in essence the desire to absorb and the desire to emit, the desire to know and the desire to test, the desire to hear and the desire to utter, are the basis not only of a true and effective education, not only are they the wholesome body and the enchanting voice of art, but they are greater then these, for they are the animation of quality of that higher purpose and significance of art that we call poetry."

## Louis Sullivan

Crafts are the integration of art and life. They bring together nature and man in the form of a usable object. Architecture may be named the ultimate craft endeavor for through building we create a work of art which is used by man. In the thesis the two disciplines are brought together in the Center for Arts and Crafts. The Center, a complex of structures united by public space acts like the guilds of the early twentieth by providing "a forum for exchange of ideas and theories and [a place for] socializing." (Cummings, page 25) The craft center offers an opportunity to learn about craft; the use of our minds and hands together. Visitors have the chance to participate with craft through viewing completed objects, purchasing them, viewing the making process, and making them oneself. The theme for the design becomes "interaction". Interaction is possible for the neighborhood with those outside and those inside.

Providing public space is essential to encourage interaction. "Space is the principle medium of urbanism - the matrix
that units public and private interests in the city, guaranteeing a balance between the two." (Michael Dennis, Court and Garden, page 2) The making of a public rooms is often neglected in today's architecture. Where ever these courtyards and piazzas occur, they are active and full of life. The Washington Harbor which neighbors the Incinerator site is a successful example of the desire of people to congregate and their need for socializing. The Arts and Crafts Center becomes a stage, enlivening the structure through activities of the public and their interaction with the inhabitants of the complex. The creation of a space which requires human participation to complete the architecture ensures that we, humanity, are the primary subject or object of architecture.

Architecture is built by human hands for humans to inhabit. It should spark our imagination and encourage our participation. The honest expressions of structure and materials are rare in recent buildings leaving us faced with false images and removed from reality. How can we interact with false truths? In our search for a new reality we can look back to simpler times and apply their principles to our complex world. Nature and our own histories must become our guide on the journey toward meaningful and engaging architecture.

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## A Center for Arts and Crafts



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What is a museum? This was a primary question of the thesis. Once considered, the objects to be displayed in the museum became paramount. My interest in connections and details lead to research of the Arts and Crafts Movement and its influence on 20th century design. "Craft" has come to encompass many disciplines from the fine arts to folk crafts, yet it still maintains the basic principles of earlier Arts and Crafts work: a handcrafted, useful object. The 'hands-on' nature of the arts and crafts lead the thesis to grow beyond the boundaries of traditional museums. What was needed was a place where exploration and discovery were paramount. The program expanded from a one building museum into a complex of studios, classrooms, shops, auditorium, and housing all focused on the display and discovery of crafts. Interaction between the visitors and the crafts and the artists will ensure that the "architecture is therefore not simply a way of housing artworks, nor is it a display machine. It is a critical tool that makes art accessible and understandable." (Carlo Scarpo)

## A Center for Arts and Crafts

## Research



Detail: Rouen Cathedral ${ }^{1}$

## The Arts and Crafts Movement \& <br> Modern Architecture

One of the many foundations of Modernism lies in the Arts and Crafts Movement which began in England during the later part of the 19th Century. Although relatively short lived the movement's influences have been far reaching. Many designers and architects practicing today display some of the basic principles set forth by Ruskin, Morris, and their contemporaries from the Arts and Crafts period. In order to extrapolate these ideas from contemporary work one must first understand the main ideas of the Arts and Crafts movement as well as why they were so readily accepted by young designers of the time.

The movement was founded in Victorian Britain by theorists, architects, and designers. The industrial revolution had divided labor and devalued the work of the individual, turning them into "a mere cog in the wheel of machinery." (Arts and Crafts Movement, p. 6) In reaction to this division, the arts and crafts movement aimed to reestablish harmony between architect, designer, and craftsman. Also, the mass produced objects of the industrial revolution were found to be lacking in character and style. Objects of the new movement were intended to bring handcraftsmanship to the production of well-designed, affordable, everyday objects. In spite of the general rejection of industrialism and mass production a link between craft and industry was deemed
necessary by many of the most influential reformers. The affordabiltity of mass produced objects was essential if the ideas were to be promoted to all classes of people.

The new movement was as much about social reform as it was about quality design and craftsmanship. Not only were the proponents of Arts and Crafts advocating improved conditions and production methods for the workers, they also believed the presence of quality objects in the homes of all would raise moral standards and improve the quality of life for the lower classes. Craft classes were prevalent. People were encouraged to work with crafts during their free time. Many people took up one or more craft disciplines as careers or explored craft as hobby.

Of the many reformers, three were instrumental in creating and promoting the Arts and Crafts Movement:A.W. N. Pugin, John Ruskin, and William Morris. Through their publications, lectures, and work they spread their ideas to many designers within England and also internationally. A. W. N. Pugin was both a designer and a writer. His Gothic revivalist publications of the 1830's and 1840's, Contrasts, or a Parallel Between the Noble Edifices of the 14th and 15th Centuries, and Similar Buildings of the Present Day: Showing the Present Decay of Taste (1836) and the True Principles of Pointed or Christian Architecture (1841) inspired those who followed. The principles of the Arts and Crafts movement set forth by Ruskin and
his followers were founded on Pugin's writings. The Victorian practice of imitating classical architecture was rejected by Pugin, who instead looked to Medieval Gothic for inspiration. The Gothic style "reflected the order and stability of the Christian faith." Industrialism was causing a "decay of taste," leading Pugin to adapt from preindustrial England and the vernacular a new style that was more purely English and rooted in Christian rather than Pagan culture reflected in the contemporary Victorian vogue for classical revival. (The Arts and Crafts Movement, p. 11) Gothic buildings had integrity, were founded upon functional plans, displayed expressive facades, and integrated structure and ornament. Unlike the Classical Revival style, the asymmetry of Gothic allowed the architecture to respond to need and condition. He believed there should be no features about a building which are not necessary for convenience, construction, or propriety. "(Encyclopedia of Arts and Crafts, p. 10.) In Contrasts, Pugin stated for the first time that architectural beauty depended upon the form evolving from the function. Pugin also believed that a nation's character is derived from its architecture. This idea further reinforced his enthusiasm for the Gothic period whose character was based in vernacular, regionalistic architecture.

The faith in Gothic espoused by Pugin was echoed a few years later by John Ruskin, a fellow designer, theorist, and critic. In his essay, "The Nature of Gothic," Ruskin wrote: "It is one of the chief virtues of Gothic builders that they never suffered ideas of
outside symmetries and consistencies to interfere with the real use and value of what they did. If they wanted...a room, they added one; a buttress, they built one; utterly regardless of any established conventionalities of external appearance..." (Arts and Crafts Movement, p. 12.) Another important quality of the Gothic era revered by these writers was the unity of craftsman and designer, in essence a unity of spirituality and commonality of workers which resulted in a homogenous finished product. It was accepted that Gothic builders and craftsman had complete freedom of expression. This idea was put forth by Ruskin in the essay, "The Nature of Gothic" and in The Seven Lamps of Architecture. Ruskin's Seven Lamps are: sacrifice (offering of precious things), truth (honest use of materials), power (simplified massing), beauty (naturalistic ornamentation), life, memory, and obedience (historicism of style). (Seven Lamps of Architecture, p. 11) They were conveyed through form, ornament, and construction. Ruskin emphasized the beauty of architectural ornament carved by hand, it reflected "the sense of human labor and care spent upon it." The belief that a building or object must be created with enjoyment to be of value was Ruskin's major legacy to the Arts and Crafts. It formed the basis of Ruskin's work as well as many who followed after. In the machine oriented era of Victorian Britain, commercial production increased. Designers were separated from production leaving the workers as part of the production machine not part of the creative process. Little enjoyment was involved in


John Ruskin ${ }^{3}$


William Morris ${ }^{4}$
the making of objects leading to the desire for improved production methods. Publications like Ruskin's Seven Lamps of Architecture added urgency to the desire for change by offering alternatives to the status quo.

John Ruskin was a supporter of the "decorative arts" which had been separated from the fine arts by the British governments design reform schemes. In his book of 1859, The Two Paths, Ruskin wrote that decorative art was not a "degraded or separate kind of art." Ruskin supported the "freedom of expression for the designer and the direct study of nature as a source for both artists and designers. Most importantly, he reintroduced morality to art and design, arguing that the way to improve society was to reform its art, and support indigenous historical sources for design." (Arts and Crafts Movement, p. 13) What had begun as art reform was becoming a plan for social reform as well. Urban reform was also influenced by these beginnings of social reform; the garden city movement was begun by Arts and Crafts reformers. In his own guild, the Guild of Saint George, Ruskin's ideas on social reform were put into action. Although the immediate effect on society was not seen, Ruskin's guild provided a precedent for later craft guilds.

Even though Pugin and Ruskin were widely read and admired, it was William Morris whose ideas were most influential (Arts and Crafts Movement, p. 14.) Morris developed affection for the culture of the middle ages which was stimulated by the
appreciation of Gothic architecture he acquired while studying at Oxford, by his travels to the Cathedral cities of France, and by his familiarity with Ruskin's works (Encyclopedia of Arts and Crafts, p. 11.) Like Ruskin, Morris was driven by his disillusionment with what he saw as a sick society. Morris agreed with Ruskin's love of the handmade but wanted to see it applied to modern commerce. His goal was to see manufacturers simplify design "not only to raise standards and keep unit costs at an affordable level but also to draw together the designer and the craftsman" (Arts and Crafts Movement, p. 15.) Unlike Ruskin who stayed out of politics; Morris, who reached maturity during a period of greater democracy and new status for the worker, became an active Socialist as well as a craftsman and designer much admired by his peers (Arts and Crafts Movement, p. 15.) Morris was influenced by Ruskin in both theory and design. While a reflection of Ruskin's desire for a return to nature was evident in Morris's designs, innovative ideas were evolving in his work. Nature was becoming abstracted in Morris's wallpaper designs. Morris also gained knowledge and experience through his work at the architectural office of G. E. Street. Street believed in an interdisciplinary approach to architecture; he thought an architect should be not only a builder but also a painter, a blacksmith, and a designer of stained glass (Arts and Crafts Movement, p. 15.) He encouraged Morris's future collaboration with many other artisans on projects such as Morris' own home, the Red House, designed his friend Phillip Webb (Encyclopedia of Arts
and Crafts, p. 11.) The house was in essence a communal "labor of love" to which many of Morris' artistic friends contributed. The effect achieved was a unified whole from exterior to interior. Because its interrelated nature the house has become a monument to the history of the Arts and Crafts Movement.

Conflicts arose from Morris's desire to achieve quality in design and the political goal of affordable art for the middle class. Although these conflicts were never fully resolved and the firm was only moderately successful, it served as a "testimony to the merits of artistic cooperation."


Following the success of the Red House, Throughout England small groups of Morris founded Morris, Marshal, Faulkner, architects, designers, craftsman, and critics and Company. The company operated in combined their talents and dedicated much the manner as medieval guilds and themselves to design reform. Included received great exposure from the various international exposition of the time. The company, later renamed Morris and Company, produced a wide range of interior furnishings, finishing materials, and accessories. Morris set high standards and as it turned out the unobtainable goal "to provide a tasteful and affordable alternative to products of the Industrial Revolution." among these groups were the Century Guild (1882), theArt Workers Guild (1884), and the still existent Guild of Handicraft. Influence of the guilds was spread through their works, lectures, workshops, and classes. Regular exhibitions also promoted the work produced by the guilds. These exhibitors also hoped to raise public taste through exposure. The (Encyclopedia


Details ${ }^{7}$

Besides the education of the public and improved design, the elevation of the craftsman to artist was also a goal of the reform movement. Many professional organizations were founded. Through competitions among themselves, lecture series, and gatherings of these art associations, the values of the Arts and Crafts Movement were spread. During the meetings discussions often revolved around the relation between architecture and decorative arts, workshop organization, and the role of museums in education. The goal of these exhibitions and meetings was to "establish a proper status for the artist, craftworker, and designer and to put these in touch with industry and the users of their products." The annual show of the Arts and Crafts Exhibition Society was a direct result of the reformers' attempt to accomplish their desire for improve positions (Arts and Crafts Movement, p. 27.)

The Arts and Crafts Movement was composed of many driving ideals. Although some directly evolved as a rejection of their own times and are not as relevant today, many concepts continue to influence contemporary designers. Arts and Craft concepts of lasting influence include regionalistic influences (historical and vernacular), quality craftsmanship and handwrought designs, unity of the entire project, both inside and outside, plans and elevations based on functionalism, and a relation to nature. Within the discipline of architecture can be seen the continuation of Morris, Ruskin, and Pugin's ideas. Among contemporary architects exhibiting
these qualities in their work are Fay Jones, Tado Ando, Norman Foster, and Alvar Alto (architects from many parts of the world). Perhaps not obvious at first look, the Arts and Craft movement has spread its influence to the "modern" architecture around us today.

Fay Jones is one contemporary architect who's work shows obvious connections with the Arts and Crafts Movement. The six months Jones spent at Taliesin in 1953 learning from one of America's foremost Arts and Crafts designers, Frank Lloyd Wright, had much influence on the direction Jones has taken with his architecture. Jones was influenced by many architects but his love of history has been a major design determinant. Jones, like the Arts and Crafts architects, has embraced the underlying forms and theories of historic and vernacular models, creating his own American architecture. The historic examples become, in Jones' words, the "generative idea" for his buildings. They never imitate but transform the original models. For example, Thorncrown Chapel (1980) reveals a Gothic influence with buttressing and crossbracing but the end result is a light, modern design in wood, not the stone of medieval churches. Jones also uses a Gothic base for Cooper Chapel. He and his partner, Maurice Jennings, transform the traditional Gothic into what they call "Gothic's operative opposite," a reversal of the structural system which uses tension, derived from the lighter materials of today, rather than compression. Like many Arts and Crafts buildings, the chief ornament Jones uses
is the structure. Its design influences other parts of the building. The wooden lanterns of Thorncrown Chapel uses similar language as the trusses whose "crossbracing and pegged vertical members create the depth and intricacy of stalactites." (Architecture, March 1990, p. 82) A strong relationship with the wooded surroundings relates to the importance of nature in design, another tenant of the Arts and Crafts Movement.

Besides his chapels, Jones has designed many houses which also draw from historical models. The Hogeye Residence for example is a simple gabled house inspired by the vernacular barns of Arkansas. In another residential project for the Watson family in Arkansas, Jones' signature high craftsmanship is exhibited. The "site, residence, and its details combine into a single piece of joinery, a harmoniously dovetailed design." (Architecture, March 1990, p. 84.) Based firmly on functionality of the plan the Watson Residence again displays Arts and Crafts characteristics.

Jones architecture is seen and admired by many and like Morris and his contemporaries, he also spreads his knowledge and ideas as lecturer, teacher, and juror, effectively carrying forward the tradition of the original Arts and Crafts designers.

From the other side of the globe comes another architect whose work also exhibits the characteristics of the earlier movement. TadaoAndo is currently practicing in Japan
and though his work is more reminiscent of the international style, there can be found examples of the Arts and Crafts influence. Ando's architecture begins its connection with the Arts and Crafts in his "pre-modern" workshop system. His projects are completed in an atmosphere of cooperation, much like that of the medieval guilds. The designs Ando pursues are based on an initial concept and developed into a harmonious composition where each part relates to the other parts and also to the whole. These relationships determine space for Ando. His pure, almost stark spaces search for the "original form of space," not abstract space. Ando's spacial sensibilities developed from architecture which he visited and sketched while attending drawing school near Osaka. His realm of study ranged from shrines and temples to residences and gardens. Included among these were folk houses. Early in his search for understanding of the idea of "house", Ando studied the folk houses which have "no intentional ornament except for things that are necessary and simple." (Tadao Ando, p. 7) As the Arts and Crafts architects had done one hundred years ago, Ando looks to the vernacular work of his ancestors.

Materials are as important toAndo as form, he chooses "materials as a poet chooses words." His results are the purification of space into the "spacial essence" or the "original form of space."

Ando's belief that beauty is essential in our lives is another ideal he shares with the


Sumiyoshi Row House ${ }^{8}$


Row House Interior ${ }^{9}$


Essen Opera House ${ }^{10}$


Arts and Crafts founders. His row house in Sumiyoshi became a prototype for his architecture and "corroborated...the equivalence between aesthetics and the way one lives." (TadaoAndo, p. 8) Nature and simple geometric forms endow Ando's work with complexity through changes in light. Ando seeks balance with nature, no a conquering of it. For Ando, nature is the best and divine of all things. (TadaoAndo p. 9) Geometry and light are important because for Ando they are the essence of nature. (Tadao Ando, p. 11) Three elements are necessary for the crystallization of pure geometry (as in such structures as the Pantheon): authentic materials, pure geometry, and domesticated nature (nature endowed by man with order and in contrast with its chaotic nature-"order abstracted from nature" (Tadao Ando, p. 13). He has achieved a fresh architecture which is rooted in Japanese tradition and continues to absorb new ideas from the culture of Japan

Similar to Ando and Fay Jones, AlvarAalto has defined a modern architecture based in the principles of the Arts and Crafts Movement of the past. Also like the others, this new architecture is one based firmly on the traditions of Aalto's native culture. Aalto's architecture is part of the Finnish National Romantic Movement which is rooted in medieval imagery and historicism with little formal interest in the past. Use of traditional materials, stone and brick and wood, plays a large role in Finnish architecture and this also influenced Aalto's work. Aalto's approach to
architecture was to "blend modern technology and standardization with a craftsman's approach to the design and realization of his buildings" (Alvar Aalto: a Critical Study, p. x). The functional approach to architecture valued by theArts and Crafts designers is found in Aalto's buildings. Aalto succeeded in making functional buildings while maintaining a humanistic approach which did not allow the function to be the driving force for the architecture, the functional intention of the plan or section was concealed beneath the building's surface. Alvar Aalto's architecture "links us with established traditions of architecture." (Alvar Aalto: a Critical Study, p. x)

Both a Finn and a Swede, Aalto was greatly influenced by his heritage. Aalto also shares with Eliel Saarinen the view that architecture should be a reflection of the nature of the materials - "the nature of materiels decides the nature of the form." (Saarinen). He was also profoundly influenced by the Finnish National Romantic movement. This movement freely interpreted historical forms. Aalto sympathized with the movement by juxtaposing the past with the present to bring innovation to his designs.

Aalto's architecture addresses social concerns through his desire for humanized buildings. Aalto believed the form and function of a building should be derived from the needs of the people using them. Architecture should be a "perfect instrument in the harmonious life of the people" for whom it is built (AlvarAalto, p.
2). Another dimension to Aalto's sense of social obligation as architect is his acceptance of social responsibility for what he creates. Although he is not creating a social reform movement like the early arts and crafts reformers, the social impact of his work is important.

Resources of the past and a sense of craftsmanship were also essential feature of the National Romantic movement. Aalto drew directly from these characteristics of the Finnish movement and in so doing he exported the Arts and Crafts ideas into modern Finnish architecture. Attention to detail is displayed in many of Aalto's buildings including, the tuberculosis sanatorium at Paimio. His craftsmanship in joinery detailing is evident in the furniture and fittings of the Woodberry Poetry Room of the Lamont Library, Harvard University. Form for Alvar Aalto is an expression of the nature of the materials and this form is constructed from natures inspiration. Nature, becomes essential to the architecture's conception as it does for Jones and Ando and the Arts and Crafts architects before them. Nature's influence is seen in Aalto's furniture and his architecture. For example, the Essen Opera House (1961-65), the Kauffman Rooms of the Institute of International Education (1963-65) and Finlandia Hall (1962-71) were "precisely conjured out of an innate sensitivity to the forms of the forest in general and the unique nature and potentialities of wood in particular." (Alvar Alto, p. 3). The importance of light and shadow also comes into play in Aalto's work, revealing nature's affects on the
structures
Like the designers of the later part of the Arts and Crafts, Aalto saw mass production as important. Architecture could become standardized if it was modeled after "the best standardization committee in the world...Nature herself" (Alvar Aalto, p. 6.) Nature is standardized into the smallest possible units, the cell. The cells are combined in millions of ways giving immense richness and variety. Nature has been one of Aalto's recurring themes with its vocabulary of warm colors, sympathetic textures and subtle, undulating forms. In a lecture given in Vienna in 1955, entitled "Between Humanism and Materialism," Aalto stated:

> "It seems to me that there are too many situations in life which the organization is too brutal: it is the task of architecture to give life a gentler structure"
expressing his belief that nature, the great softener, is a valuable guide from which to build architecture.

The ultimate manifestation of the Arts and Crafts movement's desire for unity between industrialism and quality craftsmanship can be found in the architecture of Norman Foster. Foster's "High Tech" architecture relies on a calculated aesthetic of fine bones and details. Each piece of the structure is custom designed with an intensive investigation into every aspect of each problem. Revealed in Foster's


Sainsbury Centre ${ }^{12}$

architecture is his "passion for the perfect object." (Progressive Architecture, March 1986, page 67.)

Foster's architecture is also affected by nature, but not in the same manner of the previously discussed architects. Preservation of nature and natural resources has been a recurring theme in Foster's work. Early house designs were dug into steep sites in order to preserve energy and in response to the existing topography lines. Later work shows a disdain for masonry and concrete and an obsession for lightweight materials which "use far less of the earth's mass." (PA March 1986, p. 70.) Within the framework of lightweight materials there is an exploration and development of glazing systems and solar design, such as the use of a large sunscoop in the Hongkong Bank project.

The interest in "perfectly made and assembled" structures is another predominate theme in Foster's work. Unlike his contemporary, Rodgers who is known for letting the "nuts and bolts hang out", Foster's approach to "structural virtuosity" is rationalistic. (PA, March 1986, p. 70) At the IBMAdvanced Head Office in Hampshire (1971) Foster developed a rationalized component system with a membrane skin of solar glass. His pursuit of perfection is carried to the ultimate "coolness" in the perfect glass skin of the Willis, Faber, Dumas building (1975). Foster's use of full size mock-ups not only allows the designs to be tested forperfection before implementation, they
give the client an opportunity to understand and evaluate the product before it is finished.

Unification of social reform (desired by the Arts and Crafters reformers) and elegant efficiency (desired by the Modernists) has been brought to Foster's architecture by his rethinking of social organization within the building. (Modern Architecture in Europe, p. 198) At Willis, Faber, Dumas, Foster considered the office environment to be a potentially cohesive social environment. The emphasized use of the escalator over the elevator has created an interactive transport system, placing the employees all in a common community. Other amenities, such as the pool and roof top garden, strengthen the sense of unity within the office complex. The similar design for Hamersmith Centre developed a balance between commercial and social uses within one structure.

Foster's architecture applies many ideas from the Arts and Crafts movement to the present. He has adapted the ideals of the past to modern construction methods and building types bringing the earlier movement into the Twentieth and Twentyfirst Centuries.

Although the image presented to the world by prominent designers of the Arts and Crafts movement, the Greene brothers, Charles R. Mackintosh, and M. H. Baillie Scott for example, has virtually disappeared; the main characteristics of the movement have continued into the present. Many contemporary architects'
work embodies the underlying ideals of Morris, Ruskin, and Pugin. A sense of scale, detail and humanism is bestowed on works which carry forward the tradition of the Arts and Crafts movement. This trend allows the creation of a richer, more complex, more symbolic, and therefore more humane architecture - an architecture of honesty and "reality". In his book For an Architecture of Reality Michael Benedikt is describing an architecture based on the same principles as those of the Arts and Crafts: real materials, human scale, thoughtful details, understanding of our heritage and culture, and accessible and usable objects and buildings. It is through writings and architecture like the examples given here that the Arts and Crafts movement will continue to influence today's and tomorrow's professionals, students, teachers, and layman.


Glascow School of Art ${ }^{14}$


Gamble House ${ }^{15}$


Baillie Scott Interior ${ }^{16}$

## A Center for Arts and Crafts

## Design Process

A full understanding of the site one is building on is essential to the beginning of the design process. History has a large impact on any architecture, especially when building in a city with strong ties to its past. Knowledge of the history of an existing structure is also important. From the study of the site history and conditions a design parti is developed forming the foundation upon which the project is based.

## History of Georgetown <br> \& The incinerator site

The area along the Potomac River once occupied by Colonel Beall's eight hundred acre plantation is now known as Georgetown. Georgetown was well established long before Washington, D.C. was developed. Its beginning as a site inhabited by the Anacostan Indians who traded with early explorers, set Georgetown's future as a communication and trading port. In 1632, Captain Henry Fleete was the first white man to sail past the area; one hundred and twenty years later the town of Georgetown was founded.

In 1738, after much of Georgetown's land was purchased by George Gordon, a merchant, a ferry was established from the Virginia shore
across the Potomac to Gordon's land. A tobacco storage building was built shortly after the ferry in 1745 for goods being shipped along the river. The area around the warehouse developed the nucleus of a settlement and a port serving the nearby Maryland tobacco plantations. As travel on the Potomac ferry increased, the need for a tavern was noted and a license was granted to establish one in the area. The growing settlement became assured of its permanence in 1747 when Gordon's warehouse was given status as an official tobacco inspection station. In 1751 the Maryland Assembly received a petition for the erection of a town "adjacent to the inspection house." The petition was granted. Acreage was acquired from George Beall (son of Colonel Beall) and George Gordon by Frederick County (Georgetown was originally part of Maryland before the establishment of

the District's boundaries) and divided into eighty lots. The new town was bounded on the southern side by the Potomac river. A long street was laid out to serve the harbor, a street now known as 'K' Street.

The Chesapeake and Ohio Canal brought increased trade and population to Georgetown, beginning the period of Georgetown's history labeled the Canal Era (1828-1889). By 1850 the Potomac Aqueduct Bridge linking the Alexandria Canal to the Chesapeake and Ohio Canal was built through a major feat of engineering. (Only a few of the piers still remain of this structure.) The structures now standing along the waterfront were built during the aqueduct's time in the wake of the prosperity it brought to Georgetown. The canal's prosperity did not last and competition of the railroad along with the disastrous flood of 1889 eventually put the canals out of business. The town's changing physical appearance during this era
was documented by the Boschke Map of 1861 (Albert Boschke, a German employed by the U.S. Coast Survey, was first to accurately document the buildings of Georgetown.) The railroads carrying industrial goods began to bypass Georgetown and other areas around Washington (the Potomac Yard switching station in Alexandria also was a victim of this decline in traffic). Large industries once prevalent in Georgetown, such as coal shipping and ice production, declined with the rerouting of rail lines and with technological improvements leaving the town's industries to be developed and oriented towards business and of course politics. The waterfront was left abandoned and relatively unused.

New development along the waterfront was undertaken by many. Condominiums occupy parts of the land in this area along with business offices, retail shops, and restaurants. Most of this development has taken place on



Georgetown Incinerator Site

'K' Street under Whitehurst Freeway


Incinerator Detail
the north side of 'K' Street while the southern side has remained largely vacant. Arthur Cotton Moore designed the Washington Harbor in the 1980's. The Harbor was to be a link between a public park that has only been partially built on the west side of the project and a boathouse on the east. Although the project has been heavily criticized by the architectural community, it is a popular destination and successfully brings a link to the rest of the waterfront property is its inward focus of public functions-actually turning its back to its neighbors whom it had intended to connect.

A strong presence along the waterfront is the Georgetown Incinerator with its imposing brick chimney rising above it. The incinerator, built in excessive pollution generated. The building is now derelict and has been since it was shut down. The incinerator occupies a large piece of land, the landscape of which was originally designed by the Olmsted firm in Brookline, Massachusetts whose founder was Frederick Law Olmsted. The site is now overgrown and littered. What may have once been a fare between the commercial, retail traffic of Wisconsin Avenue on one side and the populated Washington Harbor on the other. The abandoned incinerator site's adjacency to the waterfront park does not encourage public

use of the park leaving it near empty most of the time. Many uses have been proposed for the incinerator site ranging from a night club to parking to office space to housing. The latest competition in 1988 produced a winning design by Hartman-Cox composed of a complex of mixed uses - parking, public meeting space, townhouses, and offices. As with many of the past proposals for the incinerator, nothing has happened since the selection was made. Under the Whitehurst Freeway, which opened in 1949, lays 'K' Street. Once busy with waterfront harbor traffic, ' $K$ ' Street is now used mostly for parking in an area of the city seriously short of parking. This shortage is one of the main reasons for the hold on further development of the remaining waterfront property - most of which is now occupied by parking lots. The vehicle traffic flow along ' K ' Street is relatively light and slow moving making the street a safe and appropriate location for mixing of pedestrians and vehicles. In spite of this, the pedestrian traffic is also light. Buildings along this section of ' K ' Street are a mixed variety of uses and character, ranging from the new Harbor project and its large neighboring office buildings to converted historic warehouses now occupied by restaurants and retail stores. There is limited development on the waterfront side of ' K ' Street, the most notable of which are the

Washington Harbor and the public park. With its views to the water and covered street giving protection from the weather, ' $K$ ' Street could have enormous potential as a pedestrian path.

Whitehurst Freeway, as it now stands is a divider between the city and its waterfront. The area under the freeway is treated as an undesirable space and draws little pedestrian traffic - making it seem unsafe and dark. The city will move under this street to use the waterfront as is proven by the Harbor's success. If people are given a reason to go to the waterfront that enhances the existing public park. They will cross the barrier of the elevated freeway and inhabit the land again. The freeway has positive effect as well as negative. It reroutes high speed traffic away from the pedestrian and allows people to bypass the heavier traffic in Georgetown along ' M ' Street helping to speed traffic movement both for people in the city and for those merely passing by it.

Georgetown's two main streets are ' M ' Street and Wisconsin Avenue. These are both major shopping streets and house many of Georgetown's business offices. Wisconsin runs from the northern outskirts of the district to the water, but it lacks a proper terminus for the axis the Avenue creates. Traffic is heavy at most times and the sidewalks are often overflowing. The mixed functions of the buildings along these streets brings many people to Georgetown and the varied character of the predominantly historical structures is what gives Georgetown its unique identity. The streets coming off these two major roads are a mix of smaller retail and restaurants, but the majority are occupied by residential structures. Georgetown is still a very residential area with small streets lined with row houses and shade giving trees making the scale of the
neighborhoods very intimate and human. Typical of these side streets is 31st Street which runs perpendicular to the water and along one side of the incinerator site. Smaller scale businesses, retail, and restaurants occupy the structures near ' $M$ ' Street. As the road gets closer to the waterfront, the structures grow in size and become more modern and their occupancy becomes more private - housing mostly offices.

Georgetown is already a unique town with many facets. Unlike many areas with a waterfront, this town does not rely on its river front property for its vitality and interest. In this case, a developed waterfront will enhance the town bringing back some of its historical roots, creating a pleasant recreational area, and allowing for real-estate development on the land. The city sill gain not only a populated waterfront, but also a used one that will the city financially as well as socially.


## Initial Design Proposals

Develop a new attitude toward the space under the freeway.

Treat it as a room or an arcade to the buildings along ' K ' Street - an arcade facing out to the waterfront.

If building on the south side is restricted and set backs are used, the "arcade" will not become dark and too enclosed.

Develop existing retail/restaurants with sign and lighting creating a humanely scaled space for pedestrians to share with the automobile.

Recognize the importance of lighting as an element which can set a tone of safety and inhabitability - a place where people belong.

Extend special paving from sidewalks onto the street. Treat the street as a floor of the arcade/room.

Encourage new development, similar in content to the existing fabric of Georgetown, a mixture of residential and commercial. This will bring pedestrian traffic to the street.

Add human scale elements to the


Washington, D.C. Map

massive structure of the Freeway - street Episcopal Church's park off Wisconsin furniture, lighting, flags, signs, etc. Avenue to the existing, underused, waterfront park. The landscaping would Possibly allow space to be occasionally cut begin to develop a series of connecting off from vehicle traffic for special events - green spaces in Georgetown. festivals, weekly markets (farmer's markets, flea markets, craft fairs). The built in weather Create a courtyard space off of the "arcaded" protection makes this an ideal site for such street allowing for a contrast to the park activities without the need for hired tents, across the street. Many types of spaces can etc. engage the public with the site.

Create a variety of spaces along Street

Land along the waterfront needs to be used for more than a parking, however the town's need for adequate parking should not be ignored.

Recreational uses occur at the ends of the waterfront - the boat house near Key Bridge and the Washington Harbor near the beginning of Rock Creek Park. These areas should be connected but not necessarily with one continuous park. A continuous path should be the common, connecting element for all new development; bringing a focus to the continuous nature of the Potomac River.

Renovation of the Incinerator site.
Occupy the structure with a public building (a library, a museum, housing, visitors center) which will bring people to the now abandoned site.

Develop the overgrown landscaping around the building, creating a park setting which links the historic C \& O Canal and the Grace


Seattle's Pike Place Market ${ }^{18}$


Atlanta's Underground ${ }^{19}$

The space under the Freeway can be a lively and usable space as long as a new attitude is developed toward it that will extend Georgetown to its waterfront and allow its visitors and citizens to occupy and enjoy this underused strip of land in a multiple of ways. The success of projects with similar problems - Seattle's Pike Place Market \& Atlanta'a Underground - shows the positive results which can be achieved. structure with its identifying chimney ond this rich brick details. Allow the structure to reclaim the land around it and become a landmark for the neighborhood it occupies.


Parti Sketch


Series of Study Models


Study Model

## Building Design

From the site and city analysis developed a design strategy for the site. The program was laid out and the two were merged to form the final result. A need for structure of public space became evident along with a need for a stronger connection from ' M ' Street to ' $K$ ' Street, the park, and the waterfront. The stair with its classrooms and housing becomes a pedestrian street through the site. A large stepping piazza or square gives the project focus and gives the city needed public space. The large stair provides public access to a currently accessible site.

The courtyard is occupied by the incinerator stack. After attempting to enter the museum structure (the body of the incinerator) through the stack, it became apparent that the stack should remain as an object - the focus of the courtyard symbolizing entry to the site and acting as a landmark in the city. Circulation into the different structures around the courtyard guided the design of the space. The levels of the auditorium correspond with the levels of the courtyard in an attempt to make the courtyard become an enclosed portion of the space. Its presence is seen from many places within Georgetown and from the neighboring areas (Rosalyn, Arlington, the Mall) It is a landmark along the Potomac River along side the Lincoln, the Jefferson, and the Kennedy Center. It gives identity to Georgetown like the University's spires.

Interaction of the artists and visitors to the complex was another driving idea for the design. Studio's open to the courtyard side with terraces accessible to the public. At the courtyard level, a desire to make the studio section of the project as a public as possible lead to the cafe and gallery. The gallery and cafe provide a place to purchase goods made at the Center and help to bring people to the site for more than crafts. One of the terraces opens off of a studio at the courtyard level allowing flow between the public and the artists. Surrounding this terrace is a wall where pots may be dried or goods displayed. The courtyard serves as market or host to craft fairs with the auditorium building aiding in the case of bad weather.

Although not entirely closed off, the parti becomes a box with an object inside. All structures are open to the inside, the walls are solid on the street side and light and open to the courtyard and terraces. The buildings open to the middle where activity and interaction bring life to the structures. In a search for detail and meaning in construction, a realization occurs that the give and take of the project and its surroundings is what makes the project real. Detail and honesty are important aids to making the architecture accessible and understandable.



Early Design Sketches:
Museum



Early Design Sketches:
Studios

Early Design Sketches
Courtyard



Early Design Sketches:
Auditorium

## A Center for Arts and Crafts

Final Design

The site is located along Georgetown's waterfront, on the site of the cities abandoned trash incinerator. The incinerator building, dating from the 1930's, is a brick structure typical of the architecture of the time. It serves as an example of the detailed building of the early 20th century and the Arts and Crafts period.


Site Plan



First Level Plan

The main element of the first level plan is the courtyard. The courtyard has become the datum for the entire complex of structures. It is an organizing element and as the focus of the project, it acts as the place where interaction between the public and crafts begins.
A. Auditorium/ Meeting Hall
B. Cafe and Gallery
C. Outdoor Cafe Seating
D. Studio Space
E. Trash Storage
F. Museum Gallery
G. Museum Storage
H. Stack

The stack is accessible from the second level of the museum. Participation with the stack from two levels allows various ways of experiencing the object which occupies the courtyard. The studios become more open and begin to flow together allowing the artists to interact with each other.
A. Auditorium/ Meeting Hall
B. Cafe and Gallery
C. Museum Gallery
D. Museum Library
E. Stair to Parking
F. Studio Space
G. Trash Storage
H. Stack



At the Third level the classrooms begin to be accessible from the grand stair, which links South Street to 'K' Street. The classrooms, a public function, give the stair a public presence and create a link with the museum and studios across the site. The studios at the Third level have balconies and open to a terrace. The terraces and balconies allow the artists a variety of work environments and increased flow from one space to another. The auditorium has a roof terrace, overlooking the courtyard, accessible at the third level of the building.
A. Auditorium Roof Terrace
B. Classroom Space
C. Museum Gallery
D. Studio Space
E. Stack

Third Level Plan


The Stair leads off of 31st Street bringing the public through the site. The stair and studio terraces are reflections of each other yet they are very different; the stair is a hard scape and the terraces are green and vary depending on the artists use of them. The garden of the museum is also an opposite version of the courtyard. It belongs more to the museum than the public which occupies the courtyard below. The terrace off 31st Street doubles as a loading bay for the studios and the museum.
A. One Bedroom Apartment
B. Classroom Space
C. Museum Gallery
D. Museum Garden
E. Loading Terrace
F. Studio Space
G. Studio Terrace
H. Stack



This plan shows the housing and final level of the museum. The plan of the studio is split to show the last studio on the Fifth Level and the Penthouse Level apartments. There are five types of housing units; traditional one and two bedroom units over the classrooms and efficiency/ studio apartments for the artists above the studios.
A. One Bedroom Apartment
B. Two Bedroom Apartment
C. Museum Gallery
D. Studio Space
E. Artist's Apartment
F. Stack

Fifth Level Plan



Key Plan


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31st Street Elevation



Key Plan


Key Plan



Key Plan


Section through Auditorium, Stack, and Studios


Section through Studios


Section through Studio, Museum Garden, and Housing


Section through Auditorium, Classrooms, and Housing

Key Plan


Key Plan


The museum occupies the existing incinerator. A new steel structure is set within the shell of the original brick building forming a connection to the freeway which runs over ' $K$ ' Street. A circulation tower rises up in the middle of the space. It is an occupied tower reminiscent of the chimney stack occupying the courtyard. The fire stairs in the museum are towers of light (glass and steel) in opposition to the other "heavy" towers. The additive nature of the existing structure is carried into the new museum. The exposed structure is carried into the new museum.

Key Plan


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Section through Museum


First Level Plan


Third Level Plan


Second Level Plan


Fourth Level Plan

The exposed structure is intended to make the craft of construction of the museum part of the exhibits. The museum plan is open and flexible. The exhibits are to be arranged as rooms in order that the objects are seen in their intended position as part of a well designed whole, not as individual objects in display cases.


Model View of Museum

Enlarged Museum
Plans

View into Courtyard from 'K' Street


View of 31st Street Elevation



Artist's Apartment


One Bedroom Apartments


Artist's Apartment


One Bedroom Apartments


Enlarged
Apartment Plans

What began as an exploration of detail in construction has grown into a search for what the work around us has to do with a real or true revelation of the process of building, connections to our past, and the nature around us. This project began as a museum and developed into an entire complex devoted to the discovery of craft. Discovery becomes the source for interaction between the public, the objects, and the artists. This relationship is essential for a community and for the success of public architecture. The part of Georgetown in which the project is located, needs a catalyst to bring the businesses around it into contact with the residential community of Georgetown. It also serves to bring activity to the waterfront. Currently the waterfront's potential is underdeveloped.

As with all projects in architecture, there is so much which has not been addressed or completed to satisfaction. The preparation and development of this thesis project has been both and a struggle and a pleasure. Hard questions were posed, some answered and others I will continue to research in the future. Beyond pure form making, architecture must be a search for truth and understanding of human relationships to built structure and the role materials play in these questions. An understanding of what I desire to achieve through architecture has been gained during the course of the thesis process. New questions have been posed and will give me a place to start from on the journey into the practice of architecture.


## A Center for Arts and Crafts

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