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EDWARD LARRABEE BARNES'S DALLAS MUSEUM OF ART:  
AN ARCHITECTURAL DEVELOPMENT STUDY

THESIS

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By

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This study examines the development of Edward Larrabee Barnes's design concepts for the Dallas Museum of Art, from preliminary concepts and program statements by Director Harry Parker and Dallas Museum trustees, through initial planning and architect selection, to site selection, the Program and Space Study, Barnes's early conceptual plans, and his Dallas Arts District master planning. Influences on Barnes's work and his career development leading to the Dallas commission, his most ambitious museum to date, are examined.

Discussion and documentation of design development is based on schematic studies, presentation drawings, models, and trustees' minutes. Design changes during construction and all phases of expansion planning are also discussed.

The conclusion summarizes historical influences on the design and Barnes's fulfillment of program concepts.

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## CHAPTER I

### INTRODUCTION

The new Dallas Museum of Art is a building of great architectural and aesthetic significance for the city of Dallas and the surrounding area. Since its opening in January 1984, the museum has received much national attention. It has been highly praised by the critics in Newsweek, Architecture, Progressive Architecture, and Texas Architect magazines, The New York Times and The Washington Post.<sup>1</sup> The subtle and restrained building design of Edward Larrabee Barnes has also been well received by professional architects, and was nominated for a 1984 Honor Award offered by the American Institute of Architects. Within the city of Dallas, interest in the art museum substantially increased after the opening of the new facility. Attendance in 1984 was nearly triple that of the previous year at the former Fair Park location, while public participation in educational programs more than doubled. The success of the museum's first year and its location as the cornerstone of the proposed arts district in downtown Dallas has encouraged new development in this area of the city.

The Dallas Museum, which has an 85-year history, was hampered by space limitations at its old facility in Fair Park. The new structure is two and one-half times larger

than the older museum. This physical expansion provides ample space for displaying the museum's permanent collection and for traveling exhibitions. The increased public interest has stimulated the growth of museum programs and activities. This has demanded a corresponding increase in the staff, which has more than doubled. Public support for the new museum has also grown, with museum membership increasing by one-third over 1983's level. Private donations to the museum were encouraged by the construction of a larger art facility, and several major collections were received after its completion. Of these, the most significant has been the Wendy and Emery Reves Collection of paintings, drawings, sculpture and decorative arts, which greatly expanded the scope of the Dallas Museum's collection into the realm of the decorative arts. This thirty-million-dollar donation of art objects has nearly doubled the value of the Dallas Museum's holdings. Conditions attached to the acquisition of the Reves collection necessitated the construction of the first expansion of the museum, even before the original building was completed.

The Dallas Museum of Art may also be considered a major new building in the career of architect Edward Larrabee Barnes. Barnes has achieved a reputation for his functional and sensitive museum designs. His firm was cited in 1980, when it received the American Institute of Architects' Firm Award. Barnes will be 74 years old in 1989. Although he is

a prominent New York architect and widely recognized by his own profession, his career has not been documented in a monographic study such as those devoted to other 20th century architects. Thus, this examination of a major commission in the context of his overall career development will not duplicate a previous study.

The Dallas Museum of Art was completed relatively recently, and no extensive research has yet been undertaken on the development of its design. This was an opportune time to document the design process, because primary source material (drawings, correspondence, etc.) was still available. It was also possible to record some of the thoughts and ideas of the architect, the director of the museum, and others involved in the design and construction phases of the new museum project before they were forgotten.

#### Statement of Problem

The purpose of this study is to trace the development of the architectural design of the present Dallas Museum of Art from its inception to its final expression in the existing structure. The primary problem of the thesis will be to document the evolution of the new Dallas Museum of Art from the initial ideas of the architect and client through the final critical reaction after its completion. A second objective is to place the building within the context of the career development of Edward Larrabee Barnes.

## Methodology

The thesis is organized into five chapters. The first of these is an expanded version of the original thesis proposal. It restates the purpose of the study, and serves as an introduction by discussing the history of the Dallas Museum of Fine Arts as an institution, and the events leading to the selection of an architect to design a new museum in downtown Dallas. The second chapter investigates the work of architect Edward Larrabee Barnes prior to the Dallas Museum commission. It includes an examination of his training and influences on his work, and a retrospective survey of his major buildings. A special focus of the building survey is the series of museum commissions completed by Barnes. The third and fourth chapters present the design evolution of the museum. The third chapter examines the initial concepts for the museum design and includes a discussion of the 83-page Program and Space Study prepared by Barnes's office and the staff of the Dallas Museum of Fine Arts. The fourth chapter traces the museum's design progression by studying the series of schematic floor plans, presentation drawings and models, and investigates the reasons for design changes. An examination of the construction phase is also included. The final chapter serves as a conclusion by comparing the initial design concepts with the completed building. It also includes an

assessment of critical reaction to the building by the public, critics, and museum staff.

#### Collection of Data

The preliminary concepts for the museum design were documented through the author's personal interviews with members of the museum staff and trustees, and with Mr. Barnes and his associate Daniel Casey. The building program and space study prepared by the architect's office and the Dallas Museum's staff was examined by the author. The author studied museum board minutes and retrieved correspondence between the museum staff and the architects. City regulations affecting site selection and building design were noted, and the 1977 report by Stephen Carr and Kevin Lynch on the city's arts facilities was consulted by the author. Local newspaper articles were examined for statements made during the early design period. The author retrieved and studied early schematic drawings, site planning diagrams and models. No preliminary sketches were located and preliminary massing studies had been destroyed by the time of the author's study.

The design development was traced using several methods. First, drawings and models of the museum produced during various stages of development were examined. In addition to visual materials, contract documents, work permits, and correspondence from the design period were studied and related to the chronology of the design

presentations. The author interviewed individuals who made significant contributions to the design and the construction of the museum. Periodical literature was utilized during the course of research on museum design and construction.

Information on the architect was obtained through personal interviews, interviews with his staff, and a search of the literature. An interview schedule has been included as an appendix.

#### Review of the Literature

Research for literature pertaining to the new Dallas Museum of Art and Edward Larrabee Barnes utilized a search of databases containing entries for architectural periodicals and Dissertation Abstracts. Art Index and the Architectural Index were searched for citations of related articles, and Pro File and Contemporary Architects were consulted.<sup>2</sup>

In Bill Marvel's Dallas Times Herald article, "'Country Look' Unveiled for New Museum," Barnes describes his working ideas for the building, and one of the early models is illustrated.<sup>3</sup> John Morris Dixon's article in Progressive Architecture, "Art Oasis," details the plan of the Dallas Museum of Art and gives his architectural assessment of the building's design.<sup>4</sup> The article is well illustrated and includes museum floor plans and a plan of the Dallas Arts District.

The 1985 January-February issue of Texas Architect contains two articles on the Dallas Museum. Peter Papademetriou's "Dallas Museum of Art: Extending the Modernist Tradition of E. L. Barnes" is a critical examination of the successes and deficiencies in the museum design. Ray Ydoyga interviewed museum staff for his article, "Mending Loose Ends: DMA User's Survey."<sup>5</sup>

The Dallas Museum of Art and other museums designed by Barnes are included in an exhibition catalogue published by the Katonah Gallery in 1987. The exhibition, Edward Larrabee Barnes Museum Designs, was held March 22 to May 24, 1987, at the Katonah Gallery, Katonah, New York.<sup>6</sup> The catalogue includes illustrations of twelve of Barnes's museums, statements by the architect on each design, and statements by four museum directors with whom Barnes has worked.

Barnes's career and approach to architecture has been outlined in several sources. The previously-cited issue of Texas Architect contains Papademetriou's brief retrospective analysis of Barnes's work.<sup>7</sup> The most comprehensive visual coverage of Barnes's career output is found in the July 1985 issue of Space Design (SD), a Japanese periodical. The special feature of the issue is a study of Barnes's most significant commissions, including the Dallas Museum of Art. The text was written by Masahiro Horiuchi, an architect who spent two years employed in Barnes's office. Horiuchi

summarizes Barnes's building activities and classifies them according to patterns of design. Interspersed with Horiuchi's text are Barnes's own statements on various commissions, although these are not identified as the architect's statements. Also included is a transcription of Horiuchi's 1984 interview with Barnes, titled "Space Music Composed by Geometrical Forms".<sup>8</sup>

In another significant article, "Profile of the Winner of the 1980 Firm Award," Cervin Robinson provides details about the size and management of Barnes's New York office.<sup>9</sup> Comments by Barnes's associates give insights into his working methods. Robinson discusses influences on Barnes's work and the building commissions which have had the greatest impact on his firm.

At this writing, there are no monographic books which are devoted exclusively to Barnes's work, although material for a monographic work on the architect is being compiled for a future publication by Rizzoli. The author did not have access to this material, however. The following books have sections devoted to Barnes. American Architecture Now, by Barbaralee Diamonstein, contains interviews with many contemporary architects, including Barnes.<sup>10</sup> Barnes's interview focuses on his museum designs and recent work in New York, as well as touching on his philosophy and style. Helen Searing's New American Art Museums contains the architect's statement on the Dallas Museum design, and

documents models of the museum produced for the Whitney Museum of American Art's exhibition of the same title.<sup>11</sup> Paul Heyer explores continuity in Barnes's work in Architects on Architecture: New Directions in America.<sup>12</sup> Heyer presents Barnes's comments about his own designs and his observations on other architects. Contemporary Architects provides a selected bibliography of articles by and about Barnes, and a list of his built projects.<sup>13</sup> An essay by Ching-Yu Chang is also included. Two bibliographies on Barnes were published by Vance Bibliographies in 1981 and 1982.<sup>14</sup>

Many other magazine and newspaper articles reviewed the Dallas Museum of Art after its completion.<sup>15</sup> However, no published material has directly addressed the problem of tracing the development of the architectural design.

#### Preliminary Museum History

The present Dallas Museum of Art originated in 1903 as the Dallas Art Association. In 1936, the Association adopted the title of Dallas Museum of Fine Arts when it moved into the Art Deco-style museum building in Fair Park commissioned by the State Fair of Texas.

The collection of the Dallas Museum of Fine Art grew in 1962, when it absorbed the modern art collection of the Museum for Contemporary Arts through a merger of the two institutions. The previously-independent Museum for Contemporary Arts had been initially established by a

private group of Dallas citizens concerned about the extremely conservative and powerful influence of the Dallas city government on the collection policies of the publicly-funded Dallas Museum of Fine Arts.<sup>16</sup>

The first director of the combined institutions was Merrill C. Rueppel. Rueppel was very active in expanding the collection further through acquisitions in classical antiquities and Pre-Columbian, African, Oriental and contemporary art. By the late 1960s, the expansion of the collection led to dissatisfaction among key museum supporters with the space limitations of the Fair Park building. Active collectors and trustees such as Margaret McDermott, John Murchison, Algur Meadows, Elizabeth Blake and Betty Marcus wanted the Dallas Museum of Fine Arts to become a major cultural institution, but felt this would be impossible if the collection remained in the small and remote facility in Fair Park.<sup>17</sup> They believed the ultimate solution was a new building in a location which would not place it in competition with the annual State Fair of Texas.

To those trustees who envisioned a new art museum, it was apparent that a change had to occur in leadership if broad support for a new facility was to be cultivated. During his tenure as director, Rueppel had alienated both trustees and staff and members of the local art community.<sup>18</sup> Rueppel was persuaded to leave, and he resigned in 1973 to assume the directorship of the Boston Museum of Fine Arts.<sup>19</sup>

After Rueppel's departure, the trustees embarked on a series of carefully considered actions which would ultimately lead to the creation of a new museum.

The first step taken by the museum trustees was to find the right man to spearhead their efforts to generate public and private support and build momentum for a new museum. Harry Parker soon emerged from a field of over fifty candidates as the ideal choice. Parker had a solid educational and administrative background. He graduated Magna cum Laude in 1961 from Harvard where he majored in art history under Seymour Slive, the Netherlandish scholar. Parker received a Fullbright fellowship in 1961 and spent a year studying Netherlandish art at the University of Utrecht.<sup>20</sup>

But the impetus for Parker's subsequent career came from his enrollment in the master's program at the Institute of Fine Arts of New York University. This program launched many promising young scholars into museum careers--among Parker's classmates were J. Carter Brown and Philippe de Montebello. Parker studied for a period with the renowned Erwin Panofsky, then enrolled in the Institute's museum training course, where he met James Rorimer, who taught some of the sessions. Rorimer, then the director of the Metropolitan Museum, gave Parker the opportunity to develop his potential and hired him as his assistant in 1963. Parker learned first-hand from Rorimer about the "care and

feeding of trustees and donors," an art essential to cultivating major new acquisitions and financial support for any museum.<sup>21</sup> Parker would later prove his own adeptness at this special art.

From Rorimer, Parker also learned about the traditional approach to museum directorship. Like his counterpart, Sherman E. Lee of the Cleveland Museum of Art, Rorimer stood as the quintessential connoisseur-director.<sup>22</sup> Parker has described Rorimer as being "very object-oriented,"<sup>23</sup> meaning that Rorimer saw the museum's role as being the repository and conservator of art objects; as a cloistered environment for quiet contemplation and study.

Rorimer died suddenly in 1966 and Parker found himself thrust into an entirely new situation. He was appointed executive assistant to the president of the Metropolitan's board of trustees, and in this important position he acted as the liaison between the board and the museum staff.

Thomas P. Hoving was hired as director of the Metropolitan Museum in 1967, and became a new mentor for Parker. Parker was only twenty-seven when he was quickly promoted by Hoving from a position as Hoving's executive assistant to head the education department.

In Hoving's sometimes controversial approach to museum directorship, he sought to promote the museum as a "positive, relevant and regenerative force in modern

society."<sup>24</sup> Harry Parker has described the new climate under Hoving's tenure in which he was immersed:

The 1960s, my most formative years, was an anti-institutional era. A lot of the issues concerned institutional change and responsiveness to new attitudes. There was demand for greater involvement in the community at large, and an attack on the elitist values that I had been educated in. I was just the right age--I was in my 20s--and I certainly identified with those issues.<sup>25</sup>

Hoving's desire to provide his audiences with a more "participatory experience" heavily depended upon a revitalized, active education department. Parker recalled his role in this way:

I was the point man for what he wanted to accomplish, which was the democratization and popularization of the museum. We did educational materials, projects, slides and so forth. It was typical of the excesses of the time that we attempted to do too much. Some projects were far too idealistic.<sup>26</sup>

Parker thrived in this atmosphere, and his elevation in 1971 to the post of vice-director for education gave him museum-wide power. Further, this appointment placed his department on an equal footing with the curatorial division, altering the traditional museum hierarchy.<sup>27</sup> It has been observed that it was a measure of Parker's adaptability and savy that he flourished under two such different personalities as James Rorimer and Thomas Hoving.<sup>28</sup>

The trustees of the Dallas Museum of Fine Arts correctly perceived that the skills in which Parker excelled at the Metropolitan Museum would serve them well in Dallas. As Betty Marcus, a museum trustee recalled, "We knew we

needed someone with political savvy, a person who could take the ball and run with it."<sup>29</sup> Parker's apprenticeship under Hoving seemed ideally suited to the task of developing a broader public constituency, a necessity for fund-raising and the passage of a bond election package.

Parker, when approached by the Dallas Museum trustees, was initially reluctant to take the director's position in Dallas. In a letter to the search committee, he called the Fair Park location "a wet blanket on optimism,"<sup>30</sup> yet indicated that he agreed with the trustees' ultimate goal:

Though I realize that this will require patient and subtle work to satisfy all the elements of the community, I believe the responsible inner group should now set as a primary objective the accomplishment of a move.<sup>31</sup>

Parker's observation exactly mirrored the trustees' own commitment to relocate the museum. The trustees clearly felt that Harry Parker had the ability and personality to spearhead their efforts and successfully accomplish this task. After persuading Parker that such a move was possible, the board of trustees unanimously ratified his appointment as director of the Dallas Museum of Fine Arts on 10 October 1973. Parker assumed his duties on 1 January 1974.<sup>32</sup> After Parker's selection, the director and the trustees carefully began taking the preliminary steps which would lay the groundwork for a new museum.

### Preliminary Studies

Additional problems with the aging facility in Fair Park soon became apparent. In September of 1974, Perry Huston, then the art conservator of the Kimbell Art Museum, examined the Dallas Museum building and its collection. One problem noted in his report to the board of trustees was the lack of uniform temperature and humidity levels in the museum building.<sup>33</sup>

Many studies were conducted by the staff during this period to determine whether the old structure in Fair Park could be renovated and updated to meet current standards. Most of the staff studies focused on exposing the inadequacies of the Fair Park museum.<sup>34</sup>

Also in 1974, a \$250,000 renovation of the school wing was in progress. A 1972 bond election had provided funding for this renovation which included the construction of new gallery space, offices, a library, and a meeting room.<sup>35</sup> It was hoped that this work would help alleviate the temperature and humidity control problems and temporarily provide for the space needs of the growing collection. Parker's success in soliciting donations of art for the Dallas museum's collection would soon make the addition of even more gallery space imperative.

After spending his first two years as director courting local support, Parker felt it was time for the museum board

to officially set their plans into motion. The 8 January 1976 Board of Trustees minutes recorded:

Mr. Parker stated that the museum in the last year has made great progress locally and nationally, but has problems of attendance and public and private support which cannot be solved without moving to a new location and building. He asked the Board members to think about the idea of moving to a more accessible place.<sup>36</sup>

A resolution to examine the possibility of a museum move was formally approved by the board of trustees on 11 March 1976.<sup>37</sup> Margaret McDermott, a long-time benefactor of the museum, added further impetus to the movement for a new museum at the annual meeting on May 13, 1976. As chairman of the acquisitions committee, she reported that five million dollars of art had been added to the collection in the two years since Harry Parker had assumed the directorship of the Dallas Museum of Fine Arts. Among these acquisitions were two major collections--the Schindler collection of African art, and the Wise collection of Pre-Columbian art. McDermott noted that "with the acquisition of these two collections, the museum has run out of space and the time has come to do something about the shortage of space, both in storage and exhibition."<sup>38</sup>

#### Establishment of Study Committee

The first action to pursue the establishment of a new facility was taken at the Board's annual meeting during which Board President John D. Murchison announced the appointment of a "Study Committee for a New Museum." The

Committee's primary purpose was to study the feasibility of a new building and site for the museum. Members of the Study Committee were: George V. Charlton, L. G. Foster, Ray L. Hunt, Irvin L. Levy, Betty Marcus, and Peter O'Donnell, Jr. Ex-Officio advisers were John Murchison and Margaret McDermott.<sup>39</sup> George Charlton was elected Chairman.

The specific tasks undertaken by the Study Committee for a New Museum included:

Determining the availability of a new site; estimating future space requirements in light of the growth in programs and collections; estimating the probable cost; considering the methods of selecting an architect; considering the possible level of public and private financing; and recommending other uses for the present museum building.<sup>40</sup>

It was imperative for the Study Committee members to consult with city officials regarding their deliberations, as the majority of the museum's art collection was owned by the city of Dallas. City funding had provided for maintenance and expansion of the Fair Park facility, and the financial support of the citizens of Dallas would be crucial to build a new facility. Fortunately for the museum, Robert Folsom had been elected Mayor of Dallas in April 1976. Both he and City Manager George Schrader were highly interested in the revitalization of downtown Dallas, and they felt that the city's art organizations could help stimulate redevelopment.<sup>41</sup>

In preliminary meetings with city officials, Study Committee members stressed the importance of a proper

environment for the city collections, the potential gifts of art that might be received if a new facility were built, and the benefits of increased attendance of local and out-of-town patrons. Early in September 1976, representatives of the museum's Study Committee and other Dallas arts institutions met with Mayor Folsom and City Manager Schrader to discuss city financing of a master arts plan and survey of location needs.<sup>42</sup> Mayor Folsom, who saw his role as that of a "catalyst," proposed that the survey be funded by both the city and the individual institutions.<sup>43</sup>

It was determined at this meeting that one of the proposed questions to be studied by the consultants hired to undertake the master arts plan would be the "possible relocation of the Dallas Museum of Fine Arts."<sup>44</sup> Folsom also suggested that if the consultants' recommendation was to develop a new arts center in the downtown area, a municipal bond issue could help provide funds for construction. "I feel that a bond program for the arts can be sold if the public is given enough information. The concept I see would be a city match of all funds that your organization could raise."<sup>45</sup> This promise of financial assistance through matching funds would be crucial for the museum in its drive to solicit support from private donors. The securing of these combined funds would be essential for the trustees to undertake a building program of the scope that they envisioned.

The proposed master arts plan and survey of location needs of the various arts organizations would eventually be undertaken in May 1977 by a Boston consulting firm headed by Steven Carr and Kevin Lynch. The study would be known as the Carr/Lynch study.

The Study Committee for a New Museum presented its first report to the Board of Trustees in November 1976.<sup>46</sup> The Study Committee had reached several conclusions which supported the board's basic positions. The first of these, predictably, was that the Fair Park facility was "inadequate for the present collections and program, and completely inadequate for the anticipated future collections and program."<sup>47</sup> The Committee next reported on their consideration as to whether the Fair Park facility should be expanded, or whether a new building should be built in a different location. It was agreed among members of the Study Committee that the Fair Park location was not "sufficiently supportive, visible, or accessible, and that it should explore alternative sites to see if a preferable situation could be achieved elsewhere."<sup>48</sup> The Study Committee further concluded after consultation with city government officials and community leaders that relocation of the museum would be possible. The Committee also expressed its support for the Mayor's proposal for a central planning study of sites for future cultural buildings in Dallas.<sup>49</sup>

The imminent planning study proposed by city officials pressed the Study Committee members to propose further action. The Committee hoped to have an architect hired by the time the planning firm began its study so that a proper site selection could be made based on the museum's needs.

As George Charlton noted:

. . . there would be significant advantage in our appointing an architect as planner now to make an analysis of the Museum program currently and for the future as to how it will affect space requirements both for the site and building. The accuracy and specificity of the data will be critical in the deliberations of the professionals making the City's site study, and therefore it would be necessary that an architect we would hire would work closely in conjunction with the planners hired by the City.<sup>50</sup>

The last action taken by the Study Committee for a New Museum was to recommend the appointment of the Architectural Selection Committee. The nominees approved in January 1977 included Henry C. Beck, Jr., Vincent Carrozza, George Charlton, Betty Marcus, and Robert D. Rogers. Continuity was provided by retaining George Charlton as chairman, and Margaret McDermott, John D. Murchison and Harry Parker as ex-officio members.<sup>51</sup>

The Board of Trustees, in a motion establishing the Architectural Selection Committee, also specified the responsibilities of the architect chosen by the Committee. The architect was to "determine the space requirements for a future building and its site," and would "work closely with the professional planners hired by the City of Dallas who will be making site studies."<sup>52</sup> It was also established

that the same architect, with approval by the Board of Trustees, would "design a new Museum building, and in the final stage, supervise its construction."<sup>53</sup>

#### Architect Selection

The Architectural Selection Committee's first action was to select an architectural consultant. George Charlton stressed the important role the consultant played in the Committee's deliberations. Since none of the Committee members had architectural expertise, they realized the necessity of obtaining good outside advice from a knowledgeable source.<sup>54</sup> A list of twenty-four potential consultants was compiled and discussed by the Committee at its initial meeting. This list included practicing and retired architects, chairmen of university architectural programs, and architectural critics. Some of those considered as potential consultants were: Jacquelin Robertson, Charles Eames, Vincent Scully, Gerald McCue, O'Neal Ford, Marcel Breuer, Peitro Belluschi, Ada Louise Huxtable, and Wolf Von Eckhardt.<sup>55</sup>

The Architectural Selection Committee selected as its consultant Lawrence Anderson, architect and former Dean of the School of Architecture and Planning at the Massachusetts Institute of Technology.<sup>56</sup> As an architect, Anderson could evaluate the technical aspects of the work of his peers, and knew the reputations of their respective firms. Many of the

architects who would ultimately be interviewed by the Committee were professional acquaintances of Anderson. For example, Anderson had been the coordinating architect for the new campus of the Rochester Institute of Technology (1967). During the course of this project, Anderson collaborated with architects Edward Larrabee Barnes, Kevin Roche, Hugh Stubbins, Harry Weese, and landscape architect Dan Kiley.<sup>57</sup> All of these architects were considered for the Dallas Museum commission; Barnes and Kiley would eventually be selected.

Anderson's personal opinion of the selection and architectural design process was that a museum "selects a great architect and then wrenches a great building out of him."<sup>58</sup> He also voiced a concern which was echoed frequently by museum officials and which became one of the determining factors in the choice of an architect. Anderson emphasized that the architect selected by the Committee "must be able to make a building that will become 'a work of art itself' without allowing it to become so 'fussy' or 'impressive' that it fails to serve its function 'as background for the works of art it houses.'"<sup>59</sup>

Anderson and the Selection Committee jointly compiled a list of fifty-seven regional, national and international architects who were invited to submit thirty slides of three recent projects. Included in the 57 firms were 25 Dallas architects who had expressed an interest in the commission,

or were included at the wish of the Architectural Selection Committee. In addition, the architects were to answer a questionnaire concerning the size and age of their firms, the character of their work, and the availability of principals.<sup>60</sup>

The architectural firms contacted had approximately three weeks to respond with the requested information. Out of the fifty-seven firms initially contacted, thirty-eight responded with applications, six others had specific reasons for declining, and thirteen did not reply. Of the thirty-eight respondents, thirteen were regional and twenty-five were national and international architects.<sup>61</sup> In addition to the finalists ultimately selected by the Committee, many other well-known architects and firms responded with applications. Among these were: Gunnar Birkerts, Marcel Breuer and Associates, Ulrich Franzen, Hardy Holzman Pfeiffer and Associates, Philip Johnson, Richard Meier, Charles Moore, Paul Rudolph, Kenzo Tange, Robert Venturi, and Harry Weese.<sup>62</sup>

At the 7 March 1977 meeting of the Architectural Selection Committee, the slides sent by the responding firms were shown by Anderson, and he commented on the architects' qualifications and previous work. The list of thirty-eight firms was narrowed to the following eight finalists:

Edward L. Barnes of Edward Larrabee Barnes Associates,  
New York City

Araldo Cossutta, Vincent Ponte of Cossutta and Ponte,  
Architects-Planners, New York City

O'Neil Ford of Ford, Powell and Carson, Architects and  
Planners, San Antonio

Romaldo Giurgola of Mitchell-Giurgola Architects,  
New York City

Enslie Oglesby of The Oglesby Group, Inc., Architects,  
Dallas, Texas

I.M. Pei of I.M. Pei and Partners,  
New York City

Edward Bassett of Skidmore, Owings and Merrill,  
San Francisco

Arthur Erickson of Arthur Erikson Architects,  
Vancouver, British Columbia, Canada<sup>63</sup>

Interviews with these architects chosen as finalists were held on 31 March, 1 April and 2 April 1977. The architects gave slide presentations of their work and answered questions from the Architectural Selection Committee.

Edward Barnes was interviewed by the Committee during the March 31 meeting. In his presentation, he explained that museum design presented a unique problem in that "the building should not outdo the art held in it," but should be a place where art can be displayed to its greatest advantage.<sup>64</sup> During the interview, Barnes showed slides of

several of his buildings, including the Walker Art Center, the Scaife Gallery, the "Pueblo Museum" in Santa Fe, and a few private houses.<sup>65</sup> As he discussed the buildings illustrated to the Committee, Barnes emphasized that his main concerns were in the expression of prime forms, minimalist detailing, and relating the scale of his buildings to people and the surroundings.<sup>66</sup>

The Committee followed up with questions about the materials and costs of the Scaife Gallery, which had been completed by Barnes in 1974, and materials planned for the Asia Society building, apparently under design by Barnes in 1977.<sup>67</sup>

The Committee was also curious about Barnes's penchant for using the same material on roof and walls, as in the Walker's brick-clad exterior, and the Heckscher House's shingled exterior. Barnes explained his reasons in both instances for making the walls "fade into the roofs." In the Heckscher House, his purpose was to enable the house to blend into its surroundings. At the Walker, since the roofs are used to display sculpture, Barnes wished to have no visual interruption which cut the sculpture in two, so he used the same brick material to cover the roof and walls.<sup>68</sup>

Barnes was also asked by the Selection Committee whether his buildings could grow naturally when needed. He responded that the availability of outdoor spaces should make expansion "elegant and easy," and affirmed that he

could design a building which could expand naturally and gracefully. He further noted that "museums never know when they will need to expand as they never know when they will [acquire] great collections."<sup>69</sup> This interchange demonstrates that the trustees already had plans to expand the building in the future, as additional art collections were accessioned, and therefore, expansion considerations would be part of the new museum's program. Barnes's response also indicates the necessity for a site of adequate size which could accommodate future expansion, and this concept would bear on the trustee's later site selection deliberations.

Additional questions directed to Barnes concerned consideration of operating costs, involvement of principal architects, fee structure and estimation of length of design period.<sup>70</sup> In further defining his proposed approach to the museum commission, Barnes observed that, as the Dallas lifestyle is relaxed and easy, the building should reflect the personality and attitudes of the area. At the close of the interview, the Committee members asked Barnes what he considered to be the most important element of a museum. Barnes restated his concern for keeping a museum building subordinate to the art it houses by affirming that the collection should be remembered over the building of the museum.<sup>71</sup> Barnes's past record in museum design supported his contention.

Of all the architects under consideration, Edward Barnes had completed the most museums and galleries, including the Walker Art Center (1971), the Scaife Gallery (1974), the Marlborough Gallery (1973) and the Wichita Art Museum (1974). He was also engaged in commissions for the Indian Arts Museum in Santa Fe, and the Asia Society gallery and office building in New York. Barnes's Walker Art Center had received particularly high praise from critics and exhibiting artists. Paul Goldberger's article, "What Should a Museum Building Be?", gave a very positive assessment of the Walker. Among other comments, Goldberger quoted Leo Castelli's description of the Walker as "probably the best museum space that we have in the United States."<sup>72</sup> Barnes's deference to art in the galleries of the Walker Art Center seemed to exemplify the approach and attitude sought by the Selection Committee.

After the principal architects representing the eight firms had made their presentations to the Architectural Selection Committee, Committee members made visits at their own expense to various cities such as Vancouver, Minneapolis, Oakland, Boston, San Antonio, Philadelphia and Pittsburgh to view completed buildings by the architects.<sup>73</sup> Some of the architects' offices were visited so that Committee members had an opportunity to meet other staff members and observe the organization at work. Over forty previous clients of the architects under consideration were

contacted for their comments. George Charlton recalled that several of the finalists were eliminated as a result of these consultations with former clients.<sup>74</sup>

Of Barnes's completed museum commissions, both the Walker Art Center and the Scaife Gallery were visited by Selection Committee members. No record was found of the Committee members' impressions of the Walker, but Committee Chairman George Charlton sent a memorandum to Harry Parker describing his visit to the Scaife Gallery. Charlton's impression of the Scaife Gallery is recorded in this excerpt:

This museum was far and away the most elegant, beautiful, and practical. Leon Arkus took me on a personally guided two-hour tour. He is a big fan of Barnes although he admits that they fought continuously during the development of the building. First scheme proposed by Barnes was "totally unacceptable," he said, but he points out the final product works well and seems beautiful to him. Couldn't agree more. It is truly elegant. The granite you see on floors and walls from Norway "makes" the building. The look of everything is simple but exquisite. . . . The galleries are beautiful and the overhead lighting from skylights is excellent. Once again, as at the Walker, Barnes uses those wide, large entry-ways between galleries so you can see pictures in one room from another room.<sup>75</sup>

Charlton's enthusiastic report clearly indicates that the beauty and elegance of the Scaife Gallery made a strong impression on him. His positive reaction may well have been an important factor in swaying the Committee's opinion to Barnes, especially since the date of the memorandum suggests that his visit was made shortly before Barnes's interview with the Committee. As a previous client, Leon Arkin's very

positive assessment of Barnes would have been noted by the Committee.<sup>76</sup>

The Architectural Selection Committee met on 3 May 1977 to make their final decision. By this time, the finalists had been narrowed to O'Neil Ford and Edward Barnes. That O'Neil Ford was a Texas architect was a factor in his favor, but Barnes's past record of museum design was impressive. Ultimately, Harry Parker's preference for Barnes was the deciding factor, as the Committee believed that Parker would be working most closely with the architect.<sup>77</sup>

Barnes was presented to the Board of Trustees for approval on 31 May 1977 with George Charlton's enthusiastic introduction:

This job has taken longer than originally anticipated. As we became more involved in our work, our dedication grew more and more intense to be sure we were choosing the greatest architect we could find for this particular project. He had to be a man who had proven by his career that he could handle a project of this magnitude. He had to be a brilliant designer. He had to have a strong organization and a reputation for bringing the job in on time and on budget. He had to be a master at problem-solving and conceptualizing, and he had to be dedicated to the idea in designing a Museum of putting the art first, rather than upstaging it by monumentality of structure. And finally, it was essential that the job had great personal meaning for him.<sup>78</sup>

The Board of Trustees then unanimously approved the appointment of Edward Larrabee Barnes as the architect for the new Dallas Museum of Fine Arts.

NOTES FOR CHAPTER I

<sup>1</sup>See citations for these reviews of the Dallas Museum of Art listed in the thesis Bibliography under "Barnes's Museum Architecture."

<sup>2</sup>Dissertation Abstracts International, (Ann Arbor, MI: Xerox University Microfilms, 1938+); Bertrum Delli, ed., Art Index, (New York: H. W. Wilson Co., 1929+); Erwin J. Bell, ed., Architectural Index, (Boulder, CO: The Architectural Index, 1950+); Pro File: The Official Directory of the American Institute of Architects, 1989-1990, (Topeka, KS: Archimedia, 1989); Ann Lee Morgan, Colin Naylor, ed., Contemporary Architects, (Chicago, IL: St. James Pr., 1987).

<sup>3</sup>Bill Marvel, "'Country Look' Unveiled for New Museum," Dallas Times Herald, 17 May 1979, 1, 4(B).

<sup>4</sup>John Morris Dixon, "Art Oasis," Progressive Architecture 65 (April 1984): 127-136.

<sup>5</sup>See Peter Papademetriou, "Dallas Museum of Art: Extending the Modernist Tradition of E. L. Barnes," pp. 36-47, and Ray Ydoyga, "Mending Loose Ends: DMA User's Survey," pp. 52-55, in Texas Architect 35 (January/February 1985).

<sup>6</sup>[John Barnes], Edward Larrabee Barnes Museum Designs, (Katonah, NY: The Katonah Gallery, 1987).

<sup>7</sup>Peter Papademetriou, "E. L. Barnes in Retrospect," Texas Architect 35 (January/February 1985): 48-51.

<sup>8</sup>Space Design (SD) 250 (July 1985): 5-92. See "Space Music Composed by Geometrical Forms," 89-90. Also of interest is a chronological diagram of Barnes's work drawn up by Horiuchi, pp. 80-81.

<sup>9</sup>Cervin Robinson, "Profile of the Winner of the 1980 Firm Award," AIA Journal 69 (April 1980): 62-71.

<sup>10</sup>Barbaralee Diamonstein, American Architecture Now, (New York: Rizzoli, 1980): 16-32.

<sup>11</sup>Helen Searing, New American Art Museums (Berkeley, CA: University of California Pr., 1982), 86-91. The exhibition was held at the Whitney Museum of American Art, New York City, 24 June to 10 October 1982.

<sup>12</sup>Paul Heyer, Architects on Architecture: New Directions in America (New York: Walker & Co., 1966).

<sup>13</sup>Morgan and Naylor, Contemporary Architects, 71-73.

<sup>14</sup>See Robert B. Harmon, The Architecture of Restraint in the Works of Edward L. Barnes: A Selected Bibliography (Monticello, IL: Vance Bibliographies, 1981), and Lamia Doumato, Edward Larrabee Barnes (Monticello, IL: Vance Bibliographies, 1982).

<sup>15</sup>See thesis Bibliography for citations of Dallas Museum of Art reviews.

<sup>16</sup>Tomkins, Calvin, "The Art World: Dallas," The New Yorker, 13 June 1983, 92-93.

<sup>17</sup>Dillon, David, "The New DMA: How We Got It," Dallas Morning News, 22 January 1984, 5(C). See also Tomkins, "The Art World: Dallas", 92-94, who cites Margaret McDermott in particular for her long-standing support for the arts institutions in Dallas. McDermott was the President of the board of the combined art museums, and became Chairman of the Dallas Museum of Fine Arts Board of Trustees in 1974.

<sup>18</sup>Bill Marvell, "Harry Parker: The Man behind the New Dallas Museum of Art," Dallas Times Herald, 11 January 1984, 1("Unique" sec.). See also Dillon, "The New DMA: How We Got It," 5(C).

<sup>19</sup>Board of Trustees minutes, 17 April 1973, 2, Dallas Museum of Fine Arts, Dallas, Texas.

<sup>20</sup>Marvell, "Harry Parker--the Man Behind the New Dallas Museum of Art," 1.

<sup>21</sup>Ibid., 7.

<sup>22</sup>See Grace Glueck, "The Ivory Tower versus the Discotheque," Art in America 59 (May/June 1971): 80-82, for her profile of Sherman E. Lee's classic approach to museum directorship.

<sup>23</sup>Marvell, "Harry Parker," 7.

<sup>24</sup>Glueck, "The Ivory Tower," 83. See Glueck's profile of Thomas Hoving and his radical departure from the relatively staid directorship of James Rorimer, 82-85. See also Michael Conforti, "Hoving's Legacy Reconsidered," Art in America 74 (June 1986): 19-23.

<sup>25</sup>Marvell, "Harry Parker," 7.

- <sup>26</sup>Ibid.
- <sup>27</sup>Glueck, "The Ivory Tower," 85.
- <sup>28</sup>Marvell, "Harry Parker," 7.
- <sup>29</sup>Dillon, "The New DMA: How We Got It," 5(C).
- <sup>30</sup>Marvell, "Harry Parker," 7.
- <sup>31</sup>Doug Bedell, "Harry Parker: Controversial Museum Director the Man with the Most Riding on Bond Election," Dallas Times Herald, 28 October 1979, 6(K).
- <sup>32</sup>Board of Trustees minutes, 10 October 1973, 3.
- <sup>33</sup>Board of Trustees minutes, 9 September 1974, 5.
- <sup>34</sup>Dillon, "The DMA: How We Got It," 5(C).
- <sup>35</sup>Board of Trustees minutes, 17 April 1973, 3. See also Board of Trustees minutes, 9 September 1974, 5.
- <sup>36</sup>Board of Trustees minutes, 8 January 1976, 7.
- <sup>37</sup>Board of Trustees minutes, 11 March 1976, 4.
- <sup>38</sup>Board of Trustees minutes, Annual Meeting, 13 May 1976, 2.
- <sup>39</sup>Board of Trustees, 13 May 1976, 3.
- <sup>40</sup>Board of Trustees, Regular Meeting, 13 May 1976, 3.
- <sup>41</sup>Dillon, "The New DMA: How We Got It," 5(C).
- <sup>42</sup>In addition to the Dallas Museum of Fine Arts, the other organization represented at this meeting were: Dallas Symphony Orchestra, Dallas Civic Opera Association, Dallas Civic Ballet, State Fair Music Hall, Council Arts and Beautification Committee (Parks and Recreation Board), Dallas Summer Musicals, Dallas Theater Center, Municipal Library Advisory Board. See [Kit Bauman], "City Arts Leaders to Chart Future," Dallas Times Herald, 10 September 1976, 4(B), and Henry Tatum, "City Officials Pledge Dallas to Help Arts," Dallas Morning News, 10 September 1976, 1(A).
- <sup>43</sup>Board of Trustees minutes, 16 September 1976, 3.
- <sup>44</sup>[Bauman], "City Arts Leaders to Chart Future," 1, 4(B).

<sup>45</sup>Mayor Folsom quoted by Tatum, "City Officials Pledge Dallas to Help Arts," 1(A).

<sup>46</sup>The initial investigations of the Study Committee are summarized in a later report filed with the Board of Trustees minutes, 12 May 1977.

<sup>47</sup>Study Committee Report submitted to Board of Trustees by Chairman George V. Charlton, filed with Board of Trustee minutes, 11 November 1976, 1, item no. 2.

<sup>48</sup>Study Committee Report, 11 November 1976, 1, item no. 4.

<sup>49</sup>Study Committee Report, 11 November 1976, 1, item nos. 5 and 6.

<sup>50</sup>Ibid., 2.

<sup>51</sup>Board of Trustees minutes, 13 January 1977, "Motion Establishing the Architectural Selection Committee," n.p., filed following minutes. The appointment of the committee was first proposed to the Executive Committee in October 1976. See Executive Committee minutes, 19 October 1976, [4].

<sup>52</sup>Board of Trustees minutes, January 13, 1977, "Motion Establishing the Architectural Selection Committee."

<sup>53</sup>Ibid.

<sup>54</sup>George Charlton, interview by author, 2 August 1985, Dallas, Texas.

<sup>55</sup>Architectural Selection Committee minutes, 11 January 1977, list filed following minutes.

<sup>56</sup>Janet Kutner, "Architectural Consultant Named for Dallas Museum," Dallas Morning News, 28 January 1977, 5(D).

<sup>57</sup>Mildred F. Schmertz, "R.I.T.'s New Campus--A Unique Design Collaboration," Architectural Record, 144 (November 1968): 123.

<sup>58</sup>Janet Kutner, "'International Net' To Seek Architect for New Structure", Dallas Morning News, 7 February 1977, 6(C).

<sup>59</sup>Janet Kutner, "International Net," 6(C).

<sup>60</sup>See Architectural Selection Committee minutes, 7 March 1977, 1, Board of Trustees minutes, Report of the Study Committee for a New Museum, 12 May 1977, 3, and Kutner, "International Net," 6(C).

<sup>61</sup>Architectural Selection Committee minutes, 7 March 1977, 1. Janet Kutner, "DMFA Designer List Narrows," Dallas Morning News, 8 March 1977, 7(C).

<sup>62</sup>Information from list of architectural firms contacted and their responses, n.d., Architectural Selection Committee Correspondence files, Dallas Museum of Art.

<sup>63</sup>Architectural Selection Committee minutes, 7 March 1977, 2. Philip Johnson was not a semi-finalist, as indicated in David Dillon's article: "The New DMA: How We Got It," Dallas Morning News, 22 January 1984, 5(C). Janet Kutner's article, "DMFA Designer List Narrows," 7(C), provides a speculative list of fifteen architects, some of whom were not finalists.

<sup>64</sup>Architectural Selection Committee minutes, Special Meeting, 31 March 1977, 1.

<sup>65</sup>One of these houses is described later in the minutes as "the house in Maine," which indicates that this was Barnes's Heckscher House (1974). The "Pueblo Museum" probably refers to the Indian Arts Museum which Barnes was designing at that time as an addition to the Santa Fe Museum of Fine Arts. See Architectural Selection Committee Minutes, 31 March 1977, 2. The projected completion date for the Indian Arts Museum was 1979, but the Barnes design was never actually built. These buildings are discussed in more detail in Chapter II; see figs. 53, 120.

<sup>66</sup>Architectural Selection Committee minutes, 31 March 1977, 1.

<sup>67</sup>The minutes of Barnes's interview include his description of preliminary design plans for the Asia Society's galleries for the Rockefeller Collection: "soft general lighting . . . and lots of natural materials such as wood, linen, and stone." Architectural Selection Committee minutes, Special Meeting, 31 March 1977, 2.

<sup>68</sup>Ibid.

<sup>69</sup>Ibid. Barnes's comment appears calculated to appeal to the trustee's desire to attract new collections with a new building. Perhaps not coincidentally, in the same year, 1977, the Dallas Museum Associates had made plans to visit Emery and Wendy Reves's Villa La Pausa as part of their trip

to France to see private collections in that country. The visit to La Pausa was cancelled that year because of Emery Reves's ill health, but Harry Parker would later contact Wendy Reves regarding the collection in 1982 with more success. See Robert V. Rozelle, The Wendy and Emery Reves Collection, (Dallas: Dallas Museum of Art, [1985]), 63, note 1.

<sup>70</sup>Architectural Selection Committee minutes, 31 March 1977, 3-4.

<sup>71</sup>Ibid., 4.

<sup>72</sup>Paul Goldberger, "What Should a Museum Building Be?", ARTnews 74 (October 1975): 36. A copy of the article, with the section about Barnes highlighted, was included in the material considered by the Selection Committee. See also Peter Blake, "Brick-on-Brick and White-on-White," Architecture Plus 2 (July/August 1974): 38-47.

<sup>73</sup>Board of Trustees minutes, Report of the Study Committee for a New Museum, 12 May 1977, 3. George Charlton recalled that at least one member of the Selection Committee visited a building of each finalist. George Charlton, interview by author, 2 August 1985, Dallas, Texas.

<sup>74</sup>Ibid.

<sup>75</sup>George V. Charlton to Harry S. Parker, "Notes on Trip to Scaife Gallery," 28 March 1977, 1.

<sup>76</sup>Arkus made another revealing comment as a cautionary note, also reported by Charlton: "Arkus said that the building "worked" because he had been given complete support from his Board in dealing with Barnes, who can sometimes be overpowering with his personality. If it looks like Barnes is the one, you'll have to talk to Leon first." Ibid., 2.

<sup>77</sup>Architectural Selection Committee minutes, Special Meeting, 3 May 1977, 2.

<sup>78</sup>Board of Trustees minutes, report of Study Committee by George V. Charlton, 12 May 1977, 3, 4, For Trustees' confirmation of Barnes's appointment, see Board of Trustees minutes, Special Meeting, 31 May 1977. See also articles by Janet Kutner, "Museum Board Selects Architect," Dallas Morning News, 1 June 1977, 1(A), "New Architect Flexible Rather Than Flamboyant," Dallas Morning News, 1 June 1977, 5(C), and "The Special Challenge of the DMFA Design," Dallas Morning News, 5 June 1977, 1(C).

## CHAPTER II

### CAREER DEVELOPMENT OF EDWARD BARNES

The involved architect selection process resulted in the trustees' decision to commission Edward Larrabee Barnes as architect for the new Dallas Museum of Fine Arts (fig. 1). In selecting Barnes, the trustees allied themselves and the museum's future with a mature architect of thirty years experience at the time of the Dallas Museum commission.

Barnes was a well-recognized figure within the architectural profession, and had an established record of distinguished museum designs. He had received numerous awards and honors throughout his career, and his projects had been widely published. National recognition of his work came unusually early for an architectural career. His first commission in 1949, a house for Whitelaw Reid, was published in Architectural Record, and his subsequent commissions were frequently documented in all of the major architectural periodicals.<sup>1</sup> Within ten years of the establishment of his architectural practice in 1949, Barnes received the first of a series of many professional honors. In 1959, he received both the A.W. Brunner Prize from the National Institute of Arts and Letters and the Yale Award for distinction in the arts. Other significant honors followed, including the Louis Sullivan Award for Architecture in 1979, and the

American Institute of Architects' Firm Award in 1980.<sup>2</sup>

Throughout the years of his practice, Barnes continued to receive recognition from all the professional architectural organizations in the form of medals, citations and honor awards for his design work. These awards were given for a variety of building types, including private and public housing, commercial, academic, and museum design. That Barnes received awards in all of the major areas of his career practice suggests his adeptness in solving a wide variety of design problems. It should also be noted that his first commissions for public housing, office development and museum design were all given special awards.

In addition to the many awards generated by his work, Barnes has had the opportunity to exert considerable influence through significant teaching and professional appointments. From 1954 to 1964, Barnes was Design Critic and Lecturer at the Pratt Institute in Brooklyn and Yale University. In 1966, he became a Fellow of the American Institute of Architects. He has been a member of the Visiting Committee at Harvard University and the Massachusetts Institute of Technology and was named Thomas Jefferson Professor of Architecture at the University of Virginia. Barnes served as trustee and Vice Chairman of the American Academy in Rome, and is an Academician of the National Academy of Design. Since 1975, Barnes has been a Trustee of the Museum of Modern Art.<sup>3</sup>

Barnes's path to this distinguished career was assisted by his family, as he was reared by accomplished parents. Born in Chicago on 22 April 1915, he was the son of Margaret Ayer Barnes, who had won a Pulitzer Prize for her writing, and Cecil Barnes, who was a lawyer. His early schooling was at the Francis W. Parker School, Milton Academy, and when he went on to Harvard University, his family expected him to become a writer like his mother. However, while he studied English at Harvard, he graduated in 1938 with a B.S. in architectural history. He then returned to Milton Academy to teach English, but this was not to be his career.<sup>4</sup>

It was the propitious influence of the Bauhaus master Marcel Breuer which would inspire Barnes to chose architecture as his profession. Barnes made his career choice after a pivotal visit to Breuer's house (fig. 2). Barnes's own recollection of this visit has been frequently quoted:

Breuer's own house in Lincoln was a revelation of a new world of light and space. You may remember the plan, with a two-story living room, a bedroom on a balcony, and a dining room a few steps down. I had never seen such fresh details and materials. I remember a great deal of white, mirrors beyond Japanese reed screens, a Scotch plaid bedspread, stone, huge sheets of glass, wicker, and chrome, more white walls, somewhere the first Breuer blue wall, an early Calder mobile, and sheer white curtains. I was dazzled by the sureness of this touch--Breuer's ability to combine totally dissimilar elements and materials and yet not crowd the space. And I felt that his architecture was somehow like the Paul Klee paintings in which disparate objects float in space--an arrow, a moon, a flower, a glass--all unrelated yet held together by their exact placement. This quality of tension and contrast seemed

to be a true expression of our lives at that time.<sup>5</sup>

This passage is so strongly associated with Barnes, in fact, that it has obscured Barnes's deliberate movement away from some of Breuer's concepts in the early 1960s.

After Barnes's discovery of the possibilities of architecture in Breuer's house, he entered the architecture program at Harvard University to study with Marcel Breuer and Walter Gropius.<sup>6</sup> According to Barnes, his tenure in the graduate program was an exciting one, occurring only a few years after Gropius and Breuer began teaching at Harvard. He describes Harvard during that period as

the only modern architecture school in the country. One could study with Frank Lloyd Wright, but outside of that, Harvard was the only non[-]Beaux[-]Arts school; there was a great missionary sense which was probably falsely felt. I think that many of us felt the strong influence of Le Corbusier and Breuer.<sup>7</sup>

Barnes found the concepts of Le Corbusier to be transmitted most directly through Breuer himself:

When I was at school, Corbu was our hero. . . . However, Corbu was always one step removed, and we saw the International Style at first hand through Breuer, who had just come to join Gropius at Harvard. He was young and talented and a great admirer of Corbu.<sup>8</sup>

In a recent interview with Masahiro Horiuchi, Barnes commented upon the different ways in which Walter Gropius and Marcel Breuer influenced their students, noting that he perceived Gropius as more of an intellectual than an architect, "a man of ideas, a thinker and a talker."

But Breuer at that time, when he was doing all the design with no office, was an artist. . . . I worked

for him, and he influenced me as an artist and a designer, that is, visually not intellectually. Breuer was somewhat inarticulate because he did not speak English well at that time. So you had to learn from what he was doing and from his design.<sup>9</sup>

While in school, Barnes had the opportunity to gain experience working in the Gropius Breuer office. In 1941, Barnes won the Sheldon Fellowship to study housing in Washington, and his thesis concerned housing.<sup>10</sup> During World War II, Barnes served for four years in the Naval Reserve and worked as Naval Architect on submarine design. Barnes received his architectural license in 1947, and worked briefly in the office of Wurster, Bernardi, and Emmons. Thereafter he worked with Henry Dreyfuss on the design of prefabricated housing for Consolidated Vultee Aircraft in Pasadena.<sup>11</sup> Barnes and his wife Mary, who also was trained as an architectural designer, moved to New York in 1949. A remodeling job for the New York Herald Tribune led to Barnes's first house commission for the Tribune's editor, Whitelaw Reid. In that year, Barnes opened his own office.<sup>12</sup>

#### First Decade

After opening his private practice in 1949, Barnes's office remained small and grew slowly during the early years. The staff consisted of Barnes, his wife Mary, who handled interior design, and a several other young architects such as Roger Moger and Al Brownell.<sup>13</sup> Not surprisingly for a small firm, the early commissions were

predominantly private residences. The years of the late 1940s and early 1950s were crucial as a testing period in which Barnes assimilated his Harvard training characterized as it was by the strong influence of the first generation of modern architects--Mies van der Rohe, Breuer and Gropius. Le Corbusier's simple form-making would become increasingly important as an inspirational source, particularly in the second decade of Barnes's practice.

Barnes's education at Harvard provided a firm foundation upon which he drew during his personal evolution as an architect. Barnes never abandoned his disciplined training although his own approach underwent changes in ensuing years. He found that

The Harvard training with its strong functional base, later ridiculed for being too narrow, was actually a good approach--a good discipline in combination with vital aesthetic and formal considerations. I have never been able or willing to reject it. Rudolph, Johnson and other people were actually irritated by functionalism--for me it always seemed a valid approach. I felt that the use, the life and the activity of a building, were terribly important; and that if one broadened the meaning of 'functional' to include psychological needs, one might in effect create expressionist architecture, with its roots firmly planted in functionalism.<sup>14</sup>

Barnes's receptivity to Breuer's concepts during this period is most noticeable in the "bi-nuclear" plan of his first house for Whitelaw Reid (1949, fig. 3). Breuer's typical bi-nuclear dwelling was divided into two distinctly separate areas for the active and passive aspects of family living. This practical arrangement meant that the sleeping

quarters were located in a separate wing away from the areas used by the family for daily activities and entertainment. In the Reid House this division is expressed in a long rectangular two-story wing containing bedrooms and services, and a square unit for the living areas (fig. 4).

The natural materials of local stone and wood siding chosen by Barnes for the Reid House are similar to those employed by Breuer at this time, and are also indicative of Breuer's notion of textural emphasis rendered through the use of contrasting materials.<sup>15</sup> Barnes would continue to use natural stone extensively in the subsequent designs for his "platform" houses, and the cypress siding of the Reid House would also be incorporated in later designs of the 1950s and 1960s.

A particularly notable aspect of this early house by Barnes is its compact circulation core, which was designed to link the two wings in an efficient manner. The two wings were connected by a slender hall which contained a double staircase that provided the key to the circulation pattern of the house. The staircase, exposed by a two-story glazed wall, simultaneously linked the upper and lower levels of the wings both horizontally and vertically. Barnes commented at the time that "To make a house of this size at all livable you have to solve its circulation before you do anything else."<sup>16</sup> Barnes's commitment to functional design as reflected in commissions throughout his career required

that the resolution of circulation was always taken as an initial step in the design process.

Paul Heyer was the first writer to describe the episodic phases of Barnes's early development.<sup>17</sup> The first of these phases consisted of a series of "platform houses" built by Barnes during the 1950s. The series consisted of three houses in Connecticut--the Osborn House and Studio (1950, 1951 project, figs. 5, 6), the Buck House (1952, fig. 7), and the Marsters House (1956). Edward Barnes built his own platform house at Mt. Kisco, New York in 1952 (figs. 8-10).

The basic concept of the platform house series involved the composition of the house and its surrounding garden courts within a limited rectangular area circumscribed by low stone walls. The entire horizontal plane containing these elements was lifted above the site upon this podium-like stone structure--the "platform"--which was an extension of the foundation of the house. According to Barnes, the advantage of this arrangement was the easy maintainance of the relatively small courtyard terraces located upon the platform, while the surrounding countryside could be left virtually in its natural state.<sup>18</sup> As an extension of the house foundation, the stone platform to some extent helped to knit the house to its site. Depending on the slope of the site, the platform appeared in many guises; sometimes the top of the platform was flush with the

interior courtyard, and at times it formed a retaining wall high enough to sit upon.

The platform houses were related to their natural surroundings through the use of local materials of wood and stone, an approach which owes something to Frank Lloyd Wright, yet Barnes did not pursue a highly organic interrelationship between house and site in the Wrightian manner. As Barnes stated,

The contrast between untouched nature and the area for living is dramatized in the platform plan. A house should never melt completely into the landscape--it should retain its identity as a habitation and have its own crisp organic form. To me 'organic' does not mean that the house sprouts out of nature like an over-fertilized plant.<sup>19</sup>

The platform concept reveals Barnes's very controlled and conservative approach to the integration of house and site during the first decade of his career. True to his Harvard training which emphasized formal geometry, Barnes composed the house as a "defined geometric shape in sharp contrast to Nature."<sup>20</sup>

Barnes's predilection for the dominance of order over nature is akin to Le Corbusier's approach for the Villa Savoye (1931), which clearly dominates its site, appearing as a streamlined white ship sailing on a green sea of grass. Barnes's house for Allen Buck (fig. 7) was described in 1956 as a "houseboat in the fields,"<sup>21</sup> and Barnes himself later noted that the platform "became a framework for all the highly cultivated activities of a house, rather like a house

boat."<sup>22</sup> But, in synthesizing the dual influences in his training, Barnes tempered the sharp geometry of Corbu's approach with Breuer's fondness for the textures of natural materials. Barnes's platform became a transitional element between house and site, rather than giving a sense of total physical detachment which the use of pilotis would have produced. Barnes's synthesis of design concepts foreshadows a predilection that will shape his evolution as an architect.

In spite of Barnes's training as a Modernist, classical influences are also apparent in the platform houses. In several of these early designs, such as the Osborn House and the Barnes House, the classical podium is paired with a symmetrical plan. Barnes observed recently that symmetry was always present in his work, beginning with his own house, and that even in the period of "highest Modernism" he never thought that symmetry was something which should be excluded from an architect's design options.<sup>23</sup>

The bi-nuclear concept was expressed by Barnes in the platform houses in a variety of arrangements of living and sleeping wings within the rectangular form of the enclosing platform. For example, the extended linear wings of the Osborn House that separate bedrooms from living areas demonstrate Barnes's adaptation of the bi-nuclear concept. Writing in 1956 about his plans for future, more ambitious houses, Barnes commented that he would like to "define the living platform at an upper level."<sup>24</sup> This development

would occur during the next decade of his career, in which he extended the bi-nuclear concept vertically.

It is interesting to note the persistence of the platform concept in Barnes's later works. Stone platforms reappear in the Cowles House (1963), the Hilltop House (1965), and even in the later Righter House (1975). The concept undergoes a transformation from stone to wooden platform decks in his "woodland" houses, the Haystack School of Arts and Crafts (1962), and the Hecksher House (1974).

On the platform itself, Barnes integrated indoor/outdoor space through the juxtaposition of exterior courtyards and interior environments visually linked by glass walls. As Barnes wrote,

In the platform plan, the garden is conceived as part of the house. Its wall is an extension of the house foundation; enclosed terraces complement inside spaces. Shade trees make a leafy outdoor ceiling.<sup>25</sup> (fig. 9)

The concept of walls extending from the house foundation to enclose exterior courtyards derives ultimately from the court houses of Mies van der Rohe in his projects of 1931-1938 (fig. 13). Mies linked the housing units to alternately paved and grassy courts which together formed a single open plan within a simple rectangle formed by the enclosing walls. The brick walls of the houses were continued uninterrupted to enclose the adjacent courtyards.<sup>26</sup> In Barnes's platform houses, it was the stone foundation which was extended to enclose both house and court.

Unlike the open plan in Mies's court houses, Barnes positions interior wall partitions to insure privacy for the occupants, demonstrating his functional approach. Also unlike Mies, Barnes avoided showing the internal supports of his structures, and whenever possible, he concealed the supporting beams within the vertical partitions of the small platform houses. When incorporating supporting columns into the glass walls facing the courtyards, the beams become part of the elegantly simple door frames, as seen in his own house (fig. 9). In some of Barnes's larger house commissions supporting elements are exposed. In the Ted Weiner house in Fort Worth (1951), thin pipe columns support a continuous oak ceiling plane inside and awnings and trellises outside.<sup>27</sup>

In many ways, an examination of the early platform houses reveals the genesis of basic concepts which Barnes would express with great variety throughout his career. Characteristic of the platform houses as well as later designs, is the interplay between indoor/outdoor space. The courtyard terraces offered easily accessed and maintained areas for outdoor dining and recreation. Visually and functionally, the courts became extensions of interior living areas.<sup>28</sup> In Barnes's house, all interior/exterior space is defined on one plane flush with the top of the platform. This makes one conscious of looking down from the platform, while at the same time being aware of the overall

unified plane of the composition.<sup>29</sup> In the Osborn House (fig. 5), both sunken and raised terraces are employed; the sunken terrace corresponded to the adjacent sunken living room, and the raised entrance court was level with the top of the platform and sidewalk. In this design, an entirely different physical space is beginning to be created for separate portions of the house, and a unique character is created for each room by the variously planted adjacent courtyards.<sup>30</sup> Some thirty years later, the persistence of this approach would be a significant factor in the shaping of the design for the Dallas Museum of Art.

Barnes's next major cluster of designs during the first decade of his career evolved from a series of woodland camps he designed for the New York Herald Tribune Fresh Air Fund in Fishkill, New York. The earliest of these were Camp Bliss and Camp Hayden, both designed in 1956, and Camp Hidden Valley in 1961 (fig. 14, 15). Out of this body of work Barnes developed his next approach to private residences--the "woodland houses."<sup>31</sup>

Barnes's reluctance to seek an organic integration of the platform houses with the surrounding landscape was softened somewhat by the woodland buildings of the late 1950s. These structures challenged Barnes by forcing him wrestle with the problem of grafting the buildings onto difficult wooded sites. Barnes's sensitivity for the site was always a crucial factor in his design approach; his

tendency was always to leave the site in its natural state. He even specified that in woodland architecture, buildings should be "set up on stilts so as not to disturb the rocks and leaves."<sup>32</sup> Yet at this point in his career, a growing desire for continuity prompted him to seek balance and unity between house and site. Barnes now felt that he was approaching a "Wrightian organic interaction of house and site", in which the house would blend, rather than dominate its surroundings.<sup>33</sup> Even as he acknowledged this, he added a cautionary note:

A woodland site seems to demand forms which are a part of the atmosphere of the woods: organic forms advancing and receding among the trees and never fully visible. But within such a romantic approach there still must be discipline.<sup>34</sup>

The Straus House and the Miller House--the "woodland houses"--comprise the second major development in Barnes's private house commissions. As in the platform houses, a continuous plane defined the living space at one primary level (fig. 16). In striving for "organic" interaction between house and site, Barnes referred to the natural environment by sheathing the houses entirely in cypress wood. However, the houses continued to ride above the hilly sites, the single-level platform supported by pilings where necessary. The mass of the house remained a distinct geometric form which projected over the site, rather than stepping down or penetrating into the hill.

The Straus House in Pound Ridge, New York (1957, figs. 16, 17) is quite large and much more complex than the platform houses. However, it again takes up the functionalist, bi-nuclear concept which Barnes had adapted for the platform houses. In the Straus House, the different living and sleeping areas are separated into clusters of rooms which are linked by long corridors. The lines of the house are long and horizontal; the separate wings of the house appear interlocked with the site. In plan, the organic form of the house appears almost figurative, with the crab-like "arms" enclosing the front courtyard and entrance into the main "body".

The physical interlocking of the woodland houses with their sites was enhanced by the visual continuity between interior and exterior space, just as it was in the platform houses. The layout of the wings and window openings was carefully planned to capitalize on the variety of scenic views of the site. The interpenetration of space was characterized by vistas down the long corridors and through the large expanses of glass walls.<sup>35</sup>

A new physical element--peaked roofs featuring glass gables--is incorporated into the woodland houses, deriving from the A-frame roofs of many of the woodland camp structures. A single roof peak in the Straus House and twin peaks in the Miller House represent a significant development of interior space, and set off the main "body"

and living areas of the houses from the flat-roofed linear sleeping wings.

### Second Decade:

#### Ingredients of a New Approach

The first turning point in Barnes's education had resulted from his visit to Breuer's house in Lincoln--a journey which inspired Barnes to turn his creative energy to the study of architecture. A major development in his professional career occurred after he received a pivotal commission in 1959 to design the United States consulate in Tabriz, Iran. Through this commission, Barnes had the opportunity to observe not only the indigenous architecture of Iran, but also that of Athens and Mykonos during his travels to the Mediterranean world (figs. 18-22). Barnes has vividly described his impressions of these experiences:

That journey was a turning point for me. And if I had to choose one word to define the architectural dimension that I saw in the Middle East, it would be the word continuity....

One is overwhelmed by the sense of time--the slow, unchanging cycle of life and death and work and worship. This same round, these same crumbling brick compounds existed a thousand years ago, and, indeed, one often sees mounds on the plains, vestiges of a buried village decomposing under the drifts of earth. It is as if the village were an organism, like a coral, growing by accretion, each dwelling modeling itself on its neighbor, each street widening and narrowing in a fluid way, as a river responds to currents. The individual does not count; society does. And in village architecture, whether in Persia, Africa, or Mykonos, society is the unit, not the individual. Any single building in the village is conditioned by what is around it and what came before. As society is continuous, so is the architecture.

Surely, there is a place and a need for continuity of this kind in Western culture and architecture. We live in a society that is fragmented, fugitive, and often shallow. We practice architecture in a highly competitive, building-by-building way that is frequently without significance.<sup>36</sup>

For Barnes, the impressions of Middle Eastern-Mediterranean architecture crystallized into a major new design approach. This change in direction had been foreshadowed by his previous developments in the woodland houses and camps of the late 1950s. In these works, Barnes first began to incorporate extensive use of a single material to provide unity for community groupings of the camps, and to develop a harmonious relationship of house to site. This approach was an early expression of the unity that Barnes so strongly advocated after his travels in Iran and Greece. Barnes adopted the word "continuity" to describe the new developments in his design approach of the 1960s. It is a complex concept which Barnes defines in this way:

In architectural terms continuity means the use of fewer materials; an emphasis on what is alike, not on what is different; the elimination of unnecessary articulation; the use of land without the wholesale use of the bulldozer. It means designing with respect for adjoining buildings--their scale and color and mood, with respect for the spaces between buildings, realizing that this space may be important in the buildings themselves; finally, it means thinking of each building as part of a process, not as a world unto itself....

When I emphasize the need for continuity in architecture you may imagine that I am hopefully promoting the idea of a plastic city where walls, floors, ceilings, streets, and landscape all flow

together organically. In fact, I am arguing for architecture which is in harmony with its environment, assuming the environment is not a no man's land or a slum. And I am arguing for the unified statement.<sup>37</sup>

In this statement, Barnes introduces several significant new design concepts:

1. Designing with respect for the context of site, using vernacular forms and materials.

2. The use of fewer materials with reduced articulation, implying a trend toward reductionism, minimalism, "prime forms," and volumetric architecture.

3. The example of "village architecture" as a generating form for composition and unity.

Through the use of fewer materials, Barnes chose to simplify and clarify his approach in an effort to achieve greater overall unity. Frequently, Barnes would choose a building material based on vernacular associations and thereby develop a relationship between his design and the architectural continuum of a particular locale. Barnes states, "I got very interested in the continuity of time and the continuity of history as it is expressed in one material."<sup>38</sup> For example, the Tabriz Consulate is built of brick, the traditional building material used for centuries (fig. 24). In a literal adaptation of vernacular form, Barnes incorporated the forms of traditional Iranian sail vaults constructed through local building techniques (figs. 22, 23). Barnes's New England buildings dating from this period, such as the Mountain Haystack School of Arts and

Crafts, Deer Isle, Maine (1962), as discussed later in this chapter, utilized the wood siding and simple shed-like forms of traditional New England saltbox houses.

With his emphasis now placed on the use of one material, Barnes turned away from his earlier textural combinations in the platform houses to a new expression which was

. . . quite different from Breuer who used many materials, combined like elements in a painting to make a collage. His early houses were really like beautiful little collages. . . . But I reacted against it. I wanted simplicity. I found that I liked simple things, prime forms, and single materials. And it all became clear when I went to Iran and found just those things.<sup>39</sup>

Though not explicitly stated in Barnes's published statement of 1965, the "use of fewer materials" and "the elimination of unnecessary articulation"<sup>40</sup> led naturally to what would be expressed as a reductive architecture, which focused attention on form and volume, rather than on structural and surface detail. Barnes's development of a minimal "volumetric" approach led to a greater appreciation of the "prime forms" which had been a mainstay of Le Corbusier's design vocabulary. Le Corbusier had been inspired by the beauty and the power of prime forms in American industrial design (fig. 25). It is pertinent to recall the significance of Le Corbusier to Barnes's generation of young architects at Harvard--"When I was at school, Corbu was our hero . . ."<sup>41</sup> Barnes's notion of

prime, or primary forms, was ultimately derived from Corbu's "Three Reminders to Architects":

First Reminder : Mass

Architecture is the masterly, correct and magnificent play of masses brought together in light. Our eyes are made to see forms in light; light and shade reveal these forms; cubes, cones, spheres, cylinders or pyramids are the great primary forms which light reveals to advantage; the image of these is distinct and tangible within us and without ambiguity. It is for that reason that these are beautiful forms, the most beautiful forms. . . .<sup>42</sup>

Barnes's reawakened interest in the prime forms of Le Corbusier was tempered by his desire to accommodate his work to the "context" of the environment. Le Corbusier shocked many with his bold, strident buildings and his work is often not sympathetic to its surroundings. Yet Barnes has noted Le Corbusier was "Gray," or contextual, in his approach to the religious commissions of La Tourette and Ronchamp, and points to this as evidence that continuity was present in work of the early Modernists as well.<sup>43</sup> Barnes proposed to design structures which respected adjoining buildings in scale and materials, and suggested an awareness of vernacular associations. So there existed a duality in Barnes's new approach--his respect for the vocabulary of the modern masters and his combination of those principles with a personal style that sought compatibility with regional context. "Continuous architecture . . . is the architecture of society," Barnes states.<sup>44</sup> He continues:

I was always interested in the vernacular or contextual approach to design. . . . What I found was that I did

not wish to make a statement against society. I wanted my buildings to be . . . part of the existing fabric. . . . At the same time by using prime forms, I tried to clarify and simplify my design."<sup>45</sup>

In examining Barnes's concept of "village architecture" and its expression in his design work of the 1960s, it is essential to consider his response to the simple organic architecture of the ancient villages he had observed in the Mediterranean and the Middle East. He saw each building as "part of a process, not as a world unto itself."<sup>46</sup> As previously noted, he likened the ancient villages to "an organism, like a coral, growing by accretion, each dwelling modeling itself on its neighbor, each street widening and narrowing in a fluid way. . . ."<sup>47</sup>

Barnes developed his modern interpretation of village architecture by drawing upon the idea of repetition and growth of simple individual units to create a unified whole. This approach would shape many of his designs throughout his career. Adding like forms by "accretion," he arrived at such varied designs as the U.S. Consulate and Office Building in Tabriz (completed 1966), the W. D. Richards School (1964, fig. 26), the Crown Center Office Complex (1972, figs. 27-28), the Chicago Botanic Garden (1976, fig. 29), and the Dallas Museum of Art (1984, fig. 30).

In another variation on the theme of village architecture, Barnes chose to focus attention on a single form, used as a physically independent motif, but linked to

similar forms through spacial relationships and a circulation "spine" inspired by the narrow village streets (fig. 20). This approach to village architecture was utilized in his well-known design for the Haystack Mountain School of Arts and Crafts, Maine, completed in 1962 (figs. 31-34). As Barnes explains, at Mykonos he saw "peasant architecture which is fairly undisciplined."<sup>48</sup> He therefore utilized the concept of village architecture only as a departure point. The formlessness of village architecture was transformed in Barnes's design by rigorous geometry and a disciplined framework. At Haystack, the simple volumes of the various classrooms appear to cascade freely down the precipitous, heavily-wooded coastal site. In fact, the units are highly organized through the employment of a connective vertical spine staircase which runs downhill through the composition and stem "street" platform walkways which branch out horizontally from the central staircase (figs. 31-32).

The longer building units are clustered near the central vertical stair; these break up into smaller units as they are dispersed on the stems farther away from the center. The spaces between the smaller units are equal in width to the buildings themselves. Barnes further defined continuity by designing "with respect for the spaces between buildings, realizing that this space may be important in the buildings themselves. . . ."<sup>49</sup> The interior space of the

individual structures is clearly revealed by the exterior forms. Their expression as pure volume is accentuated through the use of a single material and minimal detailing, and the shingled exteriors further serve to evoke the vernacular Maine fishing villages.

Compositionally, the bold triangular roof forms imparted a feeling of movement and tension to the design. This diagonal movement and composition of triangular shapes would be repeated with many variations in Barnes's other work of the 1960s. At Haystack, a distinctive push-pull effect is created by the pitched roof lines alternately echoing and counterpointing the fall of the slope to the sea. As Barnes simply explained, "The design grows out of this slope. That is its strength."<sup>50</sup>

Haystack demonstrates Barnes's continued use of the platform base raised on piles in the manner of the woodland houses. The wooden platforms extending from one structure to another unite and distinctly separate the geometric forms from the natural slope. This leaves the site completely intact, reaffirming "the use of land without the wholesale use of the bulldozer."<sup>51</sup>

In the forms used at Haystack, one can see the preference of Barnes for the "prime form." Breaking away from the traditional box forms of the International Style, Barnes combined simple geometry, mixing triangular and rectangular shapes to create the distinctive volumes of the

Haystack school. Haystack was clearly foreshadowed by the Osborn Studio project of 1951. As Papademetriou has noted, a proportional relationship exists between the elevations of the Osborn Studio (fig. 6).<sup>52</sup> Similar elevations are employed at Haystack. Haystack also represents an extension of the subtractive form-making introduced by Barnes in the Osborn Studio project. The basic forms of Haystack result from triangular and trapezoidal wedges removed from a larger conceptual rectangular block (fig. 35). The resulting negative space has its own importance in the overall composition of volume and space. Barnes's manipulation of positive/negative space is related to the Japanese concept of "absence" which critic Joseph Giovannini defines as "the remembrance, and slight sadness, of something once there."<sup>53</sup> The simplicity of Barnes's treatment of the facade details and the use of a single material for both roof, walls and platform are indicative of the minimalism which pervades his design approach throughout his subsequent career.

#### House Design of Second Decade

Barnes experimented in the early 1960s with several approaches to the design of private residences before focusing on a new thematic development to follow the platform and woodland houses. Several unique projects were the result of this exploratory period, some of which had important ramifications for later designs.

The Caribbean House project of 1962 was such a design, as its vaulted roof and vertical slit windows would reappear in the Dallas Museum of Art (figs. 36-37). The Caribbean House project relates directly to Barnes's concerns in the early 1960s and the inspiration which he drew from his Mediterranean travel during that time. Compositionally, its serial repetition of vaulted modules is related to the clustering of the hemispherical vaults of the Tabriz Consulate. Just as the vaulting of the Consulate suggests an association with the vernacular "sail vault" construction of the Islamic world (fig. 22), the cylindrical vaults of the Caribbean House clearly evoked the vaulted cell construction indigenous to the Aegean (fig. 21). The traditional architecture of Mykonos, the simple volumes and continuous expanses of white walls, was translated by Barnes to the sun-drenched Caribbean. From a modern perspective, the Caribbean House recalls Le Corbusier's "Monol" houses (1919), his apartments at Saint Baume (1948, fig. 38) and Cap Martin (1949), and Barnes's own low-rise apartment housing project in San Juan, Puerto Rico (1960, fig. 39).<sup>54</sup>

The formal unity of the Caribbean House is achieved through the repetition of a single cell unit. In the Caribbean House, the linkage of the modular units through the continuous wall relates to another of Barnes's impressions of Mykonos: "I was struck by the fact that buildings were connected with each other, that they were

glued to each other, that they went uphill and down together."<sup>55</sup> This observation shaped not only the conjoined modules of the Caribbean House, but other projects of the period, particularly St. Paul's School, which steps down a hillside (fig. 40).

Structurally, the Caribbean House differed from the Tabriz Consulate, which was constructed with local masonry techniques. The proposed Caribbean House project was thoroughly modern structurally--it was to have been built of "clearly articulated . . . poured concrete columns and vaults."<sup>56</sup> The extensive exposure of poured concrete on the exterior and the very obvious structural statement would have been an unusual approach for Barnes, if the project had been carried out as planned. The concrete enclosure would have been alternated with glass walls on opposing ends of the upper and lower stories. These modern components of the design demonstrate that Barnes chose to temper his reference to vernacular architecture with what he would describe as the "discipline and form of positive ideas" in the Modern vocabulary.<sup>57</sup> He never allowed the influence of the past in his work to dominate the design so that the structure would be ultimately interpreted as anything other than an expression of the Modern movement.

It is not surprising to note the formal physical similarity between Barnes's Caribbean House and Louis Kahn's Kimbell Art Museum (1972), as both architects shared an

interest in vernacular and prime forms (fig. 41, 42). The irony of this resemblance is heightened by the comparisons that are made locally between the Kimbell and the Dallas Museum, and further, that Barnes was a finalist for the Kimbell Museum commission.<sup>58</sup> Barnes's design predates Kahn's by at least six years and the Caribbean House project was published in Architectural Record in 1964.<sup>59</sup> Barnes's expressed admiration for Kahn's work has been previously noted,<sup>60</sup> yet it is also apparent that Kahn shared a reciprocal appreciation for Barnes's work. Richard Weinstein, who studied with Kahn at the University of Pennsylvania, has related that Kahn suggested he work for Barnes after he finished his degree:

He felt that Barnes of all the prominent architects was the least doctrinaire with respect to the modern movement and the influence of history on architecture, and I think he also sensed that Barnes was an outsider with respect to the other major figures of his time in architecture.<sup>61</sup>

Functionally, the Caribbean House and the Kimbell Museum are quite different--one was intended as a private residence, the other a museum. Kahn and Barnes also had very different ideas regarding the use of materials in museum design. For Barnes, however, the flow of interior circulation would become a primary feature of his approach to both building types. When Barnes would later describe his museum designs, he frequently asserted that "flow is as important as form."<sup>62</sup> At least one of Barnes's museum designs evolved from the circulation pattern of a unique

private residence of the 1960s. The Henry House project (1963, fig. 43) was the first scheme for the Adirondack House of 1964. The project's proposal for a series of rooms connected by stairs that pinwheel around its service core was later adapted to the kite plan of the Walker Art Center (fig. 44).

As Barnes was completing the Haystack School of Arts and Crafts in 1962, he was also working on a private residence which would further advance his concept of village architecture. This residence was the Cowles House, completed in 1963 (figs. 45-48) and later converted to a conference center in 1970, and expanded in 1983 (fig. 49).

Although the Caribbean and the Henry House projects were unusual and unique designs from the early 1960s, the Cowles House suggests the continuation of the design development of the woodland houses. In plan, the Cowles house is very similar to the Straus House--the main alteration was in the placement of the bedroom wings--the separate master bedroom and children's wings of the Straus House were combined into an "L"-shaped wing in the Cowles House (figs. 17, 45). The rather figurative plans of both houses feature a central "body" which functions as a living room and to which the servant/dining wing and the bedroom wings are linked by low gallery/"arms."

Visually, the Straus House was much more recessive. Built of dark brown cypress wood and floated over its site

on piers, the structure kept a long, low profile broken only by the two-story peaked living room. The profile of the Cowles House as it was originally designed had an entirely different aspect because several of the major rooms appeared as discrete elements--almost as if they were individual houses. Yet as one approached the house, it became apparent that the entire complex was physically linked by one-story galleries. Barnes has described the appearance of the Cowles House in this way:

Coming in the front entrance road or up the farm service road, this house looks like a village on a hill. One enters a square central courtyard surrounded by low white walls and scattered peaked roofs. The great living room, master bedroom, and the two-story guest house and servants quarters all have studio peaks. The rest of the house moves quietly under a low flat roof. The materials--white siding, gray-green terne roofing and great sheets of glass--are simple, even austere. It is the sunlight and shadow on the masses, and the reflection and transparency in the openings that illuminate the architecture.<sup>63</sup>

The outdoor spaces of the Cowles House became highly developed extensions of interior space, or an "outgrowth of zones within the house."<sup>64</sup> The surrounding terraces were quite large by comparison to previous houses, and were oriented in geometric relationship and proportion to the structure. Long limestone walls emerged as extensions of the foundation to define the outdoor space, and were supplemented by white farm fencing and trellises. It can be seen that a platform, formed by the enclosing limestone walls, is used as the basic leveling device for the large

complex so that one grade is established for all housing units. The platform is not a dominating feature as it was in the platform houses, and is apparent today only on the rear of the house (fig. 47). In the Cowles House, Barnes continued to use the platform as a compositional device to geometrically order nature.

Barnes continued to develop in the Cowles House an increasingly minimal approach which allowed the volumetric architecture to appear with greater clarity. In contrast to the Straus House, structural elements are concealed within the walls, so that the continuity of the white planes is emphasized. Barnes also utilized "pocket" windows in which the glass, frame and screen could slide into a hidden recess in the wall, "leaving clear naked openings."<sup>65</sup>

Barnes's underlying interest in the mood-related implications of geometric simplification is evident in an unpublished portion of a lecture given by Barnes at Columbia University. In one passage, Barnes outlined his approach to the composition of volumetric architecture:

It seems to me that one cannot think of surface texture and decoration until a plane has been defined. And one cannot think of a plane without thinking of other planes and the volumes and masses that govern the planes. And one cannot think of volumes and masses without thinking of the spaces--inside, outside and between the buildings. And one cannot think of spaces without sensing larger dimensions . . . One senses an orderly design in which . . . no preconceived idea is allowed to assume too much power or to warp the overall concept.<sup>66</sup>

To illustrate his approach to reductive design, Barnes first describes all the details common to a colonial American farm house--the shutters with wrought-iron hinges, the panelled front door, the picket fence, and shingled roof. Then, as if viewing this house "by moonlight on a winter night," in Barnes's eyes the house undergoes a transformation to its simplest components:

The lights in the farmhouse are out, and we see the profile of the house connected to the vast barn by a long continuous corridor, which looks like a covered bridge. We see the shadows of these forms and a few free[-]standing farm buildings--simple geometric forms. We may see a rather eerie cave-like entrance to the spring house and the tall cylinder of a silo. The moonlight on the great tilted roof planes, the volume and the spaces between are all apparent, and we understand the power of simple architecture where a system of priorities is taken for granted.<sup>67</sup>

This last descriptive passage gives insight into Barnes's personal process of clarifying a design approach. With its atmospheric evocation of great shadowed forms revealed by stark moonlight, Barnes's statement reveals an analogy to Boullée's depictions of an architecture des ombres<sup>68</sup> (fig. 50, see also Purchase campus, figs. 69, 70). Barnes, in expressing his interest in the mood-related aspects of architecture, combined a Modernist approach with a Romantic imagination. Barnes's own term for the work he created during this period was "expressionist architecture," which he defined as architecture "with its roots firmly planted in functionalism,"<sup>69</sup> yet at the same time, satisfying psychological needs by providing a sense of atmosphere:

Right now I am working with a site on the Yale campus that has a mood almost as strong as a piece of music. Each of the surrounding buildings is dark brownstone, they each have the same regal first floor height, they are all inward looking. These buildings create a mood which must be respected; however, I would like to achieve this expression without ending up on the Romantic side of the fence. One cannot let one's approach become too literal. There are certain things that are timeless: material, light, shadow, and scale; and there are other things that are purely motifs. There is a certain point where you stop being genuine and become derivative; although I dare say every architect would draw the line at a different place. Certainly all of us are becoming less edgy about looking at history and sensing continuity with the past.

Barnes makes a clear distinction as to the basic contextual elements to which he responded, yet he would not compromise his expression of Modernist principles in an effort to mimic a previous historical style. He instead focused on what he termed the "timeless" aspects of design so that the juxtaposition of historical and modern design would relate on a basic conceptual level, rather than through superficial stylistic imitation. This conviction would set Barnes apart from the advent of the eclecticism of post-modernism.

The earliest academic design to grow out of Barnes's new approach was the St. Paul's School Boys' Dormitories and Masters' Housing (1961, fig. 40). Barnes further explored the use of context within a community and combined this with the continuity of historical precedent. Barnes placed the dormitories so they reinforced the street line and continued the scale of nearby Victorian buildings.<sup>71</sup> Barnes utilized a historical hierarchy, citing Jefferson's University of

Virginia as a prototype, in which the dormitories

become an expression of the boy-master relationship, groups of one-story student rooms spilling across the site with the master's houses set above them.<sup>72</sup>

St. Paul's School was the first of many academic commissions undertaken by Barnes's firm in the 1960s. While designing private residences occupied most of Barnes's time in the 1950s, the educational building boom of the 1960s made academic design work the bread-and-butter staple of the office. The office rapidly increased in size to accommodate the additional workload. Several of Barnes's current partners joined the firm in the 1960s--Alistair Bevington in 1960, John Lee in 1964 and Percy Keck in 1967.

The firm undertook all kinds of educational design--classrooms, dormitories, libraries, administration buildings, arts and performance facilities. In addition, Barnes was commissioned to design master plans for campus development. The campus master plans of the 1960s included those for the State University of New York at Potsdam (1963) and the State University of New York at Purchase (1968). In 1976 Barnes drew up the master plan for Indiana University/Purdue University at Indianapolis, Indiana.

Barnes's master plans for the various campuses differed in important ways. At Potsdam and I.U.P.U.I., his task was to unify the already existing campus development. At Purchase, he had an opportunity to design the new campus from the ground up, and delegated design responsibility for

some of the individual buildings to other architects. Barnes unifies the Purchase campus through its central urban plaza (figs. 51, 52). This plaza, with its classroom buildings branching off to either side, recalls the central spine of Haystack. Again, circulation has a significant impact on composition. The symmetry of Barnes's master plan for Purchase, while dismissed as Beaux-Arts design by some critics,<sup>73</sup> is an effective means through which discipline and order provide the framework for future expansion. Barnes's master plans afforded him the opportunity to investigate different approaches to urban and suburban planning:

I think what is missing in architectural schools is the linkage between architecture and planning. For campus design, you must have planning ideas, which connect directly with architectural form ideas. If you take two examples, [Potsdam] and I.U.P.U.I., there [were] [existing] buildings on the campus. . . . Our buildings were used as connectors, instead of the typical American campus solution of separate buildings. We felt that we should define space. We made our buildings linear and used them to define courtyards and to tie all the buildings together.

Purchase campus is a planning idea which provides open-ended planning. We made a very strong central armature that was to accommodate eight or nine buildings to be designed by different architects. All of these buildings could expand infinitely. This is a combination of a tight plan with a completely open-ended free plan. I think it is going to be quite interesting to see the discipline of the master plan when all the buildings with their different heights begin to expand.<sup>74</sup>

#### Diagonal Forms of the 1960s

The late architectural historian C. Ray Smith described the decade of the 1960s as "the decade of the diagonal,"

because of the frequent incorporation of diagonal forms and motifs into architectural designs of that period.<sup>75</sup> Smith attributes this development of a new permissiveness in design to the desire on the part of architects to break away from the cubical massing of the International Style:

Symbolically, the diagonal was adopted as the line that cut across established traditions, breaking out of the box and exploding "the architecture of squares."<sup>76</sup>

Diagonal forms and motifs became quite prevalent in Edward Barnes's work in the 1960s. Smith observes that Barnes was one of the leading architects who popularized the diagonal form: "The first signs of the ascendance of the diagonal came early with the faceted, prismatic shed-roof clusters by Edward Larrabee Barnes."<sup>77</sup> Smith illustrates his statement with Barnes's Cowles House (1963), but the Barnesian exploration of diagonal motifs actually began early in the 1950s, with his shed-roofed Osborn Studio project (1951). As previously noted, this project was the prototype for Barnes's better known shed-roofed structures to follow in the 1960s and 1970s, such as the Haystack Mountain School of Arts and Crafts (1962) and the Hecksher House (1974, fig. 53). Other early diagonal forms appeared in the center-peaked roofs of Barnes's woodland houses--the Miller House and the Straus House, both dating from 1957. These houses received wide exposure within the profession, as they were all published in the major architectural journals.

Undoubtedly, one of the most influential of Barnes's pitched roof projects was the Haystack School of Arts and Crafts. Its counterpoint composition of shed-roofed, shingled volumes spilling down a sloped site won a 1965 citation in landscape architecture from the Architectural League of New York. Vincent Scully noted not only the striking pitched forms of the Haystack School, but also its vernacular shingled siding in his discussion of the modern revival of the Shingle and Stick styles in The Shingle Style Today. Scully cites Barnes's Haystack School as an influence on Charles Moore's well-known Sea Ranch condominium apartments in California (1965-66), and he further points to Barnes's influence on the architects who worked in his office at this time, such as Giovanni Pasanella and Jaquelin Robertson.<sup>78</sup> Cervin Robinson has also taken note of the attention which Haystack brought to Barnes in the 1960s, and the talented young architects who came to work in his firm during this period. Some of the now-prominent architects who apprenticed with Barnes in addition to Robertson and Pasanella were: Robert Siegel, Richard Weinstein, Richard Moger, Al Brownell, and Charles Gwathmey.<sup>79</sup> While Charles Gwathmey tends to discount the experience he gained while working for Barnes in the early 1960s, his house and studios for Robert Gwathmey (1966-67) clearly evoke the familiar Barnesian "beautiful shed" with their simple primary shapes, wood siding and pitched roofs.<sup>80</sup>

Other notable Barnes designs of the 1960s exhibiting variations of the diagonal theme were the Cowles House (1963), Studios for Two Composers (1963, fig. 54), Adirondack vacation house (1964, fig. 55), the Righter Beach House (1964, figs. 56-57), and the Hilltop House (1965, figs. 72-75). The volume of the Righter Beach House was principally shaped by the diagonal. Not only did it exhibit the now-familiar shed roof, but its side walls also pitched inward to form a trapezoidal mass. This was a significant design, for it demonstrates Barnes's continuing efforts to find innovative alternatives to the rectangular planes of the standard Modernist forms.

The shed roof forms of Barnes's academic buildings during this period parallel his form-making in other building types. His exploration of the diagonal motif extended to academic structures such as Bennington College (1966) and the W. D. Richards School (1964, fig. 26).

#### Early Office Development

Barnes received an important commission in 1965 to design his first commercial office tower for the New England Merchants National Bank. Barnes's design, presented by developers Cabot, Cabot and Forbes Company, was selected in a "developers competition" in which financial feasibility as well as design concept was judged.<sup>81</sup> The forty-story office tower was the first truly high-rise building which Barnes had designed, so there is no precedent of the same scale for

comparison in his earlier work. However, two projects of moderate height from the early 1960s share similar characteristics with Barnes's competition design for the Boston Tower.

The earliest medium-rise structure designed by Barnes was the fourteen-story El Monte Apartment Building in San Juan, Puerto Rico, completed in 1960 (figs. 39, 58). An examination of its physical characteristics reveals that Barnes approached the design of this multi-unit vertical structure with the intention to emphasize its strong structural elements and to shape exterior space in a sculptural, expressionistic manner. At El Monte, precast concrete planes are used as shading devices and form the exterior galleries and balcony walls. Through the manipulation of these simple planar elements, Barnes created a dramatic, expressionistic rhythm through strong contrasts of light and shadow. This effect is comparable to Breuer's coffered surface treatment of his office complex for the Department of Housing and Urban Development in Washington, D.C. (1968), and a comparison can also be made in the curvilinear form of both structures. The minimal treatment of the exposed stairwells on either end of the complex foretells Barnes's later developments<sup>82</sup>, but overall, the screen of projecting elements breaking up the surface volume is atypical of Barnes's general approach, even at this early date. The expressionistic shading effects of the structure,

however, relate to the exteriors of Barnes's first office buildings.

The ten-story Princeton University Administration Building (1965), while not a commercial building, was Barnes's first completed office building in the United States (fig. 59). It relates to the original design of the New England Merchants National Bank in Boston (fig. 60), although on a reduced scale. These two early office buildings share many characteristics. In both instances, Barnes chose not to level the sloping sites, accepting the slope as a natural counterpoint to his extremely disciplined structures. This approach is entirely consistent with his dictum: "the use of land without the wholesale use of the bulldozer"<sup>83</sup> The two lower floors of the Princeton Administration Building, partially sunk into the hillside, form a clearly and functionally separate service podium. The use of the podium base relates the Princeton building to the classical concepts which shaped the earlier platform houses.

Both office buildings were designed with open loggias at the pedestrian entrance level, comparable to breezeways incorporated at the base of El Monte. Princeton's primary office block is raised on piers to create a two-story loggia with a central circulation core. The New England Merchants Bank features a tall pedestrian arcade that pierces the shaft of the building at the base and provides a dramatic corridor at street level. Barnes would continue to

incorporate an arcade for pedestrians in several of his later office buildings, most notably the IBM Building. The visual interpenetration provided by this piercing of the volume ties the structure into the fabric of the street, allowing for vistas of surrounding buildings and into the bank tower itself. The Dallas Museum would later feature an interior pedestrian arcade.

The form of both of these early office buildings derives in part from simple repetitions of a proportional unit of space. The central core of the Princeton Administration Building is based on a twenty-seven foot square<sup>84</sup>. This unit becomes the basis of the structural module which is repeated three times on each side to create a perfect square. The Boston tower's basic structural unit is also repeated in multiples of three--three units deep and nine across.

The careful attention which Barnes gives to proportional consistency has been an important characteristic of his work throughout his career. Barnes's form-making, to some extent, is generated through an analysis of proportional relationships, and this analysis also figures in an on-going process of design refinement. The mathematical basis of this approach to design has been noted in the massing of the Crown Center office complex in Kansas City (1972), which followed the design of the Boston bank tower, and is an

important aspect of the design for the Dallas Museum of Art.<sup>85</sup>

The New England Merchants National Bank exhibits Barnes's first use of subtractive form-making in an office building, a significant design technique that would be employed with increasing complexity in the office buildings of the 1980s. The U.S. Consulate and its offices and the Princeton Administration Building were created by an additive, modular repetition of units and floors. The Boston tower differs in that a long rectangular wedge was removed from the top of the large box-like volume to create a stepped crown. The lower level of this crown was developed as a roof garden and restaurant with two penthouse floors composing the upper level. The south elevation shows that the subtracted volume at the top of the tower is balanced proportionally by the subtraction of an area of equal height from the opposite side of the base at street level to form the pedestrian corridor (fig. 60).

One other significant similarity between the Princeton Administration Building and Barnes's original design for the New England Merchants National Bank tower was the sculptural handling of the exterior walls expressed in the combination of recessed windows with sunshade devices to create a coffered facade. The windows of the Princeton office building were deeply inset to a depth of four feet. The original Boston tower design employed tipped spandrels for

sun protection, although the recesses only extended inward eighteen inches. The glazing was placed flush with the interiors of the columns so that a flush interior wall was created.<sup>86</sup> In effect, a double volume is implied. In both buildings, Barnes reasoned that the mood evoked by a deeply-shadowed facade and the emphasis placed on the projecting structural members might relate the buildings better to their surroundings--in both cases, a community of older structures with load-bearing walls.

However, Barnes reconsidered this approach as he worked to refine his original competition design for the New England Merchants National Bank tower for downtown Boston. His final decision was to dramatically alter the appearance of the tower by redesigning it, replacing the coffered facade with a flush skin (fig. 61). His client accepted the redesign proposal when it was demonstrated that rental return from the additional space exceeded the cost of the design change.<sup>87</sup>

Barnes's concern was to express the technical logic of the skin in the modern sense--as a flush curtain wall--rather than distorting it in a phony manner to make the surface appearance more "interesting"<sup>88</sup> Barnes's structure was the product of a distinctly different era and steel frame technology, and he chose to develop the tower as a counterpoint to the surrounding historic buildings with bearing walls of solid masonry. Barnes's concession to

context was to harmonize the color of the reddish-gray granite facing of the spandrel panels and the solar gray tinted glass with the local colors of brick, stone and concrete.

Barnes expressed his thoughts on the aesthetic of the thin skin tower in this way:

The magic of a steel office tower is that it is a shell, a very lightweight container. You cannot make it look medieval or massive no matter how hard you try. Look at a city at twilight when the lights are going on. Then all the office buildings shine through to show what they really are--delicate volumes. Too many architects are afraid to express the skin of a building for what it is, a taut technological membrane. As for the contrast between our building and the Boston City Hall, I like it. The heavy sculpturing of Kallmann's cantilevered concrete would make an 18[-inch] coffered facade look silly. As it is, the two buildings are strong foils to each other.<sup>89</sup>

This statement underlines the directness and consistency of Barnes's career development. In a statement about his first house commission, the Reid House, Barnes noted that he chose to honestly express the strength of a steel-framed wing of the house through the use of wide bays and deep cantilevers. He also commented that "the cypress siding is meant to look like a skin, not faked to appear as part of the structure."<sup>90</sup> This approach can be continuously traced from the development of the walls of his early private homes as thin envelopes of space to the later design of office towers with their thin glass skins and strength of the steel structure expressed by tall piers, cantilevered corners and wide arcades. Barnes's decision to

redesign the facade of his Boston office tower was an important one. It brought an overall unity to his design approach for all building types for the first time, and demonstrates his personal transition from orthodox Modernism to the stylistic approach defined by Charles Jencks as Late-Modernism. Jencks describes the evolution of the Modern curtain wall to the "ideal condition of a thin membrane," observing that through technological advances

even the mullion disappears in the pure glass building, . . . [an effect] made possible by developments in stronger glass walls, thinner gaskets and various new means of assembly including small clips and glass structural fins. They lead to a Late-Modern curtain wall, the slick skin membrane which is quite different from the Modern one with its strong vertical divisions, its "skin and bones."<sup>91</sup>

Barnes's purest statement of the "glass skin building" was his IBM World Trade Corporation--Americas/Far East Headquarters completed in 1974 in Mount Pleasant, New York (fig. 62). In this strikingly recessive three-story office building, the mullion-free butt-jointed glass alternating with flush aluminum spandrel panels gives the structure an ephemeral, floating quality which quietly merges with the beautiful surrounding wooded estate. The minimalization of the joinery makes the glass walls almost disappear amid reflections of the surrounding grounds, further echoed in the long reflecting pools along the building's base. The wide spandrels emphasize the layering of space within the prismatic volume.<sup>92</sup>

### Minimalism

As Barnes pursued his notion of continuity with ever greater conviction during the 1960s following his pivotal trip to Mykonos, his architecture grew ever more reductive and minimal. This effect was the natural expression of his underlying definition of continuity as "simplification of detail and of form." In rejecting "the brittle use of planes, screens, and precast elements" common during that period, Barnes concluded, "Basically, . . . I am reacting against the breaking up of the facade."<sup>93</sup> This development is exemplified, as described earlier, in his rejection of his early use of sculptural or coffered facades in the previously discussed buildings. His focus on pure form was increasingly clarified and refined, as in his description of a vacation house:

When one thinks of volumetric architecture, there is really no difference between the roof and the walls; they are all just planes enclosing three-dimensional space. . . . It's a perfect volume. You could turn this house on its side and it would still be perfect. . . . The surface materials of the house emphasize the sense of a continuous skin: The exterior is completely shingled, and the interior is entirely sheathed in spruce.<sup>94</sup>

The increasing simplicity of Barnes's approach in the sixties, particularly his employment of single materials and reductive form, links his work naturally to the minimal art movement. The expression of minimalism in architecture and art has been discussed by C. Ray Smith; Barnes himself has

compared the prime forms of his architecture to the work of the minimal artists.<sup>95</sup>

Barnes's design aesthetic grew increasingly pure and abstract in the 1960s and into the 1970s. Examples of Barnes's most reductive work throughout these years are the Ford Foundation Theater project (1961), the Christian Theological Seminary (1966), the Walker Art Center (1971), the State University of New York at Purchase (1968-1979), The IBM World Trade Corporation--Americas/Far East Headquarters (1974), and the Plants and Man Building, New York Botanical Garden (1975 project).

The Walker Art Center is discussed in detail at the end of this chapter. Of all of Barnes's designs, perhaps it was developed most overtly as a minimalist sculpture. Another very reductive design derived from prime forms is the sleekly sculptural Ford Foundation Theater (fig. 63). Barnes explains that the design emphasis in the theater is placed on "the volume of the major masses rather than the surface textures and details," with the nested volumes of the stage house and the auditorium "carved out of two great cones."<sup>96</sup>

Barnes's minimalist aesthetic seems particularly suited to religious commissions. The Christian Theological Seminary Chapel (fig. 64b) as envisioned in the original design model was starkly beautiful; its utter simplicity of expression was entirely appropriate to the nature of its

use. It is clear that Barnes felt the minimal detailing of the interior to be essential to the character of the church:

The space and light inside this chapel is the single design idea. There is no interior decoration. The boxlike sanctuary is simply white plaster, with the large cross and chancel furnishings standing in what Tillich calls "sacred emptiness."<sup>97</sup>

The only proposed openings within the chapel walls were a series of tall vertical slits functioning as windows, which would appear again in the Dallas Museum of Art. The exterior volume of the chapel was equally unadorned, yet striking in the asymmetry of its massing. The pitched roof functioned as a scoop skylight for the interior of the church, and its diagonal thrust countered the simple rectilinear shaft of the bell tower. The uniqueness of the chapel's profile suggests the individual expression of faith Barnes sought to capture--he was unwilling to indulge in "easygoing exploitation of well worn spiritual forms."<sup>98</sup>

As finally built, twenty-five years after it was first designed, the chapel hardly differs from the original conception. A gable roof, elevated above the main block of the sanctuary, was substituted for the shed roof so familiar to Barnes's 1960s designs. The other notable design revision replaced the vertical slit windows with square side windows illuminating the interior through a special interior glass grid. The dichroic glass used in the horizontal sections of the grid separates the light spectrum into pure colors projected upward and downward on the white plaster

walls. In this design, as in others by Barnes, the white interior functions as a passive receptacle for environmental effects of light, color and shadow. He links the all-white interior to the "Barragan--Le Corbusier tradition," and hoped it would express "clarity and mystery."<sup>99</sup> A stunning complement to the simplicity of the sanctuary is the baptistry room, with its gray limestone floor, semi-circular pool, pitched skylit roof and white columnar screens. The use of materials and light in this chapel relates it to the Dallas Museum of Art.

The chapel further demonstrates Barnes's continuing reduction of interior space to the simple intersection of pure white wall planes. The wood-sheathed interiors of many of his earlier designs were gradually eliminated in favor of continuous white walls. This minimal expression created restrained, yet luminous interior lighting effects in many subsequent designs (figs. 65, 66).

The chapel was part of Barnes's plan for a religious community, the Christian Theological Seminary (fig. 64a). The plan is focused around a traditional cloistered grassy court, surrounded by an S-shaped chain of buildings, which terminate at various points in the chapel, library, and lecture hall. Barnes's analogy of this plan to a living organism "with a tail, a stomach, a head and a soul,"<sup>100</sup> continues the figurative design approach of some of his earlier works, such as the Straus House.

The Plants and Man Building, a botanical conservatory, was commissioned by the New York Botanical Garden in 1975, but never built (fig. 67). It is one of the purest and most direct of the reductive designs of the 1970s, yet it is also the most organic. Composed of a series of independent hexagonal glass forms, the structure was described by Barnes as "a glass building . . . seen as architecture as form, as a reflective prism."<sup>101</sup> Barnes also noted the similarity of the form to a quartz crystal, which is solid, yet transparent, and is essentially a fractured volume.<sup>102</sup> Barnes particularly seems to enjoy designing glass structures, for they not only display the transparency of space which he appreciates, but glass buildings viewed at certain angles can also take on the appearance of a solid volume. He explains:

I think that glass has that quality of . . . sometimes being a solid, sometimes expressing a form, enclosing a form. In other words, being highly prismatic. At other times being completely transparent.<sup>103</sup>

An innovative feature of the Plants and Man Building project was that each hexagonal section was supported by a separate structural system. Therefore each "cell" could grow vertically as needed, and new units could be added when the garden expanded. Barnes described it as being

completely flexible--it's a new type. It's not formal, it's not symmetrical. It is like a honeycomb or a piece of coral, which grows naturally. . . . This is the only building I've ever done, where I feel it being an organic form, that it can grow like the plants themselves.<sup>104</sup>

The abstract volumetric approach favored by Barnes in the late 1960s found its most reductive expression in the campus of the State University of New York at Purchase. Barnes was the master planner for the campus, and the key to his organization of the campus was the formal emphasis of the central plaza as the circulation armature or "spine" from which the campus buildings extended (figs. 51, 52).

Barnes also designed many of the academic buildings at Purchase, including: the performing arts center (fig. 68), health and physical education, library (fig. 70), post office, bookstore, theater arts and music instructional facilities, and student activities buildings.<sup>105</sup> Other architects designed the rest of the campus buildings, but were obliged to respect the overall unifying concept stipulated by Barnes, which was that all structures would branch from the central mall, and all would incorporate the same brick exterior and tinted glass. Unifying a design with single materials was of course a typical practice of Barnes during the 1960s, and its effect on this scale was monumental and elemental. The simple, angular forms which comprise the campus are arresting in their starkness. Antonia Mulas has noted the immediate visual impression of the Purchase campus architecture:

Arriving from New York, the University appears with the sheer volumes of the theatre center, standing alone, rising from a vast green expanse of lawn. This is the impact with the metaphysical world of Purchase, totally structured in clear-cut contrasts, the minimal and the abstract seen in architectural terms (fig. 68).<sup>106</sup>

The simple clarity and strong axuality exhibited in the master plan is reiterated in Barnes's design of individual buildings. The clean volumes of his campus buildings are deceptively simple and give little hint of the complex and varied activities occurring within. The Performing Arts Center, for example, had a very challenging program--it had to combine four specially-equipped separate theaters with a full complement of service spaces--lobbies, costume and carpentry shops, dressing rooms, storage areas, administrative and public spaces.<sup>107</sup> Downplaying the complexity of activities within, Barnes made a lucid organizational statement in the massing of the structure, which exemplifies the well-known clarity of his design approach. The ordered composition is dominated by the monumental volumes of the fly-towers which contain the physical staging areas for the three major performance halls and become a simple external statement of the interior programmatic divisions. The shared lobby areas are centrally located and form the "body" of a rather figurative site plan, and the four performance halls radiate in symmetry from the central crossing.

The library was originally planned as an underground complex below the mall, illuminated by skylights.<sup>108</sup> In a design process apparently akin to geologic uplift, the library eventually rose up to take its central position on the mall (fig. 70). Designed for student interraction and

quiet study, it is more invitingly scaled than the boldly assertive urban forms of the theater center.

The control that Barnes exerted over the materials at Purchase and the resulting homogeneity of form was too much for the taste of some critics.<sup>109</sup> For at least one critic writing in the 1970s, the reference in the Barnes's master plan to Beaux-Arts axiality was cause enough for suspicious comment on his design "tendencies":

At a glance, the plan is unabashedly Beaux-Arts. Its strong longitudinal axis, the mall, with the streets running on cross axis to it, the placement of a performing arts center at the top, a gymnasium (is that symbolic?) at the bottom, all create a definite symmetry and organization of some bygone era.<sup>110</sup>

The tone of the critic's essay, in fact, "unabashedly" reveals some of the lingering prejudice prevalent at that time against the overt appearance of classicizing influence in modern design, and suggests the difficulties which Modernists such as Barnes faced when reaching for historic continuity. Among them, Barnes was characterized as a modern architect giving into his "secret Beaux-Arts fantasies," which had been "considered an aberration since the modern movement substituted shifting balances for symmetry . . . as the chief means of ordering design."<sup>111</sup>

For his part, Barnes contends that symmetry is very appropriate for large-scale planning and has always employed it.<sup>112</sup> He appreciated the axial layout for its "vistas and sense of expansion one sees in a city grid and its open-

ended plan."<sup>113</sup> He further noted that the benefits of the disciplined master plan would be seen as the buildings expanded (fig. 51).<sup>114</sup> The grid system allows lateral expansion to occur along parallel avenues set at right angles to the axis of the mall, which would retain its significance as the center of the arts village. The expansiveness of the open space in the central mall clearly anticipates and counters the density of expected expansion around it.

Perhaps more interesting than debates over the appropriateness of Beaux-Arts composition as the basis for a modern campus is the evocative nature of the abstract architecture of Purchase (fig. 69). In his conception of the monumental forms of the Performing Arts Center, Barnes recalled evening concerts he had attended in the medieval castles of Europe,<sup>115</sup> leading one to visualize the surprisingly "modern" reductive forms of Spanish castles (fig. 71). Antonia Mulas also detects a cross-cultural link in the simple architectural volumes and attributes it to Barnes's physical execution which is

remarkable . . . for the masterly use of brick, for vertical and horizontal surfaces, outside and inside, for prismatic and cylindrical volumes. As a result of the brick this complex (completed only a few years ago) emanates something of the fascination of earlier cultures, and the undefinable air of civilization.<sup>116</sup>

However, where Barnes's thoughts were of medieval castles, Mulas imaginatively visualizes at Purchase "the great Teotihuacan esplanade, with the volumes of the pyramids

overlooking the great central space," as well as sensing the mysterious atmosphere present in the "paintings of the Metaphysicals."<sup>117</sup> This juxtaposition of analogies evoked by a cluster of simple volumetric buildings on a great court underscores the dual character of Barnes's architecture. As previously noted by the author, the Barnesian primary forms are deceptively simple in their minimal presentation. And yet this simplicity of form and detailing allows the design a freedom that more deliberately allusive and overtly historical approaches do not share--a uniquely evocative character which is restricted to no particular historical period but relates to a universal architectural expression. The building impulses of generations of builders of various cultures are contained in the same primary expressions of structure and space. As Barnes says, modern "architecture can have a simple relationship to the past."<sup>118</sup> The individual who experiences that space brings his own visual memory to bear on his interpretation and association of the building in a historical continuum.

Barnes admired Louis Kahn most for bringing

history and the best principles of modern architecture into perfect sympathy. More than anybody today, he said it all. I think he managed to unify conceptually one's desire to be part of the thread of history, which was missing in the Corbusier period and the Harvard period. He also really cared about the whole technical side of architecture. At the same time he was walking in history.<sup>119</sup>

With Kahn, Barnes shares a desire to express continuity in modern architecture, and seeks always to demonstrate that his work emanates from the 20th-century time frame in which it was created. At the same time, he appreciates the universal building forms appearing in and linking both sophisticated and primitive cultures throughout history. Barnes seeks to express these historical associations without resorting to the eclecticism of post-modernism. In a 1979 lecture at Harvard, Barnes contrasted his approach to that of the post-modern movement through a comparison of popular verbal syntax:

Consider the buzz words eclecticism, historicism, pluralism, dichotomy, analogue, metaphor, syntactic, semiotic, and of course[,] complexity and contradiction. . . . all have to do with diffusion, second meanings, multiplicity. Images are overlapping and somewhat blurred. With pluralism there comes a lack of conviction, and with a lack of conviction, a certain malaise. (How different from my day with buzz words like clean, simple, and functional.) . . .

I would like to [add] two others; synthesis, and clarity. We need an architecture which can unite and synthesize [the concerns of today] with the flow of history and the deepest instincts of the heart, and do it with simple clarity.<sup>120</sup>

#### The Tower Plan in House Design

In the Hilltop House of 1965, located in Greenwich, Connecticut, Barnes employed a vertical dimension to develop the concept of village architecture in a new direction. The tower concept developed for the Hilltop House would become the characteristic approach taken by Barnes in his subsequent house designs. The Connecticut house was located

on a heavily wooded site which was smaller than that of the Cowles House. In contrast to the drawn-out horizontal character of the Cowles House (figs. 45, 46), which preceded it, Barnes chose to mass the components of the Hilltop House so that the succession of rooms were stacked in compact vertical towers (fig. 72, 73). This arrangement allowed the vertical components of the design to pierce the dense wood for additional daylight exposure.<sup>121</sup> In continuing the material vocabulary of the Cowles House, each of three vertical stacks is crowned by a copper-clad shed roof which is individually oriented to take advantage of sunlight at different times of day.

The "tower plan" as a new development of village architecture was first fully realized in the Hilltop House, but had as its antecedent the Studios for Two Composers designed in 1963 (fig. 54). The two studios were box-like towers appended at either end of a long rambling house; their pyramidal roofs were punctuated by triangular dormer windows to admit daylight.<sup>122</sup> The physical independence of the studio towers resulted from the programmatic requirement for private working areas for the clients.

In a similar manner, the spacial concept of vertical towers became a unique living solution for the family who commissioned the Hilltop House. The parents desired a separate wing for their three young children and a private bedroom wing for themselves. In previous house designs,

Barnes utilized adaptations of the bi-nuclear plan to provide privacy for family members through separate horizontal bedroom wings joined by long galleries to the living areas of the house (see figs. 5, 17, 45). In the tower plan, one progresses from one tower containing the two-story living room up to another tower housing the kitchen/dining areas below, and the master bedroom above. The master bedroom level was connected by a corridor to the children's tower composed of their bedrooms and a large skylit playroom and roof deck on the top floor. In this mode of movement, ascending from one level to another, the house plan spatially seems to "unwrap" itself, an effect not unlike the spacial unfolding of the Henry House (fig. 43).

In the larger houses of the 1950s to early 1960s, such as the Osborn House, the Straus House, and the Cowles House, interior circulation gradually became dispersed and unwieldy because of the ever increasing length of the individual wings. From the standpoint of privacy for individual family members and guests, the long, separated wings of these houses functioned well as extensions of the bi-nuclear concept. However, the cost of maximizing privacy was a lengthy transversal and doubling back through the connecting gallery corridors.

The new approach Barnes took in the Hilltop House plan, with a vertical spacial expansion contained in its towers, yielded an improved circulation pattern, but not at the

expense of privacy. Not only were the towers physically separated, but the stairs leading to each tower were also separated at either end of a long hall. Rather than creating a compact circulation core, as in the Reid House, Barnes found that separating the circulation for the individual towers made each a more independent, private unit, almost like a separate house.

The relationship of the Hilltop House to its site is noteworthy because of the transitional approach Barnes utilizes in different facades of the house. The view of the the pergola-shaded, formal entrance court reveals that the house is raised on a large man-made stone terrace which resembles a truncated pyramid (fig. 73). This terrace with its battered walls appears as a larger version of his earlier house platforms. The primary difference is that the Hilltop House platforms step down the site. The practical advantage of the high podium was to elevate the house on its steeply-pitched, wooded site so that it could receive additional daylight. It also serves to provide several level, formal platforms on which to present the clustered massing of the house. Barnes approaches the rocky podium in a Wrightian manner, incorporating it as a physical extension of the natural rock outcropping seen at left and as a rugged counterpoint to the unadorned, sleek cypress walls. The opposing side of the house is a private area for the family with balconies cantilevered from the rear wall and a

deck for outdoor dining opening from the breakfast room (fig. 74). This view reveals the developing integration of the house with its site. The rear of the house is treated as a continuous plane punctuated by the openings for windows and decks. The wall becomes a blank canvas against which shadows flicker and the sloping ground falls away. The formal podium completely disappears, allowing the sheer vertical walls to intersect directly with the site. This informal orientation of house to site is more suited to the relaxed, outdoor activities of the family.

The Hilltop House was a significant transitional design within Barnes's long development of his personal approach to the private residence. The formal entrance established by the pyramidal platform courts relates it to Barnes's early houses. His initial development of the platform/podium and later, the decking raised on piles, maintained the integrity of Barnes's volumetric forms by preventing them from merging with the site. However, the need for a platform as a transitional device diminished as Barnes gained confidence in the visual strength of sheer volumes. His expression of volumetric form retained its potency whether discretely expressed or partially obscured by insertion into the site. The Hilltop House expresses a more complex spacial development in Barnes's designs, in which the varied elevations of the house more fully exploit

the possibilities of a pitched slope and physically interlock the plan with its site (fig. 75).

Barnes continued to utilize the tower concept in his subsequent house designs, including a bedroom tower which was added to his house in 1968 (fig. 12). Barnes has made several additions to his own house over the years. It has been suggested that these additions to his original 1952 design constitute a chronicle of his own evolution as an architect.<sup>123</sup> The original house (fig. 10) remains the classic example of his first series of platform houses, "isolated from nature, like a raft floating over a field."<sup>124</sup> Flanked by newer wings built to the east and west, the low, horizontal lines of the 1952 house still retain their distinct identity, elegantly spare and rigorously modern (fig. 11).

The first of the additions, a small, flat-roofed studio with a pergola-shaded entrance was built to the west of the house in 1957. It modestly evoked the low horizontal character of the original house. An element of drama was added to this serene compositional massing in 1968, when the three-story bedroom tower was added on the east end. This wing, with its steeply-raked roof, contributes to the series of simple prismatic house forms Barnes designed during the 1960s and 1970s, such as the Cowles House (1963), Fieldwood Farm (1967), and the Heckscher House (1974).<sup>125</sup> The materials are the same as those of the Cowles House--

continuous, blank white walls and a terne roof. The acutely-angled volume boldly projects upward from the sloped site with no transitional or intervening element, as had been employed in the platform houses. To the southeast, the land falls away from the bedroom wing, with the line of the falling slope forming a diagonal counterpoint to the rise of the pitched roof, in a manner reminiscent of the Hilltop House (1965). A unique feature for this period is the sculpturing of the facade with a recessed angled window niche, which anticipates the volumetric form-making of the 1980s and prefigures the recessed triangular window in the Dallas Museum of Art facade.

Another guest bedroom wing was added to the garage on the west side in 1974. This two-story form, with an A-frame terne roof is not as dominating as the east wing, yet maintains a distinct profile as if it were a separate house, as it essentially is. It primarily functions as a bedroom for Barnes's son John, who studied architecture at Berkeley, and assisted his father with the house additions. The idea of building separate pavilions for parents and their grown children would become Barnes's standard approach for subsequent houses with a similar program, as he relates:

I think it's a very real way that people live after they get old enough to have children who are independent. . . . Houses where everybody is on the same bedroom corridor hold up until the kids are about seventeen, and then it doesn't work.<sup>126</sup>

The original house remains the focal point of the composition, with the clarity of its flat-roofed, box-like form and perfect symmetry providing an anchor for the other varied house forms (fig. 11). Barnes notes, "The middle of the house is like a town square where we meet."<sup>127</sup> The combination of the asymmetry of modern design with classical symmetry is a design problem to which Barnes has returned with increasing frequency. In spite of the asymmetry of the wings, the overall massing seems visually balanced because of the house's direct response to its site. Where the site falls away, the mass of the house grows to counter the slope and lend visual stability. To the west, the wings and studio step up the site as individual units, gracefully accommodating the gentle rise in elevation. His own house is as responsive to its site as it is a unique design in his career.

As the continuation of the tower plan in residential design, the most significant private residence of the 1970s was the Vacation House on Mount Desert Island, Maine, completed in 1974, built by Barnes for August Heckscher (fig. 53). In this structure, the elements of the house were dissected into four physically discrete forms placed on a continuous base of wood decking. Entirely independent towers housed the guest quarters, studio and one-bedroom house, expressing the ultimate conceptual development of the village and tower concepts. The shingled volumes, as

subtractive or recombined elements of a larger whole, are reminiscent of Haystack's shingled forms and continuous wooden decks (fig. 76). In the Heckscher House, a small community of dwellings has been created for the special needs of a family as another variation of the village concept. The wooden deck becomes the connecting device of the "town square".

#### Houses of the 1980s

The dual influence of the village and tower concepts have shaped Barnes's houses from the 1960s through the 1980s. Yet he has continued to assimilate and synthesize new ideas into his personal expression. Barnes has always been unusually forthright in acknowledging the influence of other architects on his work. Early in his career, he pointed to Breuer and Le Corbusier as strong influences; later, he cited the work of Louis Kahn as being significant. Barnes has continued to be receptive to new ideas throughout his career:

Usually the deepest [impressions] are made when you are young. Then they are set, and often nothing happens to change them. But in my case in 1980, I started to look at Barragan. I think he is the current influence in my work. I admire his work very much.<sup>128</sup>

The appeal of Barragan's work for Barnes is not surprising, as Barragan employs the same minimal abstracted forms of which Barnes is fond, and their work shares a similar stark monumentality (fig. 77a, b). Barnes, however,

has avoided the use of vibrant color which Barragan frequently employs, continuing to prefer Corbusian white.

Evidence of Barnes's reference to Barragan is to be found in the Garden Library, in Upperville, Virginia (1983). This building is surely one of the strongest vernacular statements by Barnes to date. Resembling a Mexican farmhouse in its rustic simplicity, the structure is composed of simple cubic blocks with white-washed rough fieldstone walls. The materials relate the library to the clients's home, a farm at Oak Spring, which is itself composed of whitewashed peaked-roofed buildings.<sup>129</sup>

Barnes's plan for the library is composed within an L-shape of two structural blocks and several enclosed courtyards extended at different elevations of the sloped site. The rough wall planes are punctuated solely by recessed square windows and wooden doors. The main library building appears as a long rectangular two-story block with square windows exactly aligned above each door and a subtle wedge form introduced as a projected chimney mass. The perimeters of the library courts are defined by low stone walls, again recalling the platform house series. Three of these courts are linked by simple stone staircases, ascending up to the rooftop of a workroom.

The southwest view of an end wall of the seemingly rectangular library block reveals that it has a slightly pitched roof, echoed in the lower roof of an attached room.

This facade of the library faces one of the lower side courts, and opens onto the court with a double door framed by a subtly arched lintel. A simple steel rod projects at an angle from the wall to form an elemental sundial as its shadow passes across steel markers on the wallface. A similar preoccupation with the passage of time and light is seen in the vault of the Dallas Museum as the light beam created by the slot window passes across the floor below.

In the Dallas Residence (1984), Barnes continued his exploration of Barragan's formal language.<sup>130</sup> The Dallas Residence is one of Barnes's most highly-refined and more complex houses. Its white stucco walls define the structure with more clarity than the rustic fieldstone walls of the Garden Library. An extremely large house, consisting of 13,000 square feet, it is broken into smaller blocks which cascade down a sloped site. One living plane is established at the upper level leading off the formal entry courtyard, yet as the house steps down the hill, rooms with connecting terraces open out to the rear of the site (fig. 78, 79).

Barnes describes this progression:

The living and dining rooms are two-story spaces that connect the entrance level with the lower terraces and the brook beyond. The movement through the house down into the site is a series of diagonal vistas defined by levels within the house and stepped terraces outside. The house and nature interlock.<sup>131</sup>

Barnes's village concept is epitomized in this integration of the stepped elements of the house with its site, while at the same time, individual elements of the house are

expressed as discrete units. The unity of the house and nature is an effect heightened within the house by the carefully selected views outside. Large square sheets of glass offer uninterrupted vistas, and an impression that one could simply step through a glass wall to the garden outside. The two-story window wall in the living room evokes Barragan in its division into quadrants by cross-shaped mullions. An overall unity in formal relationships is reiterated inside and outside, such as in the view of a curving border of plantings outside, visible through a window carefully set under the subtle arc of an interior staircase which repeats the same sinuous line.

The tower scheme is employed as the underlying organizing concept (fig. 80). Four separate blocks, including two tall bedroom towers (fig. 81), a two-story living room/dining room (fig. 79), and another bedroom wing comprise an upper level of the house, continued in three adjoining courtyards. But at the lower level, all the elements connect in a continuous flow of space from kitchen, dining room, living room, art gallery, and library.

While the spacial flow through these rooms is enhanced by limestone floors and white walls, each room has its own special character created by variety in ceiling heights, lighting, and unique exterior views. The dramatic height of the brightly daylighted dining room and living room with broad views of a large open courtyard (fig. 82), changes

dramatically as one passes into the intimate art gallery with its subdued lighting and low ceilings (fig. 83). The art gallery leads to the secluded library set off by its slightly lower elevation, and a more constricted exterior view of a grove of trees.

A key to the complex spacial organization of the large house is found in a round skylight opening from the pool court into the art gallery below (fig. 83). This skylight, a recognizable shared element of two different levels, allows the viewer on one level to visualize his spacial relationship to the other level--an effect of simultaneous perception. A similar technique is employed by Barnes at the Dallas Museum, in which the cantilevered apsidal form projecting from the west facade defines for the viewer at street level the elevated grade of the sculpture garden above, even though it is concealed from view within the garden walls.

Other characteristics which the Dallas Residence shares with the Dallas Museum, designed concurrently by Barnes, are the indoor/outdoor expanse of limestone floors, a curved balcony flanked by a cantilevered staircase, and simply-detailed white walls on which to display the clients's extensive art collection. The perimeter skylight in the living room also appeared in the Fort Worth house Barnes designed in 1951 for Ted Wiener, another art collector, and in the reading room of the Garden Library. Automatic shades

are timed to cover the skylight as the sun passes overhead. The sliding pocket windows were derived from several previous Barnes house designs. David Dillon has noted the regional references to southwest architecture in the Dallas Residence, synthesized with Barnes's other favorite sources:

Here is an exemplary Texas house designed by a New York architect in a style that evokes Luis Barragan, Le Corbusier, Mykonos, and a 12th-century Cistercian abbey in the south of France. So much for the notion of an unsullied vernacular tradition. If there were such a thing as international regionalism, this would be a superb example.<sup>132</sup>

One of the most striking of the Barraganesque details is the second floor balcony's limestone channel with projecting spout, spilling a stream of water into the living room's exterior semi-circular reflecting pool (fig. 84). A more ancient precedent is the Bath of the Princess, a stone font and ceremonial pool of Inca origin (fig. 85). The distinction which should be made between Barnes and Barragan is that Barnes rejects the hot colors employed by Barragan in Mexico, and instead allows the pure white exterior walls to be printed by shadows of trees and trellises (fig. 78), and colored by the setting sun. Barnes recalled that he attempted to use color in the house, "but just couldn't."<sup>133</sup> While Dillon asserts that the white stucco walls are a regional reference, it is clear that Barnes has long preferred the clarity of white interior and exterior forms, as seen not only this Texas house, but also his Cowles House

in Minnesota, the Garden Library in Virginia, and his own house in New York.

One of the most unfortunate aspects of Barnes's specialization in house designs for increasingly prestigious clients is that several of his best designs have remained unpublished, due to the reluctance of the owners to relinquish their privacy. Since he completed the Dallas Residence, Barnes completed an unpublished vacation house for Ved Mehta, a blind writer,<sup>134</sup> and designed a house in Westchester County which has not been built. He is currently working on a major house commission in New York state, but publication of this house seem unlikely, due to the owner's prominence.<sup>135</sup> It is difficult for the architectural profession to evaluate Barnes's contributions to the design of private residences when important commissions go unrecorded. The high quality of his recent house designs is indicated, however, by the recognition awarded to the Dallas Residence when a 1986 Honor Award was bestowed on it by the American Institute of Architects.

#### Office Design in the 1980s

High-rise office design became the high-profile work for the firm of Edward Barnes in the 1980s. The first major buildings to be designed by Barnes in New York City included four skyscrapers and the Asia Society Headquarters, all commissioned in the late 1970s. These projects were under

construction or nearing completion early in the next decade, and brought international attention to the firm.

As these projects developed, Barnes's underlying aesthetic approach to office tower design remained essentially the same as earlier expressed in his New England Merchants National Bank Tower. Barnes's Modernist preference for flush curtain walls and horizontal roof lines combined with a classical or Sullivanesque division of the skyscraper into base, shaft and crown shaped the overall form. Yet the variations on this formula grew increasingly complex with successive designs.

Barnes's office projects during the last decade have followed two lines of development. The most characteristic of these, for Barnes, is the office building conceived as a prismatic form--initially a rectilinear volume which is shaped to relate it to the context of a specific site. In these structures, the cladding material or materials are selected to emphasize the integrity of the volumetric form with a continuous "skin." Three buildings in New York City were designed in this manner: IBM 590 Madison Avenue, 535 Madison Avenue, and 599 Lexington Avenue. Barnes's other approach has involved a dramatic shift in his usually simple treatment of cladding materials. In several office projects, he has demonstrated an heightened interest in developing the complexity of the exterior cladding of the office building. Most frequently, this increased complexity

results from the use of contrasting colors or finishes in the cladding materials. Recent examples of this approach include the Asia Society Building and the Equitable Tower West in New York City, and Old Stone Square in Providence, Rhode Island.

The former approach, that of volumetric form-making, appears as a continuous extension of Barnes's design concepts for other building types. In office towers, the volumetric development which began with the the New England Merchants National Bank, Boston (1971, fig. 61), was continued in Old Stone Square, Providence, Rhode Island (1984, fig. 86). Both of these designs evolved with square sections removed from the top, creating stepped roof-top gardens, and equivalent sections from the base, opening up pedestrian paths at street level. Complementary diagonal slices were removed from top and base of the 535 Madison Avenue tower in New York (1982, figs. 88, 89), and increasingly aggressive diagonal shaping continued in IBM 590 Madison Avenue (1983, figs. 88, 90), transforming the overall structure into a wedge shape. The most complex of these manipulated volumes is the 599 Lexington Avenue office tower (1986, fig. 88).

Barnes describes his design conception of these office towers as "subtractive form. One has to imagine a block of space, and then subtract from it."<sup>136</sup> The creation of a new volume through this subtractive process, particularly in the case of the IBM Tower, is the result of a thoughtful

analysis of relationships with the surrounding city and the gridiron of New York streets, as Barnes explains:

IBM was not just abstract. We felt that the high mass should be on the wide streets. In New York City, the pattern of side streets, which are narrow and low, and avenues running north to south which are wide and take high buildings, gives the whole city its grain. In the case of IBM, there was a wide crosstown street. We decided to take the bulk and put it on the northeast corner of the lot, where it would be close to the avenue and the wide crosstown street and would keep the midblock low. I think the preservation of midblock scale on the narrow streets is very important. That was the genesis of the use of the 45 degree angle and the massing on the corner. From that we conceived the whole lot as a square, and we took the southwest side, sliced it off, and turned it into a park. Next, we worked with the northeast corner of the site, which rose straight up to the top. Finally, we subtracted from the form by cutting away a big slice at the bottom.<sup>137</sup>

Through this subtractive process, Barnes designed IBM to be contextual; responding to the grain of the city and to the needs of the public, particularly in the attention given to pedestrian flow.<sup>138</sup> The base of the massive tower is surprisingly open, inviting pedestrians to pass through the building in almost any direction. High-ceilinged arcades ensure that the major paths through the tower, including a through-block arcade between 56th and 57th streets, are obvious to passersby (fig. 90).

The underlying concept for the expression of prismatic form is most explicitly stated in the glass-walled greenhouse at the base of the IBM Tower, described by Barnes as "brilliant crystalline form next to a prismatic tower" (fig. 92).<sup>139</sup> Actually an indoor park, the glass

building with its saw-toothed, serrated rooftop and interior bamboo plantings is a popular year-round public space. It functions as a real amenity, rather than just an empty gesture appended to the design simply to receive bonus floor space. The boldly reductive forms of the IBM Tower and 535 Madison Avenue Tower, both designed in the mid-1970s, reflect Barnes's design aesthetic during the same period of time as his most austere, minimal commissions such as the Walker Art Center, the SUNY Purchase campus, and the Christian Theological Seminary. In this framework, IBM's prismatic shaft can be seen as pure minimalist sculpture, as discussed earlier in this chapter. In a historical context, IBM's wedge form is reminiscent of a much earlier tower, Daniel Burnham's Flatiron Building (1903, fig. 91).

Another factor which significantly shaped Barnes's design of New York City skyscrapers was the various zoning guidelines enacted to control or encourage specific kinds of development within the city. The public amenities such as the bamboo garden at IBM and an open plaza at the base of 535 Madison Avenue, are a reflection of the 1961 New York Comprehensive Zoning Revision, which allowed developers to add additional height to their buildings in return for such public-use features. The often-criticized bulk of three towers built in a densely-developed section of Midtown--the AT&T, IBM, and Trump skyscrapers--resulted from "bonus" space earned by the developers under these guidelines.<sup>140</sup>

New forms developed in later skyscrapers are partially the result of yet more zoning revisions. While the Barnes design for 599 Lexington Avenue continues the process of subtractive form-making used in the earlier Barnes towers, it also anticipated the new guidelines imposed by the 1982 rezoning of Midtown even before they became effective. The office tower received a bonus in floor area ratio under the 1982 guidelines for its public improvement of a new subway concourse allowing transfer between two existing stations. The new zoning regulations mandated setbacks in the massing of skyscrapers. In 599 Lexington this is achieved by a 45 degree rotation of the tower above the fifth floor, and further reductions in floor size at the 33rd floor and again at the 42nd floor. As these setbacks occur, progressive changes in the geometry of the floorplan follow--the initial trapezoidal base is reduced to a diamond, then to a rectangle, then to a triangle. The shifts in geometry allow the various building faces to align with surrounding towers and streetwalls (fig. 93).<sup>141</sup>

The form of the Equitable Tower (figs. 95, 96) was in its turn affected by the new zoning guidelines as well as contextual influences, as Barnes explains:

The Equitable Tower is really different. It's under the new zoning which dictates setbacks. One does not get the same volumetric forms. Instead, the new code produces perimetrical forms and symmetrical forms, so that in many ways the form of the Equitable Tower is dictated by the zoning. . . . Contextual consideration in [Raymond] Hood's McGraw-Hill building and Rockefeller Center certainly came into play. . . . For

some of the same reasons, they made setbacks, and I thought the look was quite nice. I was also trying to get a sense of place and scale as one moves up the building.<sup>142</sup>

An important consideration in contemporary New York office towers, one to which perhaps too much critical significance has been attached, is the selection and finish of cladding materials. Consistent with Barnes's previous treatment of building surfaces, the two materials composing the exterior of the IBM Tower--gray granite cladding and blue-green glass--were treated as one material. To reinforce the impression of a continuous surface, the granite cladding was highly polished and set flush in alternating bands with the glass ribbon windows. While the horizontal layering of space is emphasized by the separate bands of glass and granite, the overall gleaming finish unifies the building as a simple prismatic form. Barnes's decision to use polished granite drew criticism because of the increasing use at that time of rusticated stone cladding, particularly in the adjacent AT&T Building, designed by Philip Johnson. Paul Goldberger, in describing IBM's style as that of the "computer esthetic," goes on to generally characterize thin-skinned towers as sharing

a quality of thinness, of tightness--they are stretched as thin as possible across a frame, with virtually no texture, no depth, to them. The windows have no recesses, as in masonry towers of old; there is a feeling that the entire structure has not been built piece by piece so much as rolled out of a great machine. It is the absolute culmination of the machine esthetic which so fascinated early modernists. It is the esthetic of a post-mechanical age, in which the

machines are computers that make no noise and conceal their inner workings.<sup>143</sup>

In spite of the prevailing fashions, Barnes elected to retain the Modernist flush, continuous curtain wall for the IBM, 535 Madison, and 599 Lexington skyscrapers.

Rusticated-finish stone cladding, which suggests load-bearing masonry construction, was rejected by Barnes as it would not honestly reflect the actual steel structure of the skyscrapers. However, the 599 Lexington flush facade would be manipulated to create the illusion of depth.

Yet a distinctively new direction was taken by Barnes in other office designs which involved the re-consideration of exterior cladding. Barnes pursued this alternative approach in several of his towers, enlivening the facade through the selective combination of dissimilar colored materials and finishes. While the exterior skins of these buildings are seemingly composed in abstract pattern-making, the cladding is actually primarily utilized as a descriptive element which illustrates the vertical supporting members and the horizontal layering of floors. This development is a natural outgrowth of the assertive horizontal banding of IBM's facade with its alternating strips of glazing and granite spandrels, attributed by one critic to Barnes's "reassertion of the Modernist legibility of structure and function often missing from scaleless reflective-glass curtain-walled buildings."<sup>144</sup>

The steel structure of IBM is more subtly indicated by vertical reveals in the granite cladding. But in the Asia Society Gallery and Office Building (1981) and Equitable Tower West (1986), Barnes decided to bring the vertical element into overt play by defining the vertical supports more literally in a distinctively contrasting cladding. At Asia Society, two contrasting finishes of red Oklahomas granite--polished and thermal--are employed in the facade, producing different but related colors. At the Equitable, the vertical members are illustrated with rose granite, opposing the beige limestone-clad spandrels.

In the facade of the Asia Society, one of Barnes's most adventurous buildings, the deliberate placement of the polished and unpolished sections of granite is further illustrative in its tripartite division of the building into levels corresponding to the functions of gallery space, offices and meeting rooms (fig. 97). Although the facade, suggesting the "richness of an inlaid jewel box,"<sup>145</sup> is not purely decorative, it alludes to decorative aspects of 16-century Indian tile work veneers in the contrasting patterning of its stone cladding. Other evocative touches in the Asia Society building's facade are the semi-circular windows and the projecting windowsills. The slight projection of the windowsills is a very unusual effect for Barnes, as the curtain wall normally remains inviolate in his work. This effect is not only decorative, but is a

contextual reference to the adjacent brownstone structures, a gesture which is seriously reiterated in the deference with which the building steps back from the side street.

The semi-circular windows would become a favorite motif used by Barnes in many of his later projects, but the Asia Society was the first to employ them. The position of one of these windows (fig. 98) offers a hint of the surprising presence within of a vaulted gallery space (fig. 99).

Barnes notes, "There's a lot going on in that facade. It's a great departure from other Ed Barnes buildings."<sup>146</sup>

Asia Society's inventive, decorative facade is significant, for it represents Barnes's exploration of a new approach to exterior design. While Barnes did not attempt a recapitulation of Breuer's use of dissimilar materials--the same granite is used for Asia Society with different finishes--he does break up the facade in a manner quite unlike his typical unified expression of single materials. He would move a step farther along this path with the Equitable Tower's facade, in which two dissimilar colors and materials are juxtaposed. While Barnes appeared to be enthusiastic over the new approach to Asia Society, he does not consider an eclectic approach or the complexity advocated by architects such as Venturi to be his forte in design, saying, "I just don't feel that that's my style."<sup>147</sup> Reiterating that his approach involved a volumetric point of

view, which naturally implies an austere surface expression, Barnes observed:

But [austerity] is not exactly in fashion. I think the ideal thing would be to do [volumetric design] and also be able to have a rich surface. I'm not sure if I can handle that, but some people like Schinkel did.<sup>148</sup>

In his design for the Asia Society building, Barnes handled the combination of austere volume with rich surface detail quite successfully, according to Douglas Davis in his

Newsweek review:

. . .the Asia Society building is clearly the most advanced and imaginative work of pure design that Barnes has yet produced, on a site where it is sure to receive the attention he has long missed. It not only signals an abrupt break in the long line of sober-faced Barnesian structures, but also recalls--in its high-spirited, intuitive facade and delightful interior--the spirit of Breuer's apartment, where Barnes's exemplary career began.<sup>149</sup>

In Barnes's Equitable Tower in New York City, a much stronger contrast of materials is employed in the facade and the interior lobby. Horizontal bands of unpolished beige limestone play against the contrasting cladding of the vertical supports in polished rose granite (fig. 96). However, in Providence, Rhode Island, Barnes used a more subtle tonal palette for the Old Stone Square tower (1984). His treatment of cladding was very similar to the Asia Society in that one stone, a grey granite, creates a decorative pattern on the facade through its deployment in polished and thermal finishes (fig. 87). The resulting pale grey and nearly white tones are combined in modular square patterns delineating floor levels and supporting members.

The grey granite was selected to repeat the color of the adjacent Old Stone Bank and as a foil to the surrounding Colonial brick structures.

A design objective in the project was to achieve "harmonious proportions" through the development of the building design as based on the dimensions of a square module extracted from the original Old Stone Bank.<sup>150</sup> As Barnes explains:

The building is designed on a cubic module--this is to say that the vertical floor-to-floor dimensions and the horizontal column grid dimensions both are divisible by a common module of 4 feet 8 inches. The result is a particularly satisfying abstraction where the stone facings and windows [and] the terrace and park and block-like massing all come out in true squares.<sup>151</sup>

The square module is expressed in the patterning of the polished and unpolished stone finishes. This aspect of the design is also reiterated in the four-square division of the windows with crossed mullions, a highly unusual touch in a Barnes building, which almost exclusively exhibit mullionless fenestration. The blue glass selected for the windows echoes the blue sky and imparts an impression of penetrability to the structure, giving it a lighter feeling. The quadrant of the building devoted to an elevator shaft is enclosed, yet this portion of the facade almost seems to disappear as a "ghost" image palely reflected in the light grey patterning of squares and window mullions. Historian Richard Chafee describes the building as an "apparently

weightless architectural volume, the surfaces of which are figure-ground studies."<sup>152</sup>

599 Lexington in New York City appears to be a transitional development in Barnes's latest office towers in terms of surface treatment. Clad with a metal skin to harmonize with the adjacent Citicorp Center's curtain-wall, there is no attempt in the exterior of 599 Lexington to create the evocative or overtly decorative effects sought in the stone facades of the Asia Society, Equitable Tower, or Old Stone Square. While strongly exemplifying Barnes's volumetric form-making because of its complex subtractive massing, a new window treatment gives depth to the building's facade, without compromising Barnes's Modernist preference for flush curtain-walls. The unique window system creates a "shadow-box" effect through the inclusion of an interior framed, opaque panel set six inches within the continuous exterior skin of ice-green metal and glass (fig. 94). The metal frame outlining the horizontal panel gives the appearance of a continuous band of small square window mullions, breaking the facade into smaller components. The supporting columns are clearly visible through the windows, and add an additional rhythmic vertical counterpoint to the facade. Even Paul Goldberger was pleased with this solution:

. . . 599 Lexington is surely Mr. Barnes's best tower in New York since his 535 Madison Avenue building was finished in the early 80's. . . . The real achievement . . . is the building's unusually handsome metal

"skin," or exterior sheathing. . . . here at 599 Lexington Avenue, Mr. Barnes and Mr. Lee have found a way to make an exterior wall of metal that is fully "modern," yet has a degree of texture and variety to it that resembles the more articulated facades of older buildings.<sup>153</sup>

Barnes's latest project in midtown Manhattan suggests that he may continue to pursue the success of 599 Lexington with related design developments rather than the direction indicated by the Asia Society building and Equitable Tower. Barnes's 23-story office building at 125 West 55th Street developed for Harry Macklowe Real Estate Company is currently under construction.<sup>154</sup> Even though adjacent structures are masonry, blue-green glass sheathing has been selected for the exterior of the Macklowe building. However, other contextual concerns have been addressed in the design. The first nine stories of the tower rise to the upper cornice line of the flanking buildings, then the main bulk of the tower is set back to conform to zoning guidelines. The set-back allows light to penetrate to the interior of one of these smaller structures and to give clear view of the City Center's dome, a prime form undoubtedly appreciated by Barnes. The lower portion of the facade angles in from the street line to open up a slightly recessed plaza on 55th Street in front of the building. A slim rectangular slice was removed from the main tower block, leaving an "L" shape which frames a plaza on the 56th Street side. A striking variation in the sleek glass facade is the projection of a vertical triangular fin extending the

height of the upper portion of the tower, and a similar notched form is cut into another side. These add visual interest to the cladding, and subdivide the tower into sections corresponding to its neighbors. Overall, the combination of block forms and angled geometry in the new tower reiterates the volumetric development from 535 Madison to 599 Lexington, rather than pursuing the decorative contextualism of Barnes's stone-clad towers.<sup>155</sup>

#### Museums and Galleries

##### "True Objects" in White Space

The building type which has brought Barnes's firm the most national and international attention is his design of numerous museums and galleries. Barnes's success in museum design, in his opinion, can be attributed to his austere design approach which is sympathetic to the creation of a quiet atmosphere for art viewing. He also relates that his office is much happier and more comfortable working with the smaller scale of museum projects, as opposed to large-scale commercial buildings.<sup>156</sup> Yet museum commissions involve big-scale movement, and it is this challenge which Barnes enjoys pairing with his concern for humanly-scaled, quiet viewing spaces.<sup>157</sup>

In all of Barnes's museum commissions, flowing white interiors predominate. He explains that it is the luminous light quality which is characteristic of white rooms that

holds such strong appeal for him.<sup>158</sup> Barnes's predilection for white space as an appropriately supportive setting for art objects can be traced back to his Modernist training. Barnes has noted that his initial attraction to architecture was the result of Breuer's skillful deployment of

snow-white walls and soft, indirect lighting instead of the usual cream walls and blond furniture. And floating in this white light were the most wonderful disparate objects and materials . . . .<sup>159</sup>

The soft, reflective light quality of white surfaces which allowed objects to seemingly float in space obviously made a lasting impression on the young architect-to-be.

The architect Le Corbusier, who was also a painter, expressed strong views on the almost mystical power of beautiful objects when viewed in the clarity of whiteness:

Law of enamel paint of whitewash: suppression of the equivocal. The concentration of intention on the proper object. The attention concentrated on the object. . . . The perfect object is a living organism; it is animated by the spirit of truth. We have in us a direct command which is the spirit of truth and which recognizes the true object within the limelight. The true object shines with power; between one true object and another astonishing relations develop.<sup>160</sup>

Even before his undertaking of museum commissions, Barnes demonstrated his affinity for white spaces in two early commercial commissions from the 1950s. In a showroom designed in 1953 for Mercedes-Benz on Park Avenue in New York City, Barnes approached the interior design as if it were an art gallery. Barnes chose to create a "sandwich" of light to showcase the expensive automobiles (fig. 100). To achieve this lighting effect, he incorporated the unusual

feature of a white terrazzo floor with a ceiling of white acoustic tile for the maximum utilization of reflected light.<sup>161</sup>

The showroom was not an entirely neutral background, however, for the luminous space was embellished with a variety of elegant materials on the walls and supporting columns. The columns and one of the walls were sheathed with gun-metal gray mirrors, one wall was painted gray, and two other walls were covered with Alabama marble and South American koa wood.<sup>162</sup>

Barnes's combination of diverse materials in the Mercedes Benz showroom points to the influence during his early career of the rich material vocabulary of Mies and Breuer. However, Barnes first incorporated the concept of a "sandwich" of white space here, demonstrating his interest in its reflective properties which created soft, even lighting and isolated the object to be displayed.

A later commercial design commission, a showroom for Jack Lenor Larsen (1960), was remodeled by Barnes as display area for a variety of fabrics, decorative objects, and other products for interior decorating. Barnes created a cruciform plan for the showroom by constructing new walls flush with existing columns, leaving an uninterrupted interior volume for exhibition space.<sup>163</sup> Barnes would again use a cruciform plan in the Marlborough Gallery (1973), the

Dallas Museum of Art (1984), and the Minneapolis Sculpture Garden (1988).

Materials were simplified in the Larsen Showroom. The continuous walls were painted white to set off the fabrics on display. An ash grid was suspended from the ceiling (useful for displaying light fixtures and fabrics) and the flooring was oak. The Larsen Showroom shows Barnes's reduction of elements to two basic materials--wood and white plaster walls--as a reflection of his new concern for simplicity after his trip to Mykonos. This approach was combined with his conviction that a displayed object should maintain pre-eminence in white supporting space.

#### Walker Art Center

After forty years of architectural design, Edward Barnes is today often described as a museum specialist.<sup>164</sup> The origin of this designation arose in 1971, when Barnes completed his very first museum commission, the Walker Art Center, to great acclaim.<sup>165</sup> Barnes's success with the Walker led in subsequent years to many other museum commissions, so that museums have today become a significant part of his practice.

Originally engaged to make an addition to the existing museum, Barnes unexpectedly was commissioned to design an entirely new structure.<sup>166</sup> However, the design concepts developed by Barnes in his previous work proved to be very conducive to the creation of a supportive museum

environment. His adeptness in formal program organization and sensitivity for spacial flow were crucial to the success of the Walker. In addition, Barnes's preference for single materials, the continuity of white space, and minimal detailing was ideally suited for serene, almost neutral spaces which would not compete with the art on display. Barnes and Walker Director Martin Friedman were in agreement that, "For museums, the architect must produce a strong architectural idea that is in complete sympathy with what is being shown."<sup>167</sup>

Working within the physical constraints of the site, Barnes found that vertical spacial development of the galleries was necessary, but "The question was how to arrange these spaces so that the galleries themselves could become a procession."<sup>168</sup> His solution for circulation recalled a previous project for a private residence, the Henry House (1963, fig. 43). In describing the plan of the Henry House, Barnes noted: "Within a square plan, the rooms step up around the central core so that there is a stairlike progression from the lowest level to the roof."<sup>169</sup> In transposing this concept to the Walker, the rooms became a helical procession of white gallery spaces connected by short flights of steps (fig. 44). Barnes likes to emphasize that the Walker "has an architectural idea at its guts. . . . This is an architectural idea unlike many architectural ideas today that involve only a facade; it has to do with

circulation and form."<sup>170</sup>

Barnes approached the circulation concept with the intent to reduce museum fatigue as much as possible. This was accomplished in several ways. First, by using short flights of stairs to connect the galleries, Barnes led the visitor upward through a series of levels without a lengthy ascension of stairs at any one point (figs. 101, 102). The variety achieved by the changes in elevation and shifting perspectives help reduce the perception of the distance traveled through the galleries.

Barnes stresses that "The sequence of spaces must be seductive. There must be a subtle sense of going somewhere, like a river. At the same time the architecture must be relatively uneventful and anonymous."<sup>171</sup> Barnes subtly encourages circulation with the inclusion of wide doorways at the top of each flight of steps, through which the next gallery could be glimpsed (fig. 101).

To further reduce fatigue, Barnes strategically placed a window, a glass wall, and a skylight within various galleries so that the visitor would encounter daylight as a fresh interlude in the interior processional space. The windows also serve to orient the visitor to the outside world and give views of the roof-top sculpture terraces.

Barnes summed up his strategy for the Walker and his subsequent museum designs:

Museum fatigue is reduced by a sense of progression; it is also avoided by gentle variations, by occasionally providing orientation to daylight, and by giving each gallery its own sense of place.<sup>172</sup>

Barnes's natural affinity for volumetric form-making achieved one of its strongest expressions in the Walker Art Center. The succession of box-like rooms stepping up around the central core is clearly delineated on the exterior of the building in the complementary ascension of the roof terraces (fig. 103). The exterior volumetric form of the building therefore directly results from the circulation concept--supporting Barnes's contention that "the architectural idea . . . has to do with circulation and form."<sup>173</sup> The low massing of the building's base is surmounted by a high tower containing a restaurant, conference room and offices.

The stairwells which extend from the exterior walls of the structure are exposed as independent volumes so that their attachment to the building makes them appear somewhat like trailing "arms" following the pinwheeling movement of the helical plan (fig. 102). The projection of the stairwells on the exterior of the building maximizes interior gallery space, and is similar to the later resolution of the same design problem in the Dallas Museum.

Barnes depended upon the unity of two materials--the all-white interiors and the continuous brick-sheathed exterior--to carry out his expressed desire for a simple

architectural statement to support, but not overwhelm the art it was designed to house. In Barnes's words:

The ambience of the galleries is white on white. Reflected light is maximized. Architectural details are minimized; elaborate wall systems and "interesting" materials are avoided. We want the paintings to be seen in space, not "against" confusing surfaces. We want a sense of release, not of containment.<sup>174</sup>

The white terrazzo floors of the Walker have not been accepted in all of Barnes's subsequent museum commissions, and he views the Walker's combination of white galleries with white floors as a "blessing. It makes sort of a light sandwich."<sup>175</sup>

The simple and unadorned dark, brick-sheathed massing of the Walker reflects Barnes's minimalist preoccupations during his most austere period of design during the late 1960s and early 1970s. Also dating from this period were his simple, reductive designs for the State University of New York at Purchase (1968-1979) and the Christian Theological Seminary in Indianapolis (1966).

While the Walker's interior galleries have always been highly praised, particularly by exhibiting artists,<sup>176</sup> the museum's exterior has occasionally been criticized for its severity. Recently, the building was described as "overspecialized and introverted," and the exterior was criticized for appearing as "a mass of closed volumes."<sup>177</sup>

These comments overlook Barnes's basic intention to defer to the collection--an approach clearly desired and seconded by Director Martin Friedman. Selected pieces from

the Walker's collection of modern sculpture were displayed on the roof terraces. The outdoor display of these works was enhanced and supported by the continuous background of brick and sky (fig. 104). Barnes stated,

The building itself is a pedestal. Sculpture is seen against giant walls and stepped terraces, and best of all, against the distant Minneapolis skyline. It is important to see sculpture related to architecture. It is equally important to see it standing alone.<sup>178</sup>

In a manner typical of his contextual design approach, Barnes intended for the Walker to reflect its site conditions and to relate to its surroundings. The Walker's facade and roof line continues that established by the Guthrie Theater and the the museum's tower is aligned with a nearby insurance building. Rather than mimicking the exterior of the adjoining Guthrie Theater, however, the solid volumes of the Walker stand as a foil to the combination of precast concrete fins, screens and transparent openings in the Guthrie facade.

Although Barnes's stated intention was to defer to the Walker's art collection, he has found it necessary at times to defend his approach to those who question whether a building composed of seemingly anonymous galleries will result in a weak architectural statement. Barnes responds:

I think the question is: can a building of that kind be strong architecture, positive architecture? I feel very definitely that the rooms themselves have to represent calm, well-proportioned spaces. The sequence and the sense of flow must work, and the way you move through it must be graceful. I think it's a very difficult thing to explain how you can do architecture with a

strong central idea, with just as self-centered an idea as any building, and at the same time have that idea opt for this function of bringing out these various shows which go through it. It's not just an anonymous building . . .<sup>179</sup>

Malcolm Holzman has also addressed the concept of anonymous gallery spaces and he cites the Walker Art Center as

one of the landmarks of modern museum design. Because the floor is white, the ceiling is white, the walls are white--everything is white--some people call it neutral. In fact it is one of the strongest kinds of space to exhibit art in. You have to deal with it, I think, rather aggressively, as the staff at the Walker generally does. I have yet to be in a space that's neutral. All spaces come with certain qualities. What architects try to do is to build into those spaces the qualities that we like to see, so that the art looks better.<sup>180</sup>

The volumetric massing of the Walker Art Center resulted from the helical circulation scheme but also demonstrates Barnes's consciousness of architecture as sculptural form-making. Although Barnes said of the Walker, "it is flow more than form that has concerned us,"<sup>181</sup> the structure has a strongly sculptural aspect in its clustered massing of cubical forms, emphasized by the continuous brick veneer. As a result, the overall impression is that of a six-story high minimalist sculpture, and it suggests the long-standing empathy between Barnes and the minimalist art movement.<sup>182</sup> Barnes would later comment:

I think that some of architecture is sculpture. There are things that architecture is, that sculpture isn't. It is a social instrument, connected with history and society, and structure and technology. There are many things about architecture that are rooted in society and technology, that you don't see in sculpture. But

there's a side of architecture which is absolutely pure sculpture. It should be.<sup>183</sup>

The strong sculptural statement of the Walker would prove to be restrictive years later, as the museum expanded to a point that additional facilities became a necessity. Barnes's initial design was not programmed for additional wings, and the architect was reluctant to alter the appearance of the award-winning museum. Barnes observed, "The museum was designed not to expand. It's a contained building: it has its own being."<sup>184</sup> Barnes was persuaded to design an expansion, however, when director Martin Friedman suggested that he might engage another architect.

Barnes was able to unobtrusively add a cubical block of office space next to the L-shaped tower of the building. However, the bulk of the addition, which included two new galleries and a print study room, was more difficult to combine with the original design. "After a good deal of torture," Barnes ultimately found the expansion solution in his initial concept. The helical plan was extended underground so that it appears to be "screwing down into the earth" and actually wraps around the original basement level of the building.<sup>185</sup> The flat roof over the expanded base of the building steps down as it wraps around the lower level, complementing the stepping of the other roof terraces and providing additional sculpture display space (fig. 103). The Walker addition is related conceptually to Barnes's WVIP

Radio Station (1958), in which additional growth was planned as an outward spiral around the core of the structure.

Although construction of the Walker expansion did not commence until January 1983, it is possible that Barnes had already been faced with the unprogrammed addition to the Walker even as he began contemplating the Dallas Museum design. When Barnes was interviewed by the architectural search committee for the Dallas Museum commission in 1977, he was asked about the expansion potential for museum designs. He responded that the availability of outdoor space makes expansion "elegant and easy," and that he would design a building which would expand naturally and gracefully. Barnes clearly wished to avoid the difficulties in the Dallas Museum design that he would eventually face when the expansion of the Walker Art Center became imperative.<sup>186</sup>

#### Sarah Scaife Gallery

Barnes's next major art gallery commission was the addition of the Sarah Scaife Gallery to the 1907 Carnegie Institute of Arts complex in Pittsburgh. The addition, completed in 1974, incorporated not only exhibition spaces, but also other facilities such as a cafe, a museum shop, storage space, offices and workrooms, and a street entrance lobby. Barnes carefully studied the existing Beaux-Arts plan, and all of the elements of his resulting design related proportionally to the older structure (fig. 105).

For example, in proportion and placement, the new sculpture court corresponded to the existing Hall of Casts. Adjoining galleries continue in alignment to their counterparts in the older structure.

The glass-walled sculpture court and the adjacent granite-clad cantilevered staircase are the dramatic focal points of the addition--two key elements which would be repeated in the Dallas Museum of Art (fig. 106). The suspended glass wall system is mullionless and is delicately braced by transparent glass fins, held in place with stainless steel riveted plates (fig. 107). The complete transparency of the curtain wall achieves the sort of effortless indoor-outdoor visual flow which Barnes so often sought in his residential designs. This suspended glass wall system was originally incorporated into the Dallas Museum of Art design, but was eliminated during a design revision.

The paved sculpture court enclosed by the glass wall provided a transitional mediation between the meeting of the old and new structures of the Carnegie Institute. John R. Lane, former Director of the Carnegie Museum of Art, asserts that "Barnes's solution is one of the most refined and seamless conjunctions yet achieved between modernist and beaux-arts style buildings."<sup>187</sup> On the exterior, Barnes's addition reinforces the street and cornice lines of the older structure. The stone cladding of the Scaife Gallery

is thermal-finish Norwegian emerald pearl granite, which relates in color to the original building. While the Scaife wing complements the context of the two Beaux-Arts pavilions it adjoins, Barnes at the same time strongly asserts its modernity. Rather than attempting to mimic the classically-derived colonades of the porches, Barnes merely suggests the continuation of their structural rhythm through a series of modern tipped planes. These mitigate the juncture of the old Beaux-Arts structure and the new exhibition pavilion. The unity and modernity of the Scaife exhibition galleries is clearly delineated on the exterior through the simple expansive mass of the granite-clad facade.

Barnes created a unique pattern of circulation for the Scaife Galleries. The second floor galleries continue from either end of the original building's galleries, and in the center of the new gallery wing the long walls are wrapped one around another, in a series of interlocking "U" forms which, in plan, resemble a maze pattern (fig. 108a). Outlets are provided at one end of the galleries so that the channeled processional may be by-passed, if desired. Barnes describes his concept for the galleries:

The galleries are not box-like rooms, but long serpentine spaces that flow quietly from one to the next, leading around the sculpture court back into The Carnegie Museum. Daylight is admitted through scoop skylights so that the walls are bright surfaces. The white terrazzo floors are reflective, and incandescent light is carefully modulated for accent and focus. As the sun and clouds pass over the Gallery, the colors of

the paintings advance and recede in the fluctuating light.<sup>188</sup>

Unlike the Walker Art Center, which primarily utilized artificial lighting, Leon Arkus, former Director of the Carnegie Museum, charged Barnes to devise a natural lighting system for the Scaife Gallery. This system, shown in section (fig. 108b), incorporates roof-top skylights to admit filtered daylight into the galleries below. After first passing through a pair of horizontal diffusing panels positioned under the skylight, the light then bounces off to either side of a suspended ceiling to pass through vertical diffusers which softly spread the daylight over half-vaults running the length of each gallery (fig. 109). The daylight, directed downward by these coves, washes the white plaster walls with the greatest luminosity.<sup>189</sup> Barnes contrasts his approach with the classic European-style museum in which light enters directly into the galleries through a glass ceiling (fig. 110):

Our theory has been that . . . we don't want to have the ceiling as the brightest thing, because you look at the brightest thing. And you don't want the floor [to be] the brightest thing. What you want is [to have] the wall bright. So if you have the light introduced at the side, the way we've been doing it--the ceiling is dark, and the floor is a little less dark, and the walls are the brightest. That's where the pictures are.<sup>190</sup>

It is interesting to compare the skylighting system of the Scaife Gallery with that of the Huntington Gallery addition in Huntington, West Virginia (fig. 111). Designed

by Walter Gropius, principal of The Architects Collaborative, the Huntington addition was completed in 1972.<sup>191</sup> In this museum, daylight enters the galleries through half vaults faced with clerestory windows (fig. 112). The vaulted light coves project prominently above the roof line (fig. 113). However, light is less diffused than in Barnes's Scaife Gallery, encountering only one vertical diffuser before passing over the half-vault into the gallery.

Barnes's approach to the Scaife Gallery differs in that while he also employs the cove form to spread the light onto the wall below, he took elaborate means to conceal the source of the light. Within the gallery, the upper portion of the skylighting system is cut off completely from view by the vertical glass diffusing panels set above the suspended ceiling (fig. 108b). The full enclosure of the skylight apparatus between the suspended gallery ceiling and the actual roof above ensures that the Modernist flat roof plane is maintained. A large open area exists above the gallery ceiling, large enough to function as a catwalk so that knock-out panels can be accessed. The purpose of the removable panels was to allow daylight to enter the galleries more directly to light sculpture or the movable panels fixed beneath the suspended ceiling. These panels are indicated by the squares in the second floor gallery plan. (fig. 108a) This additional lighting capacity proved

to be unnecessary because the white walls and floors dispersed light so effectively.<sup>192</sup>

Surprisingly, the earliest precedent to be found in Barnes's oeuvre for the Scaife Gallery is the Neiman-Marcus Shopping Center in Fort Worth (1963). The Neiman-Marcus design features two partially-roofed, outdoor courts which form a strong analogy to the interior ceiling design of the Scaife Gallery. The roofs of the courtyards provide shade from intense sunlight, yet are cantilevered so that a perimeter opening is provided along the side walls and corners. This permits side light to wash down the stucco walls, similar in effect to the Scaife Gallery daylighting. Further, a central rectangular opening in the roof plane creates a well of light within the court, relating to the knock-out panels provided in the Scaife Gallery, and foreshadowing the use of courtyards as wells of light in the Dallas Museum of Art.

The original 1974 design for the Scaife Gallery was devised by Barnes and Director Leon Arkus. Under the new Director, John R. Lane, a reinstallation of the gallery spaces was undertaken.<sup>193</sup> While modifications were made to the gallery design, the staff respected the original design by following the principle of reversibility in making all changes. The primary physical change of the reinstallation was to interrupt the linearity of the serpentine galleries through the insertion of panels at various intervals. These panels

were positioned to fill in the perimeter openings between the ceiling and the side coves. In some areas, a solid panel was inserted with a "doorway" cut into it. The continuous flow of white gallery spaces was also transformed by the introduction of subtle color.

While these new additions meant that more traditional room-like enclosures could be created within the galleries, the unique experience of procession through the modern lineal galleries was conventionalized. The long sweeping vistas within the original galleries were altered radically and the spacial flow so integral to a Barnesian gallery was broken up. The architectural drama of the long, seemingly unsupported, cantilevered gallery ceiling was diluted by the insertion of the new side partitions. The intersection of the partitions with the ceiling suggests that they provide support for the ceiling, a violation of the intellectual basis of the design. Overall, the changes in the galleries reveal the inherent vulnerability of the Barnesian approach--while he attempts in his museum designs to subordinate the architectural character of his galleries, his signature is still apparent. Seemingly simple alterations can substantially alter the clarity of his design approach.

#### Marlborough Gallery

Barnes undertook the design of the Marlborough Gallery interiors and sculpture court in 1972 when the gallery was

preparing to move into an existing building at 40 West 57th Street. Jack Mognaz, Vice-President of the Marlborough Gallery, recalled that he was attracted to the second story suite because of an adjoining roof terrace which he wished to utilize for sculpture display.<sup>194</sup> Barnes covered the sculpture terrace with brick paving, just as he did for the Walker's terraces.

In the interior of the Marlborough Gallery, Barnes chose to leave the original coffered ceiling exposed (fig. 117). The Marlborough is the only one of his gallery spaces which has a coffered ceiling. This approach coincides with Barnes's decision to reveal the pre-cast concrete T-beams in the ceilings of the Walker's original galleries. In later museum designs, Barnes would choose to further minimize visual distractions by almost exclusively using suspended ceilings with flush details. Two pre-existing columns occupy a central position within the gallery.

The gallery was painted entirely in white and had a white terrazzo floor, as previously utilized by Barnes in the Walker Art Center and the Scaife Gallery. Two of the opposing walls of the rectangular primary gallery space are each opened to the outside by windows shaded by vertical slatted blinds. As Mognaz explains, these windows were pre-existing, and the original fenestration of the two exterior walls featured a row of these floor to ceiling windows. The other windows still exist, but Barnes chose to cover them to

create more interior wall space and to contain an air conditioning system so that the gallery would have independent climate control.<sup>195</sup> This direct visual contact with the city streetscape is very unusual in a Barnes gallery, and would not be repeated in a similar manner until the Whitney Galleries of the Equitable Center (1986).

A unique aspect of Barnes's original design for the Marlborough Gallery was the incorporation of "floating" wall panels mounted to lie flat against the perimeter wall planes, and yet could also be swung inward to create new interior walls. These wall panels still exist and are elevated four inches above the floor on pipe columns. The columns closest to the center of each wall are fixed in place as pivots, allowing the panels to swing out from the walls and into the interior space.

Originally, there were eight of these panels in the gallery--two panels flanking two side windows, and two flanking each of the opposing walls. Conceivably, if all of the panels were positioned perpendicular to each wall, they would meet at right angles and create an interior space in the form of a Greek cross plan. This double axial alignment is not possible today, however, because two of the panels have been removed from the walls containing windows. The remaining panels can be positioned to create an axial processional from the entrance through the gallery to the outdoor sculpture court, or, if the two panels on the

opposing walls are pulled out, a four-square gallery with a central through-axis can be created. Barnes also designed temporary partitions which can be employed to cover the two central columns within the gallery, providing additional wall space. Mognaz has described the Marlborough as "one of the most flexible gallery spaces in New York City."<sup>196</sup> The original concept for the New York Marlborough Gallery, with its suggestion of the coexistence of a modern loft space with an inherent Beaux-Arts axial division of space, was preceded by the earlier Larsen Showroom, and would be taken up again by Barnes in the vaulted contemporary galleries of the Dallas Museum.

#### Wichita Art Museum

Barnes's next museum commission was a major expansion of the Wichita Art Museum. Initiated in 1975 and completed in 1977, the 100,000 square foot facility is notable for the simplicity and clarity of its unadorned geometric forms (fig. 118). As former Director Howard Wooden noted, "The design is so pure, simple and unpretentious. Rather than competing with the collections, it emphasizes their greatness."<sup>197</sup>

Barnes's expansion was perfectly symmetrical, its design engendered by his decision to retain the square core of architect Clarence Stein's 1935 art museum as the symbolic heart of the new, greatly enlarged facility (fig. 119).

Barnes undoubtedly appreciated the simple, unadorned geometry of the Stein structure. While the square core of the Stein building was essentially engulfed by the Barnes expansion, its presence and formal significance is suggested in the exterior massing, in which the third-story central square block containing mechanical services rises above the main gallery level.

Around the square center of the Stein building, Barnes rotated a larger square form at right angles, creating a square-within-a-square design. Eleven new galleries were located in the resulting triangular spaces. A similar spacial concept would be incorporated later in the Dallas Museum's Pre-Columbian exhibition galleries into which the rotated square form of the Gold Room was inserted. The new galleries in the Wichita Museum are interconnected to form a complete circuit of flowing space around the central Stein building. A walk through the galleries inevitably leads the visitor back to the starting point. Barnes, commenting on the Wichita Museum commission in a 1975 interview, revealed the intuitive manner in which he developed a "processional" through his gallery designs:

In a museum, flow is just as important as form. The architect has to create a way for the visitor to walk through, to enter one area from another almost without knowing it, to be enticed along from one area to another. [If] that is done, visitors won't get museum fatigue. And that means that when you're designing an art museum, you don't have nonsequitors or deadends.<sup>198</sup>

The galleries are partially top-lit by skylights. The skylights hug the base of the central square tower, at the point where its side walls meet the roof plane of the lower level block (fig. 118). In this manner, the skylights illuminate interior rather than perimeter gallery walls with daylight.

The entrance level of the Wichita Museum was exclusively devoted to galleries of "serene space," painted in off-white. As with other Barnes museum designs, the "active space" is physically separated from the galleries.<sup>199</sup> Areas for education and other staff work space are placed on the lower level.

Despite the formidable minimalist appearance of the exterior expanses of sheer brick-clad walls, Barnes included a very humane and essential feature in the lower level staff working areas--daylight. Daylight was introduced into offices and classrooms by a continuous strip of ribbon windows encircling the building. Although daylit working areas for staff are often an anomaly in the museum designs of Barnes's colleagues--particularly those who design with the concept of a museum as a "strong box"--Barnes did not allow his minimalist tendencies to overrule the interruption of a surface plane with windows.

Barnes, in fact, employed the office windows as a strong design feature. Corresponding to the continuous brick cladding of the museum, Barnes extended the smoked

glass in a continuous strip around the buildings' first floor. The windows thereby open up unobstructed views through the building, resulting in a visual effect in which the museum block appears to hover over the ground.<sup>200</sup> To emphasize this "floating" quality, Barnes undertook what was for him an unusual alteration of the site--he had the landscaping banked up beneath the window to cover the lower walls, leaving the transparent strip window as the visual base of the structure (fig. 118).

A characteristic Barnesian touch in the Wichita Art Museum was the full visual penetration of the structure, as already noted in the views he created through the strip windows and further exemplified by a dramatic vista through the entrance. This long vista extends through the main axis of the building, passing through the front doors, the original Stein Building core, the rear sculpture deck, and out to downtown Wichita.

#### Museum of New Mexico:

##### American Indian Arts Museum (project)

##### Renovation and Addition, Santa Fe Museum of Fine Arts

Barnes's unbuilt design, dating from 1979, for the American Indian Arts Museum in Santa Fe was unique for its symbolic representation of the cultures of the Pueblo and Navaho Indians. Barnes consulted with Indian activist and anthropologist Alfonso Ortiz, who emphasized the contrast in lifestyles and art of the relatively stable, introverted

Pueblos and the nomadic, transient existence of the Navahos. Barnes has described how these considerations affected his design for the museum space:

. . . the design concept was to have a round inward-looking Kiva-like room in the center with cases containing pots and Kachina dolls arranged on circular ramps--this was the Pueblo collection. We wrapped around this room an angular space with a series of galleries sometimes limited and sometimes expansive showing the history of Navaho art in chronological order. Thus, the Pueblo space was centripetal, and the Navaho space centrifugal, suggesting the static and dynamic nature of the two societies. . . . this museum, like Walker, . . . also involves flow; the way you move through the exhibits; the sense of transitional space. . . but, in addition, the spaces have symbolic meaning: they reflect the character of the subject matter.<sup>201</sup>

The resulting spiral design, as seen in a model, (fig. 120a, b) exerts the same strong directional flow as the looping circulation path of the Scaife Gallery, but in a totally new form. This design is also reminiscent of the spiral of the WVIP Radio Station (1958).

Barnes's plans for the Indian Arts Museum never reached the construction stage, and were eventually abandoned when the Museum found another site. However, Barnes also worked on various schemes for additions to the Museum of New Mexico's Museum of Fine Arts during the 1970s, one of which was completed in 1985. During this period, the original 1917 building was renovated under the supervision of associated architect Antoine Predock.

Barnes's design options for the addition were severely restricted by the city's Historic Styles Committee and Santa

Fe building codes, whose primary concern is the preservation of the city's Southwestern mission-style architecture. Barnes's 13,000 square foot addition, consisting of new galleries and art storage space, so modestly integrates itself with the older structure that it has been described as "architecture reduced to a barely audible whisper."<sup>202</sup>

The galleries' dark, integral-color concrete floor and wooden-beamed ceiling, features contrary to Barnes's more usual all-white palette, were included to relate the addition to the more traditional areas of the museum.<sup>203</sup> More typically Barnesian touches are the white gallery walls and the simple cubic volume of the stucco addition. A breakaway wall included in the gallery addition allows for future expansion.<sup>204</sup> Barnes's master plan for gallery expansion calls for the linkage of two additional rooms to create a four-gallery "pinwheel".<sup>205</sup>

#### Asia Society Gallery

Whitney Branch Museum, Equitable Center

Barnes's two most recent designs for museum space in New York City are parts of a larger composition in which rooms for art display are combined in the same building with office spaces and other facilities. The spaces for art display in each are quite different.

One of these designs is the museum for the Asia Society, completed in 1981, which houses the Asian art collection of John D. Rockefeller III. The building also

contains offices, conference and reception rooms for the Society. The striking introduction to the Asia Society art galleries is a two-story rectangular entrance lobby which culminates in a barrel-vaulted ceiling (fig. 99). The barrel vault forms a curved backdrop to the sculpture displayed on the second-floor balcony. That this second-level gallery is the precursor of several concepts used in the Dallas Museum is not surprising, considering that the Asia Society building was under design shortly before Barnes accepted the Dallas Museum commission.

The cantilevered balcony projects in a half-moon shape from the second-level gallery, and is flanked to the right by a staircase leading down to the first level. It is the obvious predecessor of the cantilevered curved balconies and staircases which are a focal point in the Dallas Museum's concourse. If one also recalls the cantilevered staircase in the Scaife Gallery, it can be observed that Barnes concentrates these architectural flourishes in the circulation areas leading to the galleries, rather than placing them in competition with the art.

The Asia Society's vault defines the gallery space below with its seamless curve, which has been described as creating a "mystical sense of uncertain depth."<sup>206</sup> The vaulted gallery space would be repeated on a larger scale in the Dallas Museum of Art. The light quality in the Asia Society's vaulted gallery is much more subdued than its

Dallas counterpart. This is the result of the sand color of the interior walls which lacks the luminosity of the white interiors of the Dallas Museum galleries.

Two other galleries are included in the Asia Society building--one on the ground level for temporary exhibitions and another on the interior of the second level for display of the permanent collection of the Rockefeller's Asian ceramics. All of the galleries in the Asia Society building are distinguished by an intimate, insular atmosphere quite removed from the bustling city outside on Park Avenue and East 70th Street.

This insularity is in marked contrast with Barnes's other recent New York museum design--the branch galleries of the Whitney Museum in the Equitable Center's Tower West Building. Barnes has been credited with bringing about the collaboration between his client, the Equitable Life Assurance Society, and the Whitney trustees, who have been pursuing a policy of expanding the museum's audience base through the establishment of branch museums.<sup>207</sup>

The galleries which Barnes designed for the Whitney collection in the Equitable Center are unlike any he had designed previously. The total gallery space located on the ground level is divided into two sections, one on either side of the Equitable's immense entrance lobby. In contrast to this expansive space, the galleries are small and intimate, and subdivided by interior walls and partitions

(fig. 121a). The most notable feature of the galleries is that their exterior walls are sheathed in glass and are completely open to the view of passersby on the street. This aspect of the design is unique for a Barnes gallery and was imposed on the architect by New York City zoning regulations, which stipulated that buildings downtown must have windows at street level.<sup>208</sup> No other gallery designs by Barnes approach the Whitney's Equitable Branch in terms of openness to the street, although the Marlborough Gallery, also in New York, gives glimpses of the cityscape outside. The Walker Art Center and the Dallas Museum also contain single windows positioned in upper floor levels offering long views of their sites.

The effect of the open glass walls on the visitor's perception of the gallery space is quite remarkable: instead of having a blank background for art, much of the sculpture collection, for example, is set against the ever-changing activity of the street. While this effect can be distracting for serious art contemplation, it frequently enlivens the viewing experience as pedestrians passing by on the street stop to peer into the gallery. One of the most successful artworks which actually seems to entice passersby into the gallery is one of Duane Hansen's life-like creations, which attracts a continual parade of on-lookers, both inside and outside the gallery (fig. 121b).

Although the glass-walled galleries of the Equitable Center are a seemingly radical departure from the architect's usually sequestered museum settings, Barnes obviously relishes the dissolution of barriers between the street and the interior space. He remarked, "there is an absolutely direct connection" between observers indoors and outdoors.<sup>209</sup> The indoor/outdoor visual continuity is, in fact, much more typical of the architect's other design work, particularly his residential commissions.

It is interesting to note the versatility of Barnes's approach when faced with an unusual programmatic restriction. In his commission for the Whitney Branch Museum galleries at Equitable Center, Barnes was freed by the New York City ordinances from the constraints of a more restrictive gallery design approach based primarily on satisfying conservation concerns. While the glass-enclosed galleries do impose a limitation on the type of artwork displayed within,<sup>210</sup> In the visual openness of the Whitney Galleries to the street, Barnes has fulfilled the basic purpose of the branch museum concept: making the artwork more accessible to the public.

Within the galleries, Barnes designed what are, for him, unusually decorative doorways leading from one room to another. These door openings are marked at the top by the same half-moon cutout arched form that appears on the facade of the Equitable Center's tower--the arched window which

signals the presence of the interior vault of the top floor's conference room (figs. 95, 121a). This semi-circular form, which is obviously one of Barnes's favorite formal motifs of the eighties, is further echoed in the commissioned site work by artist Scott Burton, which is located in the center of the Equitable's lobby.

Burton has described his sitework in the Equitable Center as "the highlight of my career."<sup>211</sup> Barnes collaborated with other artists commissioned to design works for the Equitable; among them were Roy Lichtenstein, and Sol Lewitt. Unlike the more typically neutral spaces designed by Barnes for art display, the commissioned works were installed in the lobby and pedestrian corridors whose interiors are distinguished by a strong grid pattern formed by complementary colors of granite and marble. Most of the artists' works are strong enough in scale and concept to hold their own in this elegantly detailed environment. The exception is the Lewitt, which although immense in size, is too minimal to make an strong impact in its setting. Barnes also oversaw the installation in one of the building's corridors of the America Today murals by Thomas Hart Benton purchased and restored by the Equitable Life Assurance Society.<sup>212</sup>

#### Fort Lauderdale Museum of Art

Barnes drew up at least two quite different designs for the Fort Lauderdale Museum of Art, in response to two

different sites. Barnes's design for the galleries in the first site proposal dating from 1978-1979 is significant, for it clearly suggests the concurrent ideas affecting both the design of the Dallas Museum of Art and the Florida museum. The 1978-1979 Fort Lauderdale Museum project exhibited a strongly centrifugal composition, in which the gallery spaces radiated in pinwheel fashion around a large central courtyard (fig. 122). Curvilinear forms were circumscribed within two square wings of the museum, and a curved facade defined the auditorium wing. This design, although promising, was abandoned when the intended site had to be changed because of a legal technicality affecting the financing of the facility.<sup>213</sup>

Ultimately, the urban setting of Fort Lauderdale's Museum was dictated, as that of the Dallas Museum would be, by the desire of city planners to stimulate development in a depressed area downtown. An early proposal for the current site included a high-rise office tower and a shopping center combined with the museum, but these commercial concerns were ultimately separated from the museum commission and designed by another architect.<sup>214</sup> When the commercial tower and shopping center were deleted from the project, Barnes elected to design the museum so that it could "stand alone," while at the same time providing a "gateway" in the form of a breezeway to the commercial property to the rear of the

museum.<sup>215</sup> He has described the factors affecting the shape of the building:

The back and sides of the museum are orthogonal to align with the general street pattern. But the front, facing the arc of Las Olas, is designed in sweeping curves, convex and concave. Indeed, the whole composition, inside and out, is a play of convex and concave curves, always set off against the severe rectangular frame of the back of the property.<sup>216</sup>

The museum's rosy white stucco exteriors, white interior walls and terrazzo floors echo the light tonalities found in many of Barnes's commissions of the eighties, such as the Dallas Museum of Art and his Dallas Residence. The gently-curving arcs of the museum's front facade make it a unique form, but related to other recent Barnes designs in which semi-circular forms are prominently featured (fig. 123). Not since Barnes's Ford Foundation Theater project (1961), however, have curvilinear volumes been incorporated so effectively in his building design.

The gently-graduated interior curve of one of the primary interior gallery walls is unique for a Barnes gallery design (fig. 124). The opposing wall answers the curved form with strong rectangular gallery spaces. Unlike the first floor plan, which combines gallery and support services, the upper level is exclusively utilized as gallery space. The space is articulated solely by the supporting columns and the play between curved and rectangular space. The exposure of the columns is also unique to the design.

The Fort Lauderdale Museum of Art is a strong expression of the increasingly romantic nature of Barnes's designs of the eighties. Just as Frank Lloyd Wright in his mature work of the 1960s produced the curvilinear forms of the Guggenheim Museum in New York and the Johnson Wax Building in Racine, Wisconsin, Barnes, too, seems to be entering an increasingly romantic design phase in his work of the 1980s, as he explores different aspects of curved volumes and motifs.

Several of Barnes's recently-proposed museum buildings and related structures also reveal his continuing acceptance of classical design concepts into his personal design vocabulary. In several, either symmetry or a tripartite division of space orders the plan. These designs include: the Georgia Museum of Art, the Knoxville Museum of Art, the Hyde Collection, the Katonah Gallery, and the Minneapolis Sculpture Garden.

#### Georgia Museum of Art

The Georgia Museum of Art, a project initiated in 1978, is one of the most highly-developed of Barnes's podium design schemes. The classical inspiration for the plan derives from the site itself, and is, for Barnes, one of his most frankly allusive designs. The architect explains: "the museum, sited on a hill overlooking the University campus and the city of Athens, recalls an acropolis."<sup>217</sup> Richard Schneiderman, the former director of the Georgia Museum,

stated "If you saw the little hill it's on, you would know [the design] was absolutely appropriate, it's such a site-specific creation."<sup>218</sup>

The podium base of the complex assumes a greater visual and organizational significance in the Georgia Museum design (fig. 125). Rather than just being utilized as a simple platform, the podium serves a double purpose--its triangular form encloses a block of exhibition galleries, and its roof forms a platform for sculpture display. Placed atop the podium are several seemingly separate structures.

One of these is a simple block tower which functions as a monumental gateway, connected by a pedestrian bridge crossing above the street to the heart of the old campus. Barnes seems to employ the "gateway" form as a symbolic and functional announcement of the entrance to his more complex designs. It appeared in his addition to the Spring Hill Conference Center (1983, fig. 49b), and now figures in plans for the 1990 addition to the Dallas Museum of Art.

A second approach to the museum links it to to the city of Athens. As a formal entrance from street level, Barnes created a series of terraced steps and ramps shaded by a grove of trees, which lead the visitor up to the museum's main entrance. Schneiderman recalled that the design was composed to relate to the university campus and to downtown Athens:

We wanted the building to approach those constituents in two ways--one from the downtown side, one from the university, then kind of focus them into the museum.<sup>219</sup>

The other dominant structure on the podium is a rectangular block pavilion which contains a lecture hall, administrative offices, a member's room, and a small cafe at the entrance level. The second and third levels of the pavilion are set back from the lower block and contain the library, print collection, and administrative offices. The base of the tower is devoted to art handling and storage facilities, conveniently located adjacent to the gallery space which primarily composes this lower level. The tower features a dramatic arched porch at the second level, accessed by a stepped ramp leading up to a slit opening in a side wall of the porch. The main entrance is on the level below the porch. The gateway tower is also pierced by a slit window, and a semi-circular open doorway.

These stark shapes, carved out of the block forms, recall similar design elements in the Dallas Museum and Asia Society buildings, both slightly earlier in date. Yet the arched forms represent more than preferred Barnesian motifs, as Schneiderman notes, for the logo of the University of Georgia was composed of two arches. Apparently the large arch of the main entrance was not intended to correspond to a vaulted space within. While the interiors had not been completely resolved during the design process, Schneiderman recalled that Barnes resisted the idea of a vault

incorporated within the structure.<sup>220</sup> While the gateway and pavilion appear as free-standing structures on the podium base, the office/auditorium pavilion connects spatially at the gallery level underground, further relating the plan to Barnes's tower concept in which the separate tower forms are connected at a lower level.

One other form on the podium is a pyramidal skylight canopy elevated on four round columns above a square courtyard set within the lower gallery level. This courtyard functions in much the same way as the Dallas Museum courtyards, allowing daylight to enter a portion of the galleries. In this section of the gallery, two windows are also placed to give exterior views of the university campus to orient the visitor.

The basically triangular shape of the podium leads to the creation of a varied gallery shapes within (fig. 126). The gallery plan appears to be a synthesis of concepts utilized in the Scaife Gallery and the Dallas Museum of Art. After descending the staircase from the entrance level, the visitor is channeled through interlocked U-shaped galleries and passes into open space which pinwheels around the courtyard. The first series of galleries are separated from the daylight areas with screen walls, creating spaces for more light-sensitive works. The courtyard gallery leads to the last gallery containing a central panel for the display of a

prominent work from the collection. Richard Schneiderman related his enthusiasm for the Barnes plan:

To me, what was so wonderful about it--it wasn't pretentious, it wasn't something that you felt too grand for a university--but it worked. And it had an elegance, it had a certain charm about how the galleries were going to work. . . . Most of the paintings that Georgia [Museum] had . . . needed to be in intimate spaces. Ed was very, very conscious of that. . . . I think the spaces would have been wonderful with that light-filled atrium and the galleries rotating around that space. [The visitor] would have evolved through many different spaces.<sup>221</sup>

The cladding of the museum's exterior had not been conclusively determined, and was dependent on the success of the museum fund-raising. Schneiderman recalled that the consensus of the Board of Trustees was for Indiana limestone, although several Georgian marbles were also under consideration. The Board wished to avoid using brick for the exterior.<sup>222</sup>

Related to Barnes's body of museum designs, yet uniquely set apart by its dominant podium base and symbolic presence, the Georgia Museum of Art promised to be an outstanding addition to Barnes's oeuvre. Overall, the proposed design would create over 70,000 square feet in the new museum, triple that of the existing facility, with 20,000 square feet allocated to art display. Unfortunately, the construction of the Georgia Museum is currently in limbo. Private fund-raising was nearly completed under Schneiderman's tenure, and matching funding by the state legislature seemed certain, but an onset of administrative

changes and internal university politics temporarily stalled the project. Former Georgia Museum Director Richard Schneiderman is now Director of the North Carolina Museum of Art, and a succession of administrators have presided over the university in recent years. However, the new Director of the Georgia Museum, Jane Bledsoe, has stated her commitment to the Barnes design.<sup>223</sup> It remains to be seen whether the Barnes plan will be implemented. If it were, the new museum would assuredly represent a prestigious addition to the campus.

#### The Hyde Collection

Another recent classically-derived design is a new building to house the Hyde Collection in Glen Falls, New York (projected completion 1989). Flanked by two older structures with tripartite divisions in their facades, Barnes's symmetrical structure echoes these tripartite forms in its central skylit room with two flanking galleries (fig. 127). The side galleries are linked on the sloping site to the two existing houses with connecting ramped passageways, recalling the spine concourse of the Dallas Museum. A large room in the rear of the new building is punctuated with triangular windows also similar in form to the Triangle Terrace of the Dallas Museum. The lower level of the new structure will house the service area, an auditorium, and an art studio. Barnes characterizes the circulation concept in this way:

The circulation is classical; right and left through side galleries to the old house, or straight ahead to the main exhibition space, a 14 foot-high loft area with windows at each end looking back towards the two houses.<sup>224</sup>

#### Knoxville Museum of Art

Another tripartite museum design scheme is seen in Barnes's plan for the Knoxville Museum of Art (projected completion 1989).<sup>225</sup> This three-part division is apparent in the site planning as well as the museum itself (fig. 128). This museum, like the Georgia Museum of Art, will stand on a bluff. The site is not perfectly rectangular, but the museum is placed in the center, flanked by two courtyards. One of these is designated for education and experimental displays, the other will be a sculpture garden.

Of the plan, Barnes notes, "As in the Wichita Museum, the plan is zoned--quiet serene museum spaces above, and a community center below."<sup>226</sup> The three-level museum contains its public activity/service functions on the lowest of these levels, opening off great hall which overlooks the city of Knoxville. The entrance lobby on the middle level is flanked by permanent exhibition spaces and an orientation room. The upper floor, which reiterates the tripartite divisions of the site plan, is composed of two oblong loft spaces flanking an upper lobby and outdoor sculpture deck.

The total square footage of the Knoxville Museum is 53,200, including 12,000 square feet of exhibition space.

The museum is faced with pink Tennessee marble and is characterized by the simple expression of the symmetrical masses. The facade is unadorned save for the pattern of the stone blocks, and the drama of the tall glass windows framing each entrance (fig. 129).

#### The Armand Hammer Museum and Cultural Center

A surprise decision by Dr. Armand Hammer regarding the disposition of his substantial art collection led to Barnes's most recent museum commission. Hammer announced in January 1988 that rather than leaving his collection to the Los Angeles County Museum of Art, as he originally intended, he would instead build a private art museum in the Westwood area of Los Angeles.<sup>227</sup> Bordered by Wilshire Boulevard, Westwood Boulevard, Lindbrook Drive, and Glendon Avenue, the museum's site is dominated by the high-rise Kirkeby Building, the headquarters of Hammer's Occidental Petroleum Company.

Barnes's design for the thirty-million-dollar Armand Hammer Museum of Art and Cultural Center is a low, rectangular two-story building which forms a complementary horizontal mass extending from the base of the Kirkeby Building's rectangular office block. As in so many of Barnes's museums, work areas are isolated from gallery spaces. The first level of the museum is devoted to housing offices, a library, a study center, a book shop and a 250-seat auditorium, and the second floor will contain the art

galleries. Beneath the 79,000-square-foot museum will be five levels of underground parking.<sup>228</sup>

Several Barnesian details are apparent in the model.<sup>229</sup> A spread-arched, half-moon shape marks the entrance on the Lindbrook Drive facade. This form is reminiscent of aspects of Asia Society and the Georgia Museum of Art, but particularly evokes a preliminary stage of design for the facade of the Dallas Museum of Art. The Hammer Museum will also contain a large interior courtyard, a feature shared by the Dallas Museum, the Georgia Museum and a preliminary design for the Fort Lauderdale Museum of Art. However, Barnes notes that the courtyard was Dr. Hammer's idea, and that Hammer further specified that the courtyard had to be covered so that it could be used for receptions. The canopy has proven to be problematical due to the large size of the courtyard, and while the model illustrates twin counterpoised pitched roof monitors to serve this purpose, Barnes indicates that this aspect of the design is still under consideration.<sup>230</sup>

#### Indianapolis Museum of Art

In July 1986, Barnes was appointed architect of the Indianapolis Museum of Art's new Mary Fendrich Hulman Pavilion. Barnes would also later undertake the renovation of the Krannert and Clowes Pavilions. Construction commenced on the new Hulman Pavilion in September 1988 and

the opening is projected for September 1990. All the renovations should be completed by November 1990.<sup>231</sup>

In the rendering of the entrance elevation of the Indianapolis Museum of Art complex, the new Hulman Pavilion appears to the left of the central Krannert Pavilion, which is flanked on the right by the Showalter Pavilion (fig. 130). The Krannert Pavilion retains preeminence as the centermost and tallest of the structures, even as the Hulman Pavilion discreetly steps up one level above the Showalter Pavilion. The Hulman Pavilion is also set forward to align with the facade of the Showalter Pavilion, forming a classic entrance court, appropriate for the Neo-classical Modernism of the Krannert Pavilion. Barnes's design for the Hulman Pavilion also repeats the fenestration of the Showalter Pavilion, in the off-center positioning of the two large windows which are apparent on the facade.

The sleek restraint of the new Barnes wing allows it to blend easily with the overall Modernism of the museum complex. Encased in pale Indiana limestone, the facade is punctuated only by the two gallery windows previously mentioned, a series of smaller vertical windows which illuminate the office level, and vertical triangular notch which extends from the base to the crown of the pavilion. The gallery windows feature crossed mullions, a Barraganesque detail employed in Barnes's Dallas commissions, and serve the purpose of providing a visual

break for gallery visitors. The vertical notch in the facade, which also contains a narrow window slit, serves to delineate the service stairwells from the main gallery block. The two stairwells are projected out from the body of the gallery to maximize floor space in a manner similar to the Walker Art Center and the Dallas Museum of Art.

The interiors of the two gallery levels within the Hulman Pavilion are very simple, basically square rooms save for the insertion of a service elevator. The plaza level gallery has two exposed supporting columns in the center, and the second floor gallery features a central square partition rotated within the square room (fig. 131), again reiterating a theme in the Dallas Museum and the earlier Wichita Museum. One of the overall objectives of the architects in the renovation of all the pavilions was to provide "continuous traffic patterns through the galleries for chronological and cultural continuity in exhibition of the permanent collections."<sup>232</sup>

Barnes's firm also completed a small addition to the Crocker Art Museum in Sacramento, California, in 1986. Two other museum designs the Barnes firm currently has underway are the Katonah Gallery in Katonah, New York (fig. 132), and the Birmingham Museum of Art, Birmingham, Alabama. Both institutions are engaged in fund-raising and projected completion dates are uncertain at this writing.<sup>233</sup>

### Minneapolis Sculpture Garden

Barnes's career of museum design, which began with the Walker Art Center, has been brought full-circle by his recent design for the Walker Art Center's new sculpture garden, opened to the public in September 1988. A joint project of the Walker Art Center and the Minneapolis Park and Recreation Board, the 7.5-acre garden is one of the largest of its kind in the nation.<sup>234</sup> In addition to featuring permanent and rotating exhibitions of sculpture, the new Sage and John Cowles Conservatory, also located on the 7.5-acre site, will have year-round horticultural displays.

The central parti of Barnes's garden plan is a cross-axis that creates four equal courts (fig. 133). These are balanced to the south by the blocks of the Walker and the Gurthrie Theater, and to the north by an open, rectangular meadow. The axes are wide allees of compacted crushed limestone, lined with linden trees. The east-west allee is terminated on the west by the new conservatory (fig. 134b), and on the east by an apse that forms a classical sculpture niche, recalling the apsidal niche in the Dallas Museum's sculpture garden.

The formal garden plan resulted not so much from a desire for symmetry, but, as Barnes relates, from the need for "something to rivet the axis of the lobby."<sup>235</sup> Therefore, the strong north-south axis was drawn

perpendicular to the Walker-Guthrie blocks. "Once you have a line like that, you find yourself into the whole system of axial planning. And I felt the need of a strong axis and a strong connection to cross on that line."<sup>236</sup> The cross-axial plan strongly relates the garden plan to the axial concepts that shaped the site plan of the Dallas Museum.

As in other Barnes designs, there is a synthesis of historical precedent in the initial concept for the garden. The four one-hundred-foot-square grass courtyards, are each framed by double-walled stone planters containing arborvitae (fig. 134a, b). These plantings are still immature but in a few years' time will be clipped to resemble the crisp box hedges that outline traditional European parterre gardens. 17th-century illustrations of the gardens of the Villa Medici present a striking parallel to the Walker's garden plan, particularly in its combination of box parterres with long rows of trees along the allees (fig. 135). Barnes's inspiration for these "roofless rooms" came from his visits to the Boboli Gardens in Florence (fig. 136), where he observed that

the different rooms in these gardens are completely cut off from each other by the height of the hedges. So I came back and talked to Martin [Friedman] about making rooms, and putting in the trees, so that in ten years, they would be really private rooms.<sup>237</sup>

To achieve this privacy, the arborvitae hedges surrounding the grass courts may be allowed to grow to a height of fifteen feet, forming salles de verdure, or "green rooms."

Yet the outdoor courts are otherwise unembellished, allowing the minimal architecture of the Walker to deeply extend itself into the garden. The analogy to the Walker design is continued by the carefully planned openings in the court's hedges to frame views of sculptures within, an effect not unlike Barnes's placement of wide doorways between the Walker's galleries to give glimpses of the next floor.

The Minneapolis sculpture garden represents the fruition of a twenty-five year partnership between Walker Director Martin Friedman and Edward Barnes. Barnes's garden design provides a graceful synthesis of the rich history of European formal gardens with his modern approach to the outdoor setting as a understated foil for the display of sculpture.

#### Edward Barnes: Career Summary

Barnes's career development spans forty years of architectural design. His early training at Harvard emphasized clarity and functionality, and these concepts have always remained present in his approach. Initially, he felt strongly influenced by Breuer, and Breuer's notion of bi-nuclear functionalism remained prevalent in Barnes's house designs for many years. Private houses formed the core of the first decade of his practice, and his willingness to accommodate more than a strictly orthodox Modernist approach can be seen in his symmetrical plans for the Osborn House and the Barnes House. His early house

designs, including both the platform houses and the woodland houses, grew increasingly complex as extended wings interlocked the houses with their sites, forming exterior courtyards to complement interior space. The concept of the platform dominates, and especially the early houses are developed only at one horizontal level that rides above the site.

Following his visit to Mykonos in the late 1950s, Barnes made an emphatic break with Breuer's multiplicity of design elements, and adapted the village vernacular concepts he had observed, disciplining them with rigorous geometry. He began approaching his designs in the 1960s with a heightened simplicity, reducing the expression of interior and exterior walls to continuous expanses of single materials. The forms of his buildings grew increasingly simple and boldly geometric, evoking the prime forms of Le Corbusier. Yet Barnes also extracted from village architecture the concept of contextual design in buildings that related to their surroundings and gracefully accommodated their sites. The Haystack School of Arts and Crafts and St. Paul's School were the most notable early examples of Barnes's new approach. Barnes's designs grew increasingly reductive in the 1960s, when his greatly-expanded firm undertook numerous academic projects. This period culminated in the monumental severity of the Purchase campus and the minimalist sculptural form of the Walker Art Center.

It appeared that for large structures, Barnes first considered following the path of Breuer's expressionist architecture of heavily-shadowed concrete forms. This leaning is reflected in his designs for the El Monte Apartment complex, the Princeton Administration Building, and the initial design for the New England Merchants National Bank. However, in his revised plan for the bank, he expressed instead a highly-refined Late Modern concept of the thin-skinned tower as a taut technological membrane. His subsequent office designs were characterized by this approach, coupled with an increasingly complex shaping of the volume of the building, and in several, an almost decorative treatment of the exterior cladding.

Barnes's later development of house design continued to express his functional concerns in the physical separation of private and public areas. In contrast to the long horizontal wings of the Cowles House, the Hilltop House grew vertically, its spacial development expressed in distinct towers. In addition, the Hilltop House and Barnes's later house in Dallas fully meld with their pitched sites, containing entrances and outdoor courts at different levels.

Barnes has observed and synthesized many influences throughout a long career and has arrived at an approach to site and program that is uniquely his own. Peter Papademetriou has enumerated the significant elements of Barnes's career commissions:

These include as their principal features a purity of form disciplined with a clarity of geometry, a refinement of principles derived from the visual elements of orthodox Modernism, a precision of detailing emphasized by an articulation of planar surfaces, and visual richness from the inherent quality of materials selected and their finishes. There is, in other words, subscription to the ideas that unite all aspects of the design into an integrated whole, with nothing "applied"; hence the purity, simplicity, quiet elegance and integrity that are the perceived qualities of Barnes's work.<sup>238</sup>

The Dallas Residence was cited by the AIA honor awards jury as "a thoroughly romantic architectural vision, functioning within the Modernist vocabulary while borrowing significantly from the traditions of Southwestern architecture."<sup>239</sup> This observation citing Barnes's synthesis of romanticism with a Modernist vocabulary is a telling one, as it is Barnes's romantic realization of the simple beauty inherent in classic Modern forms which sets his interpretation of Late Modernism apart from his contemporaries. This romanticism has gradually become more prominently expressed, particularly in the curvilinear forms which Barnes has employed with increasing frequency in recent projects. These curvilinear forms are for the most part used sparingly and unobtrusively, with the most dramatic exception being the sweeping curved entrance facade of the Fort Lauderdale Museum and the vaulted Great Hall of the Dallas Museum. An inevitable comparison to this development are the late career works of Frank Lloyd Wright, in which a lyrical romanticism predominates in circular

design motifs. Barnes's underlying tendency toward romanticism has long been apparent, evident in the early woodland houses dating from 1957, but his latest works suggest a more predominant expression may be emerging.

The other aspect of Barnes's design which sets it apart from post-modernism is his ability to synthesize historical influences, rather than offer direct quotes or parodies of previous architectural forms. In this, he has not abandoned Modernist principles of design. Rather, Barnes has sought to create new compositions by selecting and assimilating the best design principles of the early masters and other historical sources into his ascetic expression of pure, elemental forms.

Barnes was one of the first of his generation to act as a leading proponent of contextual design. His designs have long been influenced by his desire to relate his buildings to local materials and forms, and further to vernacular forms characteristic of a particular region of the country. Barnes's influence has been exercised not only through the example of his body of well-published work, but also through his contact with young emerging architects who worked in his office for a time, then went on to put contextual ideas into practice as they established their own firms. For this reason, Barnes has often been described as the dean of the "Grays," an appellation used to distinguish this group of architects who were concerned with architecture as an

integral part of society, from the "Whites," who viewed their work as idiosyncratic, intellectual design removed from any vernacular association.<sup>240</sup>

Prior to the Dallas commission, Barnes had completed the Walker Art Center, the Scaife Gallery of the Carnegie Institute, and the Wichita Art Museum. The Asia Society galleries and offices were underway. Barnes's basic concepts for museum design had evolved through these commissions: the white room utilized as a "light sandwich," thoughtful attention to free-flowing circulation ("flow is as important as form"), perimeter daylighting deployed through light coves, minimal detailing within the galleries, and open visual flow aided by continuous materials and wall surfaces.

Barnes's characteristic design solutions and principles expressed in other previously completed work would come into play in the Dallas Museum design. For example, the influence of the courtyards and lighting effects of the Neiman-Marcus Department Store has already been noted. The modular composition of the Chicago Botanic Garden and the Crown Center Office Complex would be drawn upon, as well as Crown Center's and Neiman Marcus's graceful site accommodation. Barnes's experience in master planning would be a major asset to the Dallas Museum Trustees as they dealt with the issues of neighborhood planning which entered in the museum's role as catalyst in the proposed Arts District.

Papademetriou suggests that the selection of Barnes as an architect for the new Dallas Museum was a deliberate commitment by the trustees to his "ascetic sensibility" and "an implicit attitude of sobriety and decorum," and further underlines that this choice was an indicator of the aesthetic tastes of the Dallas community.<sup>241</sup> As noted by the author in Chapter III, the Dallas Museum Trustees confirmed that they desired the museum to have a dignified, elegant presence on the Dallas arts scene. Barnes's previous commissions inspired confidence that he would create a building of refined austerity which would serve as a commanding symbol of Dallas' cultural aspirations, yet also serve the art it was built to house. The same deliberate approach which had guided the preliminary planning and architect selection was continued as the design process for the new Dallas Museum of Art was commenced.

## NOTES FOR CHAPTER II

<sup>1</sup>See Edward L. Barnes, "Country House Has Spacious Wings Planned Around Compact Circulation Core," Architectural Forum 94, (June 1951): 180-184.

<sup>2</sup>See "Barnes Given Louis Sullivan Award by Brick Industry," AIA Journal 68 (June 1979): 25, and Cervin Robinson, "Profile of the Winner of the 1980 Firm Award," AIA Journal 69 (April 1980): 62-71.

<sup>3</sup>See Appendix H for complete listing of Barnes's awards, honors and professional appointments.

<sup>4</sup>See Carter Wiseman, "Architecture's Master of the Middle Way," Saturday Review 8, (November 1981): 24. See also biography in The Architecture of Edward Larrabee Barnes: A Retrospective, n.p., an exhibition catalogue in scroll form documenting a retrospective of Barnes's career shown at the Carnegie Institute's Scaife Gallery in October 1974. Catalogue designed by Massimo Vignelli and printed by Kenner Printing Company, 1974. The author thanks Nancy Noyes, Administrative Secretary, Carnegie Museum of Art, and Eugenie Devine, Archivist, Edward Larrabee Barnes Associates, for information on this exhibition and catalogue. Copies of the catalogue are in the archives of Edward Larrabee Barnes Associates and the Barnes artist file in the library of the Walker Art Center.

<sup>5</sup>Edward L. Barnes, "Remarks on Continuity and Change," Perspecta, The Yale Architectural Journal 9/10, (1965): 292.

<sup>6</sup>Herdeg incorrectly indicates that Barnes earned only a Bachelor of Architecture degree during his student tenure of 1939-1942 at Harvard University. See Klaus Herdeg, The Decorated Diagram, (Cambridge: The MIT Press, 1983), 4. Barnes received a B.A. degree in architectural history from Harvard in 1938. From 1939 to 1942, Barnes was enrolled in Harvard's Graduate School of Design, graduating in 1942 with a Master of Architecture degree.

<sup>7</sup>Masahiro Horiuchi, "Space Music Composed by Geometrical Forms," Space Design 250 (July 1985), 89. This article is a transcription of an interview by Masahiro Horiuchi with Edward L. Barnes.

<sup>8</sup>Barnes, "Remarks on Continuity and Change," 292.

<sup>9</sup>Horiuchi, "Space Music," 89.

<sup>10</sup>Barnes's research was published in his article, "Defense Housing," Task: A Magazine for Architects and Planners 1, no. 2 (1941): 11-13.

<sup>11</sup>See "House in a Factory," Arts & Architecture 64 (September 1947): 31-34.

<sup>12</sup>See biography in The Architecture of Edward Larrabee Barnes: A Retrospective, n.p.

<sup>13</sup>Robinson, "The 1980 Firm Award," 63.

<sup>14</sup>Paul Heyer, Architects on Architecture: New Directions in America (New York: Walker and Company, 1966), 329. In discussing his first house commission for Whitelaw Reid, Barnes noted, "In its development, the discipline I received at Harvard under Gropius and Breuer proved invaluable." See Barnes, "Country House," 182.

<sup>15</sup>Horiuchi has compared the Reid House to Breuer's Robinson House dating from approximately the same period. In contrast to Breuer's free organization of the Robinson House, Horiuchi notes that the Barnes plan was more disciplined in its firm outline and use of the primary geometry of rectangle and square for its design elements. See Horiuchi, "Architecture of Continuity," Space Design 250 (July 1985): 7. For illustration of typical Breuer house design, see Greico House, Andover, Mass. (1956), in The Second Treasury of Contemporary Houses (New York: McGraw-Hill, 1959), 72-75.

<sup>16</sup>Barnes, "Country House," 181.

<sup>17</sup>Heyer, Architects on Architecture, 326.

<sup>18</sup>Edward Larrabee Barnes, "Platform Houses," Architectural Record 120 (October 1956): 208.

<sup>19</sup>Ibid, 205.

<sup>20</sup>Horiuchi, "Space Music," 89.

<sup>21</sup>Barnes, "Platform Houses," 207.

<sup>22</sup>Horiuchi, "Space Music," 89.

<sup>23</sup>Edward L. Barnes, interview by author, 10 September 1988, Minneapolis, Minnesota, tape recording.

<sup>24</sup>Barnes, "Platform Houses," 212.

<sup>25</sup>Ibid., 205.

<sup>26</sup>A. James Speyer, Mies van der Rohe (Chicago: The Art Institute of Chicago, 1968). See catalogue entry by Frederick Koeper, 50.

<sup>27</sup>"Flat Roof Unifies Large and Complex Plan," House and Home 7 (June 1955): 119.

<sup>28</sup>The interlocking of interior/exterior space is apparent in Antonia Mulas' photography of the Osborn House. The alignment of glazed wall openings allow views right through the house. Looking out onto a court from within the house, "one feels that one could almost reach out and touch the gnarled trunk of one of the trees . . ." From "Less is more: 1950, Salisbury, Connecticut," Abitare no. 245 (June 1986): 110. See Mulas' photographs p. 110, 111.

<sup>29</sup>Barnes, "Platform Houses," 206. See also the publication of the Edward Barnes House as one of the Architectural Record houses of 1957, in "A Country House on a Platform," Architectural Record 121 (Mid-May 1957): 140-143.

<sup>30</sup>Barnes would observe later that the Osborn House was the best of the platform houses. See Horiuchi, "Space Music," 89.

<sup>31</sup>The second episode of woodland buildings was defined by Heyer in Architects on Architecture, 326. Other woodland camps designed by Barnes were the Henry Kauffman Campground in Wyandanch, Long Island, New York (1961), and the Wye Institute, Cheston-on-Wye, Maryland (1968). Several typical camp structures are illustrated in "A Romantic Discipline for the Woodlands," Architectural Record 125 (January 1959): 146.

<sup>32</sup>"A Romantic Discipline for the Woodlands," 146.

<sup>33</sup>Ibid., 145.

<sup>34</sup>Ibid., 141.

<sup>35</sup>The best visual documentation of the Straus House is the photography of [Antonia Mulas] published in "Less is more: 1957, Pound Ridge, New York," Abitare 245 (June 1986): 112-119. See also "An Elegant Cabin," Architectural Forum 110 (March 1959): 136-141. The Miller House is profiled in "A Romantic Discipline for the Woodlands," 141-145.

<sup>36</sup>Barnes, "Remarks on Continuity and Change," 292-293.

- 37 Ibid., 293, 294.
- 38 Horiuchi, "Space Music," 89.
- 39 Ibid., 89.
- 40 Barnes, "Remarks on Continuity and Change," 293, 294.
- 41 Ibid., 292.
- 42 Le Corbusier [pseud.], Towards a New Architecture, trans. Frederick Etchells (London: John Rodker, 1931), 29.
- 43 See Barbaralee Diamonstein, American Architecture Now (New York: Rizzoli, 1980), 32; and Barnes, "Remarks on Continuity and Change," 295.
- 44 Barnes, "Remarks on Continuity and Change," 294.
- 45 Horiuchi, "Space Music," 89.
- 46 Barnes, "Remarks on Continuity and Change," 294.
- 47 Ibid., 293.
- 48 Edward Barnes, interview by author, 10 September 1988, Minneapolis.
- 49 Barnes, "Remarks on Continuity and Change," 294.
- 50 Ibid.
- 51 Ibid.
- 52 Peter Papademetriou, "E. L. Barnes in Retrospect," Texas Architect 35 (January/February 1985): 48.
- 53 Joseph Giovannini, "Arata Isozaki: from Japan, a New Wave of Architects," New York Times Magazine, 17 August 1986, 62.
- 54 Due to developer's cuts, this low-rise portion of El Monte was built at the time of initial construction. See "311-Unit Apartment House, San Juan, Puerto Rico," Progressive Architecture 44 (July 1963): 125, low-rise units illustrated 124. See also "Environmental Planning," House and Home 20 (July 1961): 128 (fig. 39).
- 55 Barbaralee Diamonstein, Inside New York's Art World, (New York: Rizzoli, 1979), 18.

<sup>56</sup>"New Houses by Edward Larrabee Barnes," Architectural Record 136 (November 1964): 148.

<sup>57</sup>Barnes, "Remarks on Continuity and Change," 295.

<sup>58</sup>Alice R. Connally, "The Kimbell Art Museum Building From Concept to Completion" (M.A. thesis, North Texas State University, 1977), 23.

<sup>59</sup>"New Houses by Edward Larrabee Barnes," 148-149.

<sup>60</sup>See Horiuchi, "Space Music," 89, and Diamonstein, Inside New York's Art World, 26.

<sup>61</sup>Robinson, "The 1980 Firm Award," 64, 67.

<sup>62</sup>Edward Larrabee Barnes, "Thoughts on Design for a Museum of Contemporary Art," Helsinki, May 1986, Archive, Edward Larrabee Barnes Associates (see Appendix E). The author thanks Eugenie Devine for providing a copy of this lecture. Earlier, Barnes stated, "It is flow more than form that has concerned us." See Architect's statement, "Walker Art Center," Design Quarterly 81 (1971): 10.

<sup>63</sup>"New Houses by Edward Larrabee Barnes," Architectural Record 136 (November 1964): 141. Barnes regrets that an addition was made to the original house, observing that the overall size of the addition has diminished the two-story elements of the house which once appeared dramatic. Barnes, interview by author, 10 September 1988, Minneapolis.

<sup>64</sup>"New Houses by Edward Larrabee Barnes," 141.

<sup>65</sup>Ibid., 147.

<sup>66</sup>Excerpt from "Priority of Ideas," p. 5, from "Remarks on Priority of Ideas and The Design Conscience," an address given 19 February 1964, by Edward Larrabee Barnes at Columbia University. The author thanks Eugenie H. Devine, Archivist, Edward Larrabee Barnes Associates for providing a copy of the lecture in its entirety. The third portion of this lecture, subtitled "Continuity" was published as "Remarks on Continuity and Change," Perspecta 9/10 (1965): 291-298.

<sup>67</sup>Ibid., 5, 6.

<sup>68</sup>"The architecture of shadows." Visionary Architects: Boullée, Ledoux, Lequeu (Houston: University of St. Thomas, 1968), 34. Boullée (1728-1799), observing that "majestic nobility is the result of the simplicity of masses," preferred the deeply-shadowed effect of broad, smooth wall

planes. He argued that "smooth masses produce virile effects." See J.-C. Lemagny, Visionary Architects, 16-17.

<sup>69</sup>Heyer, Architects on Architecture, 329.

<sup>70</sup>Barnes quoted by Jonathan Barnett, "Edward Larrabee Barnes interviewed," Architectural Record 130 (August 1961): 10. Barnes was apparently referring to his unbuilt 1962 project for the Freshman Dean's House at Yale University.

<sup>71</sup>Barnes, "Remarks on Continuity and Change," 294. This basic siting approach which serves to reinforce existing street lines would be used repeatedly in Barnes's later office commissions.

<sup>72</sup>Barnes quoted by Barnett, "Edward Larrabee Barnes Interviewed," 10.

<sup>73</sup>Suzanne Stephens, "'Such Good Intentions': Architecture for the Arts at Purchase," Artforum 14 (January 1976): 27.

<sup>74</sup>Horiuchi, "Space Music," 89.

<sup>75</sup>C. Ray Smith, Supermannerism: New Attitudes in Post-Modern Architecture (New York: E.P. Dutton, 1977), 100.

<sup>76</sup>Ibid., 100. Diagonal motifs were eventually affected by so many architects in the 1960s that Spiro Kostof referred to the trend as "raging diagonalism," and Jaquelin Robertson termed it "diagonalosis." Ibid., 106.

<sup>77</sup>Ibid., 101.

<sup>78</sup>Vincent Scully, The Shingle Style Today, or the Historian's Revenge (New York: George Braziller, 1974), 18. The influence of Haystack has also been discussed by critic Robert Campbell, who observes, "Haystack possesses more significance in the story of American architecture than it usually is credited with." See "Evaluation: A Classic that Retains Its Appeal," Architecture 78 (February 1989): 62.

<sup>79</sup>Cervin Robinson, "The 1980 Firm Award," 63-64. According to Robinson, Alistair Bevington, long-time associate and Partner-in-Charge of the Dallas Museum of Art commission, was drawn to the Barnes's firm by the Haystack design, see p. 64.

<sup>80</sup>Gwathmey, quoted by Robinson, "The 1980 Firm Award," 67. Gwathmey's term in Barnes's firm is not recorded in Contemporary Architects, but he recalls it for Robinson, 64.

<sup>81</sup>"Winner Announced in Boston Competition," Architectural Record 137 (March 1965): 12. It is interesting to note that Barnes was competing for this commission against Marcel Breuer, his former teacher, who was a member of one of the finalist teams. The design submission by Breuer's team was ultimately withdrawn for financial reasons.

<sup>82</sup>See illustrations of complex in "311-Unit Apartment House, San Juan, Puerto Rico," Progressive Architecture 44 (July 1963): 128, 129 (fig. 58).

<sup>83</sup>Barnes, "Remarks on Continuity and Change," 294.

<sup>84</sup>John Morris Dixon, "Princeton: Breaking the Gothic Habit," Architectural Forum 127 (July/August 1967): 60.

<sup>85</sup>See Horiuchi, "Cluster Architecture," 69, and Peter Papademetriou, "Dallas Museum of Art: Extending the Modernist Tradition of E. L. Barnes," Texas Architect 35 (January/February): 46.

<sup>86</sup>"Winner Announced in Boston Competition," 308.

<sup>87</sup>William Wilson Atkin, "Barnes's Thin-Skin Tower," Progressive Architecture 51 (May 1970): 66.

<sup>88</sup>Ibid., 65.

<sup>89</sup>Ibid., 66.

<sup>90</sup>Barnes, "Country House," 182.

<sup>91</sup>Charles A. Jencks, Late-Modern Architecture and Other Essays (New York: Rizzoli, 1980), 66.

<sup>92</sup>Mildred F. Schmertz, "A Low Profile for IBM," Architectural Record 161 (January 1977): 143.

<sup>93</sup>"Architect Ed Barnes: Toward Simpler Details, Simpler Forms, and Greater Unity," Architectural Forum 119 (August 1963): 78.

<sup>94</sup>Barnes's description of his 1964 lakeside house in the Adirondacks, New York (fig. 55). See "Volumetric Vacation," Progressive Architecture 46 (November 1965): 135.

<sup>95</sup>See C. Ray Smith, Supermannerism: New Attitudes in Post-Modern Architecture, (New York: E.P. Dutton, 1977), 62-68, and Diamonstein, American Architecture Now, 20, in which Barnes compares his IBM Building to a Donald Judd sculpture and comments on the volumetric, prime forms of Larry Bell.

<sup>96</sup>Edward Barnes quoted in "Toward Simpler Details, Simpler Forms, Greater Unity," 78.

<sup>97</sup>Ibid., 78. Theologian Paul Tillich is author of Systematic Theology (Chicago: University of Chicago Press, 1957).

<sup>98</sup>Edward Larrabee Barnes, "Architecture as Witness," 91, an unpublished lecture presented by Edward Barnes at the 1966 National Conference on Religious Architecture, San Francisco, California, April 26-28, 1966, Archives, Edward Larrabee Barnes Associates. The author wishes to thank Eugenie Devine for providing a copy of this lecture.

<sup>99</sup>Edward Barnes quoted by Allen Freeman, "Serenely Simple Interior Painted by Light," Architecture 77 (June 1988): 86-89. Windows were designed by John Carpenter; see illustrations of lighting effects, 86, 88.

<sup>100</sup>"Line and Volume," Progressive Architecture 50 (April 1969): 88.

<sup>101</sup>Edward Barnes, Address presented at "Glass Houses for People and Plants," a symposium held on the occasion of the dedication of the Lucile Halsell Conservatory, San Antonio, Texas, 15 June 1987.

<sup>102</sup>Edward Barnes, conversation with author, San Antonio, Texas, 15 June 1987.

<sup>103</sup>Barnes, Address in San Antonio, Texas, 15 June 1987.

<sup>104</sup>Ibid.

<sup>105</sup>For a detailed presentation of the Purchase Master Plan and individual building designs, see Architecture for the Arts: the State University of New York College at Purchase, with an introduction by Nelson A. Rockefeller (New York: Museum of Modern Art, 1971).

<sup>106</sup>"Building with Brick: New York State University" ["L'Universita' della Stato di New York"], Abitare 213 (April 1983): 81.

<sup>107</sup>"Edward Larrabee Barnes's Design for the Performing Arts at Purchase," Architectural Record 169 (August 1981): 65.

<sup>108</sup>Stephens, "'Such Good Intentions,'" 28.

109Carter Wiseman, "Architecture's Master of the Middle Way," Saturday Review 8 (November 1981): 28.

110Suzanne Stephens, "'Such Good Intentions,'" 27.

111Ibid, 27.

112Edward L. Barnes, telephone interview with author, 25 August 1988, tape recording.

113Ibid.

114Horiuchi, "Space Music," 89.

115"Edward Larrabee Barnes's Design for the Performing Arts at Purchase," 65.

116Mulas, "Building with Brick: New York State University," 80.

117Ibid., 83. Herdeg and Stephens waxed less enthusiastically over historical parallels between the Purchase campus and Thomas Jefferson's University of Virginia (1817-1826). See Herdeg, The Decorated Diagram, 71-77, and Stephens, "'Such Good Intentions,'" 28-29.

118Edward Barnes, interview with author, 27 March 1986, New York City, tape recording.

119Horiuchi, "Space Music," 89.

120Edward L. Barnes, "Eliot Noyes Lecture," 6, 10, Address presented at Harvard University, Cambridge, Massachusetts, 3 December 1979, Archives, Edward Larrabee Barnes Associates, New York. The author thanks Eugenie Devine for providing a copy of this lecture.

121"Private Residence, Connecticut," Architectural Record (Mid-May 1967): 43. The Hilltop House was selected as an Architectural Record House of 1977.

122"New Houses by Edward Larrabee Barnes," 152.

123Wiseman, "Architecture's Master of the Middle Way," 28. The only published views of the Barnes House with its additions appeared in Barbro Kulvik's "My Choice: The Barnes's House," Form/Function/Finland (April 1987): 42-45. The author thanks Scott Sullivan for bringing this article to her attention.

124Edward Barnes, as quoted by Carter Wiseman, "Architecture's Master of the Middle Way," 28.

<sup>125</sup>The author thanks Eugenie Devine, Archivist, Edward Larrabee Barnes Associates, for providing illustrations of the Fieldwood Farm, an unpublished house, and for her information on the dating of the Barnes House additions.

<sup>126</sup>Edward L. Barnes, interview with author, 27 March 1986.

<sup>127</sup>Joan Potter, "Edward Larrabee Barnes: True to Himself," Westchester County (New York) Patent Trader, 28 October 1983, 10. Article provided by Eugenie Devine.

<sup>128</sup>Barnes, quoted in interview with Masahiro Horiuchi, "Space Music," 89. Luis Barragan, a Mexican architect born in 1902, was the subject of an exhibition at the Museum of Modern Art in 1976. The accompanying exhibition catalogue, The Architecture of Luis Barragan, (New York: Museum of Modern Art, 1976), was written by Emilio Ambasz. However, Barragan received little recognition outside Mexico until he won the Pritzker Prize in 1980, at the age of 78. See William Stockton, "Barragan's Eloquent Architecture," New York Times, 9 January 1986, 15, 17.

<sup>129</sup>Details on the clients' house, materials and interiors of the Garden Library were gleaned from Paula Deitz's article, "The Private World of a Great Gardener," New York Times, 3 June 1982, 1, 6(C). The author also is indebted to Eugenie Devine for providing illustrations of the Garden Library for my study.

<sup>130</sup>The Dallas Residence as an AIA Honor Award recipient was featured in a cover story in Architecture. See David Dillon, "Blend of Modernism and Regionalism," Architecture 75 (May 1986): 176-183, cover. The author is indebted to the owner for allowing her to view and photograph the Dallas Residence.

<sup>131</sup>Architect's statement, "Residence in Dallas," GA Houses 21 (August 1987): 147.

<sup>132</sup>Dillon, "Blend of Modernism and Regionalism," 178.

<sup>133</sup>Edward Barnes, interview with author, 10 September 1988, Minneapolis, Minnesota, tape recording.

<sup>134</sup>Potter, "Edward Larrabee Barnes: True to Himself," 10.

<sup>135</sup>Ibid.

<sup>136</sup>Horiuchi, "Space Music," 90.

137Ibid.

138See Mildred Schmertz, "A Skyscraper in Context," Architectural Record 172 (May 1984): 148. Schmertz includes Barnes's sketches illustrating pedestrian movement and the placement of the tower in relationship to the surrounding city grid, 149.

139See Paula Deitz's article on the greenhouse: "The IBM Garden Plaza," Architectural Record 174 (May 1984): 154-155.

140See Martin Filler, "High Ruse, Part I," Art in America 72 (September 1984): 155-156, Suzanne Stephens, "Corporate Form-givers," Progressive Architecture 60 (July 1979): 59.

141See Robert Ponte's project monograph on "New York, N.Y.: 599 Lexington Avenue" for a thorough discussion of the project's history and design considerations. Published by the Institute for Urban Design, December 1985, vol. 1, no. 4, pp. 1-8. Copy provided to the author by Eugenie Devine, Archivist, Edward Larrabee Barnes Associates.

142Horiuchi, "Space Music," 90.

143Paul Goldberger, "The New American Skyscraper," Building Stone Magazine (January/February 1982): 43. Goldberger promotes instead a merger of the computer esthetic and historicist impulses, citing examples of "active, sculptured" buildings with "myriad setbacks and cut-ins," or "essay[s] in brick and wood with rounded corners." See 43, 46.

144Stephens, "Corporate Form-givers," 59.

145Wilma Salisbury, "Edward Barnes--Monuments Are Not His Business," Cleveland (Ohio) The Plain Dealer, 14 August 1983, 50.

146Douglas Davis, "Master of Sleek Restraint," Newsweek, 18 May 1981, 126.

147Edward Barnes, interview by author, 27 March 1986.

148Edward Barnes, interview with author, 27 March 1986.

149Douglas Davis, "Master of Sleek Restraint," Newsweek, 18 May 1981, 129.

<sup>150</sup>This modular design process has often been utilized in Barnes's office projects, as in the Princeton Administration Building, discussed earlier in this chapter.

<sup>151</sup>Edward Barnes, "Old Stone Square, Providence, Rhode Island," [Architect's statement], Archives, Edward Larrabee Barnes Associates, New York. The author thanks Eugenie Devine for also providing plans of various schemes for Old Stone Square.

<sup>152</sup>Richard Chafee, Providence, to author, Fort Worth, 21 October 1987. While Chafee notes the benefit of making a tall building seem weightless, he asserts that more could have done to relate the Barnes building to the small-scaled neighborhood, a historic section of Providence. However, the unusual detail (for Barnes) of the crossed window mullions and the base module of the small square demonstrate that attention was focused on small scale detailing. The author is indebted to Richard Chafee for providing photographs of Old Stone Square (figs. 86, 87).

<sup>153</sup>Paul Goldberger, "Out-of-Town Builders Bring Their Shows to New York," New York Times, 1 June 1986, 35(sec. 2). "Mr. Lee" is John M.Y. Lee, Barnes's long-term partner, whom Barnes credits with the development of the final design of 599 Lexington. See Horiuchi, "Space Music," 90.

<sup>154</sup>See Thomas L. Waite, "Choir School Site: Offices by Macklowe," New York Times, 13 March 1988, 1(sec. 10). The author thanks Eugenie Devine for bringing this article to my attention.

<sup>155</sup>Barnes seems to have turned his back on surface contextualism in this building, although its form clearly defers to the domed City Center. He indicated that he prefers "the simple buildings" such as IBM 590 Madison, 535 Madison, and 599 Lexington, noting that "they really suit me better." In contrast to the Equitable Tower, which Barnes described as an "impure building" because of the commercial pressures on the design and the collaboration with Kohn Pedersen Fox on interiors, the Macklowe tower with its sheared blue-green glass volumes promises to follow in the line of his volumetric office towers in which "just one simple idea carries through." Edward Barnes, interview by author, 10 September 1988, Minneapolis.

<sup>156</sup>Edward Barnes, interview by author, 27 March 1986.

<sup>157</sup>Salisbury, "Edward Barnes--Monuments Are Not His Business," 50.

158 Edward Barnes, interview by author, 10 September 1988.

159 Davis, "Master of Sleek Restraint," 126.

160 Le Corbusier [pseud.], New World of Space (New York: Reynal & Hitchcock, 1948), 37.

161 "Modern Setting for Classic Cars," Architectural Forum 99 (December 1953) 148.

162 Ibid., 126-127, 148.

163 "Two Showrooms," Progressive Architecture 41 (August 1960): 163.

164 See Barbaralee Diamonstein's interview with Barnes in American Architecture Now (New York: Rizzoli, 1980), 17, for other museum commissions undertaken by Barnes.

165 For contemporary critical assessment, see Peter Blake, "Brick-on-Brick and White-on-White," Architecture Plus 2 (July/August 1974): 38-47, and Paul Goldberger, "What Should a Museum Building Be?" ARTnews 74 (October 1975): 36.

166 See Barnes's personal account of the inception of the project, Diamonstein interview, American Architecture Now, 17.

167 Edward Larrabee Barnes quoted in "Barnes Revisits the Walker," Architecture Minnesota (November/December 1984): 7.

168 Diamonstein, American Architecture Now, 17.

169 "Tenth Annual Design Awards: Citation, Residential Design," Progressive Architecture 44 (January 1963): 90.

170 "Barnes Revisits the Walker," 7.

171 Architect's statement, Design Quarterly 81: 10.

172 Ibid.

173 "Barnes Revisits the Walker," 7.

174 Architect's statement, Design Quarterly 81: 10.

175 "Barnes Revisits the Walker," 7.

176 Sculptor Louise Nevelson stated, "The architect has captured, for our times, the space concept of contemporary,

creative minds. I know of no other museum that quite captures the needs of the artist as this one does." See Peter Blake, "Brick-on-Brick and White-on-White," 40.

<sup>177</sup>Joseph Giovannini, "Museum Piece," Artforum 25 (February 1987): 3.

<sup>178</sup>Architect's statement, Design Quarterly 81: 10.

<sup>179</sup>Diamonstein, American Architecture Now, 18.

<sup>180</sup>See Building the New Museum (New York: The Architectural League of New York, 1986), 61.

<sup>181</sup>Architect's statement, Design Quarterly 81: 10. See also "Minimal Sculpture Inside and Out; the New Walker Art Museum by Edward Larrabee Barnes," Architectural Record 150 (July 1971): 34.

<sup>182</sup>Barnes has compared his New York IBM building with the sculpture of Donald Judd. He also has declared his affinity for the "prime" forms in Larry Bell's sculpture. See Diamonstein, American Architecture Now, 20.

<sup>183</sup>Ibid.

<sup>184</sup>Edward Barnes quoted by Roy M. Close, "Needed expansion is faithful to Walker Art Center design" St. Paul Pioneer Press/Dispatch, 5 September 1983, 3(D).

<sup>185</sup>Ibid.

<sup>186</sup>Minutes of special meeting, Architectural Selection Committee, Dallas Museum of Fine Arts, 31 March 1977, 3.

<sup>187</sup>John R. Lane, "Director's Statements," Edward Larrabee Barnes Museum Designs (Katonah, New York: The Katonah Gallery, 1987), 30.

<sup>188</sup>Edward L. Barnes, "Sarah Scaife Gallery," Edward Larrabee Barnes Museum Designs, 12.

<sup>189</sup>[the Editors of Architectural Record], Buildings for the Arts [An Architectural Record Book] (New York: McGraw-Hill, 1978), 98-99.

<sup>190</sup>Edward Barnes, interview by author, 27 March 1986.

<sup>191</sup>See John Coolidge, "Walter Gropius and the Huntington Galleries" in Patrons and Architects: Designing Art Museums in the Twentieth Century (The Anne Burnett Tandy Lectures in American Civilization, no. 2) (Fort Worth, TX:

Amon Carter Museum, 1989), 59-68. See also Mildred F. Schmertz, "Museums for Today: A Quiet, Unobtrusive Building for the Contemplation of Art," Architectural Record 152 (July 1972): 108-109.

<sup>192</sup>John Morris Dixon, "Barnes Gratia Artis," Progressive Architecture 56 (March 1975): 27.

<sup>193</sup>See R. J. Gangewere, "Reinstallation: A Conversation with the Museum of Art Staff," Carnegie Magazine 57 (November/December 1984) 8-17.

<sup>194</sup>Jack Mognaz, interview by author, 29 March 1986, New York City.

<sup>195</sup>Jack Mognaz, telephone conversation with author, 15 November 1988.

<sup>196</sup>Jack Mognaz, interview with author, 29 March 1986.

<sup>197</sup>Howard Wooden as quoted by Rich Hall, "Director's Pride Obvious in New Art Museum," Wichita Journal, 5 November 1977, 1.

<sup>198</sup>"Museum Design in Skilled Hands," Wichita Eagle and Beacon, 23 March 1975, n.p. Article from Archives of Wichita Art Museum provided by Mary Ann Archer, former Administrative Assistant to the Museum Director.

<sup>199</sup>Bob Curtright, "Museum to be Work of Art Itself," Wichita Eagle and Beacon, 24 May 1975, n.p. Article provided to author by Mary Ann Archer.

<sup>200</sup>Ibid.

<sup>201</sup>Diamonstein, American Architecture Now, 18.

<sup>202</sup>Charles K. Gandee, "In Deference," Architectural Record 173 (May 1985): 147.

<sup>203</sup>Ibid., 151.

<sup>204</sup>News Service of the Museum of New Mexico, "Construction Preserves, Renews Museum", undated press release, 3. Press release provided to author by former Museum of New Mexico Librarian Sue Critchfield (deceased).

<sup>205</sup>Illustrated in Gandee, "In Deference," 147. Pinwheel master plan described in "Honor Award: Institutional/Public Building," New Mexico Architecture (January-February/March-April 1984): 8.

<sup>206</sup>Paul Goldberger, "Architecture: Asia Society Building, a Design Full of Civilized Intentions" New York Times, 11 April 1981, 15(sec. 1).

<sup>207</sup>Barnes's role in bringing the Whitney together with Equitable is noted by Michael Brenson in "Museum and Corporation--A Delicate Balance," New York Times, 23 February 1986, 28(sec. 2). The branch museums and policies of the Whitney are further discussed in William Keens's interview, "Serving Up Culture: The Whitney and Its Branch Museums," Museum News 64 (April 1986): 22-28. The art commissioned for the tower is discussed by Deborah Gimelson in "The Tower of Art," Art & Auction 8 (October 1985): 150-155, Barnes's comments, 153.

<sup>208</sup>Edward L. Barnes, interview by author, 10 September 1988.

<sup>209</sup>Edward L. Barnes, interview by author, 27 March 1986.

<sup>210</sup>The galleries have been used primarily for rotating exhibits of paintings and sculpture from the Whitney's permanent collection and other temporary special exhibits, infrequently for works on paper.

<sup>211</sup>Burton quoted by Lorraine Glennon in "Corporate Commissions," Art & Antiques (April 1987): 126. Burton's 1986 atrium furnishment for the Equitable Center's Tower West Building consists of a semi-circular bench and inner planting ring made of costly marble flanked by a stand of trees planted in a disengaged arc form. See Scott Burton, exhibition catalogue by Brenda Richardson, (Baltimore, Maryland: The Baltimore Museum of Art, 1986), 14-15 for illustration and description of materials.

<sup>212</sup>Benton's murals were originally painted for the School of Social Research in New York. See Emily Braun and Thomas Branchick, Thomas Hart Benton: The America Today Murals (Williamstown: Williams College Museum of Art, 1985).

<sup>213</sup>Legal documents regarding the intended site of the museum, the Bartlett estate, contained a clause which stated that the property could only be used for a museum. This prevented bank officials from making the loan necessary for construction in the event a default occurred, and a new site had to be selected. Cynthia Hancock, Manager of Public Relations, Fort Lauderdale Museum of Art, Florida, to author, Fort Worth, 8 December 1988. The 1978-1979 project was published in a chart of Barnes's designs compiled by Masahiro Horiuchi, Space Design 250 (July 1985): 81.

214 See the architect's statement, "The Fort Lauderdale Museum of Art and the Dallas Museum of Art," in Building the New Museum, 52.

215 Ibid.

216 Ibid.

217 Architect's statement, published in Edward Larrabee Barnes Museum Designs, (Katonah, New York: Katonah Gallery, 1987), 29. The model and plans for the Georgia Museum of Art were exhibited 22 March to 24 May 1987 at the Katonah Gallery.

218 Richard Schneiderman, telephone interview by author, 22 November 1988. Schneiderman indicated that the chronology of the commission included Barnes's hiring in late spring 1978, followed by the compilation of the Program and Space Study. A site was selected with Barnes's input in July 1980, whereupon the actual design of the facility commenced.

219 Ibid.

220 Ibid.

221 Ibid.

222 Ibid.

223 Richard Schneiderman, interview by author, 22 November 1988. Jane K. Bledsoe, Athens, to author, Fort Worth, 22 November 1988.

224 Edward Larrabee Barnes Museum Designs, 28.

225 The ground-breaking of the Knoxville Museum took place on 17 June 1988. Construction is scheduled for completion in late 1989, with the public opening in the spring of 1990. Leigh Hendry, Public Relations Director, Knoxville Museum of Art, Telephone conversation with author, 1 November 1988.

226 Edward Larrabee Barnes Museum Designs, 26.

227 Suzanne Muchnic, "Hammer Will Build Own Museum for Art Collection," Los Angeles Times, 22 January 1988, 1, 28(I).

228 Ibid., 1(I).

<sup>229</sup>Model illustrated in Milton Esterow's article, "Sincere Regrets to the County Museum, Hooray for Los Angeles," ARTnews 87 (April 1988): 124.

<sup>230</sup>Edward Barnes, interview by author, 11 September 1988.

<sup>231</sup>From "Schedule of IMA Expansion/Renovation Project," 28 October 1988, received from Judith McKenzie, Director of Planning and Special Assistant to the President, Indianapolis Museum of Art, 21 November 1988.

<sup>232</sup>"Work in Progress: Indianapolis Museum of Art Expansion and Renovation Fact Sheet," November 1988, 2. The author thanks Judith A. McKenzie for providing this information as well as floorplans of the expansion/renovation project. Judith McKenzie to author, 21 November 1988.

<sup>233</sup>See The Katonah Gallery: a Teaching Museum (Katonah: New York: The Katonah Gallery, n.d.), 12-15. Information on Birmingham campaign available in A Better Museum/A Better Birmingham, (Birmingham: Birmingham Museum of Art, n.d.), provided to author by Susan Hundley, Development Director, Birmingham Museum of Art, who also provided architect's plans and renderings of the design.

<sup>234</sup>See author, "Design Synthesis and Urban Clarity," Architecture 78 (February 1989): 64-67, for discussion of Walker Art Center's sculpture garden and conservatory design.

<sup>235</sup>Edward Barnes, telephone interview by author, 25 August 1988.

<sup>236</sup>Ibid.

<sup>237</sup>Ibid.

<sup>238</sup>Peter Papademetriou, "Dallas Museum of Art: Extending the Modernist Tradition of E. L. Barnes," Texas Architect 35 (January-February 1985): 36.

<sup>239</sup>David Dillon, "Private Residence, Edward Larrabee Barnes," Architecture 75 (May 1986): 178.

<sup>240</sup>See Horiuchi, "Space Music," 89.

<sup>241</sup>Papademetriou, "Extending the Modernist Tradition," 36.

## CHAPTER III

### PRELIMINARY CONCEPTS

#### Trustees' Concepts

When Barnes was commissioned to design the Dallas Museum of Fine Arts, he found that the members of the Building Committee with whom he would be working most closely were very interested in the design of the museum, and would make their presence felt during the design period. They had all traveled widely, and already had formed some ideas about what they wanted for the new facility. The initial Building Committee, active during site selection and the design phase of the project, was appointed in May 1977, and served through 1980. Its members were: Margaret McDermott, Betty Marcus, Richard Haynes, Elizabeth Blake, Vincent Carrozza, James Clark, Robert Dedman, Melba Greenlee, and John Murchison. Harry Parker, George Charlton, and Irvin Levy served as ex-officio members. John Murchison served as Chairman in 1977, and Margaret McDermott was Chairman from 1978 to 1980. Following the death of John Murchison, Curtis Meadows was appointed to the committee.

Project Architect Dan Casey the recalled the positive interaction between the architects and the members of the Building Committee:

We had a good working relationship with them, I would say. They had their own ideas, they were a very informed, articulate group, very knowledgeable about art, architecture and museums. The initial Building Committee was a very strong committee. There were people who represented the intellectual side and the financial side and the development side, so all bases were covered by the first committee, and that committee was intact throughout the design phase. We were very pleased to have such a good group to work with. . . . They were always respectful and very fair in their dealings with us, but they did make their opinions known. . . . They were not at all shy about giving us their reactions, . . . and I think they did influence [us], very certainly did.<sup>1</sup>

Margaret McDermott, as one of the museum's most generous benefactors, was one of the primary forces behind the entire drive for a new facility. As the Chairman of the first Building Committee, she hosted many meetings with the architects in her own home. She recalled the long discussions they had concerning important features, both stylistic and functional, which the Committee considered desirable for the museum to have:

We talked about what we wanted and [decided] we wanted something contemporary, yet classical, and something straightforward. Something that was not European, but like Texas. We wanted it to be functional and we wanted it to be beautiful. We wanted green spaces, we wanted water--we didn't want it to be a high-rise. . . . We all wanted the natural lighting. . . . And we were really thinking all the time about the art--how best to show the art.<sup>2</sup>

George Charlton, who was Chairman of the Architectural Selection Committee and served on the Building Committee, described the trustee's early concept of the museum as an "understated, simple, elegant house to display art."<sup>3</sup>

Vincent Carrozza served on the Architect Selection Committee and the Building Committees, and would become Chairman of the Building Committee at the beginning of the construction period. He recalled that even prior to the selection of the architect, there was a consensus among the trustees that the new building was to have a "low profile." He explained that this reflected not only the idea that they did not want an elevator building, but also

not a building that would make a strong presence on the scene. [It is possible for] a building that is low-rise [to make] a strong statement, but we didn't want that. We felt that the museum should be a building in which the architect doesn't use any overt strength in the interior design. . . . Unlike, for example, [Dallas] City Hall, which is a very strong building--we always felt [the museum's] exterior and interior design should be more recessive. . . . Perhaps it was uncharacteristic of Dallas to be recessive and quiet, . . . [but] we came out of the [architectural] interview process more convinced than ever that we should have a building that spoke softly on the urban scene, but spoke well for the artists.<sup>4</sup>

As to how a low-rise building would fit into the urban location that the trustees envisioned, Margaret McDermott again recalled early discussions with Barnes about this issue:

He took in mind not only the museum but the concept of the whole city. And we talked about it at great length, about how wonderful it is in the city to have some lower buildings, not all high-rise, and how it would help the architecture of the city. And it has.<sup>5</sup>

Carrozza related his view on the subject:

As the buildings around it came along, they would probably be larger than the museum and that would be fine. The museum would represent kind of an oasis in the city.<sup>6</sup>

One other consideration voiced by Carrozza was that "We should have a building that was adaptable to growth and we could add to it, both on site and off site."<sup>7</sup>

Harry Parker discussed two sources of ideas for the new building. One source was Barnes's architectural past-- primarily the Walker Art Center, the Scaife Gallery, and the Wichita Art Museum.<sup>8</sup> These museums are discussed in Chapter Two.<sup>9</sup> Barnes's previously developed concepts for circulation and lighting in museums would serve as a starting point for his approach to the Dallas Museum commission.

The other source Parker noted was the Dallas Museum of Fine Arts as it existed in Fair Park: "Since we had a museum and were going to another, we were making reference often to what we had."<sup>10</sup> This affected the type and use of spaces programmed for the new facility--for example, since the old museum had a great hall, the trustees wanted one in the new museum. Since the former great hall was used to display American school abstract art, it seemed probable that the same work would be hung in the new great hall. The older facility was the basis for space calculations used to estimate the size of the new museum. Parker recalled that the existing spaces in the Fair Park building were multiplied by a factor of two and one-half to produce the square footage figures given in the Space and Program Study.<sup>11</sup>

Parker acknowledged that his exposure to the Metropolitan Museum of Art during his tenure there was definitely a factor in the shaping of his ideas about museum design and art display. He also recalled that the members of the Building Committee were very conscious of the East Wing of the National Gallery, which had just opened.<sup>12</sup> The trustees were also certainly conscious of two local examples of museum architecture--the Kimbell Art Museum and the Amon Carter Museum in Fort Worth.

#### The Director's Concepts

Of all the Building Committee members, Harry Parker's concepts for the new museum survive in the most concrete form in two written statements. Harry Parker had taken the initiative during the architect selection period to set forward his viewpoint of the kind of facility that he wished to see designed. The first statement written by Parker which records the program objectives and requirements as he interpreted them appeared in a April 21, 1977 memorandum.<sup>13</sup> This statement was sent by Parker to the Architectural Selection Committee for the purpose of guidance in the selection of the best architect based on the particular architectural challenges provided by the program.

Parker also sent a memorandum to the board of trustees on May 31, 1977, in which he outlined his concepts in a formal program statement. This statement represents Harry Parker's interpretation of the various roles that he

anticipated would be served by the new museum. This statement was included as Appendix C of the Program and Space Study, and appears as Appendix A of this thesis.<sup>14</sup>

The earlier of the two statements, which was directed to the trustees on the architectural selection committee, can be examined as a tangible means by which Parker influenced the selection process, and further suggests that the selection process itself may have helped generate concepts for the new facility. Parker's statement surely evolved to some extent from his conversations with trustees and benefactors, curators and other museum staff. Several of the trustees to whom the statement was directed would also serve as members of the Building Committee.

Parker's second memorandum functions more as a formal program statement, directed to the architect and the Building Committee as to what the goals for the development of the building plans might be. Parker includes broad concepts in his statement as well as very specific suggestions, many of which were indeed later included in the museum design.

Parker predicted that the relocation and expansion of the museum would act as a

catalyst for the creation of a new institution with much expanded collections of important art, playing a more critical educational role in Dallas, and will permit the reorganization of the Museum's programs to meet the art needs of Dallas citizens.<sup>15</sup>

Parker anticipated that that the museum would be relocated to a downtown site, but noted that the architect would be instructed to achieve a natural, "suburban" feel. He reiterated, "we all want outdoor spaces incorporated, considerable landscaping, a protected environment."<sup>16</sup> In remarking upon the importance of the transition from street to gallery, Parker observed that the challenge of the project would be to "achieve a cultural oasis" in the midst of a bustling city.<sup>17</sup>

Parker's program statement is divided into six different sections in which he describes his view of the various functions of an art museum. First of all, Parker defines the museum as "a place to experience art." He notes that many factors affect the quality of the art experience, including the quality of the art displayed and the prior experience of the viewer. It further is affected by the "sense of place, the qualities of light and architectural setting." Parker states that "the museum facility is itself an artistic creation, vastly influencing the quality of the art experience."<sup>18</sup>

Parker continued with specific ideas to enhance the character of the galleries. Most importantly, he states, "I see our museum as supportive, not distracting."<sup>19</sup> His additional suggestions offer many ways for the architect to vary the viewing experience:

I see a coherent setting forth of the treasures we have, but also a variety in the personality of

galleries, an easy indoor/outdoor flow, areas of awe and areas of intimacy. . . To achieve character there may be special opportunities to integrate architectural elements, be they a stained glass window manufactured from our Matisse collage, a Frank Lloyd Wright period room, or a medieval cloister. . . .

Our existing collection . . . lends itself to varied and individualized presentation. A degree of natural light is most desirable for full appreciation of Impressionist painting. A luxurious setting with dramatic, even theatrical lighting, seems appropriate for the important hoard of South American gold. The presentation of certain materials--paper and textiles--require darkened spaces. The exhilaration and sheer size of di Suvero's Ave requires extensive outdoor space. A degree of playfulness--flowing water, unusual views from above and below--bright and subtle colors--is desirable in an art museum. . . .

We will need airy, elegant, informal, yet dignified, spaces with flowers, carpets, and fine furniture to show our Monets. We will need height and drama, and openness to show our Pollocks. We will need privacy and intimacy to view our primitive textiles and Old Master prints. The space must be supportive of the art, embracing its qualities, and reinforcing that sense of closeness and concentration which stimulates response to works of art.<sup>20</sup>

Parker next discussed an aspect of the museum's program most closely linked to his background in education, and obviously one of his strongest interests as a potential major development in the new museum. Defining the museum as "a place of communication and learning," Parker states that "in a major urban center and progressive community, public institutions are properly part of the total educational fabric."<sup>21</sup> He projected a trend away from

the traditional stance of the museum [as] the depository of interesting and valuable material. Increasingly, we are interactive with other agencies developing approaches and strategies for maximum utilization of the collection. We work with teachers to prepare interpretive materials and ourselves package

TV shows, films, and slide shows to be seen both at the Museum and in the classroom or home. Surely these efforts will accelerate with the museum not only the home of the objects, but also the researcher of the object's history and communicator of its importance.<sup>22</sup>

Parker saw that this increased focus on the production and use of interpretive materials would need to be considered in the planning for the new museum:

Our staff will include communication specialists developing media packages to be used in the community's formal education system. This program activity will affect space requirements in a [new] facility--studios for audio-visual material preparation, extra power for TV lighting equipment, a teachers['] lounge for communication and interchange, classrooms, an area for studio projects, special logistic facilities for incoming groups.<sup>23</sup>

Within the overall education program, Parker saw the library as a focal point. "It is the center of curatorial activity and the backbone of research and publication." He stressed the significance of the slide library, not only as a resource collection of materials for slide presentations, but also as the repository for color transparencies and black and white photographs for reproductive use.<sup>24</sup>

The auditorium was considered by Parker to be a key communication component, a "lively center for many programs of the museum--especially at night." Parker noted the use of the Fair Park museum's auditorium for lectures, recitals, and films and occasionally for other performing arts events such as dance and theater. Parker observed that if the new museum was in a more accessible location,

it is entirely conceivable that a far more active program of special auditorium events can be arranged.

Opportunities exist for the use of the auditorium by other organizations including rental to convention and business groups.<sup>25</sup>

Parker's emphasis on the public use of all of these facilities would affect their placement in the museum design.

Importantly for the later physical development of the new facility, Parker specifically highlighted the role of the special exhibition as "the basic educational medium of an art museum."<sup>26</sup> "The regular presentation of special shows should continue to be a strong part of our public program and the basis of regular local attendance and national recognition."<sup>27</sup>

It should be recalled that the Dallas Museum's Fair Park facility did not have a separately-designated area for special exhibitions. Hosting traveling exhibitions was difficult because the space factor necessitated the removal of the permanent collection. He stressed the point that "with the proper facility and greater national recognition, we can expect to receive the great circulating exhibitions of foreign nations."<sup>28</sup> Parker further elaborates on the special requirements for this exhibition space:

[these include] a separate space with flexible wall arrangement and lighting, orientation theaters, crate storage and extra wide and high door openings. This space should be near the restaurant, auditorium, and major entrance so that this most highly trafficked area of the museum can be opened separately and securely at nighttime.<sup>29</sup>

The development of the museum as a symbolic manifestation of Dallas' cultural ambitions on a grandiose scale is reflected in Harry Parker's description of the museum as "place of civic pride":

A new and prominent location will make our institution a showplace for Dallas' aspirations to education and civilization. It should be an attraction for citizens to take their visiting friends, the logical place for civic entertainment of visiting public figures. Although we intend to build a functioning practical museum, we also aspire to a "temple of the muses"[--]an extraordinarily beautiful work of architecture and a place of pride.<sup>30</sup>

Another important consideration for Parker was what he perceived to be the museum's role within the social climate of Dallas. The late Arthur Drexler commented on the recent phenomenon of the entertainment function of today's museums and its effect on museum design:

The existence of museums in a mercantile society has increasingly come to depend on the institutions' ability to lure members, patrons, sponsors, donors, and corporate CEOs to those gala events that make people feel they have arrived in the world. . . .The principal responsibility that museums are now facing is to engineer their own transition in an economic, social, and cultural matrix that is changing very rapidly. Institutions sense that they may be able to guarantee their survival by entertaining the community. That intention now influences the shapes museums are taking. It may not be articulated by the museum administration or recognized by the architect, but it plays a decisive role.<sup>31</sup>

Parker, in fact, does articulate the entertainment aspect of the Dallas Museum program, stating that "social functions are not only unavoidable, to me they are part of the Museum's purpose."<sup>32</sup> He proposes that the art museum functions as the "public living room of Dallas":

It is hard to imagine a Dallas Museum without the annual Beaux Arts Ball which means planning certain areas to be convertible for dining and dancing-- hopefully without necessitating the complete removal of the collection, and with planned provisions for the safety of works of art under these demanding conditions. Exhibition openings are properly happy affairs with an expectation of gaiety, social intermingling, and fun. Our museum should provide for these occasions in the initial plan, and not suffer them as an intrusion on day to day functioning.<sup>33</sup>

Parker next proposed the concept of a separate display area, "a place apart," set aside for the outdoor display of large-scale sculpture.<sup>34</sup> He observed that in traditional museums, a sculpture garden often appears as an "addendum."<sup>35</sup> He proposed a larger park-like area, "perhaps in ground area as large as the museum itself."<sup>36</sup> Parker saw this large sculpture garden as

an outdoor museum corresponding in appeal to the indoor museum. Our climate permits rather extensive use of outdoor facilities and would have special appeal for families, and for office workers on a lunch break as well as the daily visitor.<sup>37</sup>

Parker pointed out that a primary advantage of the museum's current facility was its park location. He urged,

We must try to transport this asset with us and provide beautifully landscaped outdoor areas. This would be not only a highly used portion of the museum, but would also create for the museum a kind of oasis setting apart from city streets.<sup>38</sup>

Parker cited the Oakland Museum as a prototype in its function as an extensively-landscaped urban park.<sup>39</sup> He also cited the historical association of the museum and the park as a natural alliance between the enjoyment of nature and art.<sup>40</sup> The concept of the museum and its landscaped park as

an "oasis" within the city was a significant one which would be taken into consideration as the planning for the museum progressed.

Parker more specifically defined the character of the museum as "a place apart":

A museum is a special place for contemplation. If not exactly a refuge from day to day living, it still ought to be for all visitors a special kind of experience reminding us of our best capabilities and aspirations. A museum is not a church, but it shares with a church an uncommon atmosphere and a separation from daily life.<sup>41</sup>

The emphasis in Parker's statement on the contemplative nature of a museum and its special atmosphere is also significant in terms of later design considerations.

The next aspect of the program which Parker discussed was the museum as "a place for professionals to do their work." Parker defined the "working complex" as the "intellectual center of the museum."<sup>42</sup> He emphasized that central to the professional's work would be the library, slide library and object catalogue information.

The ordering of these functions and the related staff office spaces, seminar rooms, and carrels for visiting scholars, must be carefully planned for efficiency and comfort, with an eye to meeting eventual expansion needs. The storerooms of art not on exhibition as well as study collections of prints, photography, and textiles need also to be located in the working complex . . . No visions of ivory tower separation are intended here. Rather, students, scholars, the inquisitive public will find this area the focus of in-depth teaching and utilization of the collection.<sup>43</sup>

Close to this scholarly working complex, Parker saw the positioning of the conservation laboratory so that there

could be contact between the conservators and the curators. Parker considered the "essential professional team" of the museum to be composed of the conservator working in cooperation with the curatorial and education departments.<sup>44</sup>

Parker emphasized the importance to the museum professional of the planning of the service areas, including shipping and receiving, art packing, storage space, a carpentry shop, and a photography studio. The importance of proper environmental control of light, temperature, humidity and air quality was stressed, as were security, smoke and fire detection systems. Parker specifically mentions:

We are concerned that the carpentry shop be located apart from the art storeroom; that a substantial art elevator offer direct access to galleries; and that floor level changes not interfere with art movement. Working this summer with the selected architect and learning from the solutions achieved in recent museum buildings challenges us to plan the most up-to-date and best functioning museum facility in America.<sup>45</sup>

The last issue discussed by Parker, but clearly one of the most significant for him, was the significance of the design of the new facility as "a place to accommodate a broader view of the role of the art museum" He stated, "I am particularly concerned that we face head on and resolve what I perceive to be a basic philosophical conflict regarding the proper role of an art museum today."<sup>46</sup>

Illustrating this conflict, Parker cites the philosophical debate between Metropolitan Museum Director Thomas Hoving

and Cleveland Museum Director Sherman E. Lee. Their opposing viewpoints were discussed in Chapter One.<sup>47</sup>

Parker described three types of museums examined by the museum officials:

Some of the museums we have studied are primarily treasure houses devoted to a permanent collection (Kimbell, Dunbarton Oaks, or the Cloisters); some are primarily changing exhibition centers (Centre Beaubourg, Whitney, Walker Art Center). We are a hybrid--carrying both responsibilities--similar to such museums as the Metropolitan, the National Gallery, or Los Angeles [County Museum of Art].<sup>48</sup>

Clearly Parker would not be satisfied with a facility that functioned only in the traditional sense as a passive repository, providing for presentation, preservation, and study of a permanent collection. In discussing the changing exhibition center as an education tool, he questioned:

Is the museum today properly a dynamic educational force in a community which by grouping works around certain themes and displaying them in a dynamic or dramatic way, can raise levels of taste, knowledge, and self-awareness, actively engaging the visitor and channeling his response?<sup>49</sup>

Parker wanted both aspects, both the passive and the active, to be represented in his ideal museum. To resolve the conflict between the two functions, he called for a "unique physical solution" which would incorporate "two separate but closely linked facilities."<sup>50</sup> Specifically, Parker describes the arrangement in this way:

A clear division may be made between the repository space for the permanent collection in which works of art remain in relatively fixed locations in an ambience as quiet and contemplative as possible--something on the order of the gracious and elegant calm of the Kimbell Museum. A separate and carefully connected

facility could house the more active and aggressive functions--the special exhibition galleries, orientation and education spaces, bookshop, restaurant, and auditorium.<sup>51</sup>

Citing precedents for this architectural approach, Parker noted:

The spacial solution would be in the tradition of such museum buildings as the Archaeological Museum in Mexico City, the new National Gallery in Washington, which, with the I.M. Pei addition, carefully separates permanent and temporary exhibitions, and in program but not aesthetics, relates to the plan of the Los Angeles County Museum complex. It would resolve the kind of philosophical and spacial conflict which has torn at the Museum of Modern Art for the past decade.<sup>52</sup>

Parker sums up the opportunity for the Dallas Museum to find a fresh solution in the design of a new facility from the ground up:

The great problem facing the older American museums is how to incorporate the new public education role utilizing television, dance, participatory activities, in a building originally planned for passive contemplation. Our architect should tackle this problem head on and try to achieve an innovative and exemplary solution to satisfying the old and new demands on all museums.<sup>53</sup>

#### Program and Space Study

A major step toward the design phase of the museum project was taken during the summer of 1977, when the details for "The New Dallas Museum of Fine Arts Program and Space Study" were researched and compiled by the staff of the museum and the architect's office. The resulting 83-page document was completed and presented to the board of trustees on 15 September 1977 by Daniel Casey, Project Architect, and John M.Y. Lee, Associate-in-Charge of the

museum project during programming and the schematic design phase.<sup>54</sup> The Program and Space Study was meant to represent "a collective judgement of facility requirements and proper space allocation for the next fifteen to twenty years of the museum's development."<sup>55</sup>

The first section of the overall study, the introduction, consisted of a verbal description of the desired characteristics and projected use of the new facility. Much that is stated in the introduction is comparable to the concerns expressed by Parker in his program statement, which is included as an appendix C of the Program and Space Study. Several key concepts were explicitly stated in the introduction to the study, such as the following description of the gallery spaces:

A system of courtyards interspersed with gallery space provides a unique indoor/outdoor ambience with certain galleries indirectly skylit for paintings and sculpture and other gallery spaces completely darkened for light-sensitive collections. The traffic pattern of the galleries is free-flowing and avoids long hallways or a limited one-route approach. Space is custom designed for individual collections, and certain key works of art are specifically located to permit a sense of character and permanence in these areas.<sup>56</sup>

This is the first time that courtyards are specifically mentioned, demonstrating that there was an early determination to incorporate them into the gallery plan.

It is further noted that the permanent collection galleries are to be doubled in size from 27,000 to 45,000 net square feet. Individual collection areas were to be

doubled or tripled in size, and anticipated gifts or purchases were allocated an additional 10,000 square feet. It was anticipated that the collection would grow by 500 objects by 1982.<sup>57</sup>

Based on the experiences of other museums in comparable expansion situations, the expectation was stated in the introduction that attendance at the new Dallas Museum would double immediately, to 500,000 annually.<sup>58</sup> Plans were made to increase the capacity of certain services such as the museum shop, restaurant and auditorium to accommodate the increased use. It was emphasized that

exhibition areas for the permanent collection would not be invaded by temporary shows, and the changing areas could be opened on a different schedule to accommodate evening hours without requiring the opening of permanent collection galleries.<sup>59</sup>

Other plans outlined in the Program and Space Study introduction noted that an outdoor sculpture garden would be placed in proximity to the restaurant to permit outdoor dining. Outdoor surface parking for 250 cars was specified.<sup>60</sup>

Complementing Harry Parker's special interest in education, was the particular attention given to describing the education facilities:

A complete center for children's education programs is provided with studio and exhibition spaces plus special entrances for school groups, docents' room, and audio-visual presentation areas. School tours will, of course, continue to feature the permanent exhibition areas, and this special place for children is intended for orientation and reinforcement activities. . . . Services and materials for teachers and students, as

well as extension programs to the community will be headquartered in this area.

Serious students will have access to the museum's library, slide, and photograph collections, as well as to curatorial expertise. The library, together with two seminar rooms and separate study rooms for prints and textiles, offer important new teaching elements of the museum's program.<sup>61</sup>

Other new features planned for the facility included temperature, humidity and clean air controls for all exhibition and storage areas. Both the conservation laboratory and photographic studio were new facilities, specifically programmed for the "care and documentation of the collection."<sup>62</sup>

The major portion of the document is devoted to the Program and Space Study itself. This Study consisted of a lengthy enumeration and description of the various programmed components of the facility. The building program is divided into seven functional groups including general public services, exhibition, children's education, administration, education and curatorial center, art storage and handling, and services. The net total for each is specified, with the building gross total figured as 182,925 square feet.<sup>63</sup> Within the seven major groups appear various specified related activity areas and support facilities. In table form, the program descriptions follow, including an architectural description, the desired net area in square

feet, and specifications for necessary furniture and equipment. As an example, Appendix B reproduces one set of the program descriptions from the Space and Program Study-- in this case, for the exhibition galleries.

The compilation of the Space and Program Study was a crucial step in the design development of the new museum, as it determined for the architects the specifications they needed to plan for the size, character, and adjacency of museum services. The determination of space needs and facility requirements was based on the recommendations of the staff of the museum. As explained in the introduction to the study,

The process of evolving the space and program study has involved all senior members of the museum staff and drawn on their collective experience with the current Dallas Museum facility and museums where they have worked in the past. The program has been cross-checked against the Walker and Scaife museums designed by the architect (see Table II) Particular attention has been paid to comparable program and space allocations in the nearby Kimbell, Amon Carter, and Fort Worth Art Museums.<sup>64</sup>

The table cited in the quotation listed comparisons of square footage in the existing DMFA, new DMFA, Scaife Addition and Walker Art Center for various major museum facilities.<sup>65</sup>

Dan Casey, as Project Architect, was responsible for compiling all of the detailed information for the Program and Space Study. He recalled that the staff of the museum had been asked to write down their ideas about what they

needed in the various departments. This material, while somewhat sketchy and unorganized, provided some basic concepts on which the architects could build. From that point, Casey described the process of putting the Program and Space Study together:

We ended up doing several rounds of interviews with every key staff person to determine what their needs were. Also, to assign square footage numbers to activities. And then, once you get all the pieces listed, you go about assembling those in various ways. I think in some cases if we had taken their suggestions literally, we would have ended up with some areas that would have been too big, and some too small, obviously. So you have to rely on all facets of museum design. And also to keep in mind the overall goals and priorities . . . to balance everything.<sup>66</sup>

Casey noted that part of the challenge in compiling all this material was due to the large scale of the overall project. Rather than being simply the expansion of a few specific areas,

This museum was sort of unique in that they wanted everything in one building, the first time. It wasn't all gallery space, or it wasn't all support, they wanted it to be sort of a miniature Metropolitan Museum of Art in one shot. So there was an auditorium, there was a restaurant, there was a bookstore, an orientation theater, a professional conservation lab. All those things that are important, which in most museums develop over the years, [they wanted immediately].<sup>67</sup>

Casey recalled that much of the early work on the Program and Space Study determined the square footage per gallery to be allocated to each collection. Casey noted that the strongest areas of the collection--the Pre-Columbian, African and 20th-century American--needed expanded galleries so they could be displayed in depth. It also needed to be

determined which other parts of the collection were most likely to grow. This seemed most probable in 19th and 20th-century European art and 19th-century American art. All of the other collections also received a substantial increase in space.<sup>68</sup>

Another study of projected space requirements for the overall new museum facility had been prepared by the Dallas Museum staff in June 1976, apparently to give the architects a preliminary idea of areas to be expanded. This study listed the various services, offices and exhibition areas, giving their present and anticipated size in square feet.<sup>69</sup> The 1976 Space Requirements study pre-dated the 1977 Space and Program Study by fifteen months. The author compared the figures for projected size requirements in both studies, and it is apparent that there are differences in the square footage figures, including major variations in some areas. It would seem that all of the space requirements were re-evaluated for the Program and Space Study. For example, the anticipated space projected for education, curatorial and administrative offices in the 1976 study is 7500 square feet, while the 1977 Space and Program Study nearly doubled this figure to 14,730 square feet. The later study also shows space allocations for special areas, such as a photography studio and an exhibition design studio, which were not included in the 1976 study.

Commenting on the approach used by the staff in estimating the space requirements for the new facility, Harry Parker recalled that increasing the overall size of the Fair Park museum's exhibition and supporting spaces by two and one-half times was the targeted objective.<sup>70</sup> An examination of the "Museum Net Program Comparisons," a table from the Program and Space Study, reveals that in many areas this desired expansion in square footage was achieved as projected in the calculations for the program space requirements. Most areas were at least doubled in size, and some were more than tripled.<sup>71</sup>

In the division of gallery space for the various permanent collections, contemporary art received by far the greatest share--12,000 square feet. This was followed by projections of 5,500 for Pre-Columbian art, 4,000 for American art prior to 1940, and 3,000 for African art. The smaller collections were allotted 1,000 to 2,500 square feet.<sup>72</sup> Another 10,000 square feet was assigned to a section for "additional collections," which was described in the Program and Space Study as being "for the display of collection not defined at the present, such as decorative arts, etc." This gallery space was to be flexible to allow "environmental exhibits."<sup>73</sup>

The Program and Space Study is undoubtedly the most significant document relating to the design of the museum, for it functioned as the basic starting point for subsequent

design work. The calculations made by the staff for space requirements, and whether or not they had judged their future needs accurately, would be very important to the overall success of the ultimate design. There would have to be some compromises made as certain aspects of the building program were modified to fit the projected budget, but satisfying the requirements of the Program and Space Study would be one of the primary goals of the architects.

#### Site Selection

At the time that Barnes was hired as the architect of the museum, in May 1977, Carr/Lynch Associates were hired by the city of Dallas and the various Dallas arts institutions to study appropriate sites for the arts organizations. As discussed in Chapter one, Barnes was hired simultaneously to ensure that the museum's interests would be considered by the city planners. The trustees's concern was that the selected site would be large enough for the museum and would be appropriately located for the museum's constituency. Dan Casey characterized the separate, but related contributions of Carr/Lynch Associates and Barnes's firm in this way:

[Carr/Lynch] was the first to articulate the concept of trying to collect the major art institutions in one part of town, with possible use of shared facilities. We were the first to start talking about where this [district] might be located.<sup>74</sup>

The process of site selection reflected the concepts of director and trustees, cited at the beginning of this

chapter.<sup>75</sup> For example, the trustees had earlier indicated that they didn't want a high-rise building. They also desired to have a sculpture garden, courtyards, and daylight galleries.<sup>76</sup> This meant that more horizontal acreage would be needed for the site so the building spaces could be spread out, not stacked.

One of Barnes's earliest determinations for the museum project was an estimate of horizontal acreage needed for site acquisition. Since the trustees had indicated that they wanted an adequate site, not only for the basic building and a sculpture garden, but also for future expansion, it was crucial that enough land was acquired at the outset. After consultation with Harry Parker regarding the general size needs of the new museum, Barnes met with the building committee in June, 1977, to report that eight acres of horizontal space was needed for the basic facility. This would allocate two acres each to exhibition galleries, support and service facilities, controlled courtyard area (sculpture garden), and parking.<sup>77</sup>

Taking into consideration the trustee's plans for future expansion, Barnes's estimate was for a total of twenty horizontal acres for present and future use. Barnes assumed that if some of the building's facilities could be stacked into a low-rise, three-level museum, this three-level structure would require about seven acres of land.<sup>78</sup>

The importance of Barnes's early estimate for site size is underscored by Margaret McDermott's recollection that the trustees were, at that time, considering the purchase of only one block for the museum. She credits Barnes for convincing the trustees that they should acquire at least three blocks.<sup>79</sup> With this figure in mind, site selection went forward.

Concurrently with the museum's site selection, the Carr/Lynch planning team was undertaking their studies of the optimal location for city's arts institutions.<sup>80</sup> By July 1977, the Carr/Lynch planners had identified four districts downtown on which their investigation was focused--including the "core ring" (the Central Business District), the civic center, the warehouse district, and the "northern district" (the museum's current site).<sup>81</sup>

These districts were discussed by the building committee, and it was determined that Barnes should make a land-use study of two of the areas--the civic center district and the northern district. The civic center district included the Convention Hall and the City Hall. The northern district was located north of the core ring, or central business district, and included Ross Avenue, which was proposed as the link between downtown and the Cedar Springs and McKinney area. During this same July meeting, the committee also decided that a report would be made to

Carr/Lynch that the northern district was the museum's first choice, but that other sites would be considered.<sup>82</sup>

Barnes reported back to the building committee in August 1977 with his conclusions from the land-use studies of the two districts. The civic center, or convention center site, was clearly not as desirable as the site adjacent to Ross Avenue (the northern district site) for several reasons, which Barnes presented to the building committee. The maximum available acreage near the convention center was 4.8 acres, as compared to sixteen acres near Ross Avenue. Due to the configuration of the smaller site, Barnes explained that the form of the building would have to be restricted to an L-shape, wrapped around Pioneer Cemetery. Also, because of the restricted acreage, future expansion would necessarily be vertical--stacked on top of the original building.<sup>83</sup> This was undesirable, as the trustees had previously voiced their opposition to an "elevator" building. The stacking of expansion space on top of the original building would also obscure skylights on the gallery floors, and daylit galleries were considered by the trustees to be a basic design feature. Another major drawback to the convention center site was that there would be no room for parking facilities on the site, since all of the available acreage would be needed for the museum building.<sup>84</sup>

Barnes's presentation of the second site in the northern district sharply contrasted with the size limitations of the convention center site. Barnes defined the northern district site as the area bordered on the north and south by Woodall-Rogers Freeway and Ross Avenue, and extending east to Pearl Street and west to St. Paul Street. This also was referred to as the Ross Avenue site. The entire area covered sixteen acres (twice the size of the museum's current acreage), with 8.6 acres designated for the museum itself.<sup>85</sup>

It was obvious from the land-use studies which Barnes presented to the building committee that the Ross Avenue site, in terms of size alone, was by far the site with the most possibilities for the museum and for the concept of an arts district. As Casey remembered:

This was the one that we preferred, because it was the most land, and the least in the way of existing conditions. The site was [partially] abandoned, and the other half was a used-car dealership. So, there was very little in the way, and it was so close to the heart of the downtown--and freeway access--that it seemed to have everything going for it. And then once you look at that [large] tract of land, it was just a perfect opportunity to do something here that would be a catalyst for all this [development].<sup>86</sup>

There was apparently no serious contention between the two sites from the trustees's viewpoint, and they had already indicated their preference for the northern district/Ross Avenue site at the July meeting.<sup>87</sup> However, the civic center site had one undeniable advantage in that it was already owned by the city of Dallas.<sup>88</sup> This factor would

have substantially reduced the total cost of the new museum, and was undoubtedly one of the reasons the site was being studied.

Fortunately for the museum, it had the support of Mayor Robert Folsom, who strongly desired to stimulate new development and construction in the city.<sup>89</sup> Even though city officials had previously stated that the city would assist the museum with land acquisition costs, the cost of purchasing a site in a less-developed area, such as the northern district, might not be viewed as an impediment. As Margaret McDermott pointed out, the land prices for that district, at the time, were the lowest in Dallas.<sup>90</sup> The trade-off for the museum land acquisition costs would be new vitality and growth in the area surrounding the museum and the other envisioned cultural buildings. The final report of Carr/Lynch Associates further supported the selection of the northern site for a clustering of the major arts institutions, such as the museum, by stating:

the common choice fell to the north, both [sic] because of the ample and less expensive sites available there, the good highway access, the relation to downtown growth, and the interesting existing structures which remain from the days when this was [a] favored residential area of Dallas.<sup>91</sup>

Barnes also foresaw the potential impact that the museum might have on future development of the area, and he observed that the site would act as

. . . a natural bridge from the central business district to the Turtle Creek neighborhood just a few

blocks to the north. Surely, the undeveloped land in this corridor will be improved . . . so that the Turtle Creek-downtown axis will be increasingly attractive.<sup>92</sup>

That Barnes was correct in assessing the future development of this corridor can be seen today in the massive Crescent Court office/hotel/retail complex and the surrounding retail/residential construction, all located north of the freeway and the museum's site.

The location of the Ross Avenue site seemed politically expedient as well--an important consideration, as the trustees recognized that they needed support not only from city officials, but also the voting public, if a bond election was necessary for funding. Barnes observed:

By placing the museum downtown close to the freeway, we are serving greater Dallas. At the same time, this northern site is a gentle expression of orientation to the suburbs that have traditionally given the museum support.<sup>93</sup>

The trustees had been aware of the Ross Avenue site for some months, and it satisfied the trustees' desire for a fully accessible location. The Ross Avenue tracts had been proposed as a potential museum site back in November 1976 by Robert B. Kilcullen, of Hudson and Hudson, a Dallas-based real estate firm. In a letter to James H. Clark, an important benefactor of the Dallas Museum, Kilcullen noted the site's location north of the traffic-congested heart of the central business district, its proximity to several downtown hotels, and its accessibility by car or bus. He also noted that the property was "within walking distance to

the heart of Dallas, which means office workers could come to the museum during the week."<sup>94</sup>

Barnes, after studying the Ross property, cited the advantages of its location within the central freeway ring and its easy accessibility:

. . . it is close by the planned Pearl Street exit of the Woodall-Rogers expressway so that there is the possibility of smooth access from the freeway system. Local streets, St. Paul and Harwood, bridge the freeway and run past the site, and Ross acts as part of an inner ring past the site in a generally east-west direction. No other site that we looked at had such graceful access.<sup>95</sup>

Barnes saw other advantages in the Ross Avenue site:

The site is on high ground, in the only blocks where the freeway ring is depressed. This feature is significant. Only here can we be conveniently close to the freeway without being dominated by the sight and sound of the stilted parkway. . . Here, on this rise, there is open sky, and the towers of Dallas at arm's length.<sup>96</sup>

The initial plot proposed by Kilcullen was bounded by Harwood, St. Paul, and Munger and totaled 5.94 acres, less than the current museum acreage. Johnson Chevrolet owned the southwest corner of the property, where a concrete and steel building housing the business was located. The rest of this site was composed of several tracts containing other older structures and parking lots.<sup>97</sup> Kilcullen continued to contact the various owners of the land lying between Munger and Ross Avenue on behalf of the museum, and he also began contacting owners of the three blocks to the east of the current museum site. This included property bounded by Ross, Pearl, Flora, Olive, Munger, and Harwood.<sup>98</sup>

The trustees recognized that the entire area had good potential, not only for the museum, but as a location for the proposed arts district. The overall land parcel that came to be envisioned for the district is illustrated in a later model that was commissioned by the City of Dallas to indicate where the "Proposed Arts District" would be located (fig. 137).<sup>99</sup> The inexpensive land in this underdeveloped area was affordable for the various arts organizations interested in relocating. The site therefore had the potential to fulfill another of the trustees' concepts--that of a grouping of the city's arts facilities.

The trustees approved the optioning of the property, and John Murchison, chairman of the board, began to privately take free options on behalf of the museum. These free options were for one year with two six-month extensions. The ultimate goal in optioning land within this larger acreage was that the trustees hoped to reserve some parcels of land in this way so that the options could be transferred to the symphony, opera and other arts institutions. The arts organizations could then be clustered near the museum, as a kind of "mini-Lincoln Center" north of Dallas' central business district.<sup>100</sup> Although there would later be a reaction against the Lincoln Center prototype, the concept did influence early land-use studies.<sup>101</sup>

Barnes strongly encouraged the trustees to option the land surrounding the museum. Harry Parker recalled:

I think that Barnes really should be credited with from the beginning, [being concerned] not only for the museum building, but for the whole museum neighborhood. Which translated into [our] optioning land . . . off our site. . . . Maybe it was a very grandiose thing

on our part, but we were taking responsibility for the whole district.<sup>102</sup>

The second land-use study prepared by Barnes on the preferred Ross Avenue site gives the first indication of Barnes's earliest concept for site development and basic form of the structure. With 8.6 acres available on the Ross Avenue site, Barnes saw the possibility for a two-story structure with room for a horizontal, rather than a vertical expansion. Parking facilities would initially be located on the designated expansion area. He described the museum as a square-shaped building, which because of its horizontal orientation could have courtyards and skylights. Barnes also envisioned small pocket parks landscaped along Ross Avenue.<sup>103</sup>

Barnes's one reservation about the Ross Avenue property was indicated when he voiced his concern that it would be important to control the height of the immediately surrounding buildings so that the museum would not be drowned.<sup>104</sup> The trustees apparently did not agree on this last point, and in the discussion that followed, it was decided that the goal would be to keep the level of the buildings around a "center turn-around" to two stories, in

which case a high-rise commercial building on the street side would not matter.<sup>105</sup> The minutes of the meeting do not indicate whether Barnes was in agreement on this point. However, this statement suggests the concept of the orientation of the building around a center turn-around being a key element in early planning.

#### Early Conceptual Plans

A space diagram was filed with the minutes of the 1 August 1977 Building Committee meeting which illustrates the land-use study on which Barnes made his report (figs. 138-140). This is apparently the earliest surviving visual image of the conceptual plans for the new museum.

The "DMFA Space Diagram" was clearly identified as being a depiction of the Harwood site (Harwood intersects with Ross Avenue, so this is another way of identifying the Ross site), but no streets are indicated for site orientation purposes. However, when the space diagram (fig. 138) is compared to a schematic site study (fig. 141) that appeared one month later, it is apparent that the space diagram shows the site as viewed from north to south--the south end being at the top. The later site study presents the north end at the top.<sup>106</sup>

The DMFA Space Diagram is presented in three phases (figs. 138, 139, 140) which illustrate the proposed manner in which the museum could expand on the Ross Avenue site

(the diagram refers to the site as the "Harwood site" for the street to the east which spans the length of the property). Phase A (fig. 138) projects the initial construction of a two-story, 160,000 square foot building with permanent galleries on the top floor, temporary galleries and various office spaces and educational facilities on the ground floor, and storage and services below grade. The museum building is shown composed of a basically square shape pierced with squares representing courtyards and pocket parks.<sup>107</sup>

Phase A (fig. 138) shows the square form of the museum building aligned with a larger rectangular gridded area containing a center circle. This area is identified as "Plaza and Entry" in the Phase A diagram, and it probably represents the "center turn-around" discussed during the meeting. However, the museum building and entry plaza do not appear centered on the overall rectangular Harwood site, indicated by the square areas shaded with dots. The reason behind the seemingly off-center positioning of the main structure on the site is apparent when the Space Diagram is compared to the schematic site study (fig. 141). The site study places the plaza (4) and museum (1) in alignment with Flora Street so that a major processional to the museum is created. At the time of the study, Flora existed as a small side street that curved to the north as it approached Harwood and cut through the museum's site (see existing site

study, fig. 142). The architects' proposal for straightening Flora and Olive Streets (fig. 143) illustrates their developing master plan for the neighborhood. Straightening Flora would be advantageous to the museum's location, and straightening Olive would make the surrounding land parcels more attractive to other developers. Eventually, Flora would be raised and realigned in partial fulfillment of these early proposals.<sup>108</sup> This study illustrates the genesis of a very significant concept for future development of the design plans.

Phase B of the Space Diagram (fig. 139) projects the first phase of expansion for the museum. The projected expansion appears in the dark shaded sections of the drawing. The projection includes 70,000 square feet of gallery expansion on two levels and 40,000 square feet of expansion for supporting space. The gallery expansion depicted in Phase B (fig. 139) demonstrates that the concept for pocket parks and courtyards was to be continued in the addition. In a comparison of Phase B with the site study plan (fig. 141), it can be seen that the expansion is programmed for the northern portion of the site (2).

Phase C (fig. 140) gives an extended view of gallery expansion, in which the entire northern portion of the site is covered by an additional 110,000 square foot expansion of galleries and museum support space. In examining the upper level of gallery expansion, it becomes apparent that a

pattern of development is being set up. The upper gallery floor is composed of rectangular blocks of space, each with a courtyard positioned in the center. In the fully-developed pattern of Phase C, these blocks appear to step back and forth within the overall site. Phase C of the Space Diagram demonstrates that dating from the earliest conceptual planning, the provision for gallery expansion had an impact on the site planning and ultimate form of the building.

The early site study (fig. 141) is interesting for its proposal of additional parking facilities in the neighborhood. Area 4 is described as "plaza with parking below." This underground parking would presumably have shared use by the commercial developments identified for the two flanking blocks (area 5) and the museum. Although area 2 of the diagram appears as the designated museum expansion rather than museum parking, it had been proposed in the land-use study for the site that surface parking facilities would be located on the designated expansion area.<sup>109</sup> However, if additional parking could be placed under the entrance plaza, the museum could share the cost with the neighboring developers and possibly with the city of Dallas, rather than bearing the entire cost by itself.

In April 1978, Barnes would meet with city manager George Schrader to review alternative parking schemes for the arts district neighborhood. Schrader supported a city

parking garage proposal which would have served the museum and the symphony, if it was located nearby. An alternate proposal was also discussed for a flexible program of surface and underground parking with the building of parking facilities coordinated with the development of the cultural facilities.<sup>110</sup> Although the concept of shared parking was considered desirable by museum and city officials, ultimately no agreement was reached, and the museum was restricted to on-site parking only.

Barnes's written comments on the site can be examined as a significant record of existing neighborhood conditions in 1977. His observations are recorded in a letter dated 14 October 1977, which he wrote to Harry Parker in support of the museum's preferred site adjacent to Ross Avenue.<sup>111</sup> Barnes's letter is included as Appendix C of this thesis. Much of the area has changed radically since 1977, and it is important to realize that decisions about site selection and development were based on conditions existing at that time. One of Barnes's primary concerns in the consideration of the Ross Avenue site is revealed in his discussion of the "edge condition":

If this is the right site, then it is essential that the Building Committee address the surroundings--what I have called the "edge condition". As compared with other sites, this one is pretty good. There is the sunken freeway corridor guaranteeing open sky to the north. There is Southwestern Life--a low white marble building to the west. And there is the well-kept Methodist Church to the south. This assortment (with the Sedco complex and the Fairmont just beyond) is a good edge condition. It is to the east that we have

problems. Here between Harwood and Olive there is an unacceptable jumble of low structures and parked cars. It is essential that these blocks be planned and developed intelligently.<sup>112</sup>

Area 5 (fig. 141) was not only just being considered for commercial development. Negotiations with the Dallas Symphony were on-going during this period in an attempt to attract them to one of these neighboring blocks, so that the symphony could share parking and a central plaza with the museum.<sup>113</sup> Barnes strongly argues for this arrangement in his letter to Harry Parker:

. . .whatever is planned east of the museum must be compatible. . . another cultural institution or sympathetic private development would be good. If Olive Street and the related freeway bridge is located to the east as we recommend, then this parcel, bounded by Woodall-Rogers, Olive, Ross, and Harwood becomes most attractive for development. It is our hope that the Symphony and enlightened private developers will see this attraction.<sup>114</sup>

In his letter, Barnes also describes the proposed entrance plaza and his concept for adjacent retail development:

We are suggesting a central arrival plaza--a landscaped forecourt--serving equally the museum, . . . the Symphony on the large parcel north of the plaza, and an office retail building on the smaller parcel on Ross. It is hoped that restaurants (such as the Gingerman near Lincoln Center) as well as art shops, music stores, etc., would be attracted to this retail block. If the symphony opted to be our neighbor, the two institutions together would make a solid impact on retail development. If the symphony splits, and the two institutions go it alone, then the possibility of lively compatible commercial use is less likely.<sup>115</sup>

To facilitate the coordination of a "combined neighborhood plan," Barnes urged the executive committees of

the museum and the symphony to meet and clarify their objectives.<sup>116</sup> Barnes found it difficult to proceed with definite plans until the site selection was finalized. However, the symphony's plans for their new facility were not as far advanced as the museum's, and a firm commitment was not forthcoming as to their participation.<sup>117</sup>

Barnes's obvious concern about compatible development near the proposed entrance plaza led him to investigate other options within the northern district site. When the symphony appeared uninterested in the property adjacent to the museum's proposed site, he presented an alternate site for the museum. This site was one block east of the original site, on the property previously designated for the symphony, plaza and retail development (see fig. 141, areas 4 and 5). Barnes was concerned that the original site might not be "effective" if no plans were finalized for compatible commercial development of the entrance plaza. He noted that the advantage of the alternate site was that it would not require concurrent actions by other arts groups, which were apparently holding up progress.<sup>118</sup>

Barnes felt that whether or not the symphony was interested in a site in the neighborhood, the museum needed to move forward with its own plans for the entrance plaza and provide impetus for an overall master plan to control development of the parcel.

The entire area from Pearl to Southwestern Life is one neighborhood, and from an urban point of view should

have one master plan--a plan that not only dictates land use and traffic flow, but that also determines massing and such things as cornice lines and building materials. . . . We have gone as far as we can with exploration of possibilities and objectives. We now need specifics, a firm plan defining everything from land acquisition and street closings to traffic flow and land use. It is our job now to structure the next concrete step in the planning process.<sup>119</sup>

That Barnes was an early advocate of neighborhood planning for the arts district is not surprising, considering his previous experience as a master planner.<sup>120</sup> From the beginning, Barnes's firm worked in collaboration with the Carr/Lynch team and their traffic consultant Warren Travers so that an adequate site with good access could be obtained for the museum. Since much of the surrounding property was underdeveloped and undervalued, Barnes was naturally concerned that the inevitable movement of commercial developers into the area might lead to rapid and uncontrolled high-rise growth which would "drown" the museum.<sup>121</sup> The adoption of a master plan would provide some measure of control over surrounding development.

It is somewhat surprising that Barnes was not asked to officially act as master planner for the district under consideration. He had considerable previous experience and was the first architect to be hired to design an important civic commission which undoubtedly would serve as an anchor for the entire neighborhood. He was the first to articulate specifics for a plan in his October letter to Harry Parker, and to urge the hiring of a master planner.<sup>122</sup> The

Carr/Lynch report was not presented to the city council until 16 November 1977, and it primarily addressed the selection of a general location for a recommended clustering of arts facilities.<sup>123</sup>

A likely factor against the selection of Barnes as master planner was that the museum trustees, gingerly engaged in negotiations with the symphony trustees, who had selected I.M. Pei as their architect, did not wish to appear to be exerting too much control over neighborhood plans by promoting their own architect as master planner. Vincent Carrozza suggested:

I think they excluded themselves because they were prominent in the district. If Barnes had been chosen, or if Pei had been chosen, there might have been some feeling . . . that the architects for those specific [projects] were dominating the planning of Flora Street to the advantage of the particular service with which they were associated. I don't think they would have accepted [the position].<sup>124</sup>

However, even though Barnes was not the designated official master planner, he exerted a great deal of influence through his early planning for the overall district, both on museum trustees and on outside groups. To illustrate his concept of a "neighborhood plan," Barnes's firm produced a model which was shown to museum officials, the Carr/Lynch Associates, city officials and the Symphony trustees. This was described in minutes of the Building Committee as "a model representing a master plan for development of the Ross Avenue site."<sup>125</sup> In form and size, the master plan model probably resembled a later

site massing study model (fig. 173), although the appearance of the museum had not yet been determined. Dan Casey recalled this model as an "on-going process model" used to discuss many alternatives considered and proposed by the architects for the museum site and surrounding neighborhood. Casey noted that the master plan model was not a fixed scheme, but came with a "shoebox" of various sized building blocks that could be interchangeably placed to suggest where certain facilities, such as the Symphony, might be located.<sup>126</sup> The effect that this model and Barnes's discussions with the various interested parties had in forming a collective concept for a master plan cannot be determined, but several of Barnes's recommendations were eventually carried out.

A planning concept promoted in Barnes's early conceptual presentations was the central position of Flora Street as a processional entrance to the museum, and as the hub of development for the surrounding arts district. Dan Casey mentioned the architects' initial idea of straightening Flora Street so it could act as a center line for the district, and placing an entrance court in that line.<sup>127</sup>

This concept is reflected in a drawing of the early conceptual planning which shows the alignment of Flora with the proposed arrival plaza, off-site, occupying one block to the east of the museum (fig. 141, compare with fig. 142 showing existing right-of-way for Flora and Olive streets).

The arrival plaza concept was later reduced in scale and moved to the museum's own site, a development that will be discussed further in Chapter IV. But to continue the focus on Flora as an important axis, Barnes proposed that Flora Street would be realigned from Pearl Street to Harwood Street, leading in a direct line to the museum's own entrance court.

Barnes's pivotal recommendation for focusing the arts district development around Flora Street was later adopted in the master plans developed by Sasaki Associates for the district.<sup>128</sup> Barnes never was publicly credited with the development of this key concept, but that he was the first to articulate it has been acknowledged by participants in the early discussions.<sup>129</sup> For Barnes, the logic of drawing Flora to intersect with the museum property was as an additional means of access to the middle of the eight-acre site. Beyond that, Barnes simply states, "The purpose of this was to [create] an Arts District, and the original concept was that there would be a pedestrian street here--a tree lined street. This was our idea."<sup>130</sup> But Harry Parker goes farther in summing up Barnes's impact on early planning in the district:

I think that one of the most responsible things that Barnes did was that throughout he saw the assignment as broader than just the museum's location. He's the one who identified the piece of land. He's the one who drew in Flora Street. Visually and design-wise, he invented the Arts District when he was working on the museum project. . . . Later [Sasaki] came into it--

but that was all after we [Barnes and building committee] identified Flora Street by the court and the vault, and the facing of the museum toward Pearl, and the requirement that Flora Street take its center line off the center line of our vault. All those things were museum decisions that created the Arts District.<sup>131</sup>

As an early advocate of master planning for the arts district, Barnes felt strongly that haphazard development would not further the trustees' concept of a major arts complex. Elaborating on his concept for a "neighborhood plan," Barnes called for one master plan:

. . . a plan that not only dictates land use and traffic flow, but that also determines massing and such things as cornice lines and building materials. There is the possibility here to make contained city spaces, like the streets and squares of older cities, outdoor rooms framed by old and new buildings, a sculpture square, an arrival plaza, and landscape[d] boulevards. We should aim at no less. . . we need a neighborhood master plan.<sup>132</sup>

The recommendation to hire a master planner was eventually adopted by a planning committee for the Arts District composed of major property owners in the area, museum, symphony and city representatives. A competition to select a firm to draw up a master plan was subsequently undertaken. Sasaki Associates of Watertown, Massachusetts were selected in 1982, and their design scheme would address many of the ideas voiced by Barnes in his October 1977 letter to Harry Parker.

One of Barnes's proposals which was not carried out was his suggestion to straighten Olive Street from Ross Avenue to McKinney Street. In his October 1977 letter to Harry

Parker, Barnes refers to his proposal to relocate a portion of Olive Street and the related freeway bridge to the east of the existing Olive Street right-of-way, which narrowed considerably north of Flora Street (compare fig. 142 to fig. 143). The effect of this proposal would have been to increase the size of the available land parcel bounded by Woodall-Rogers, Olive, Ross, and Harwood, thereby increasing their attractiveness to potential developers.<sup>133</sup> Dan Casey explained that this was

part of our master plan where we looked at ways to activate the sites adjacent to the museum. And to do that, we had [drawn up] schemes for realigning Olive Street to leave larger parcels for the symphony, opera, and so forth. These things were part of our thought process in trying to enliven the neighborhood and develop the concept of the Arts District.<sup>134</sup>

Since the trustees were purchasing options on parcels of land in these blocks, it might have been possible, with the cooperation of city officials, to carry out this scheme.

However, as Parker recalled, with the defeat of the municipal bond package for the arts in June 1978, the trustees lost their options on this property, and did not seek further to acquire this land, focusing their efforts instead on the actual museum site.<sup>135</sup> This was a significant change in strategy, because in doing so, they lost control over the development of other parcels in the district. However, Parker pointed out that as optimism returned with the passage of the second bond issue in November 1979, the museum purchased off-site land on the

opposite sides of Flora at Ross Avenue. This land purchase at least allowed the museum to control the Flora Street entrance.<sup>136</sup> "But the first reaction to the [bond election failure], unfortunately, was to stop feeling responsible for the whole district," Parker said.<sup>137</sup>

If Barnes's proposal to realign Olive Street had been carried out, it would have further served to define the arts district "neighborhood" within two approximately equal, rectilinear parcels of land. Barnes's desire for the street realignment to define the arts district reflects not only his view of this area as one urban neighborhood, but also his own strong preference for the gridiron system as the ultimate logical basis for urban planning.<sup>138</sup>

In an earlier statement of his ideas in the 1960s, Barnes commented on his concept of developing "protected neighborhoods" within overall city planning:

In the best solutions there is a strong central idea involving activity; it may be static or mobile, but it has to do with the human being in space. . . . Can one apply these ideas to City Planning? . . . The pattern . . . typical of many cities [is that] express roads and boulevards are defining neighborhoods.

I submit that by intelligently concentrating traffic, we also make it possible to return whole neighborhoods to the pedestrian. . . . And surely this concept of the protected neighborhood merging almost as a single building, surely this organic separation of traffic from community life points to city plans where the total form is a more comprehensible expression.

Fly over our cities at night and you will see that the gridiron disappears and the meaningless 'city beautiful' vistas vanish. What is etched in light are the rivers and streams of major traffic, circling and defining quiet dark neighborhoods. It is easy to talk

nostalgically of the market squares and plazas of Europe, but what is needed is a firm architectural concept for the major arteries, the true city entrances, and centers, and most important, the individual neighborhood communities.<sup>139</sup>

It is interesting to note that while Barnes was seeking to develop the Arts District area as a distinct neighborhood centered around Flora Street, apparently in this instance, he was not advocating separation of automobile and pedestrian traffic. The architects' objectives for the urban planning of the neighborhood are enumerated in Project Architect Daniel Casey's 1982 letter responding to proposals for the District made by the City of Dallas Planning Department. His letter is included as appendix D of the thesis. Casey's letter demonstrates that the architects have continued to remain interested in the development of the concepts of the Arts District and their attempts to protect the Dallas Museum's interests in the neighborhood. In it, Casey pointed out that several of the City Planning Department proposals could create problems for the museum, particularly in terms of accessibility. The city of Dallas has mandated controls for set-backs, materials and landscaping, as Barnes had hoped. It is uncertain, however, whether private developers will build sympathetic structures which will enhance the neighborhood feeling, or will simply "do as they please."<sup>140</sup> The current slump in the Dallas economy offers the opportunity to thoughtfully plan the continued development of Flora Street and the Arts District.

NOTES FOR CHAPTER III

<sup>1</sup>Daniel T. Casey, interview by author, Tape recording, New York City, 27 March 1986.

<sup>2</sup>Margaret McDermott, interview by author, Tape recording, Dallas, Texas, 31 July 1985.

<sup>3</sup>George Charlton, interview by author, Dallas, Texas, 2 July 1985.

<sup>4</sup>Vincent Carrozza, interview by author, Tape recording, Dallas, Texas, 23 July 1985.

<sup>5</sup>Margaret McDermott, interview by author, 31 July 1985.

<sup>6</sup>Vincent Carrozza, interview by author, 23 July 1985.

<sup>7</sup>Ibid.

<sup>8</sup>Harry Parker, interview by author, Tape recording, Dallas, Texas, 26 July 1985.

<sup>9</sup>See Chapter II, Walker Art Center, 121-129, Scaife Gallery, 129-135, Wichita Art Museum, 138-141.

<sup>10</sup>Harry Parker, interview by author, 26 July 1985. Parker also noted the trustees' awareness of the East Wing of the National Gallery, which was under construction at that time.

<sup>11</sup>Ibid.

<sup>12</sup>Ibid.

<sup>13</sup>Harry Parker, memorandum to members of the Architectural Selection Committee, 21 April 1977, from Architectural Selection Committee Correspondence files, Dallas Museum of Art, Dallas, Texas.

<sup>14</sup>Harry Parker, memorandum to Board of Trustees, 31 May 1977, 1. This memorandum is included as appendix C, 75-79, of "The New Dallas Museum of Fine Arts: Program and Space Study," September 15, 1977, Dallas Museum of Art, Dallas, Texas. It is included as appendix A of this thesis.

<sup>15</sup>Ibid. See Appendix A.

<sup>16</sup>Parker, memorandum, 21 April 1977, 1.

<sup>17</sup>Ibid.

<sup>18</sup>Parker, memorandum, 31 May 1977, 1.

<sup>19</sup>Ibid., 1.

<sup>20</sup>Ibid., 1-2.

<sup>21</sup>Ibid., 2.

<sup>22</sup>Parker, memorandum, 31 May 1977, 2.

<sup>23</sup>Ibid.

<sup>24</sup>Ibid.

<sup>25</sup>Ibid.

<sup>26</sup>Ibid.

<sup>27</sup>Ibid., 3.

<sup>28</sup>Ibid., 2.

<sup>29</sup>Ibid.

<sup>30</sup>Ibid., 3.

<sup>31</sup>Arthur Drexler, "Response," from Building the New Museum (New York: The Architectural League of New York, 1986), 57.

<sup>32</sup>Parker, memorandum to Architectural Selection Committee, 21 April 1977, 7.

<sup>33</sup>Parker, memorandum, 31 May 1977, 3.

<sup>34</sup>Ibid.

<sup>35</sup>Parker, memorandum, 21 April 1977, 5.

<sup>36</sup>Parker, memorandum, 31 May 1977, 3.

<sup>37</sup>Parker, memorandum, 21 April, 1977, 5.

<sup>38</sup>Parker, memorandum, 31 May 1977, 3.

<sup>39</sup>The Oakland Museum had been highly admired by the Dallas Museum trustees, who visited it March 3 and 4, 1977, during the architect selection process. George Charlton

wrote a memorandum to Harry Parker on March 15, 1977, enthusiastically noting the unusual landscaped surface of the museum. Files of Dallas Museum of Art, Dallas, Texas.

<sup>40</sup>Parker, memorandum, 31 May 1977, 3.

<sup>41</sup>Ibid., 4.

<sup>42</sup>Ibid.

<sup>43</sup>Ibid.

<sup>44</sup>Ibid.

<sup>45</sup>Ibid.

<sup>46</sup>Ibid.

<sup>47</sup>Chapter I, 10-12. See also Grace Glueck's "The Ivory Tower Versus the Discotheque." Art in America 59 (May-June 1971): 80-85.

<sup>48</sup>Parker, memorandum to Architectural Selection Committee, 21 April 1977, 2.

<sup>49</sup>Parker, memorandum, 31 May 1977, 4.

<sup>50</sup>Ibid., 5, and idem, memorandum, 21 April 1977, 2.

<sup>51</sup>Parker, memorandum, 31 May 1977, 5.

<sup>52</sup>Ibid.

<sup>53</sup>Parker, memorandum, 21 April 1977, 3.

<sup>54</sup>Board of Trustee minutes, 15 September 1977, 2.

<sup>55</sup>"The New Dallas Museum of Fine Arts: Program and Space Study," 15 September 1977, 1.

<sup>56</sup>Ibid., 2.

<sup>57</sup>Ibid.

<sup>58</sup>Ibid., 1, 2.

<sup>59</sup>Ibid., 2.

<sup>60</sup>Ibid., 1, 2.

<sup>61</sup>Ibid., 3.

<sup>62</sup>Ibid.

<sup>63</sup>Ibid., 9.

<sup>64</sup>Ibid., 3.

<sup>65</sup>"Program and Space Study," Table II, "Museum Net Program Comparisons," 6.

<sup>66</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>67</sup>Ibid.

<sup>68</sup>Ibid.

<sup>69</sup>See "Dallas Museum of Fine Arts: Space Requirements", a two-page table dated 21 June 1976, in files of Dallas Museum of Art, Dallas, Texas.

<sup>70</sup>Harry Parker, interview by author, 26 July 1985.

<sup>71</sup>This was arrived at by a comparison of "Existing DMFA" square footage figures with "New DMFA" figures as given in Table II from "Program and Space Study", 6.

<sup>72</sup>"Program and Space Study," 15 September 1977, 19.

<sup>73</sup>"Program and Space Study," 15 September 1977, 26-27.

<sup>74</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>75</sup>See also Chapter One, 17-20, for discussion of accessibility and concept of Arts District.

<sup>76</sup>Margaret McDermott, interview by author, 31 July 1985.

<sup>77</sup>Building Committee minutes, 20 June 1977, 1-2.

<sup>78</sup>Ibid.

<sup>79</sup>McDermott, interview by author, 31 July 1985.

<sup>80</sup>See "A Comprehensive Arts Facilities Plan for Dallas," prepared for the City of Dallas by Carr/Lynch Associates with Dallas Planning Team: Weiming Lu, E.G. Hamilton, [28] October 1977. Report filed with proceeding of Dallas City Council, 23 November 1977, #77-3503, Dallas City Hall, Dallas, Texas.

<sup>81</sup>Minutes of the Building Committee, 7 July 1977, 1. Nearly forty potential downtown sites were initially

examined by Carr/Lynch; see "Comprehensive Arts Facilities Plan," fig. 2, p. 33. This final report eliminated the Central Business District from consideration, but notes the other three sites were examined at length; see p. 34.

<sup>82</sup>Minutes of the Building Committee, 7 July 1977, 1-2.

<sup>83</sup>Minutes of Building Committee, 1 August 1977, 1.

<sup>84</sup>Ibid.

<sup>85</sup>Ibid., 2.

<sup>86</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>87</sup>As discussed later in this chapter, John Murchison, chairman of the board, was already taking free options on land in the district on behalf of the museum at this time.

<sup>88</sup>Harry Parker, interview by author, 26 July 1985.

<sup>89</sup>See discussion of Folsom's involvement in Chapter I, 15-17.

<sup>90</sup>Margaret McDermott, interview by author, 31 July 1985.

<sup>91</sup>Carr/Lynch Associates, "Comprehensive Arts Facilities Plan," October 1977, 35.

<sup>92</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 1.

<sup>93</sup>Ibid.

<sup>94</sup>Robert B. Kilcullen, letter to James H. Clark, 17 November 1976, 1-2, files of Dallas Museum of Art, Dallas, Texas. James Clark, museum benefactor and trustee, served on the Building Committee from 1977 to 1979.

<sup>95</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 1.

<sup>96</sup>Ibid.

<sup>97</sup>Robert B. Kilcullen, letter to James H. Clark, 17 November 1976, 1.

<sup>98</sup>Ibid.

<sup>99</sup>Photograph duplicated from slide collection of the Visual Resource Center, Dallas Museum of Art, with the

assistance of Eileen Coffman, Slide Librarian. Current whereabouts of model is unknown. The "Proposed Arts District" is represented by the dark raised square in the lower right corner of the photograph, bounded by Pearl, Ross, St. Paul, and Woodall-Rogers. Dan Casey's recollection was that City of Dallas officials commissioned this model to illustrate the desired Arts District location, possibly prior to the first bond election in 1978. Casey, telephone interview with author, 10 March 1989.

<sup>100</sup>David Dillon, "The New DMA: How We Got It," Dallas Morning News, January 22, 1984, 5C.

<sup>101</sup>In an interview with the author on 27 March 1986 in New York City, Dan Casey recalled: "There was another dynamic going on, which was that people didn't want another Lincoln Center--we didn't want an arts ghetto."

<sup>102</sup>Harry Parker, interview with author, 26 July 1985.

<sup>103</sup>Building Committee minutes, 1 August 1977, 2.

<sup>104</sup>Ibid. The Carr/Lynch report echoed Barnes's concern, noting in a discussion regarding the preservation of the characteristics of the district: "We would want to avoid private buildings which overpower the arts institutions by their height." See Carr/Lynch Associates, "Comprehensive Arts Facilities Plan," 38.

<sup>105</sup>Building Committee minutes, 1 August 1977, 3.

<sup>106</sup>The schematic site study (fig. 141) is filed with Board of Trustees minutes, 15 September 1977. This site study demonstrates the effect of straightening Olive Street and notes proposed traffic patterns in the neighborhood.

<sup>107</sup>This aspect of the plans had been described by Barnes during his presentation to the Building Committee, see 1 August 1977 minutes, 2.

<sup>108</sup>As observed by Dan Casey, interview by author, 27 March 1986. Casey described the then-existing Flora Street lying north of Harwood as a "small alley," telephone conversation with author, 11 April 1989. Casey stipulated the offsite improvements to Flora proposed by the architects for inclusion in the 1979 bond issue, as "Raised Flora St., realigned with 100' R.O.W. [right-of-way]." He also noted that Harwood Street was to be raised. See Daniel T. Casey, New York, to Jack Shoop [Director, Dept. of Urban Planning], Dallas, 20 July 1979, Dallas Museum of Art Construction Correspondence files, Dallas, Texas. Fig. 142 is filed with

Board of Trustees minutes, 15 September 1977. Fig. 143 is filed with Executive Committee minutes, 28 November 1977.

<sup>109</sup>As discussed by Barnes in his presentation of the land-use study to the Building Committee, 1 August 1977 minutes, 2.

<sup>110</sup>Building Committee minutes, 3 April 1978, 1.

<sup>111</sup>This letter is filed with Executive Committee minutes of 14 October 1977 at the Dallas Museum of Art.

<sup>112</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 2.

<sup>113</sup>See for example, Board of Trustee minutes, December 1, 1977, 2, and Building Committee minutes, April 3, 1978, 1.

<sup>114</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 2.

<sup>115</sup>Ibid.

<sup>116</sup>Ibid., 3.

<sup>117</sup>For a general discussion of the early development of the arts district, see George Rodrigue, "The Arts District," *D*, vol. 9, May 1982, 102-107, 124-127. In the same issue, Rodrigue's article, "Trammell Crow: Benefactor or Opportunist," 166, notes that the issue of adjacent siting for the symphony was settled after the defeat of the first bond election, when Crow purchased the land which had been proposed as the symphony's site.

<sup>118</sup>Board of Trustees minutes, 1 December 1977, 3.

<sup>119</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 3.

<sup>120</sup>Barnes was the master planner for the State University of New York at Potsdam (1963), and at Purchase (1968), Crown Center Redevelopment Corporation, Kansas City, Missouri (1972), Indiana University/Purdue University, Indianapolis, Indiana (1976), and the Colonial Williamsburg Foundation, Williamsburg, Virginia (1978).

<sup>121</sup>Building Committee minutes, 1 August 1 1977, 2.

<sup>122</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 3. Barnes urged the trustees on several occasions to encourage city officials to engage a master planner.

123 Tatum, Henry, "Arts Funding Wins Favor With Council," Dallas Morning News, November 18, 1977, 1(E). Some suggestions for building controls and development of public spaces are given in the Carr/Lynch report. The report states that "The key spaces must be carefully designed by professionals of national stature, or perhaps through design competitions," but master planning of the entire neighborhood is not specifically suggested. See pages 38-39, Carr/Lynch Associates, "Comprehensive Arts Facilities Plan."

124 Vincent Carrozza, interview with author, July 23, 1985. However, Carrozza and the Building Committee members did propose I.M. Pei be appointed master planner, clearly in the hope that the Symphony would concur with this proposal. See Building Committee minutes, 26 October 1981, 1-2.

125 Building Committee minutes, 15 September 1977, 2. Author could not locate model, presumed destroyed. Dan Casey indicated it was left at the Dallas Museum. Casey, telephone interview by author, 17 March 1989.

126 Daniel Casey, telephone interview by author, 17 March 1989. Casey recalled that this model, like many of the study models, was built at 1"/32' scale, or 20" by 20."

127 Daniel Casey, interview by author, 27 March 1985. The Carr/Lynch report, in contrast, refrained from specifically citing streets to link the proposed arts concentration to any one site in the "northern zone." An abstract diagram included with the Carr/Lynch report is described as being "tied to no particular set of sites." See p. 35, and fig. 4, p. 37, "Comprehensive Arts Facilities Plan." This imaginary diagram shows a major boulevard intersecting a right angles with a freeway, contrary to the architects' selection of Flora, which runs parallel to the Woodall-Rogers freeway, as the major axis.

128 See plans by Sasaki Associates for Dallas Arts District, illustrated in David Dillon's article, "The Dallas Arts District: Can It Deliver?," Texas Architect 35 (January-February 1985): 56-59. See also Dillon, "A Good, Gray Flora Street: Sasaki's Design Tasteful But Lacks Excitement," Dallas Morning News, 6 November 1983, 1, 8(C).

129 Harry Parker, interview by author, 26 July 1985, and Weiming Lu, former Assistant Director for Urban Design, Department of Urban Planning, City of Dallas, telephone conversation with author, 30 June 1988. Weiming Lu is currently Executive Director of the Lowertown Redevelopment Corporation, St. Paul, Minnesota.

<sup>130</sup>Edward L. Barnes, interview by author, 27 March 1986.

<sup>131</sup>Harry Parker, interview by author, 26 July 1985. Parker has elsewhere noted: "Others have contributed to the overall plan, but the basic concept of the Flora Street spine of what was later to be called the Arts District, and the position of the Museum as the anchor within the Arts District, came directly from Ed Barnes." See Edward Larrabee Barnes Museum Designs, [ex. cat.], Katonah, New York: The Katonah Gallery, 1987, 31.

<sup>132</sup>Edward L. Barnes, letter to Harry S. Parker, 14 October 1977, 3.

<sup>133</sup>*Ibid.*, 2.

<sup>134</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>135</sup>For details of the course of action discussed by the board of trustees after the bond election defeat, see Board of Trustees minutes, Special Meeting, 19 June 1978, 2-9.

<sup>136</sup>This purchase was urged by Barnes immediately after the bond election defeat. Barnes indicates in board minutes that if he was assured of a "T-formation," comprised of the museum site and a right-of-way entry from Pearl--presumably via Flora Street--the site could work for the museum without the rest of the arts district land. See Board of Trustee minutes, special meeting, 19 June 1978, 7-8. See figs. 141, 143, 198 for illustration of "T-formation" of Arts District plan.

<sup>137</sup>Harry Parker, interview by author, 26 July 1985.

<sup>138</sup>See Barbaralee Diamonstein's interview with Edward Barnes in American Architecture Now, New York: Rizzoli, 1980, 21, 30.

<sup>139</sup>Paul Heyer, Architects on Architecture: New Directions in America, Walker and Company, New York, 1966, 330.

<sup>140</sup>Vincent Carrozza, interview by author, 23 July 1985. See Rodrigue, "The Arts District," 125, for summation of design concepts for the district agreed to by public and private developers. See Rodrigue, "The Arts District," 127, and idem, "Trammell Crow: Benefactor or Opportunist?," 106-107, 165-168, for discussion of the concerns of private developers.

## CHAPTER IV

### DESIGN DEVELOPMENT OF THE DALLAS MUSEUM OF ART

Several important developments in the museum project occurred in the fall and winter of 1977. In September, Barnes had presented the completed Program and Space Study to the Board of Trustees and he also submitted a model of his "master plan" for the Ross Avenue site. At this time, Barnes announced the selection of the Dallas firm of Pratt, Box and Henderson as his firm's local associates. Phillip Henderson was the direct contact during the design period.<sup>1</sup> Ray McKinney would later assume this role during the construction period. The associate architects would be responsible for providing on-site supervision during the construction of the museum.

In December 1977, the final draft of the Carr/Lynch Report was reviewed and approved by the Dallas City Council. Of particular significance for the museum was the Council's appointment of a sub-committee to further study plans for the arts facilities. The committee's first recommendation to the City Council was for a cost-sharing plan in which the City of Dallas would assume major portions of the cost of site acquisition, construction and maintenance. This cost-sharing plan was of crucial importance in determining the financial burden that the Dallas Museum as an institution

would have to bear in designing and constructing a new facility. The percentages recommended by the committee

were:

program design: 100% institution  
site purchase: 25% institution, 75% City  
plans and schematics: 100% institution  
construction: 40% institution, 60% City  
maintenance: 100% City  
operations: under negotiation with each institution<sup>2</sup>

Following the completion of the Program and Space Study in September 1977, it might be assumed that there would be rapid progress in the design development of the new museum. However, the commencement of the schematic design phase was delayed by continuing uncertainty about the site of the new museum. Barnes had made a strong presentation for the Ross/Harwood site, and it was clearly favored by the Board of Trustees.<sup>3</sup> As discussed in Chapter III, John Murchison was convinced of its merits and he began privately taking free land options on this site and on other land in the large parcel lying between Pearl and St. Paul Streets on behalf of the museum. However, Barnes's October 1977 letter to Harry Parker (Appendix C) and several discussions recorded in Board minutes from the fall of 1977 through the spring of 1978 indicate that the site still had not been definitely confirmed.<sup>4</sup> These discussions suggest that the primary reason for the delay was the trustees' reluctance to commit to a site without concurrent action by the Dallas Symphony in selecting their own site, which, it was hoped, would be adjacent to the museum site. As a result of the

continuing uncertainty during this period over the Symphony's site, Barnes also undertook traffic and parking studies of the block to the east of the Ross/Harwood site.<sup>5</sup>

While the initiation of the schematic design phase was delayed for some months after the presentation of the Program and Space Study, it is apparent that during Barnes's continuing evaluation of the potential of the Harwood/Ross Avenue site, he was already forming several key concepts from which subsequent planning would evolve. His thorough investigation over a period of several months of the traffic patterns and development possibilities of the overall large land parcel lying between St. Paul and Pearl Streets no doubt contributed to his development of the final site plan for the Dallas Museum of Art.

The purpose of the "DMFA Space Diagram" (figs. 138-140), as discussed in Chapter III, was to illustrate to the Building Committee the land-use study on which Barnes based his recommendation of the Harwood/Ross Avenue site.<sup>6</sup> In these conceptual plans, several significant generating ideas were expressed. Figure 141 establishes that the Space Diagram was oriented so that a major entrance to the museum fronted Ross Avenue and aligned with Flora Street. (This entrance is also indicated with an arrow in fig. 138). Further, Barnes proposed centering the core of the building itself on the axis of Flora Street, rather than on the center of the museum's site. A small square forecourt is

placed within the museum block as part of the entrance from Flora Street in fig. 141. In front of the entrance also appears a large paved plaza described as a "center turn-around" for cars<sup>7</sup> that occupies an entire block between Harwood and Olive Streets.

These early proposals were retained in some form in Barnes's subsequent planning, and they underscore the potential that Barnes early on recognized in Flora Street if it were widened and realigned at its intersection with Harwood Street and the museum's site (figs. 141-143). He realized that Flora was crucial to provide necessary access to the center of the museum's large site, and he wanted to develop a "T-formation" through this intersection that would be a strong compositional anchor for the museum.<sup>8</sup> The Carr/Lynch study, conducted simultaneously with the museum's site search, ultimately recommended that the Dallas arts organizations cluster in an Arts District north of the central business district. As discussed in Chapter III, it was Barnes's early decision to place the museum--the first major institution in the Arts District--at the terminus of Flora Street which established Flora as the centerline of the Arts District. Barnes knew that the placement of a primary entrance to the museum at the end of a street-long vista would ensure that the museum would occupy a position of prominence in any further development of the Arts District concept. The importance of this entrance in site

planning is discussed later in connection with figures 144 and 145.

The schematic site study (fig. 141, area 3) indicates that the decision to place the public sculpture garden on the Ross Avenue end of the Harwood/St. Paul site was an early concept, undoubtedly to orient the outdoor garden close to downtown workers and as far away from the noise of the freeway as possible. The diagrams of the museum building include small squares intended to represent both interior courtyards and pocket parks interspersed with the building's mass along the side streets. The early appearance of these courtyards is significant, for they would feature prominently in continued design development. Barnes referred to this concept of alternating building masses and courtyards as "checkerboarding."<sup>9</sup> The opposite end of the site adjacent to the Woodall-Rogers freeway was designated for parking, as discussed in Barnes's presentation to the Board of Trustees<sup>10</sup> Figure 141, area 2, indicates that this portion of the site is designated for museum expansion, demonstrating that provision for expansion was a factor in the design from the initial conceptual planning stage.

Preliminary size estimates indicated in the diagram consisted of a total of 160,000 square feet for "Phase A" of the building design, with two subsequent phased additions of 110,000 square feet each. "Phase C" (figure 140) is the most

surprisingly prophetic of these early space diagrams--the upper level of the exploded isometric drawing depicts an overall pattern emerging of a stepping motion in the floor blocks set off by the serial repetition of perimeter parks and inner courts.

The growing significance of the Flora Street entrance in the development of site planning is indicated the Program Area Requirements studies dating from March 1978. One study (fig. 144) is for the Harwood/St. Paul site, and the other is for the Harwood/Olive site (fig. 145). The Harwood/Olive site is clearly more restricted in terms of size, constricting both the museum layout and expansion options. In both studies, the concept of the large shared plaza, which was linked to the adjacent siting of the Symphony, has been dropped and replaced by a smaller "entrance drop-off." In both, the drop-off entrance is aligned with Flora Street. In fig. 144, (the museum's current site), the three primary blocks representing the museum building are formally oriented toward Flora Street, which is extended as a boulevard through the Harwood/Olive site. In this scheme, the drop-off circle creates a formal entrance to the museum. The site has room to accommodate a sculpture park and car parking, with two options for a Phase II expansion on the parking lot indicated to the left of the drawing.

Project Architect Dan Casey recalled that the formal entrance drop-off was a program requirement, as the trustees

liked this feature of the Fair Park facility in which a car could be driven up to the door, a passenger could be dropped off, and the car then parked. The trustees had no pre-conceived idea as to where the drop-off might be placed, and to the architects, it seemed logical to tie the drop-off circle into the ceremonial process being developed in the Flora entrance axis. Casey noted that the architects liked the idea of driving down Flora and "into the building," and from this point on, the ceremonial drop-off court would be developed by the architects as "a small, contained event" on the east side of the museum.<sup>11</sup>

In fig. 145, the three museum blocks are pushed to the southern Ross Avenue end of the site to allow for an equivalent amount of on-site parking. Expansion options are restricted to a narrow strip of land, even with some road realignment indicated on Olive Street. There is no room on site for a sculpture park, one of the program requirements, although a landscaped park is suggested for additional land fronting Olive and Flora. The proximity of the freeway would have made this land undesirable for a park, however, and might have entailed a considerable expenditure of funds by the museum if it sought to acquire it in addition to the site for the museum building.

#### Commencement of Schematic Design

Barnes was authorized by the Board of Trustees to commence the schematic design phase on 19 April 1978. It

was estimated that this phase of design would be completed in approximately three months, although as it eventually transpired, this phase was extended following the defeat of the first bond election. Even though the bond election had not yet been held to secure funding, and a site change was still a possibility, the trustees wished to get the design phase underway as soon as possible. This decision was due primarily to estimated construction inflation costs of 100,000 dollars monthly, which could be reduced if the construction began sooner. Also, bond monies from the City (assuming a bond election was successful) would not be available until the design was completed. Most of the drawings analyzed by the author for this architectural development study date from the schematic design phase. The drawings reproduced in the study are primarily single-line drawings that the architects presented to the Building Committee for their comments on the placement of programmed areas and to verify space allocations. The earliest stages of design represented in these drawings are described by Dan Casey as being "almost like pre-schematics," in which major components of the museum were "floating" in response to the Building Committee's suggestions and revisions.<sup>12</sup>

#### April 1978 plans

The plans dating from April 1978 (figs. 146, 147) are the earliest surviving preliminary layouts.<sup>13</sup> They appear

to be studies for the plans which would be presented to the Building Committee on 20 May 1978. These early plans represent various schemes in which the positioning and adjacency of various functions of the museum were being examined. The services indicated are concentrated in three compact blocks continuing the assumption made in the Program Area Requirements studies (figs. 144, 145) that each block would consist of three floors.

The April plans reveal that this early layout included several features in the disposition of building masses and circulation which would remain intact throughout the continuation of design development. It should be observed that this basic scheme (fig. 146) represents the "core" layout onto which subsequent wings were appended, and it ultimately became the heart of the the final plan. The initial layout of the entrance court level (fig. 6a, 2 of 5) bears a striking resemblance to at least two earlier Barnes designs--the Osborn House (fig. 5) and the Straus House (fig. 17), both of which were shaped by a bi-nuclear functional concept that segregated differing activities into separately-expressed wings. All of these plans feature a primary entrance forecourt flanked by two equidistant wings, extending forward like "arms" on either side. The two side wings are connected by a gallery running at a cross-axis to the entrance, and one enters directly into the "body" of the composition. This basic tripartite plan is strongly linked

to Beaux-Arts design, and the resulting balance of building masses is entirely suited to the expression of repose and quiet dignity appropriate for civic architecture. Formally, the composition can be compared to a characteristic Beaux-Arts civic monument of the preceding century such as Richard Morris Hunt's Lenox Library (fig. 148, New York City, 1870-1877; demolished).

The core design for the Dallas Museum provided an armature for the development of all additional facilities. This armature was created by the early resolution of circulation on the site, and is formed by a cross-axis of two major pedestrian paths. Barnes recalled that circulation was one of the first design problems to be considered in the Dallas Museum, as it had been in the Walker Art Center.<sup>14</sup> One of these paths is indicated by the arrow pointing to the entrance courtyard leading from Flora Street and the proposed Arts District (fig. 146). The arched dotted lines on the interior of this east/west axis indicate that this entrance to the building opened under a curved balcony projected over an interior hall.

The Flora Street entrance is shown in the drawings to intersect at right angles with the other primary pedestrian path, which represents the north/south axis. A major entrance is indicated by the arrow leading from what presumably would be the Ross Avenue side south of the museum. This entrance would give the desired access to

downtown office workers. A third major entrance is indicated at the north end of the building in another one of the April 1978 drawings (not illustrated). This drawing indicates that a service level was tentatively being planned below the entrance level, and that the north entrance would be at a lower elevation than the other two entrances.

Barnes acknowledged that it seemed unconventional at the time to create three major entrances to a museum, but this this feature resulted from his determination to link the museum to the city plan. He noted that it was almost impossible to imagine conveniently accessing the museum on its sprawling eight-acre site without having more than one or two entrances. One was certainly required adjacent to the parking lot, and it would have seemed strange for the museum to turn its back on Flora Street and the Arts District, so this central area of the site seemed also to mandate an entrance. The south side linked the site to downtown Dallas, and office workers coming to the museum for lunch would have had to walk an additional block outside to the Flora Street entrance, so for their convenience, an entrance was provided on the south end of the site.<sup>15</sup>

The long passageway into which the north/south entrances opened is an early indication of the "pedestrian street" or "spine" which would serve as a linking device to the various museum activities. Barnes recalled that this feature of the design evolved naturally from a decision to

link all three entrances in an area of low security so that visitors could pass through this corridor without entering exhibition galleries.<sup>16</sup> Project Architect Daniel Casey recalled that the concept for an interior pedestrian street was incorporated into the planning from the very beginning of the design process. He also recalled that an analogy developed for this portion of the design, in which the activities along the spine were compared to "shops on a street" that could open and close on individual schedules.<sup>17</sup>

Barnes had previously used a spine as a pedestrian pathway in several of his earlier designs. The concept of an exterior spine was a primary organizing device in Haystack and the Wye Institute (figs. 32, 149), and was expressed as a stem open walkway along which the individual buildings branched. An interior spine was incorporated into the design of the Fuqua School of Business at Duke University (fig. 150) as a continuous hallway. In this design, which was developed concurrently with the Dallas Museum, the classrooms are distributed along a two-story "great internal street" paved in slate. This spine was bent at a pivot point in the center to correspond to the changing contours of the site's ridge, and to articulate between the two types of education programs.<sup>18</sup>

In the April 1978 middle level plan (fig. 146), immediate access from this interior street is offered to the bookstore, the orientation area, the east/west entrance

axis, the children's education area, and the auditorium. All of these areas which are active, people-oriented spaces branch off on either side of the interior street. The administration area is adjacent to the pedestrian street, but does not open directly onto the corridor, as it would not be utilized by the majority of visitors coming to the museum. In a slightly different variation of the middle level plan (not illustrated), the south entrance opens directly into the bookstore, with administration located to one side of this block. The dispersal of various services along the street, such as the bookstore and the orientation theater, would change as planning progressed, but the pedestrian street or "spine" would remain the connective focal point for all of the active functions of the museum. Even in these early schemes, the more active areas are being concentrated on the side of the spine opposite to the galleries, marked "contemporary."

Daniel Casey recalled that in the early plans the circulation within the spine was broken up into more levels, making the visual statement of the interior street less clear than in later plans.<sup>19</sup> This aspect of the early development of the spine is apparent in the April 1978 plans (fig. 146), in which the width of the spine is split in two on either side of the Flora Street entrance. The south entrance is the highest elevation; stairs lead up the second level, while a ramp leads down to the level of orientation

and the bookstore. At the north end, half of the spine ramps down (dn) to an area that appears to represent the auditorium adjacent to the north entrance (entrance indicated by dotted line), and half leads to other services at the entrance level. The changes in the spine's elevation suggest that, from the outset, Barnes's intention was to accommodate the sloping site in the building's design. Rather than undertaking expensive site work to level the lot, Barnes demonstrated his predilection for leaving his sites intact and he chose to establish the entrances at different grades. The only alteration of the site that would be made was the filling of a low area on Harwood Street north of the Flora entrance, which raised the grade of Harwood Street.

The appearance of the spine as a single long, grandly-scaled, continuous corridor has not yet been introduced into these initial schemes, although Casey remembers that "we wanted to make [the spine] as high, as grand as we could."<sup>20</sup> In the April 1978 plans, the spine is apparently only one story high, as the upper level containing most of the gallery space occupies the entire north end of the building, and the area above the Flora Street entrance is designated as a lounge overlooking the entrance hall on the first floor (fig. 147). Branching south of the lounge area on the upper level is the temporary exhibition area. This leaves the only probable two-story area in the spine at the extreme

southern end--the Ross Street entrance on the left side of the plan.

The second floor plan contains most of the gallery space--both for the permanent collection and the temporary exhibitions. It is apparent that in this early stage of design, Barnes was attempting to respond to Harry Parker's request for "a unique physical solution" that would both set aside space for the quiet contemplation of art and also provide active, people-oriented spaces:

A clear division may be made between the repository space for the permanent collection in which works of art remain in relatively fixed locations in an ambiance as quiet and contemplative as possible...A separate and carefully connected facility could house the more active and aggressive functions--the special exhibition galleries, orientation and education spaces, bookshop, restaurant, and auditorium.<sup>21</sup>

An important development in the April 1978 plans was Barnes's decision to physically isolate the gallery space for the permanent collection from the active spine area and facilities of the first floor. Just as in the Scaife Gallery and the Wichita Art Museum, the primary museum galleries are located on the second floor (fig. 147). The contemporary galleries are located on the first level west of the spine. The physical separation was not entirely complete in this plan, however, for the active restaurant facility was located on the second floor adjacent to the two-story entrance hall. This space, as will be explained later, was designated from the beginning as an area for art exhibition.

The schematic plan for the permanent collection galleries is indicative of Barnes's basic approach to museum design. In the author's interview with the architect, Barnes stated that he considered the individual galleries to be "a chain of spaces," and he reiterated his basic belief "that circulation--that flow is just as important as form."<sup>22</sup> Clearly, one of Barnes's primary objectives in these early schemes was to map out circulation within the galleries, just as he had already established the major pedestrian flow through the museum entrances. Barnes contrasted his museum designs with

static museums or museums with dead ends . . . [In] all the museums we've done, we give consideration to how you go through without retracing, and how you go through and have options.<sup>23</sup>

Barnes has previously voiced his dislike for wasted corridor spaces between galleries. He prefers for circulation to pass directly from one room to another. He observes:

I am interested in using the galleries as processional space. I do not want to have hall space and then have to go into little boxlike galleries. I want to have the procession through the galleries to be the main event.<sup>24</sup>

The first proposal for the arrangement of the permanent collection galleries is seen on the right side of the April 1978 gallery plans (fig. 147). The different collections identified as "American, European, Classical, Oriental, Tribal, and S.A." (South American) are isolated in separate rooms, but each room opens directly into another. The ramps

used to link the rooms further suggest that Barnes is attempting to create a special area for each collection by placing it on a different level. No directional cues are given in this plan, but movement through the succession of gallery spaces opening from the American/European gallery might be interpreted as being helical, which would be similar to the Walker Art Museum's progression of galleries (fig. 44). The Walker Museum, however, had a central elevator core around which the galleries were wrapped. This sort of pivot point is not evident at this time in the Dallas Museum plan. Whether the procession through the galleries is actually intended to move up or down is ambiguous in this gallery scheme, because no directional arrows are indicated. Barnes's concern for providing circulation options is represented in the April 1978 plan. From the American/European gallery, one could enter either the Tribal gallery or the Classical gallery and proceed through the Oriental and South American collections. Another entrance into the Tribal gallery was provided from the second level lounge. However, if a strictly chronological progression was desired, providing circulation options does not lend itself to an overt structuring of the processional.

A very significant feature of the galleries that was introduced in this early plan was the incorporation of a large courtyard within the American/European gallery. The

courtyard was placed slightly off-center in the gallery, but was directly aligned with the stairs leading from this gallery down to the vaulted space. This combined feature of courtyard and staircase would be integral to the later development of the gallery plans.

The courtyard represented one method of bringing daylight into the galleries. Harry Parker had indicated the desirability of natural lighting in his program statement to the Board of Trustees: "A degree of natural light is most desirable for full appreciation of Impressionist painting."<sup>25</sup> Several of the Impressionist paintings in the Dallas Museum's collection were donated by Margaret McDermott, who was the chairman of the Building Committee, so it is not surprising that consideration for the display of these works would have been considered early in the planning process. In Barnes's Scaife Gallery design, square openings had appeared at intervals in the roof plate to admit a direct well of light. As previously noted in Chapter II, these courtyard light wells were also provided in the Neiman-Marcus Department Store design. In the Dallas Museum design, for the first time, the courtyard was being considered as a square well enclosed on the interior with glass, as indicated by its delineation with a thin double line.

Sketched additions to the gallery level are visible on the original drawing (date when sketches were added is

unknown). The sketch demonstrates that additional galleries were being projected as additions to the north end of the building. Two rooms the size of the American/European gallery are indicated in the sketch. One of these also contains a courtyard. Its positioning at the bottom (east) of the next gallery quadrant implies the "checkerboarding" of building masses and open courts that was suggested in the space diagrams (figs. 138-140).

The April plans locate the Contemporary galleries as branching off on either side of the entrance hall (fig. 146). Harry Parker recalled that "art in the Great Hall was a given"--intended for art display from the beginning. He observed that the Fair Park museum was often used as a reference point during the early planning. The old facility in Fair Park contained a two-story entry hall which was utilized for the hanging of large contemporary pieces. The trustees wished to also have a grand entrance hall in the new building. Parker noted that during the planning of the new facility, there was some disagreement among the trustees as to which part of the collection the public should be first introduced to as they entered the museum. However, the entrance hall, because of its larger scale, would have naturally seemed to lend itself better to contemporary pieces.<sup>26</sup> Barnes's April 1978 plans apparently responded to this line of thought.

The Contemporary gallery to the north of the entrance is flanked on either side by short flights of stairs which apparently lead up to the American/European gallery. Barnes had used short flights of stairs to change gallery elevations in the Walker Art Center, and this concept appealed to the Dallas trustees. As Margaret McDermott recalled, "his idea of the gradual steps--we liked that immediately--the way it flows from the Contemporary gallery up to the Impressionist [collection.]"<sup>27</sup>

The service level of the museum (not illustrated), presumably located below the entrance level, was relatively undefined in the April 1978 plans, with the exception of a two-story auditorium incorporated as part of both the service and ground level floors. The single elevator block positioned to the right of the Flora Street entrance would have connected with this lower service level and with the second level lounge/balcony. A double loading dock is suggested on the west side of the museum, in the same quadrant serviced by the elevators.

Another service area is placed on the first floor in the upper left corner of the plan, but it is isolated from the elevator core. It was apparently intended to service the restaurant on the second level above. No delineation of the sculpture garden or parking areas is given in the April 1978 plans.

## 18 May 1978 plans

Drawings dated 18 May 1978 were viewed by the Building Committee on May 20, in one of the earliest of Barnes's formal presentations. These plans expanded upon those from April 1978 by including a complete scheme for the service level, a tower for the administration and curatorial staff, a section drawing, and a overall revision of the first and second levels. Alternate proposals were given for the location of the children's wing.

The composition of the exterior of the museum was discussed by Barnes during the May 20 meeting. He proposed that Texas granite or limestone be used for the outer skin, and further suggested that the same material, together with plaster, be used in the "Great Hall" and the interior spine.<sup>28</sup> Dan Casey recalled that stone was proposed for floor paving in the highly-trafficked areas of the spine and Great Hall, and also for the walls of the spine; plaster walls were considered necessary for the Great Hall, because of its planned use as a gallery.<sup>29</sup> Barnes's own long-standing aesthetic preference for congruous building materials, as discussed by the author in Chapter II, would have been satisfied by this proposal. In all probability, his proposal would have met with a favorable response from several of the trustees, who were very impressed with the rich effect of stone walls and paving in the Scaife Gallery.<sup>30</sup>

The large room into which the Flora Street entrance opens is specifically referred to in the minutes as "the Great Hall," signifying its importance in the overall design, and suggesting its ceremonial character. It is further described in the minutes:

The Great Hall being some two stories high would serve for receptions and also as a gallery for hanging large contemporary paintings. Preliminary plans viewed from the east entranceway showed a bridge above the entranceway from which one could look down into the Great Hall and cross into the tribal art gallery at the second level.<sup>31</sup>

The museum restaurant or "gallery buffet" was relocated in the 18 May 1978 plans (fig. 151). In these drawings, the dining area was placed on the first floor level, to the left, or south of the Great Hall. It would have had a vista of the sculpture garden to the south, and an outdoor dining area would have extended into the "Shade and Water Garden." The restaurant had previously appeared on the second floor in the April 1978 plans. In the May 18 revision, the galleries of Oceanic, African, Indian and Eskimo art were located on the second floor where the restaurant had formerly been placed (fig. 153).

The location of the bookstore would be an important consideration throughout the design development, because of the shop's revenue-producing potential. It was realized by the trustees on the Building Committee that the bookstore needed to be placed in the most highly-trafficked, visible area of the museum. In the May 18 drawings, the bookstore

was located adjacent to the previously-identified major entrance to the south--the Ross Avenue entrance (fig. 151). However, this placement was disputed by Betty Marcus, a committee member, who urged that it should instead be located "proximate to the main entrance."<sup>32</sup> This statement indicates that, at this time, the Flora Street entrance was considered in the planning to be the most significant. This point is also made visually apparent by the presence in the drawing of a large rectangular canopy over this entrance. The description of the Flora Street entrance as the "main entrance" underscores the importance of the Arts District concept to the trustees in their planning of the new museum.

A third major entrance was placed on the north end of the building, where the parking lot would be located. The north entrance is located in the May 18 plans on the lower level (fig. 155, see arrow). This is due to the lower elevation of the site on the north end. The north entrance in this plan would have opened into the floor devoted to staff support services and storage, with the only facility open to public access being the Temporary Exhibition gallery.

The dotted outlined area to the right of the same drawing shows plans for a "future garage" below the surface parking lot. This indicates that a parking garage was not planned as part of the initial construction. Dan Casey recalled that the discussions that were taking place at that

time involved shared parking developed with the City of Dallas and adjacent landowners, rather than the museum spending its initial construction budget to build its own parking garage.<sup>33</sup> The spine was described in the Building Committee minutes as an "interior street" which ran through the main level, or "action floor," and off of which curved entranceways would open to the bookstore, gallery buffet, and other facilities.<sup>34</sup>

The basement level was defined more fully in the May 18 drawings (fig. 155). Two entrances were placed on this lower level for art and service loading. The loading dock was placed on the west side of the building, opposite the Flora Street entrance. The most active service functions were grouped in the center, near the entrance--security, crating and the carpentry shop. Storage areas were clustered together on either side. Functions which needed more physical isolation from noise and contamination, such as conservation, exhibition design, and the photography lab, were grouped at the north end of the building. The temporary exhibition gallery and mechanical services were located beneath the flanking wings of the Flora Street forecourt. All services were interconnected by long hallways.

Barnes presented alternate proposals for the location of the children's wing. One proposal (Plan A) illustrated a small, two-level building separate from the museum proper,

which was positioned at the south end of the sculpture garden (fig. 151). The minutes describe the alternate plan for the location of the children's wing as being on the "lower level of the museum opening onto the parking lot, but in any event having exterior light."<sup>35</sup> However, the actual surviving Plan B (fig. 152) does not correspond to this description. Plan B positions the education wing, which also contained the bookstore, not on the lower level, but instead to the left of the Flora Street entrance forecourt. The entrances closest to the wing are the Flora and Ross Street entrances. The reference in the minutes to a parking lot entrance may have referred to the forecourt, or Barnes may have been suggesting a third possibility of placing the wing on the north side of the building. Plan B, while consolidating the primary educational facilities into the overall building mass, also depicts a separate "Children's Pavilion" in the Shade and Water Garden. This feature is not explained in the board minutes.

Anne Bromberg was not a member of the Building Committee, but as the Education Director, she was consulted about the proposals for the children's wing. She recalled opposing Plan A, with its proposal for a physically separate education wing, for the reason that its isolation would have made the situation difficult for staff communication between the wing and the main museum.<sup>36</sup> Neither did the concept of a completely separate wing answer Harry Parker's request for

a "separate and carefully connected facility [to] house the more active and aggressive functions."<sup>37</sup> Barnes's foremost concern would have been how to "carefully" connect such an active area (intended for the use of rambunctious young children) without disrupting nearby functions. His proposal of a separate facility conceptually relates to his previous designs for the Haystack School of Arts and Crafts and the Heckscher House (figs. 31, 53), in which the program is subdivided into discrete physical units.

The intended progression of gallery spaces becomes clearer in the 18 May 1978 drawings (fig. 153). Because of the size and diversity of the Dallas Museum collections, Barnes faced an even greater challenge than he had in the Walker and Scaife galleries to devise an architectural setting which would facilitate a coherent presentation, yet not be distracting. As Barnes recalled,

We were dealing with a permanent collection that ranged from primitive art through the Impressionists to the moderns. The problem was to create a clear separation of the artistic periods, yet give the visitor a sense of logical procession from one period to the next. I wanted to establish a strong design that would still treat the art with reverence--that would genuflect to the art.<sup>38</sup>

Barnes's May 20 presentation to the Building Committee indicates that his plan for a "logical procession" would follow a basically chronological flow of artworks in reverse order--from the present back to the distant past:

. . . one would enter first into the contemporary galleries, work his way back through impressionist, American paintings, Spanish paintings, old master,

thence through pre-Columbian, thence through classical and ancient and into the "tribal museum" which would include African, oceanic and American Indian art.<sup>39</sup>

An examination of the development of the gallery spaces in the May 1978 plans demonstrates the complexities faced by the architects in planning a logical viewing sequence for the diverse permanent collection (fig. 153). An obvious attempt was being made to provide variety and uniqueness to each individual collection area through different room sizes and circulation patterns. But the resulting complications of this approach might have yielded a maze-like complex of ramps and rooms with few directional clues and too many circulation options. The passage through the galleries as proposed in these plans could have proven somewhat bewildering to a first-time visitor.

A combination of approaches was used for circulation, including two variations of a rotative pattern in the American/Impressionist gallery and the Spanish/Pre-Columbian galleries, long halls for ancient and oriental art, and a traditional progression of room-like galleries and halls for the tribal arts. Courtyards were included in the gallery schemes, functioning as central pivot points in the American/Impressionist and Spanish galleries.<sup>40</sup> The courtyard for the American/Impressionist gallery was aligned once again with the ramp leading up from the contemporary galleries, as it was in the April 1978 plans. In this case,

however, the courtyard would not have been visible from the lower level, due to the long partitions surrounding it.

It is clear from the marked elevation levels in the gallery plans that a gradual ramping up was desired, probably to add interest and to accentuate changes in culture and time. The contemporary galleries began the upward movement, with a large room stepping up to the north of the Great Hall. The next level was elevated five feet and would have contained American, Impressionists, Old Masters, and Spanish paintings. The last level, marked by a six-foot elevation change, included Pre-Columbian, Oriental, Classical, Ancient, Oceanic, African, Indian and Eskimo art.

Again, this tiered processional is somewhat reminiscent of the concept of the Walker Art Museum plan, however, the clear directional focus of the Walker's helical circulation around its service core is not apparent in this preliminary gallery study. Any centrifugal movement from the Impressionist/American and Spanish/Pre-Columbian galleries is arrested as one moves into the long hall for oriental and ancient art and into the tribal collection. This change in directional flow would increase the positive effect of spacial variety, but would defeat the purpose of pattern-making, which could help orient the visitor through the repetition of a familiar and clear pattern.

At this stage of design, the second floor gallery plan appears as a sampler of approaches to gallery design, almost

as if Barnes was trying out several ideas before settling on one dominant pattern. An indication of the plan he would later incorporate to resolve the gallery flow appears in the dotted area to the right labeled "Future Gallery Floor," in which a repetition of the courtyard pattern is seen.

One of the major features of the 18 May 1978 plans is highlighted in the section drawing (fig. 156). This section drawing, which depicts a tower rising to the left of the vault, is one of the most fascinating aspects of the documentation of the early stages of the museum design development. This cross-section shows how dramatically different the museum would have appeared if this concept had been carried out.

The proposed tower would have been composed of four floors, connected by elevators, stacked above the second floor wing containing the print and textile study rooms and slide library. The tower would have risen six stories above street level and four stories above the mass of the museum. The second floor plan shows the layout of the additional floors, which decreased in size as they rose in height (fig. 154). The third floor would have contained the library, the fourth and fifth were set aside for curator's offices and other administrative offices, and the director's office and board room were located on the sixth floor. Barnes suggested in his presentation to the Building Committee that two floors might be planned for the library.<sup>41</sup>

Barnes's concept for this tower apparently did not meet with approval from the Building Committee, particularly Harry Parker. As to the reason, the minutes simply state, "Mr. Parker did not like being on the top floor."<sup>42</sup> Dan Casey recalled that Parker thought the concept for this office/curatorial center "smacked too much of an ivory tower."<sup>43</sup> In fact, Parker's program statement refers to his desire to integrate the museum professionals into the "working complex" of the museum, which he emphasizes by stating, "No visions of ivory tower separation are intended here."<sup>44</sup> Perhaps Barnes did not yet understand the implications of Parker's training under Thomas Hoving--that Parker would wish to follow in the footsteps of his popularist mentor, and reduce the impression of exclusiveness, at least in the museum's physical form.<sup>45</sup>

In spite of its summary rejection, the tower concept perhaps deserves further examination with regard to its physical form and connections to Barnes's other designs of the period. The appearance of the office tower, with its stepped rectangular blocks of office floors, would have complemented the rectangular block forming the exterior of the vault. These two forms appear in the section drawing (fig. 156) as the only punctuation to counter the horizontal massing of the three floors of the museum.

The physical form of the proposed stepped tower would have been completely unique in Barnes's oeuvre. The concept

of a private environment created by a tower with vertical circulation, however, was a dominant characteristic of his designs for private residences beginning with his Studios for Two Composers (1963, fig. 54), followed by the Hilltop House (1965, fig. 73), and the Heckscher House (1974, fig. 53). The closest functional parallel of the 1978 period would have been the Asia Society gallery and office building, which was being designed by Barnes and his associate John Lee during 1977-1978. Both buildings would evolve with several shared design features. For example, the curvilinear balcony common to both buildings makes an early appearance in the Dallas Museum May 18 plan, facing the Ross Avenue entrance. In contrast to the Dallas Museum, Asia Society is developed vertically--its two lower floors, devoted to gallery space, are topped by a narrow stack of office floors, a conference room and a reception room.

The hierarchical arrangement of office floors proposed for the Dallas tower would have had some clear advantages, the primary one being that each floor would have enjoyed greater privacy and quiet through their physical isolation. This would have been particularly advantageous for the library and curatorial areas. If the library had been planned on two floors, one might have been a public resource center and the other a more private area for staff research and book materials processing. The splitting of administrative and curatorial functions would have also

separated the corresponding clerical pools, thereby reducing the commotion from those active areas. With the limited floor sizes, a single elevator core would have provided quick access from one level to another. The tower design would have also been advantageous in that it would have permitted maximum daylight exposure for all floors, so that both professional and support staff areas could have windows--a practical and humane design aspect frequently overlooked in museum designs. The set-back portions of the tower could have been utilized as outdoor terraces, adding a pleasant amenity to the office blocks.

One clear disadvantage to the tower concept would have been the ultimate physical restriction on future staff expansion, as it would be difficult to add much additional space to the stepped tower design. The proposed floor plans were very limited in size. If the curatorial department eventually expanded beyond the limits of a single floor, for example, their personnel might have to spill over onto a different level, thus dividing the department.

In comparing the section drawing of the tower (fig. 156) to the floor plans of individual floors within the tower blocks (fig. 154), it becomes apparent that the tower would have been defined by one set-back on the north side facing the vault block, and three horizontal set-backs on the south side facing Ross Avenue. The first two floors below the tower would maintain a flush wall parallel to the

street line. The east and west facades of the office block would have been flush walls with no set-backs.

If built, this combination of sheer curtain walls with set-backs on opposing sides would have been unique for a Barnes design of this period. However, the Asia Society building was being designed concurrently, and the final design would combine a flush curtain wall on Park Avenue to maintain the street line with vertical set-backs to accommodate the adjacent brownstones on 70th Street. If the Asia Society volume were rotated 90 degrees onto its side so that the vertical set-backs became horizontal rows of set-backs, it would suggest the appearance that the volume of the Dallas Museum tower would have had. The concept of the museum tower would ultimately be expressed as well in the composite massing of the Equitable Building. Its flush facades express the modern curtain wall combined with opposing set-backs dictated, to some extent, by zoning regulations.

The strongest correspondence, however, between the proposed museum tower and Barnes's concurrent design work is seen in his unbuilt first design proposal for the Old Stone Bank in Providence, Rhode Island (fig. 157). The twin stepped towers duplicate on a larger scale the stair-step massing indicated for the Dallas Museum office tower. Further, the semi-circular arched windows which appear on the top floor of the Old Stone Bank proposal would also be

incorporated into the early plans for the Dallas Museum, although the building as it was later constructed did not include them. The arched windows would eventually appear in the Asia Society building, the Equitable building, and in the design for the Georgia Museum of Art.

Of related interest to the arched windows is the indication in the section drawing of 18 May 1978 (fig. 156) that the interior form of the vaulted entrance hall would be concealed within the exterior mass of a block-like volume. This approach was a new one for Barnes, who had, in most of his previous work, chosen to express the interior volume of a structure on its exterior. Vaulted spaces encased by rectangular blocks would become a shared feature of several of Barnes's designs of the late 1970s. It is possible that this combination of contrasting volumes was initiated in the Asia Society design, as this building was already being designed when Barnes accepted the Dallas Museum commission. The vault is incorporated differently in the Asia Society design, however--it is a gallery space inserted at the base of a rectangular stack of office floors. The Georgia Museum, too, features a vaulted opening in its squared-off front portico. A vaulted room inserted within a rectilinear exterior form would ultimately appear in the vaulted top floor of the Equitable Tower, completed in 1986.

In all of these related designs, the presence of the vault is suggested on the facade by a semi-circular window .

which is positioned so that the arc of the window aligns with the curve of the vault surface. This allows the form of the interior volume to be "read" from the facade--a variation on Barnes's more typical expression of congruent interior and exterior volumes, but still related in intent. It cannot be determined from the section drawing whether such a window was planned to correspond with the Dallas Museum vault. However, such an effect might have been considered, especially since arched windows were incorporated into later designs for the restaurant level.

During design development, the vaulted form was ultimately revealed on the exterior mass of the building. This aspect of the design process is interesting, as it did not occur in the other buildings cited. It probably resulted in part from the rejection by the building committee of the tower concept. With the tower form eliminated, there was little to counter the strong horizontal character of the museum massing. The rounded form of the vault became a foil for the rectilinearity of the museum blocks. As Dan Casey recalled, "We felt the building badly needed a focus." Casey also pointed out that it was essential to have a strong form to pin down the west end of Flora Street, where it terminated in a major entrance to the museum. He recalled numerous massing studies were being done at this time, and that some did not include a

vault.<sup>46</sup> The intention, regardless of the form, was to have the ceremonial entrance open into a grandly-scaled space.

#### 25 May 1978 plans

The plans were revised on 25 May 1978, and presented by Barnes to the Building Committee on May 26. Most of the revisions involved placement of the gallery spaces, and it is apparent that changes in elevation and ceiling heights were being worked out in greater detail.

The May 25 plans show all of the upper level galleries grouped to the north of the vault (fig. 158). Individual gallery spaces were defined by gradually decreasing ceiling heights. Leaving the vaulted hall and moving north, the first large contemporary gallery would have had a very high ceiling of 20.5 feet. Ascending to the courtyard level, the ceiling is indicated at fourteen feet. This level would have continued through several galleries, and after another change in elevation, the last two galleries would have had ten foot ceilings. Below these two galleries on the main floor was now placed the temporary exhibition gallery with a ceiling height of fourteen feet (fig. 159). In the previous plans, it opened off the basement level. Apparently, one of the problems being worked out in these plans was that of devising the upper galleries with changing floor levels and ceiling heights, yet at the same time, determining how other services could fit in below, so that the overall envelope of space was filled as efficiently and compactly as possible.

In moving the temporary exhibition gallery to the main level, almost all the public facilities were consolidated on this floor. Children's education was placed in the south wing, rather than being a separate facility, as in the previous scheme. All of the support services remained concentrated on the lower level (not illustrated). However, the auditorium was now placed on the lower level, adjacent to the north entrance.

Both the plans and minutes suggest that a reappraisal was being made of the collection planned for display in the Great Hall. The plans now identify the Great Hall gallery as "mixed exhibition." Previously designated as contemporary art space, the minutes propose "perhaps a selection of the entire collection...[would be] presented in the Great Hall to display what the museum is all about and in addition [it] might contain new acquisitions, etc." The minutes further indicate that the Great Hall would still be two stories high, but the second level walkway above the entrance was deleted at this point.<sup>47</sup>

The restaurant (not labeled) apparently was moved up to the second level again, overlooking the sculpture garden, with the Great Hall instead opening on the south to another contemporary art gallery. This gallery would then open into the sculpture garden. The first description of the sculpture garden appears in the May 26 minutes, and it indicates that two distinct areas were being planned: "The

first sculpture garden would be a grove of trees and the sculpture garden beyond would be a large space divided by three walls running east and west."<sup>48</sup>

A special setting was proposed for Algur Meadows's collection of Spanish paintings, and negotiations with the collector were apparently underway at the time. The trustees were in agreement "that the Meadows Collection should be displayed very grandly if we are able to attract it. It would be denominated as the Meadows Collection of Southern Methodist University and would be located proximate to the Old Master collection."<sup>49</sup> These areas are not indicated in the gallery plan. In the previous plans, the Spanish paintings were centered around one of the courtyards, which does not appear in this scheme. Instead, three rectangular rooms offer an interlocked circulation not unlike that of the Scaife Gallery, yet differing in their changing ceiling heights and the ramp up to the second of the rooms. The last of the rooms empties into a short hall that leads directly to the elevators and the stairs. The gallery processional is much more clearly defined in the May 25 plans. Apparently Barnes reconsidered the splitting of the second level galleries on either side of the vault, as they had appeared in the May 18 plans, and decided that more control could be maintained over circulation if the galleries were concentrated north of the vault.

The spine received further definition in the 25 May 1978 plans. Three different elevations are indicated for various portions of the spine, connected by a ramp on the south (left) end, and by split stairs on the north (right) end leading to the lower and upper levels (fig. 159). The overall change in elevation from north to south is sixteen feet.

The third major entrance into the spine is indicated on the north end, entering from the parking lot into the lower level, which is the service level (not illustrated). The only public facility located on this level was the auditorium, and for the convenience of patrons of night movies, lectures, etc., it was immediately adjacent to the parking lot. However, the rest of the lower level was devoted entirely to mechanical areas, shipping and receiving, and the other staff functions noted in the May 18 plans. Information not provided in this plan is how the public would be prevented from entering the support services corridor and gaining access to restricted areas of this floor.

The Oceanic bis pole sculpture posed a physical problem because of its large size--19.5 feet. Discussion of the work in the May 26 minutes indicates that individual pieces in the collection were given consideration as early plans progressed. Barnes's suggestion was to house the piece in an enclosed court with an inordinately high ceiling.<sup>50</sup>

The tower for administration, education and a curatorial center was still present in the May 25 plans. Public service areas, such as a coat closet and orientation booth were located between the Flora Street and Ross Avenue entrances.

#### June 1978 plans

The June 1978 plans include drawings for the main and upper levels only. The most important developments are at the north entrance and the sculpture garden.

The north entrance is now defined as being part of the ground level plan, along with the other two entrances, rather than being placed so that it entered into the lower service level (fig. 160). A curved canopy, echoing the form of the vault, shelters the north entrance. The auditorium was moved up to the ground level to share the same block as the temporary gallery. Ramps and stairs are included in the spine to accommodate the interior changes in elevation so that the three entrances would open into the spine. Stairs only are shown leading up from the north entrance to the spine, which would have made this entrance inaccessible to the physically disabled.

The basic configuration of the galleries on the upper level (not illustrated) does not change in the June 1978 plans. It is apparent that the galleries to the north of the Great Hall, which include contemporary, European, American, classical, ancient, and oriental, step up from the

ground level until they reach the second level. The second level galleries on the east side of the building are identified as Spanish, tribal arts, and Pre-Columbian art. Below this area would have been the temporary exhibition gallery and the auditorium. The second floor block would have needed to be raised considerably to allow the auditorium to fit below in below the Spanish gallery. It is also not clear what would have fit in below the west contemporary and American/European galleries, since their spaces were stepping up from the main level.

The outdoor garden receives its first tentative visual planning in the June 1978 drawings (fig. 160). It closely follows the previous description given in the May 26 minutes, in which the first garden is represented as a grove of trees, and the second section is depicted as being divided by three long, staggered walls within an exterior walled enclosure. It is now referred to as the "water and sculpture garden." A separate entrance to the south end of the garden is indicated by an arrow.

No plans were included for the office areas which had previously been housed in the tower. Probably this area was being reconsidered following the rejection of the tower scheme.

#### 1978 Bond Election Failure

A major crisis for the museum project occurred on 10 June 1978, when the forty-million-dollar arts package

included in a municipal bond election failed to win approval by Dallas voters. Twenty-five million dollars of this proposition had been earmarked to fund construction of the new museum. At this point, the trustees had 60% of the site secured in free options and over twelve million dollars raised in private funds. However, with the defeat of the arts proposition, the museum's free options on the site were lost.<sup>51</sup>

In a strategy session held on 19 June 1978, the trustees made several decisions regarding the viability of the new museum project. They decided to pursue public funding and schedule another bond election as soon as possible. Voters would be polled to find out why the issue failed to win support, and the trustees would more aggressively promote the campaign for a new museum. To encourage support by other donors, Margaret McDermott pledged her art collection to the museum if a new facility was built.<sup>52</sup>

It was decided that the museum trustees would re-option land on its proposed site, but not for the entire parcel between St. Paul and Pearl, as they had done before. This time the options had to be purchased, and the trustees felt they could not take on the responsibility of optioning land for other arts organizations. The trustees planned to follow Barnes's recommendation and option seven acres of land in a T-formation including a right-of-way entry from

Pearl Street. With this formation, access to the museum site would be assured with or without the Symphony's participation. There was some concern expressed that since the museum's site was not secured, that there was some risk in continuing with the architectural schematics, as they would be invalid if the site were changed. However, Barnes was authorized to complete the schematics and have a professional model built.<sup>53</sup>

Tracing discussions regarding the design becomes more problematic after 26 May 1978, which was the last date that Building Committee minutes were officially taken during meetings with the architects. The explanation for this lapse in the minutes offered by several of the participants was simply that these meetings were considered to be private, and minutes were not thought to be necessary. The author did not have access to any personal notes that may have been kept on the proceedings. Minutes for the Building Committee were again resumed in 1980, when construction bids were being taken for the building.

Although the trustees considered their meetings with the architects to be private, the planning which went on during these months was significant in the overall size and scope of the project. All decisions related to the design would impact on the total cost of the museum, which ultimately would be borne in part by the public. It is probable that the trustees may have felt isolated after the

defeat of the bond election in which they had placed so much hope. However, immediate plans were made to submit the matter again to the public at the 19 June 1978 Board of Trustees meeting, so obviously the concept of shared public/private funding was not abandoned.

Because of the lack of minutes or any other accessible record of Building Committee activities during this period of months that intensive schematic design work was underway, it was not possible for the author to assess the individual contributions of the trustees who met with the architects. Dan Casey, as project architect, was involved with the Building Committee "from day one." He recalled that the eight members of the committee<sup>54</sup> did have an impact during the design phase, and he described the composition of the committee in this way:

They had their own ideas, they were a very informed, articulate group, very knowledgeable about art, architecture and museums. The initial building committee was a very strong committee. There were people who represented the intellectual side and the financial side and the development side, so all bases were covered by the first committee, which was intact throughout the design phase. So, we were very pleased to have such a good group to work with. They were not at all shy about giving us their reactions and opinions, and I think they did influence [the design process], very certainly did.<sup>55</sup>

Dan Casey felt, that of all the members of the Building Committee, Harry Parker was the most influential.<sup>56</sup> Parker's memorandum to the Board of Trustees (Appendix A) is the best source for his written comments regarding different aspects

of the museum's program. When this document is compared with the completed museum, it is obvious that Harry Parker's concepts did have a major impact on the design. Other trustees who apparently were particularly interested in the aesthetics of the design were Melba Greenlee, Betty Marcus, and Margaret McDermott, although all the Building Committee trustees reportedly were active participants in design discussions.<sup>57</sup>

It was undoubtedly a challenge for Barnes and his design team to work out details for the complex museum program with the diverse group of individuals comprising the Building Committee. Casey described the working relationship of the architects with the Building Committee:

I think they were always respectful and very fair in their dealings with us, but they did make their opinions known. . . . I think in most cases, we [the architects] had a point of view and we were challenged to illustrate that point of view and prove it was the best way. I think we were successful in doing that. Oftentimes, in the form of models--it's hard for people to visualize [things]. . . . But all these concepts that we presented had to be illustrated, discussed a few times, refined, developed and that's what it's all about. Lots and lots of evolution. . . . They were influential, and I would say that it was a natural way for the plans to evolve, having that sort of relationship with the client, in the form of a good Building Committee. . . . They were really very supportive. But also challenging--that's a rare combination.<sup>58</sup>

The impact of Barnes's personality and powers of persuasion in resolving differences of opinion with the committee without compromising his own design objectives and principles should not be underestimated. Alan Arkus,

former director of the Scaife Gallery, referred to this when he told George Charlton that Barnes could sometimes be "overpowering" with his personality.<sup>59</sup> Dan Casey, speaking from the perspective of his sixteen-year association with the Barnes firm, notes:

He's very skilled and articulate at getting across his ideas and views on things. He doesn't pound the table [to make his point]. I think he likes to [prevail] by design. By that, I mean he illustrates his ideas and concentrates on design issues. He lets those be the most important thing.<sup>60</sup>

Dan Casey recalled that after the first bond election defeat in June 1978 design activity for the museum slowed down, although it did not halt completely.<sup>61</sup> Margaret McDermott stated that this slowdown period proved to be beneficial, as it gave the architects and the committee the "luxury of time" to consider their design options.<sup>62</sup>

#### 13 September 1978 plans

The September 13 plans show that some major steps were taken over the summer to rework the office floor plans. Dan Casey noted that once the tower scheme was rejected by the Building Committee, "We then began to look at ways of integrating the office functions into the [museum proper]-- closer to the galleries, closer to the collections."<sup>63</sup> The September 13 drawing (fig. 161) shows the first effort to achieve this integration.

This new proposal combines the various administrative and curatorial offices, print and textile study and gallery,

and the library and visual resources areas which had previously comprised the tower, and places them on the lower level of the museum. On this same level were still found the physical service functions of loading and receiving, workshops and design studios, photography, conservation, storage, and mechanical services. Some areas of the lower level were also devoted to services which would be used by the public, such as the bookstore, auditorium, print gallery, and children's gallery.

A slightly larger envelope of ground floor space has been used in this combined scheme than in the previous plans--in fact, one more module has been added to the north end of the complex. However, the first impression is that the floor space is still too small to contain all of these services. The result is a reduction in floor space in some areas, and certain incongruities in the placement of others. For example, the areas devoted to mechanical services and the children's gallery have been greatly reduced. Permanent storage seems oddly combined with the more public areas of the bookstore and the auditorium. Overall, this combined approach leads to a breakdown in the functional separation of services necessary for security and quiet working spaces. The juxtaposition of the conservation studio, children's gallery, and auditorium could certainly have posed problems if actually carried out.

However, there would have been positive social benefits in grouping all of the museum personnel on the same floor. Physical separation unfortunately tends to reinforce social stratification and leads to the development of a rigid hierarchy within an institution. Personnel often do not appreciate or understand the activities of their fellow employees when they do not see them on a daily basis. A sharing of space leads to better communication, increased social interaction and feeling of community.

Regardless of the changes that were occurring with the office areas of the museum, Barnes's approach to the permanent collection galleries remained consistent--they continued to be physically removed from the rest of the building offices and services. In fact, in this plan, the permanent collection galleries are concentrated entirely on the west side of the spine, rather than being split on either side of a central staircase, as in the 25 May 1978 plans (fig. 158). This development serves to isolate the galleries further from the noise of pedestrian traffic in the spine. This development is also significant in terms of its effect on the overall massing of the building. The gallery space which was relocated from the east side of the spine now forms an entirely new floor block to the north of the planned European/American gallery and its central courtyard (compare 158 to 162). Both gallery blocks are individually articulated as they each step slightly to the

west, breaking the previously straight line of the western wall. The stepping motion of the gallery wings created a corresponding change in the form of the spine. The spine appears broken into three segments which step back with the gallery blocks. This new physical configuration would have altered the uninterrupted vista of the continuous, straight spine shown in the June 1978 plans.

The overall massing of the building is now becoming more complex than the simple initial plan which called for a three-story building composed of two blocks framing a central entrance hall (figs. 144, 145). As the plans progressed beyond simple early schematics, the architects were taking a closer look at the space requirements for the galleries and services and it was realized that more space was needed.<sup>64</sup> However, Parker's stipulation that the galleries should have ample natural light necessitated continued horizontal development of the building masses to allow for top-lighting of the galleries. Barnes later recalled how he arrived at this solution:

The first plan was for a single building mass. But it scared me so much it ruined my vacation. So I looked at the museum catalog, studied the collection and talked to the curators. That helped to clarify the problem. What you have is really three museums.<sup>65</sup>

Each of the three terraced "museums" was to contain a major area of concentration in the museum's collection, including contemporary art, western art, and non-European art.

The development of a new gallery block in the September plans precipitated a very significant advance in Barnes's concept for gallery circulation, as can be seen in the study focusing on the gallery exhibition levels (fig. 162). Here, for the first time, his previous plan to align the flight of stairs leading up to the European/American gallery with the courtyard within the gallery is repeated in the new gallery to the north. This development is the first to realize the full potential of the courtyard in the circulation plan. In the passage to both gallery levels, the visitor would be drawn up into the gallery by the sight of a courtyard at the head of the staircase. Within each gallery floor, circulation would revolve around the courtyard as a central pivot, and the courtyard would also assume importance as a visual reference point for orientation within the gallery. The repetition of this circulation pattern would also be an orientation aid within each of the large gallery floors.

Also appearing for the first time in the September 13 gallery plans were long screen walls that flanked the north end of each courtyard. These walls would become a significant feature of the galleries, as they were developed not only to provide basic divisions within the gallery floors, but also to enclose and conceal the interior supporting columns so that most of the gallery space could remain open and free of visual distractions. Dan Casey recalled the developing concepts for the screen wall

divisions within the galleries: "We wanted that airiness, the idea of slipping planes."<sup>66</sup> This planar concept would permit glimpses of the interior court for orientation and would accommodate a variety of sizes of paintings in the middle level, including those larger than Old Master works.

As previously noted, the massing of the building was affected by the new gallery wing. Another change in the September 1978 plans was to move the temporary exhibition gallery to the south of the Flora Street entrance. In the previous June plan, this area was occupied by the bookstore and children's education space. The new overall plan for the gallery exhibition levels (indicated by the darkened sections in fig. 162) places the gallery blocks so that they step out in a diagonal path leading from the temporary exhibition space on the Harwood Street side of the site, and progressing from one gallery to another toward St. Paul Street.

Combined with the stepping out of the gallery blocks, the individual gallery floors physically step up through two changes in elevation, as indicated by the variation in elevation markings in the drawing. A sixty-foot elevation is indicated for the temporary exhibition and contemporary art collection in the Great Hall. The next gallery level for "western" art steps up six feet to the sixty-six-foot elevation, and the uppermost gallery is indicated at seventy-two feet, another increase of six feet. The ceiling

heights within each gallery are not indicated in this scheme, but it seems likely that there would have been a corresponding step up in the roof level to further articulate each gallery block. This would be consistent with Barnes's treatment of the exterior massing of the Walker Art Center (fig. 103).

That Barnes would combine an upward and outward stepping of the block-like masses of the Dallas Museum is not surprising when the massing is evaluated in the context of two other previous Barnes designs, such as the Crown Center office complex in Kansas City (1972, figs. 27-28), and the Neiman Marcus department store in Fort Worth (1963) (fig. 114). All three buildings were designed for sloping sites, and Barnes's consistent approach has been to build with the site, rather than to make radical physical changes to it. The stepping motion exhibited in all of these designs is a graceful means of accommodating the gradual changes in elevation of each site. Daniel Casey points out, however, that the distinction in the Dallas Museum massing is that the blocks were intended to step back and forth on the site, rather than continue in a diagonal line outward.<sup>67</sup> The outward movement was obviously constricted by the narrow site and the presence of St. Paul Street to the west. The intended placement of additional blocks on the site will be examined later in this chapter in a discussion of the architects' plans for expansion of the museum.

The developments at this time in the form and placement of the building on the site were probably the result of massing studies typically used by Barnes during the design process. The simple cardboard models used in the study of massing options for the Dallas Museum have long since disappeared, but Dan Casey recalled that these studies were ongoing throughout the early design development. With the assistance of a good model maker, the architects could examine as many as ten studies in one day.<sup>68</sup>

Other developments are revealed in the study for the roof and upper levels (fig. 163). The temporary exhibition gallery, as indicated in fig. 162, was relocated from the north wing to the south wing flanking the Flora Street entrance. The restaurant facility, which previously flanked the Great Hall to the south, has been moved from its second level position overlooking the sculpture garden to the second floor of the wing containing the temporary exhibition gallery. The primary reason for this change, as recalled by Daniel Casey, was the difficulty in servicing the restaurant as a result of its isolation from the elevator cores in the previous design schemes. By stacking the temporary exhibition space and the restaurant on top of the lower service level, adjacent to the block containing shipping and receiving, one elevator could serve for all floors. Casey also recalled that the restaurant seemed out of place inserted, as it had been, into a wing designated for the

contemporary collection galleries.<sup>69</sup> There would have undoubtedly been concern expressed over noise and activity in the restaurant entering into the Great Hall, which from the beginning was planned as a gallery space.

As Barnes recalled, another factor was the view from the restaurant, and he noted that Margaret McDermott especially wanted a downtown view.<sup>70</sup> While a view of the sculpture garden was desirable, Margaret McDermott thought that a view of downtown Dallas would be more "sparkling."<sup>71</sup> Other trustees apparently felt that the view should be oriented to and emphasize the downtown skyscrapers, particularly noting their striking appearance at night.<sup>72</sup>

The roof and upper level drawing (fig. 163) also indicates that by September 1978, the volume of the vault was revealed on the exterior of the building, rather than being concealed within the block form previously shown in the elevation drawing of 18 May 1978. Several methods of bringing daylight into the interior of the building are examined in the September 13 roof plan. Skylights are indicated over the lower level wing containing the library, curatorial and administrative offices. Perimeter skylights are also suggested for each of the two upper level galleries.

A gallery block labeled "future exhibition expansion" is appended to the north end of the spine in this drawing. Its placement encloses another open court, again reiterating

the desired checkerboard pattern of open and closed building masses and courts.

#### November 1978 plans

Two November drawings (figs. 164, 165), both lower level studies, show that planning for this area still involved the incorporation of offices and some public functions on the same level as the service and storage functions. The administrative offices were combined with the children's gallery in the wing flanking the Flora Street entrance court to the north. The block was divided diagonally so that each area occupied a triangular space. The combination of the administrative offices with the active area for children was in complete contrast to the earlier tower scheme, in which the administrative offices were isolated on the highest floor. Living up to his popularist convictions, Harry Parker was agreeable to this new arrangement, and saw no problem with the close proximity of the two areas.<sup>73</sup> The children's gallery was probably placed on the lower level to further remove it from the permanent collection galleries on the upper levels.

The auditorium was a problematic space to work into the overall planning, because its full height was at least double that of other programmed areas. It therefore had to be allotted space on two floors. In the November 1978 lower level studies, the lower portion of the auditorium was placed on the lower level below the northernmost gallery

block. Since the galleries were planned to step up to the north, an area was opened up in between the upper gallery and the lower level, into which the top portion of the auditorium could fit.

One of the November study drawings (fig. 164) demonstrates that the architects were beginning to further realize the potential of the vertical space which was created by the stepping up of the gallery floors. In this drawing, the block containing the auditorium was ringed to the north by textile and print study rooms, and the print gallery, and to the west by curatorial offices. To the side is drawn a separate L-shaped section corresponding in size to the offices and study rooms, and this section was intended to house the library and visual resources. The L-shaped area was apparently intended to stack on top of the curatorial offices and study rooms, and wrap around the upper level of the auditorium.

This development indicates that the architects had determined that it would be possible to fit another floor between the lower level and the upper gallery. Harry Parker recalled that the concept of an additional floor inserted like a wedge into the northwest block of the building was a breakthrough for the architects in the fuller realization of the floor plans.<sup>74</sup> This new approach gave more efficient use of space, as seen in a comparison of figs. 164 and 165. In fig. 164, because the print gallery, and print and

textile study rooms are placed under the library, the space next to permanent storage is freed for use as additional exhibition storage. In fig. 164, this space was used for print study, textile study and visual resources study.

The location for the bookstore is obviously still subject to change and experimentation at this time. Fig. 165 places the bookstore next to the north entrance, probably in realization of the heavy traffic that would come in from the parking lot. In fig. 164 it is placed back in the next quadrant of the spine, so that it lies between the Flora entrance and the parking lot entrance. In both, however, the visitor would encounter the bookstore within the spine as he ascended to the beginning of the galleries. Apparently, there was much discussion over the most strategic location for the bookstore, and this decision was especially difficult because the museum had three primary entrances. Margaret McDermott proposed that the bookstore be given high profile, but was opposed to having the bookstore as part of an entrance so that it was the first impression visitors had of the museum.<sup>75</sup> Apparently her input, and discussions by the Building Committee were causing the architects to consider several locations for the bookstore.

Another key area of the service level was the area designated for loading and receiving. Its significance is not yet apparent in these plans, but proximity to the

loading dock would ultimately order many of the related functions of unpacking, inspection, photography, and recreating of art objects. Already a network of corridors linked to loading and receiving is developing in the plans. At this stage in the design, well-defined envelopes of space have been established, and the different services and offices are being shuffled within them.

#### 5 December 1978 plans

From December 1978 to March 1979, the architects presented a series of large presentation drawings to the Building Committee. The major components of the floor plans had already been determined by this time, and the continuing development would primarily involve proportional and functional refinements.

The repetition of certain aspects of the design can now be seen in different areas of the December 5 presentation drawing (fig. 166). The two permanent collection galleries repeat the same pattern of staircase, courtyard and an open plan with flowing space punctuated by Miesian screens. On the opposite side of the spine from these galleries, are two blocks which show the development of a different concept involving a diagonal pattern in the layout of both the children's court and the educational/administrative wing.

Another new development positioned a pool in the center of the outdoor sculpture court adjacent to the contemporary

art gallery/Great Hall area. The addition of the pool created a three-part division of space in the outdoor courtyard, which complemented the new development of tripartite space within the Great Hall. The outdoor reflecting pool also repeated and balanced the pool being planned for the first of the interior courtyards.

The repetition of certain key design features was a useful device in the organization and progression of spaces in the large facility. By repeating a pattern, such as the rotation of spaces around interior courts, the visitor is given a sense of the familiar so that he does not become disoriented at every turn. However, the insertion of a contrasting sequence of spaces, such as the firm symmetry of the Great Hall with its adjoining small galleries, followed by the first sculpture garden court, alters the established pattern before it becomes monotonous.

The continuing enhancement of the processional for the visitor can be noted in the addition of projected glass walls which overlook the garden areas adjacent to the spine. One of these glass walls faces the sculpture garden to the west of the spine, and a longer glass wall faces the plantings in the children's court on the spine's east side. The location of both glass walls near the entrances demonstrates the architects' concern for enhancing the interior environment of the spine by allowing glimpses of the outdoor courts. This aspect of the design functions to

provide a smooth transitional experience for the visitor as he passes from outdoors to indoors. The combination of indoor/outdoor environments is established in this way as another pattern or theme of the architecture which is picked up again as the visitor sees the vista of the sculpture garden from the Great Hall and progresses to the courtyards within the galleries. Barnes had previously employed a very dramatic curtain glass wall overlooking the sculpture court at the Scaife Gallery in Pittsburgh (fig. 107). His expression of visual continuity between indoor/outdoor environments can also be traced throughout his designs for private residences.

One of the most important developments in the 5 December 1978 plans was the establishment of a cruciform plan for the block containing the Great Hall. In the previous plans, such as the September 13 drawings, the only tripartite division of space in this area was on the south side of the vault. North of the vault, the contemporary gallery had previously been planned as a large open floor, equal in length to the Great Hall.

In the December 5 plans, two cubicle rooms for contemporary art appeared on the west end of the Great Hall. Both spaces opened into the vault. Two active rooms housing the bookstore and orientation theater were also included on the east end of the Great Hall. Equal in size to the rooms on the west, these spaces opened directly onto the spine.

Dividing the paired rooms was an open area transversing the Great Hall, which created an axis from the outdoor sculpture garden up to the first floor courtyard of the permanent collection gallery. The significance of this axis is that it indicates a second processional distinct from the area of the spine, which was planned as a very active path. The two parallel passages are linked by the Great Hall, thus reinforcing the importance of the Hall in the overall circulation scheme.

The placement of the bookstore and orientation theater across from the Flora Street entrance suggests that it was still considered to be the most significant entrance. The branching of the Great Hall from the spine would of course be an area of high traffic in itself, since it was a major access point to the contemporary and permanent collections. The placement of the bookstore in a high-traffic area was a key issue because of its revenue potential. The orientation theater's placement was most appropriate where it could serve as an introduction to the collection.

Additional plans included with the December 5 drawings designate the three main floors as "service," "action" and "museum" levels. The gallery diagrams indicate that the arrangement of art work within the galleries was being planned very specifically at this time (see figs. 167, 168). The placement of art historical periods on the second level of the permanent collection was very similar to the final

plan, with the exception that classical art was included on this level, rather than being grouped with the older civilizations on the uppermost floor. A separate area was designated for the museum's fine collection of Mondrian paintings. The print gallery appears for the first time branching off the spine and across from the children's education area. The print and textile study rooms are placed on the service floor below the gallery, rather than on the same level.

On the "action" level (fig. 167), the curatorial offices were to share part of a block with the library in the L-shaped format wrapped around the auditorium as previously discussed. The library would have included a balcony, which together with the presumed height of the auditorium suggests that this space would have comprised two stories. There was no service level planned below the auditorium and library.

The curatorial offices and administrative offices are arranged along exterior walls in their respective blocks so they have access to daylight. Similar concern for proximity to daylight also guided placement of the carpentry and painting workshops, and the design and conservation studios on the lower level. A lower level plan (not illustrated) shows the inclusion of evenly-spaced slit openings in the exterior wall. Windows would later be deleted from the photography studio, as they were not needed. Other areas

not requiring daylight, such as storage facilities, and areas sensitive to daylight, such as print and textile study, were arranged within the service level blocks.

One seemingly insignificant area which was receiving attention at this time was the placement of stairwells on the St. Paul side of the permanent collection gallery floors. These stairwells were required by Dallas' city fire codes for use as fire escapes. If placed within the galleries, as in the 13 September 1979 drawing (fig. 162), they intruded on interior gallery space. Placed so that they projected from the exterior walls in the December plan, the stairwells would obviously have an impact on the appearance of the west facade. Through continuing stages of design development, subtle changes would affect the positioning and proportional size of the stairwells. It appears that Barnes was seriously rethinking the appearance these spaces would have as volumes and how they related to the rest of the volumetric form of the building. The December 5 drawing (fig. 166) placed square-shaped stairwells on the west side of the galleries. These projected forward from the corner of each stepped facade and would have had the effect of strongly framing and terminating the width of each block. The stepping motion of the blocks would have been visually affected by the projecting stairwells. Barnes's decision to push the stairwell out to the periphery of the floor blocks is in

accord with his placement of the stairwells at the Walker Art Center, which are also articulated on the exterior of the building.

#### 20 January 1979 plans

The Board of Trustee minutes dating from 11 January 1979 indicate that thirty per cent of the site for the museum was under contract. The cost of the land at that time averaged twenty-two dollars per square foot, but it was noted that prices had gone up after Trammell Crow, a Dallas developer, had purchased a tract adjacent to the museum site. To the apparent dismay of many of the Trustees, the site purchased by Crow for a planned office tower was that designated in the Carr/Lynch study for the future home of the Dallas Symphony Orchestra.<sup>76</sup>

Relatively minor changes were made in the 20 January 1979 plans. Primarily, these involved adjustments to the service level storage areas and the inclusion of additional offices on the active level. It is interesting to also note that the gallery stairwells were moved to the south corner of each block and reduced to a narrow rectangle in form (fig. 169). This alteration extended the stepped lines of the facade as it would be viewed from St. Paul Street and created a "wrap-around" effect at the corners which would shelter the staff entrances later placed here.

In one of the other presentation drawings (not illustrated), another proportional change is made in the

second of the two gallery courtyards, so that both courtyards are equalized in size. The space within both courtyards has been divided into squares--six squares long and four squares across. Proportional relationships in a design seem to be significant to Barnes, and this is reflected in the continuing refinements that appear in the presentation drawings. As Barnes notes, one does not see these refinements occur all at once in the drawings--they are part of a gradual evolution in which "you have to draw it, think about it, look at it."<sup>77</sup> Dan Casey recalled that the architects were examining the reduction of the size of the basic design module as a means of overall cost savings:

At one point, we actually talked about different modules. We looked at five feet as a module for a time and that ballooned the square footage, and gave us too much for the parti that we had. [After trying 4'8" and 4'6"], it ended up being 4'9". Going from 5' to 4'9" in a building that size is quite a savings, one that reduces the square footage without changing the relationship between the spaces, and without changing the overall dimensions much of each room. In a 30' by 30' room, you're only changing the dimensions by a foot or 18". But you add all that up in terms of square footage, and it's enough to make a difference in the cost.<sup>78</sup>

8 March 1979 plans

The March 8 presentation drawings correspond to photographs of a white cardboard model that was built for display during preparations for the 1979 Bond campaign (fig. 170). The whereabouts of this model are unknown, but the author's discussions with Larry Francell and several current

members of the Dallas Museum staff indicated that the model was probably discarded when the move from the Fair Park building to the new facility occurred. Larry Francell recalled that the expansion study wing, which appears in the photograph, was added to the model at a later date.<sup>79</sup> The projected expansion for the museum appears as the four-story block on the far right side of the model.

This simple model demonstrates how the massing of the museum had been developed. Excluding the expansion block, the front masses of the initial building step up to Ross Avenue (to the left), and the rear masses step up on to Woodall-Rogers (to the right).

The expansion block was a separate piece of the model which could be moved and positioned on the base. The placement of this block, as photographed, continues the series of open courts alternating with sections of the building extended from the spine. An alternate siting for the expansion block that might also have been considered would place it adjacent to the northernmost permanent collection gallery. This would lead to a more logical continuation of the gallery space and the stepping up of the massing.

The vault appears as a strong focal point on the roof line of the museum. Its height seems to be equivalent to that of the two-story restaurant/temporary exhibition block on the left of the illustration (fig. 170). The round motif

of the vault form is repeated in the arched windows visible on the restaurant level of this block, as well as the topmost level of the expansion block. This model is the first indication that these window forms were being considered. Margaret McDermott recalled that the arched windows were also proposed for the north facade of the library at one time, but these are not visible in this view of the model, and no elevation drawings have survived that illustrate this.<sup>80</sup>

The triangular motif which first appeared in the 5 December 1978 drawings is expressed on the roof of the education/administrative wing in the form of triangular roof monitors. The paired triangular forms are more visible in the overhead view of the model (fig. 171). The roof monitors would have allowed daylight into the interior of the wing, and were positioned over the portion housing children's education. The overhead view of the building masses also shows two long rectangular openings in the roof crossed at intervals by a series of bars. These areas are placed in the restaurant wing and the expansion wing, and they represent open-air terraces. In the restaurant, this terrace would have been used for outdoor dining.

Another lighting detail appears in the drawing of the gallery levels (fig. 172). The double dotted lines in the center of the vaulted space suggests the cove for artificial

lighting in the ceiling. This is the first indication of lighting provisions for the vault.

Although the north facade of the building is not visible in the model photographs, a window appears in the upper right corner of the floor plan, adjacent to the African gallery. This opening in the wall would later be developed into the "Triangle Terrace," although the triangular elements of the gallery floor have not appeared in the design at this time.

Changes are indicated for the sculpture garden walls in the March 8 drawings. The December 5 drawings included breaks in the east wall which would have allowed visitors to pass in and out (fig. 166). The March 8 plan fills in these breaks with a grill which would have stopped access at these points, presumably for security reasons (fig. 172). A street entrance to the sculpture garden is located on the far southwest corner of the site, indicated by a trellis canopy.

Another model of the museum and the surrounding neighborhood apparently was built based on the March 8 drawings (fig. 173). This dating seems probable because of the triangular division indicated in the children's courtyard, which corresponds to the March drawings. The whereabouts of this model is unknown.<sup>81</sup> It was not a detailed model, but simply illustrated the building masses of the museum and adjacent structures. It is interesting to

note that several major office buildings that today line Ross Avenue did not exist at the time this model was made. It is difficult to determine how large this model was, but it appears to be a portable table-top sized model that probably was used at meetings by Harry Parker and other staff members to promote the new museum concept and to raise funds.

The 8 March 1979 presentation drawings were brought before the Board of Trustees on that date. The Board voted unanimously to accept the plans for the new museum, noting that their resolution

approves in basic concept the schematic drawings for the new Museum submitted by Edward Larrabee Barnes, recognizing that there will be opportunities for additional input. The Board of Trustees notes that the building fulfills the space requirements outlined in the Program and Space Study reviewed by the Board at its meeting September 15, 1977.<sup>82</sup>

Even though the plans were considered acceptable at this time, Barnes and his office would continue to refine them and make changes as necessary, in response to trustee and staff requests. While the staff had no direct representative on the Building Committee, their means of effecting changes occurred at periodic meetings of the Board of Trustees at which they discussed the building plans. Their suggestions were reported to the architects. Project Architect Daniel Casey had meetings with staff members and the author found memoranda to Harry Parker in which the staff made requests for changes.<sup>83</sup>

## 7 June 1979 plans

Even after initial approval by the Board of Trustees, the plans continued to undergo further scrutiny and revision by the architects. Several important changes occurred in the 7 June 1979 plans.

One major change involved the creation of the office mezzanine level (fig. 175). The mezzanine was an extension of the L-shape which had previously been inserted into the November 1978 plans (fig. 164). The mezzanine floor was placed above the ground level library and beneath the African/Pre-Columbian gallery. A small, two-foot adjustment was made in the elevation of the upper gallery to accommodate the insertion of these offices. The mezzanine was composed as a U-shape which wrapped around the extended vertical height of the auditorium and the print and textile study rooms placed on the ground level. The U-shaped area contained a reception area and board room facing the spine, the relocated administrative offices placed along the north wall and the curatorial offices ranged along the west end of the block.

In this new plan, the curatorial offices were relocated to the mezzanine level from their previous position along the west wall of the ground level. Although several of the curators would have preferred the privacy of the more sequestered placement behind the library on the lower level, curator John Lunsford recalled that the results of an office

efficiency study helped determine that it would more practical to have the curatorial offices adjacent to the administrative offices.<sup>84</sup>

The relocation of the administrative offices to a level set aside primarily for office use definitely had practical benefits. Although Harry Parker may have wished to be in the thick of the "action", the combination of office space and the children's gallery would surely have been unworkable. The high decibal level of the children's wing would have made it difficult for the office staff to concentrate. This aspect of the situation was borne out when the educational offices moved out of the education wing shortly after the building opened and into the rear of the library, although this move was primarily necessitated by increased space needs.

The relocation of the administrative offices to the mezzanine level had a significant impact on the design of other areas of the museum. The vacated space in the education wing was filled by the bookstore and orientation theater (fig. 174). The relocation of these areas, in turn, opened the two additional rooms in the Great Hall block so that they could be utilized as part of the contemporary art exhibition space. The author found that the additional space gained for contemporary art display was necessary so that these galleries would fulfill the basic square footage requirements specified in the space and program study. The

overall impact of the new layout was to create greater uniformity in the function of each block.

Daniel Casey recalled that it had become apparent that the bookstore and the orientation theater, because of their "active" uses, were inappropriately located in the vaulted block, which was predominately programmed for gallery use.<sup>85</sup> Relocated in the education wing, both areas were still adjacent to the spine for easy access and high visibility. The educational nature of the orientation theater made it ideally suited to occupy space in the education wing. It is probable that it was also thought desirable to have the bookstore closer to the north entrance, which would generate a large amount of foot traffic from the parking lot.

A further change was made in the cruciform plan of the contemporary galleries. Rather than opening into the Great Hall, the four corner galleries now opened into the north/south axis. The lower ceiling in this passageway created a more intimate entrance into each of the corner galleries. If these entrances had branched off the great vaulted space, the effect of the interior volume would have been diluted. Preserving the integrity of this volume would have been a primary concern for Barnes, considering his design philosophy. The resulting effect was simpler and more reductive, and kept the monumental character of the vaulted space intact.

In practical terms, doorways to the corner galleries appearing inside the vaulted space would have severely limited hanging space, and the view of works within these side galleries would have competed with the works in the vault. A rendering illustrates how the vault would have appeared with doorways opening directly from it into the side galleries (fig. 176). The predominant art work in the rendering is the Alexander Calder mobile, representing the architect's concept of the sort of monumental sculpture appropriate for this space.<sup>86</sup> This suspended sculpture would not have been affected as much by the additional doorways. However, floor sculptures and paintings would have been constricted by this arrangement. The concept of combining the curved vault with art display resulted from the desire to have an uninterrupted background for large scale sculpture and painting. Obviously, any openings in this backdrop needed to be minimized.

As previously noted, an overall uniformity of proportion and form was governing the continuing development of the design. This is characteristic of Barnes's concept of clarity and the importance of basing design on a standard or regularized form, much in the spirit of Le Corbusier's "Modulor".<sup>87</sup>

The continued modular development of the design is most obvious in the corner stairwells to the galleries (fig. 174). In the June 7 plans, they have been modified again--

this time they have been enlarged to project from the wall as a square form, rather than the rectangular form incorporated into the 8 March 1979 plans. The square is composed of three-by-three or nine units. The square form of the stairwell duplicates the open space it encloses, creating a Yin-Yang correspondence similar to those noted by Horiuchi in other Barnes designs.<sup>88</sup> When the square form of the stairwell is compared to the rest of the museum plan, it can be observed that there is a proportional correspondence, based on multiples of three. Six of the square units can fit along either width of the contemporary art block, for example. Four of the square units could fit within each corner gallery, and as the width of each cross-axis is the same, a total of thirty-six of the square blocks can be computed to fit within this gallery floor. These correspondences create the harmonious proportions that Barnes was seeking in the design.

Another example of Barnes's continuing refinement of the design is the effort to unify the plan through repetition of certain elements. This aspect of Barnes's design approach can be seen in the June 7 plans as another Greek cross floor plan is introduced in the revised education wing, which complements the cross plan of the Great Hall.

Changes in the spine correspond to the overall design revisions. The plans indicate that the spine ramps up at

two and one-half foot intervals. The spacing of the changes in elevation of the spine correspond to divisions in adjacent areas of the museum, for example, in the opening of entrances onto the spine. An even more significant change to the spine is made in the June 7 plans in which the spine walls are straightened so that a straight axis can be drawn from one end of the building to the other. In the previous plans, the spine had metamorphosed through several phases. In the 5 December 1978 plan (fig. 166), the spine is straight on the southern half of the museum and steps back with the galleries on the northern half. In the January 20 and 8 March 1979 plans (figs. 169, 172), the spine continuously steps back with each successive gallery block. The stepping of the spine would have greatly restricted visibility to encompass only the length of one or two of the blocks within the building.

The final resolution to this design problem, in which the spine was straightened in the June 7 plans (fig. 174), dramatically changed the visual appearance of its interior by introducing a continuous vista through the spine from one end to another. Dan Casey's description of the spine as a "long, grandly-scaled room"<sup>89</sup> is fully realized at this point in the planning. Casey recalled his own arguments for making the spine a connected space:

I pushed for making it. . . a single space with a more subtle vertical definition between segments, rather than the offset [segments] which would mean that your vision would be blocked, and you would have to keep

changing directions, which just didn't seem quite as graceful. . . . I think the point of making the spine straight was so that it would do what it was capable of doing--which was to explain how to get to everything and to be a space in its own right. [In the segmented schemes] it was reduced to a corridor outside the galleries--there was nothing grand or ceremonial or gracious about it. And there is the whole idea of promenading inside a public building which I thought was missing in the segmented scheme. . . . It made a lot more sense to make it into a connected space. So Ed went in that direction.<sup>90</sup>

In agreeing to the straightening of the spine, Barnes further underscored the concept of the spine as a unified interior street. The creation of a long, uninterrupted vista in the spine of the museum is very characteristic of a Barnes design, and should be considered a signature of his personal style. At the same time, the combination of this long room with the ramping floor is completely unique in Barnes's oeuvre. The vista should not be impeded, as it is a key feature of the underlying design aesthetic.

#### Portable Dallas Museum Model--17 July 1979

The first detailed permanent model of the museum (figs. 177, 178), which still exists, was built so that Harry Parker and other trustees could easily carry it to meetings to promote the funding of the new facility in the next bond election.<sup>91</sup> Therefore, it was small and portable enough to fit on top of a desk or table. Margaret McDermott stated that the trustees wanted "several models built so we can take them to meetings in every part of town to show people how they can use the museum."<sup>92</sup> This small model remains as

tangible evidence of the countless hours that Parker and other staff members pursued their ultimate goal of securing funding for the museum.

The model is based on a series of elevation drawings dated 17 July 1979 (not illustrated). The portable model reveals the extent to which the exterior design, site plan and massing had progressed by the summer of 1979. Essentially, all the basic components of the museum are in place. The five blocks that comprise the mass of the museum appear interconnected, yet are visually distinct in an overhead view (fig. 177a).

Barnes would later describe the museum as "a cluster of stone buildings."<sup>93</sup> The impression of clustered, interlocking forms is strongest when the model is viewed from what would be the western, or St. Paul Street elevation (fig. 177b). Here, the appearance of the gallery blocks nesting within one another is created by the square block volumes of the stairwells that extend from the lower right corner of each of the two permanent collection gallery blocks. These additional forms seem to wrap the western end of each gallery around the adjoining volume.

The corner projections represent the stairwells required by Dallas city fire ordinances as fire escapes. As previously noted, the architects have pushed the stairwells out to the perimeter of the gallery floors where they do not intrude on the interior space. A functional reason for

planning the stairwell blocks to wrap around in this manner is that the projection would help shield the primary staff entrance near the loading dock from the elements and public observation.

The galleries proper for the permanent collection can be seen in the overhead photograph (fig. 177a), in which they are delineated on the roof by the perimeter skylights. The break in the skylights represents the staircase below, leading from one level to another.

The square openings in the roof clearly indicate the location of the interior courtyards within the gallery floors. The long rectangular opening appearing on the side of another block represents an open court for dining in the restaurant (see also fig. 178a).

Three pitched roof monitors appear on top of the education block. According to the corresponding drawings, "skylights are all glass--4 sides"<sup>94</sup> However, the model, as built, shows an opaque surface on the pitched plane of the roof monitor with glass on the three vertical sides.

The sheer vertical walls of the model are pierced at intervals by window openings, with each floor level or programed space characterized by a different window configuration. The mezzanine level is indicated by the horizontal strip of windows running across the middle of the north facade (fig. 178b) and wrapping around the western facade (fig. 177b). The North Elevation model drawing notes

that these windows would be flush with the exterior wall. An unusual feature of the north facade is the Triangle Terrace, which appears in the model on the third floor gallery level, expressing the diagonal focus of the interior design and accenting the north elevation with its forty-five-degree angle (fig. 178b).

The north facade at ground level featured large square windows which were recessed at this stage of design, according to the July 17 North Elevation drawing. This area of the museum was the library, and the change in fenestration distinguished it functionally from the working areas on the western facade. In addition, the large openings allowed greater penetration of north light into the reading room. The use of glass blocks for these windows is not indicated in the plans at this point.

The ground level offices and service areas on the three stepped western facades were illuminated by paired vertical slit windows which were recessed as described in the West (St. Paul) Elevation drawing. The mullions separating each pair of windows were aligned with the mullions between the horizontal windows above, thus suggesting the vertical supports within the wall (fig. 177b). The narrow design of the vertical window openings, shaded by the recesses, was particularly suitable for the western exposure.

The most unusual treatment of fenestration appears in the southeastern block containing the restaurant and

temporary exhibition gallery. The restaurant level is set off on the Ross and Harwood elevations by semi-circular openings to the interior dining terrace (fig. 178a), which was also open on the roof. The drawings for the Ross and Harwood elevations specify that the two arched areas are completely open on the south side, and half of the arch is glassed in on the east side. Other notable features are revolving doors on the north, south and east entrances, and a "curved glass canopy" over the Flora Street entrance described in the East Elevation Entry Court drawing.

The Bond Issue Campaign for the second bond election was underway throughout the summer of 1979. Richard D. Haynes was the chairman of the Bond Election committee. The museum issue was listed on the ballot as proposition 4. The campaign included bumper stickers, yard signs, billboards, bank stuffers, television and radio spots, mail and telephone banks.<sup>95</sup>

#### Large model--Second Generation

The large architectural model commissioned by the Dallas Museum was presented to the Board of Trustees on 13 September 1979 (fig. 178).<sup>96</sup> The model aided in informing the public about the appearance of the proposed museum, and it was on display at the old Dallas Museum in Fair Park during the Pompeii A.D. 79 exhibition that opened in January 1979 and drew large crowds. The model was strategically positioned in the museum so that the visitors attending this

blockbuster exhibition were "force-marched" past it.<sup>97</sup> The model gained further exposure for the museum plans when it was placed on display in two Dallas banks and the North Park Shopping Center.<sup>98</sup>

The scale of the large model allowed for more detail than the small, portable model, and it reveals much more about the state of design for the museum during the late summer of 1979. The design was further advanced by the time this model was completed, and for this reason, it is referred to as the second generation model. The roof of the upper floors of the model was removable so that the interior floor layout could be observed in the permanent collection galleries, the restaurant, and the children's gallery. The model originally indicated the placement of individual works of art in the collection, both inside the galleries and outside in the sculpture garden, although many of the pieces representing sculptures were later lost.

Within the galleries, screen partitions divide the floors in a manner similar to the final arrangement. A distinction is clearly made in the wall thicknesses. The thin screen partitions are contrasted with the thicker supporting walls, one long and two short, which surround each gallery courtyard (fig. 180a, b).

The first courtyard in the second level of the permanent collection is planned for vegetation rather than the quiet pool developed later (fig. 180a). The

Impressionists' gallery is distinguished by its placement near the daylight entering from this court, and includes a seating area. The development of this area was strongly influenced by Margaret McDermott, because she was donating her personal collection of Impressionist and Post-Impressionist paintings to the museum. She wanted this gallery to have "flowers and greenery and a place people could sit and relax. I also envision a lovely garden outside the gallery."<sup>99</sup> Barnes noted, "The inside courts will be landscaped appropriately--the atmosphere, the kind of plants--so the outside spaces and inside display will be connected." The courtyard adjacent to the Impressionist gallery he saw as being landscaped with wisteria, willows and waterlilies--plantings associated with the paintings of Monet.<sup>100</sup>

The courtyard on the third level was called the "bamboo court" at this time, and bamboo plantings are used in the model (fig. 180b). The plantings were changed later because it was felt that bamboo would be difficult to maintain in Dallas, and would not look attractive year-round.<sup>101</sup> Daniel Kiley, a nationally-known landscape architect, was the consultant for the development of the landscaping plans.

The Wise Collection of Pre-Columbian gold ornaments and objects received special attention as seen in the model. A separate viewing area, known as the "Gold Room" was created by wrapping free-standing partitions into a G-form (fig.

180b). Dan Casey recalled that the small scale of the gold pieces was taken into consideration first and as a result, it was determined that the gold collection should be seen together in its own setting.<sup>102</sup> The wrapping of the walls made a much more intimate viewing space for the small objects and underlined the idea of preciousness. However, the model does not show the canted ceiling later incorporated to evoke the feeling of entering a tomb to discover a hoard of gold objects. Dan Casey noted that the canted ceiling was a Mayan shape which related to the art itself.<sup>103</sup> The segmented wall shown in the model was retained in the final version to allow glimpses of the golden cache inside.

Another change to occur in the disposition of the Gold Room was its placement within the larger gallery floor. Both the large model and a later axonometric drawing place the G-form of the Gold Room squarely in line with the surrounding gallery walls (figs. 180b, 187). However, as a late development in the final plan, the Gold Room would be rotated within the gallery so that a new kind of residual space was created around it. The triangular spaces set up by the tipped square, as Casey pointed out, are repeated when the visitor walks around the long dividing wall and sees the Triangle Terrace window.<sup>104</sup> The model shows that triangular cases were being planned for the African collection at this time (fig. 180b), so it is clear that the

diagonal pattern originated in the African section of the galleries, and eventually influenced the rotation of the Gold Room. The curators who were involved in the planning of galleries had the impression that the tipped square design of the Gold Room was the fortuitous result of an accidental shifting of a cut-out section of the plan.<sup>105</sup> However, the rotated square within a square design previously appeared as the central concept for the galleries of Barnes's Wichita Museum (1977, fig. 119).

The axonometric drawing by Daniel Casey (fig. 187) is dated September 1980, one year later than the completion of the second generation model. It illustrates a few additional alterations in the design. The large model shows a different arrangement of the restaurant floor (fig. 181a) than that shown in the axonometric drawing. A diagonal stepped division appears in the model, separating the kitchen service area from the restaurant seating. The entire south end of the restaurant block is occupied by a long, rectangular, open-air courtyard. The area, meant for outdoor dining, is covered with a wooden trellis. The semi-circular openings on the south are unglazed, except for a band of glass at the base serving as a safety barrier. The opening on the east is half-enclosed by glass. The glazed portions are deeply inset. The interior appearance of this dining court is suggested by a photograph of a now-destroyed model (fig. 186), a portion of which served as a study of

the arched openings to the court, and of the light and shade patterns formed by the overhead trellis (fig. 182).

The open rectangular court was greatly reduced in size in the axonometric drawing (fig. 187) to a square court bounded on all four sides by the repeated semi-circular window motif. This was undoubtedly a practical development to increase the dining area available for year-round use. However, this change also unified the square form of all the courts within the museum, demonstrating Barnes's tendency in the progression of the design to bring an overall balance and consistency to his buildings. The Founder's Room was also relocated from the west side of the restaurant level to the south end.

The education wing in both the large model and axonometric view continued the cruciform design determined in the 7 June 1979 drawings (fig. 174), incorporating the bookstore and the orientation theater on the west side, adjacent to the spine. On the east end, two art studios are located, with skylights indicated for each room in the axonometric drawing. An orientation well for children is included in both floor plans, although the location is reversed in the axonometric, so that the area is closer to the entrance to the children's court on the north.

The children's court was developed as a drop-off point for school buses. The children's court is not developed in the model as it would later be designed by Richard

Fleischner. The entire court with its sculpture was a site-specific commission designed by Fleischner, not Barnes, although the plans were made with the architect's input.<sup>106</sup> Barnes's earlier plan for the court in the large model created a tripartite division of the court, with a clear axis dividing clustered plantings of trees.

The overall concept for the sculpture garden was being developed at this time with landscape architects Daniel Kiley and Chris Dunn. Larry Francell recalled their comments on the plan for the garden:

You've got to envision downtown Dallas on a summer day when it's over 100 degrees outside. On the street is a stark gray wall and all you can see is this very inviting umbrella of live oak trees. Literally, an umbrella over the whole space that is designed to lead you in--you walk in and immediately all the traffic noise goes away because of the waterwalls. You don't hear the traffic, you hear the water. You're under this umbrella of greenery, and that's the concept.<sup>107</sup>

The large model's sculpture garden is a more detailed rendering of the plans for the portable "suitcase" model. In both, the staggered wall planes divide stepped landscaped areas which echo the stepping of the building's massing and the interior restaurant level. In the large model, transparent acrylic water walls subdivide the stone screens (181b). In the final design, the water walls became solid limestone in accord with Barnes's aesthetic that proscribed continuous, uninterrupted materials as background for art display. The partitions were essentially analogous to gallery walls against which sculpture would be seen.

Long, narrow channels connect the branching water walls. A long channel is shown in both models which links the first freestanding wall to the square reflecting pool. This channel was deleted in the axonometric view of the sculpture garden, probably because it might have posed a hazard to visitors crossing from one side of the garden to the other.

The model shows two sections of the sculpture garden enclosing walls cut down on the west end and filled in with a metal and glass grill (fig. 181b). Because of the difference in elevation between the sculpture garden and the lower street level on St. Paul, this opening would have been more effective at the garden level, allowing views to the street. At street level, the openings might have appeared awkwardly-placed because they were too high to give any view into the garden.

In the axonometric view, the grills were deleted, and the northern court opening off the interior galleries and spine was redesigned. The new court design repeated the cruciform plan developed in the contemporary gallery through the inclusion of a cross-axis of limestone paving. A broad axis of paving extended from the contemporary gallery to the first waterwall in the sculpture garden. The reflecting pool was elongated into a rectangular form. The cross-axis was expressed as a narrow band of paving aligned with the projected glass wall of the spine, and which culminated with

an apsidal sculpture niche on the west end wall. The cylindrical form replaced the grilled opening in the model plans, and provides a sculptural contrast in its cantilevered projection from the west facade.

The cantilevered sculpture niche, which appears almost as a pulpit-like form when viewed from St. Paul street, (fig. 185) is significant for its physical expression of the elevation of the garden level above the street. This form creates a simultaneous perception of another level for the person on the street and is similar to a device used by Barnes in his Dallas Residence. In this house, a skylight was used to link two levels and the recollection of its placement on a different level provides a means of spacial orientation for the viewer.

The apse-like form of the sculpture niche provides a further thematic link to the contemporary gallery. The great vaulted gallery, with its evocation of a cathedral-like space, lacks only an apse to complete the allusion to nave and transept in its cruciform plan. The apse is subtly introduced in the cruciform sculpture court, preventing the allusion from being too direct for those who might object to any hint of religious overtones in the design. Whether any were intended by the architect is open to conjecture, as Barnes has not conceded this interpretation. Barnes simply states that he thought the atmosphere of the gallery "should be serene."<sup>108</sup> Dan Casey

acknowledged that there are inherent similarities between a cathedral and the vaulted gallery, particularly if one focuses on the function of a cathedral as a place for meditation and contemplation. But he notes that the parallels were not necessarily consciously expressed by the architects.<sup>109</sup> Harry Parker recalled, however, that Barnes always referred to the vault as his "Mykonos chapel," and in its volumetric form and white interior, the vault parallels on a larger scale the vaulted Theraen cells of the Mediterranean (fig. 21). Parker further commented,

I think the idea of the museum as today's equivalent of the religious buildings of times gone by has previously been noted by several writers. It has been observed many times that the museums are replacing some of the functions of the church.<sup>110</sup>

Stonework was not indicated on the less-detailed portable model. The second generation model shows that the early conception of the stonework on the exterior of the museum changed somewhat as plans progressed. In the model, the rectangular blocks of stone are positioned vertically rather than horizontally. On the vault, however, the stones are positioned horizontally. The shadow lines that would be created by beveling the upper face of selected courses of stone were not apparent in the large model. This vertical orientation of stone cladding relates to the stonework on the Methodist Church to the south, although this correlation was probably unintended. But the later shift to a horizontal format for the cladding relates better to the

emphasis on the horizontal in the massing of the museum itself. This change may have accompanied the architect's decision to set off the massing with horizontal shadow lines. A revision of the limestone module, decreasing the width of the blocks, was made in a progress drawing dated 14 January 1980. This may be when the rotation of the stone cladding blocks was decided upon.<sup>111</sup> Dan Casey disputes Papademetriou's assertion that the incised shadow lines are purely ornamental, noting instead that they correspond to the level of the galleries, restaurant and other facilities.<sup>112</sup> He explains the purpose of the horizontal incised bands:

Those were an attempt to give scale to the exterior and mark off the massing, so that instead of arbitrarily changing heights on the massing, they would change by an increment that you would remember in other parts of the building. [The bands] were doing a couple of different things--they were emphasizing the horizontality of the shapes and measuring the height, and then also expressing the thickness of the stone.<sup>113</sup>

One other alteration to the design of the facade appeared in the large model. This change altered the placement of the vertical slit windows on the west facade. These windows were paired in the small model (fig. 177b), but were spaced evenly across the facade in the large model (fig. 180a). This change would have affected the placement of the windows within the offices and studios, and also might have been related to the consideration of the placement of the stone blocks on the exterior. The earlier

concept, in which the supporting columns were framed by the vertical windows, was somewhat diluted by their evenly-spaced placement in the large model. However, the twin window concept was most effective in the elevation of the north block when they were paired with the segmented strip windows of the mezzanine level. The purpose for pairing the windows was not as apparent in the other two gallery blocks, where they were the only punctuation to the blank facade.

The height of the vault had been determined by the time the museum models were commissioned. The earliest plans had called for a two-story vault, but the architects came to realize that proportionally, it would appear too squat with that height. The vault was also affected by height adjustments made following the development of the module and the 7'3" coursing that runs through the stonework. Dan Casey stated that the final height of the vault was primarily determined through studies of it in section and in elevation (see final section, fig. 197). As Casey explains, "the height of the vault is [established] by just swinging the arc around. Wherever the vault starts, it's got to be half as high as it is wide."<sup>114</sup>

During this period, several different approaches to incorporating windows or skylights in the vault were investigated by the architects, primarily through study models. No windows in the vault appear in any of the schematic development drawings, and the portable model shows

no openings in the vault surface. Casey stated that incorporating a long skylight down the center of the vault was perhaps discussed, but never seriously considered.<sup>115</sup> Provision for artificial lighting of the vault, which would be necessary for evening activities, had already been made in the 8 March 1979 drawings. These show a lighting cove extending from end to end along the apex of the vault (fig. 172). This cove does not appear in the second generation model, however. Instead, the only suggestion for lighting the interior of the vault given in the model are twin "sky windows"--paired rectangular openings cut into the upper curve of the vault (figs. 183a, b). Barnes apparently found historical inspiration for this concept. The positioning of the windows alludes to Claude-Nicolas Ledoux's project, Inspector's House at the Source of the Loue, reproduced in a well-known engraving after the eighteenth-century architect (fig. 184).<sup>116</sup> Barnes indicated he was familiar with this work by Ledoux, and that he admired the simple, reductive geometry of Ledoux's volumetric designs.<sup>117</sup>

The scheme for the large paired windows was abandoned, as Casey recalled, when the architects studied the appearance of the windows in the large model. The model positioned the paired windows on the north side of the building to bring north light into the galleries, but Casey said the architects realized that this would not be the best

window location and shape to complement the architectural form of the vault:

It didn't do anything to strengthen the vault idea or the axis. We were marking the cross-axis with that window. We began to feel that it might be at odds with the direction of the room, or it might spoil the ceiling. . . . We grew to like those curved surfaces and wanted to see those uninterrupted. . . . we felt it would be better to not perforate that surface. . . . Initially, [the window placement was intended] to lead people up the stairs, but before you see that and understand that, there was an asymmetry as you approached the room that [looked odd].<sup>118</sup>

As previously mentioned, cardboard model studies were constructed in the architects' office to assist with design development. These models, now destroyed, helped the architects to evaluate the appearance of light entering through openings in the surface of the vault. One such model (fig. 186) shows another alternative considered as a special lighting effect in the vault. In this model, a short slit is positioned at the apex of the east end of the vault, above the Flora court entrance. An interior photograph of this model (fig. 185) reveals how this slit would have allowed a beam of light to pass over the end wall beneath.

The final resolution of the sky window concept is seen for the first time in the axonometric drawing, in which the slit window reappeared as a vertical opening in the west end wall of the vault (fig. 187). As Dan Casey related, the architects decided that since daylight was entering the vault at three of the four ends of the cross-axis, the west

end needed an opening to give a glimpse of the daylight on that wall and to balance the other openings.<sup>119</sup> The vertical window casts a narrow beam of light on the floor, which passes across the floor with the movement of the sun. The vertical slot-like window in the vault recalls the window in the side chapel's high tower in Le Corbusier's Chapel at Ronchamp (figs. 188, 189). As Barnes recalled,

. . . we first saw the introduction of light through little tiny slits in windows in Ronchamp--then you have years to think about it and all of a sudden, you find a place to do it. . . in the [side] chapel there's a slit in the hooded vault, and that's very comparable. And I certainly remembered that when we were doing this.<sup>120</sup>

This final resolution of the window in the vault is documented in the last models fabricated to illustrate the new museum. Two models were commissioned by Edward Larrabee Barnes Associates to be displayed in New American Art Museums, a 1983 exhibition organized by the Whitney Museum of Art and curated by Helen Searing.<sup>121</sup> The models, one white and one off-white, are small, table top sized constructions, and are held in the firm's New York office (figs. 193, 194).

One other existing model is still held by the Dallas Museum of Art. This was a large-scale mock-up of the finished interiors of the museum, including gallery spaces (fig. 195). This model was based on the final design of the museum, and is larger than the second generation model. It was used to plan the first installation of the permanent

collection. The model has since been disassembled, with the gallery sections currently used by the curatorial staff to work out new gallery installations. The rest of the model is in off-site storage. The final plans for the Dallas Museum of Art are illustrated in figures 196, 197 and 198.

### Second Bond Election Victory

The last key event in the museum development process occurred on 6 November 1979, when Dallas voters approved Proposition 4, which provided 24.8 million dollars in public funding for the new Dallas Museum. At that time, the amount was the largest public financing of a cultural project in the United States. This crucial funding ensured that the museum could indeed be realized in the form planned by the architects and trustees. Public funding was matched by private donations totalling 27.6 million dollars.

George Charlton, then Chairman of the Board of Trustees, cited Harry Parker, Phillip Seib, and Richard Haynes as being pivotal to the bond election victory. Their contributions are summarized by Charlton in Board of Trustee minutes.<sup>122</sup> Charlton recalled Harry Parker's efforts on behalf of the campaign for the new museum in this way:

He . . . told the story over and over again, in appearance after appearance in front of civic groups, on television and radio interview show[s], and special presentations at the Museum. We could not have had a stronger[,] more effective spokesman. And as a result, when people think of the new Museum, they will always think of Harry Parker.<sup>123</sup>

Perhaps the greatest contribution Harry Parker made to the campaign for the new museum was that he pressed for another bond election within one year of the defeat of the first bond issue. Parker was advised to wait at least five years before bringing the issue before the voters again, but he and the trustees agreed that momentum would be lost if the issue was stalled. The timing of their effort was critical. If museum officials had waited for five years, the economic down-turn in Dallas would have made it nearly impossible to fund the construction of the museum.

#### Revisions resulting from Guaranteed Maximum Price Analysis

As soon as the funding of the museum was assured by the passage of the bond election proposition, the determination of project costs and scheduling of demolition on the museum site for construction was begun. Vincent Carrozza, a museum trustee and local developer, was elected Chairman of the Building Committee for the duration of the construction of the museum.

The study of documents from November 1979 and continuing through the spring of 1980 reveals additional revisions to the design and materials used in the building resulting from an analysis of preliminary cost estimates. J. W. Bateson, the local contractor, provided several estimates for the construction budget which affected decisions regarding the materials for the building. A Project Cost History compiled by Dan Casey summarizes these

various budget components and revisions. Comments included with these estimates indicate that the ideal building first envisioned by the architects and the trustees would have had granite exterior and interior walls, roof and floors. They also desired full furniture, equipment and casework allowances.<sup>124</sup> The desire to use granite may have resulted from the trustees' appreciation for Barnes's Scaife Gallery in Pittsburgh. As George Charlton noted after his trip to view the Scaife, "The granite you see on floors and walls from Norway 'makes' the building."<sup>125</sup> The Walker Art Center also incorporates carnelian granite as paving on its roof terraces.

The expense of granite, however, pushed the total cost of building construction up too far above the target goal of about twenty-nine million dollars. The target figure for the total cost of building and site was forty-nine million dollars. A revised estimate refigured the costs with maximum cuts determined during cost meetings between the architects, owner and the contractor. The total cost was pared substantially by basing the next estimate on a brick building with wood floors and reusing some existing furniture and casework.<sup>126</sup> However, brick cladding was not a desirable alternative for the trustees or architects, as they envisioned an elegant building built with fine materials.

A compromise was reached in materials so that the target budget could be achieved. Dan Casey recalled the discussions that led to the trustees' decision to accept another alternative to granite cladding for the building:

The architect always has a certain envelope to work with, which includes square footage of the program versus dollars. And you have to give and take--in some cases the square footage has to give, and in some cases the quality of materials has to give to fit the dollars. And, I think our attitude and the museum's attitude on this was that rather than cut the program, rather than have less gallery space, they would rather go for less expensive stone. And we supported that position. So when we added everything up, and it was too much money, then we began to look at alternatives for major materials. And there was a substantial savings available by going to limestone.<sup>127</sup>

Initially, an estimate was made with the granite exterior was changed to limestone, but combined with granite interior walls and spine floors. Later, the granite was also eliminated from the interior to further reduce the cost.<sup>128</sup> The final recommended budget called for a limestone building with terrazzo floors, brick pavers outside with full furniture and casework and reduced equipment allowances.<sup>129</sup>

Texas limestone was first investigated as the least expensive option in limestone. But Casey noted that it was unavailable in the size stones desired by the architects, and the very light, creamy color would have glared too much in the intense Texas sun. Indiana limestone was ultimately chosen because its buff, rather gray-beige color was more suited to the climate considerations.<sup>130</sup>

Another practical change made at this time by the architects also resulted from environmental and economic considerations. The second generation model showed "TVS" glass walls in the spine, which would have been composed of single thickness glass sections braced floor to ceiling by glass fins secured with stainless steel rivets. This was the same glass wall system used by Barnes in the Scaife Gallery and is quite striking visually. Dan Casey explained that, unlike the lower walls at the Scaife Gallery, the forty-foot height of the projected glass walls planned for the Dallas Museum made it impossible to prevent condensation of the single thicknesses of glass in periods of cold weather or high humidity. Insulating glass would prevent condensation and provide energy savings.<sup>131</sup> So the architects decided to change the design from the "TVS" wall to large sections of double thickness insulating glass supported by a steel grid. This design change occurred by the time of the calculation of the Preliminary Guaranteed Maximum Cost.<sup>132</sup>

One other interesting architectural alternate considered at this time was a lead-coated copper vault roof, which was priced by the architects at the Building Committee's request, as several members feared that a stone clad roof would be too expensive. The copper roof came up for consideration more than once, but was dropped before the Guaranteed Maximum Cost was determined.<sup>133</sup> It seems unlikely

that this idea would have been retained, regardless of whether the rest of the exterior of the building was granite or limestone. To juxtapose a lead-coated copper sheathing on the vault with a stone exterior for the rest of the building would have been very unusual for Barnes, who has almost always chosen to cover the exteriors of his buildings with single continuous materials. Barnes recalled, "The stone vault was a big turning point. . . . A major turning point when you're able to use the same material on the roof and the walls."<sup>134</sup>

Another important development occurred before the end of 1979. This was the investigation of gallery expansion possibilities through the development with the contractor of a built-in provision for an additional floor above the education wing.<sup>135</sup> The built-in structural provisions for this proposed floor included modifications to the sizing and reinforcing of the columns in the first floor, the strengthening of roof slabs to accept gallery loads, and the inclusion of connections at the top of the columns. Massing studies were also undertaken to explore "possible compatibility" with the original design.<sup>136</sup> The future floor proposal had been accepted by the time of the calculation of the Preliminary Guaranteed Cost Analysis.<sup>137</sup> The planned expansion floor above the education wing, later designated as the Phase I expansion area, came into discussions at this time because the trustees hoped that the

new facility would stimulate donations to the collection, perhaps even a large personal collection, which would necessitate additional space.

The Guaranteed Maximum Price was determined by 14 July 1980, and was set at \$29,517,000. Vincent Carrozza noted that the negotiations undertaken to achieve the final cost did not compromise the design, as the deleted items were not necessary to the integrity or appearance of the museum.<sup>138</sup> However, as previously related, the decision to reduce costs by changing from granite cladding to limestone cladding represented a compromise, and certainly affected the appearance of the museum. Carrozza later noted that savings achieved by the museum during the construction bidding process were used for upgrades, restoring almost all of the design features that had been cut. One exception was the landscaping budget, which was not upgraded to the extent that the architects hoped it would be.<sup>139</sup> Groundbreaking for the new museum was held 6 November 1980.

#### Design Changes During Construction

It was apparent to those who worked closely with Barnes, that for him, the design of the museum did not stop once construction had commenced. Refinements continued to be made whenever possible. For the most part, these were subtle changes that had little effect on the overall appearance of the building. However, several changes

generated much discussion and are interesting for their aesthetic impact.

One of the later design changes which had a significant effect on the exterior appearance of the building was the deletion of the three half-moon shaped windows on the second floor restaurant wing (181a). The change was due in part to functional shading considerations. These windows were fourteen feet high, and as there was no overhang to the outside wall, interior shades would need to be kept lowered to one-half the window height. Barnes asserted that visually, this would defeat the design of the windows. His proposal was to change the window design to a nine-foot-high rectangular strip window, which would conform to the window design on the northwest facade of the building. This would eliminate much of the sunlight and would simplify the design of the shades.<sup>140</sup>

However, it is obvious that aesthetic considerations were the underlying reason for the design change. It has already been noted by the author that Barnes was incorporating the semicircular window into other designs of the period, including the Equitable Building (fig. 95), Asia Society (fig. 98), the Georgia Museum of Art (fig. 125), and the second scheme for the Old Stone Square Bank (fig. 157). Clearly, the arched windows had become one of Barnes's preferred geometric motifs.

In the Dallas Museum, the original design for the semicircular windows complemented the form of the vault, and perhaps Barnes initially felt that this helped link this solitary curved form to the rest of the building's rectangular mass. However, the replacement of the lunar windows with the repeated form of the strip window strengthened the aesthetic uniformity of the exterior design. In this same way, Barnes had sought to bring an overall balance to other aspects of the building design through repetition and proportional changes. Barnes's underlying preference for unity over complexity took precedence in shaping the final exterior design, and he apparently considered the vault to be a strong form that could stand alone.

Another reason Barnes may have decided to delete the arched windows is that this feature of the Asia Society Building had been poorly received in one review which appeared one month before he decided to make the design change in the Dallas Museum. While he gave a positive overall assessment of the Asia Society, critic Paul Goldberger singled out the semi-circular windows for criticism, observing that there was

something not quite right with those semicircular windows, which do not seem to fit naturally--they come off as slightly jarring, as if drawn on in a hasty gesture to enliven the facade.<sup>141</sup>

However, a subsequent review by Douglas Davis in Newsweek gave the Asia Society headquarters a glowing

review, describing it a "landmark" in Barnes's career, and praising Barnes as a "master of sleek restraint." Among other unusual details of the building, Davis made approving reference to the "two graceful semi-circular windows." However, Davis' analysis of the Asia Society facade as "pure decoration" which "denies the building's functional 'truth'" may have made Barnes squeamish about straying too far from his Modernist principles.<sup>142</sup> Given two conflicting reviews of his approach at the Asia Society, and taking the conservative views of the Building Committee into consideration, Barnes may have had second thoughts about his semicircular windows for the Dallas Museum.

It is not surprising that the trustees were persuaded to support this design change, as it was consistent with their basically conservative aesthetic tastes. Margaret McDermott's comment is revealing of the trustees' commitment to a classically modern design that would not become dated by trendy details:

All of us in the museum thought of not only how it was going to look when it opened, but how it would look ten years from now. It was our considered opinion that [the windows] might be stunning and might be unusual, but they looked rather like a gimmick.<sup>143</sup>

The cylindrical volume of the vault (fig. 191) and the abstracted form of the original lunar windows reappear throughout the building, almost as a leitmotif. The vault is reiterated in miniature in the apsidal form of the sculpture cove that cantilevers from the west facade of the

sculpture garden (fig. 192). Within the building, semi-circular forms appear in the cantilevered balconies, the interior of the vault, and the entrances to the orientation theater. The most direct vestigial reminders of the exterior lunar windows are the lighting coves in the museum's auditorium (fig. 199). Ultimately, however, the relevance of the semi-circular motif was considerably weakened by the deletion of the curved forms of the exterior windows. Viewed in isolation from the other curvilinear elements in the building, the auditorium's lighting coves must appear as an anomaly to those not familiar with the museum's design history.

An additional design change which underwent much discussion was the incorporation of an window opening from the spine into the bookstore. This idea was strongly promoted by Betty Marcus, a member of the Building Committee and chairman of the sub-committee on the museum shop, who felt that retailing would be increased if passersby could see into the bookstore from the spine.<sup>144</sup>

The bookstore window idea was initially proposed in October of 1981, and was not resolved until January of 1982.<sup>145</sup> Barnes initially opposed the idea. After meeting with the bookstore design consultant, the consensus of architect and consultant was that a window into the bookstore would have a constricting effect on the interior design and shelf space of the bookstore, and that a "more

attractive environment for traffic through the Concourse" would be provided by emphasizing the bookstore's location with large display cases prominently displayed within the entrance to the education wing into the bookstore.<sup>146</sup>

The architect further stated his concern for the unusual overhead view of the top of display cases and shelving from the spine, but ultimately agreed to add a window into the bookstore offering a view from the spine.<sup>147</sup>

In acceding to the request for the bookstore window, Barnes found it was possible to design a window which satisfied the retailing considerations and yet did not compromise his aesthetic concerns. It is an interesting study of his flexibility as a designer to examine how he achieved this. Barnes's own initial reluctance to place a separate opening for a window in the spine wall probably resulted in part from a concern that this dramatic space be left whole and as free from distracting views as possible. The vista through the spine was intended to be the primary feature. Barnes had earlier in the design process avoided making three separate entrances for the orientation theater, bookstore and children's gallery, even though this had been requested by the staff.<sup>148</sup> Instead, Barnes combined these entrances to adjacent services into one obvious opening off the concourse. The bookstore, for example, is very visible from the large opening into the education wing.

Barnes wished to preserve the integrity of the vista and the enveloping white space of the spine so that this area was visually "quiet". This device served to detach the visitor from the bustle of the outside world and prepare him, through the ascension of the spine, for entering a separate, calm environment for the contemplation of art.

The window into the bookstore was manipulated architecturally so that it did not disrupt the vista through the spine. The embrasures of the window were angled away from the most active entrance on the north, so that the visitor's impression of the bookstore comes primarily from the broad view of it through the entrance to the education wing, as originally intended. Even when the window first comes into view, the whiteness of the embrasures and the inset plane of glass on the interior of the bookstore make it blend in with the wall of the spine. The viewer's attention is more likely to be directed up through the concourse. However, as one exits the building, the angle of the window is very eye-catching when viewed from the walk down the ramp. It is most practical for bookstore purchases to take place when the visitor is leaving, so the angled window functions well as a last-minute reminder, satisfying the retailing concerns of the sub-committee.

The amount of discussion generated by this one feature of the bookstore suggests how significant the income-generating activities of the museum were in the

consideration of the overall design. One advantage of the placement of the restaurant at the south end of the spine was that it drew people up through the museum, past the bookstore, and past the temporary exhibition gallery so that they would be encouraged to spend additional money or time in the museum. Another late addition to the design was also for revenue potential. This was the addition to the plans of a supplemental retail shop within the building. As first proposed, this shop would have been located in the spine itself. This concept was opposed by the architect, and he suggested instead a temporary shop which would be related to special exhibitions. Ultimately the additional retail space was located adjacent to the spine as part of the Temporary Exhibition Gallery. It was also suggested that this space could be used as preparatory room when not serving as a temporary shop. It was noted by Harry Parker that the temporary shop was located on the path to the restaurant, and would attract visitors entering and departing the restaurant.<sup>149</sup>

The interiors of several of the public spaces in the museum were designed by Benjamin Baldwin, and Omniplan was the consultant for the offices and work areas. Vicki Haig coordinated the finish and millwork packages for the Barnes office. The graphics consultant was Vincent Vignelli. Margaret McDermott recalled the "warm relationship" the trustees enjoyed with Ben Baldwin, commenting, "he is a man

who likes quiet, subtle decoration and we did, too."<sup>150</sup> Baldwin's color sensibility is compatible with Barnes's, typically embracing a subdued palette of off-whites and beiges. His interiors feature natural materials such as oak and stone and fabrics of cotton, linen, leather or silk. Baldwin states:

I am against clutter. My work in interior design is my expression of opposition to the chaotic world man creates. . . . In nature I find a sense of order, logical and lyrical, which I would like my work to express.<sup>151</sup>

The original installation of the permanent collection galleries was very characteristic of the subtle colors preferred by Barnes. A gradual progression of tonalities enhance the smooth spacial flow with barely perceptible changes employed between levels, rather than jarring contrasts. The white walls in the contemporary galleries shifted to off-white in the second level, and to a soft gray in the upper level Pre-Columbian galleries, and a deeper gray in the African collection.

Barnes worked with Harry Parker and Steve Nash in the design and placement of the semi-permanent interior partitions within each permanent collection floor. Three thick wall partitions had been established early in the design of the floors by the architect as part of the permanent structure. These included the two short walls on either side of the courtyards, and the long wall flanking the north wall of each courtyard. These walls are key

architectural features of the permanent collection floors because of their supporting function, which makes it possible for the entire surrounding space on the floors to be totally flexible and open. Many museums have to work installations around interior columns, but Barnes's design left almost the entire floor free and clear of obstructions. However, the use of these screen-like supporting walls together with the courtyard creates an essentially Miesian architectural character which calls for the surrounding space to be developed in an open plan.

As Steve Nash and Edward Barnes recalled, the installation was custom-designed to house specific works and different groupings of portions of the collection.<sup>152</sup> The best example of this was the Impressionist Gallery (fig. 200), located on the west side of the first courtyard. As previously noted, Margaret McDermott oversaw the development of this installation, as many of the paintings to be hung there were gifts to the museum from her private collection. Harry Parker saw several parallels between McDermott's classically modern house and the development of the Impressionist Gallery. He pointed to the stone floors in her house, which had large carpets laid over the stone extending nearly to the side walls, an effect recreated in the galleries.<sup>153</sup> The house also offers a variety of views outside and into a central grassy courtyard through floor to ceiling glass windows. While McDermott demurred on

comparisons between her house and that of the museum design, Edward Barnes was a frequent guest at her house during his visits to Dallas to meet with the Building Committee.<sup>154</sup> Regardless of the source, the intention was clearly to create a residential character in this gallery. Much thought and discussion determined all details from the plantings in the courtyard, to the couches provided for seating, the limestone-colored walls, and the rug selected for the floor.<sup>155</sup>

The casework on the upper level of the permanent collection gallery is of exceptional quality, and was fabricated by Helmut Guenschel, Inc., of Baltimore, Maryland, an affiliate of Hahn, a German case-maker. The configuration of the cases and triangular layout was determined by Barnes in consultation with the curators. The casework was designed to provide maximum visibility and a dust-free environment for art objects, and contains a hidden light source. The glass walls can be popped out while remaining supported by the pedestal base, so that one person can easily access the contents.<sup>156</sup>

The museum's collections of Pre-Columbian pottery and gold works and African carvings were extensive, and had not been exhibited before in depth due to space restrictions at the Fair Park facility. It was therefore determined by the curators that these collections should be displayed in their entirety. A late gift of fertility figures from the

collection of Stanley Marcus was also added to this area. The formidable task of installing these collections was indicated by Steve Nash's observation that 22,000 objects would be installed in 800 linear feet of cases.<sup>157</sup>

Placement of the objects was primarily determined by Barney Delabano and John Lunsford. While the overall tonality in the non-Western galleries was a gradually deepening gray, Delabano incorporated more intense colors within the cases.<sup>158</sup>

As previously described, the Gold Room was an area which required special architectural treatment to create an intimate viewing space for these small works. Some relief from viewing the large quantity of works concentrated on the upper gallery level was also needed. This was provided by the "Tribal" courtyard and the large window opening on the north facade. This window, set in at an angle on the floor, gave a momentary glimpse of daylight and outdoors as a contrast to the dimmer lighting encountered in the African installation. A more important reason for the window is for orientation purposes. Barnes explained:

We felt that people need to know where they are. They have to relate back to the city every so often. So occasionally you have a city view which is like another picture, and you know where you are.<sup>159</sup>

The museum design included not only courtyards, but large expanses of glass, and light control was an important consideration. Nathan Stolow, an art conservation consultant, was employed to analyze and make recommendations

regarding the architect's light control proposals. He also was responsible for testing mock-ups and samples of shading materials under consideration.

Several methods were used to control the quantity and type of light entering the museum. First of all, an ultraviolet-absorbing film was applied to the inside of all glass surfaces. To control light entering the galleries from the courtyards and through the large glass windows in the spine, mechanically-activated roll-down fabric shades were installed. Composed of a vinyl-coated polyester, the shades are automatically lowered to half or full-drop positions according to a programmed schedule set seasonally. A third sun-control method is employed in the galleries for the skylit ceilings. Venetian-type blinds were positioned under the skylights which can be hand-cranked partially open or completely shut as necessary to control the amount of daylight penetrating into the galleries. The consultant's recommendation was that the collection be installed so that more light-sensitive works would be positioned away from the direct sources of daylight.<sup>160</sup> A separate gallery that was not daylit was designed to display particularly light-sensitive objects such as works on paper and textiles.

The employment of daylight was important in Barnes's conception of the museum. He thought of the museum as

a series of different courtyards that you pass through. I was interested in all the different ways you can use daylight within a museum. In Scaife, I used daylight

in one way, but Dallas was almost like theme and variations, trying to use daylight in as many ways as possible without glare.<sup>161</sup>

Barnes employed daylight in three primary ways. One already noted was the insertion of a window giving a view and sense of orientation to the outside world, and providing an opportunity to step away momentarily from art viewing. The second was the courtyards with glare controlled by blinds, overhangs, and plantings. The third is the scoop skylight on the roof of the galleries that washes the walls with daylight. Comparing this technique to the "subdued chapellike light that Corbusier used at Ronchamp," Barnes thinks his interpretation is "wonderful light for a gallery because the pictures are hung on the brightest surface. The ceiling is dark, the floor is dark, and the wall is light."<sup>162</sup>

#### Construction

Of critical significance to the realization of the conception of the art museum was the ultimate expression of the design in the completed building. To a large extent, the quality of construction was inextricably linked to the clarity and logic implicit in the architectural plans. Close supervision of the construction was necessary, as Barnes was exacting about the quality and details of the finished building. If construction work had been haphazard or sloppy, the purpose and overall effectiveness of the design details would have been spoiled. The precision of

the execution of construction is apparent in the crisp outlines of the building, the near-flawless alignment of stone surfaces, and the meticulous finish of every detail.

As Larry Francell related, in all there were at least eight supervisory personnel responsible for quality control on the construction project.<sup>163</sup> These included representatives for the consulting architects, Pratt Box Henderson & Partners of Dallas. Paul Lyons functioned as On-site Representative for the firm, and Ray McKinney was the Construction Administrator. Lyons also served as liaison for coordination between the consulting architects in Dallas and the Barnes office in New York City. Larry Francell was the Project Coordinator representing the museum on-site. Francell would later become Director of Operations of the new facility. The contractor, J.W. Bateson, had three quality control personnel on the site. Darren Dennis, administrative assistant for the on-site office of Pratt Box Henderson, made a daily inspection and kept a log on the progress of construction. Francell also noted the involvement of at least 27 consultants, each of whom had a certain amount of quality control responsibility. As Francell recalls,

It was a sophisticated operation with a lot of attention to detail and a lot of supervision. . . . When we started out on that project, everybody was just going to build a building. . . . By the time that project was completed, everyone working there knew it was a special building. And the workmen themselves took a great deal of pride [in it]. . . . None of the

mistakes that are normally overlooked [in spec office buildings] got into that building. It's very seldom that you have that kind of quality control on site.<sup>164</sup>

Darren Dennis recalled that the universal admonition for the workers was, "if it's not white, it's gray, and everything is flush."<sup>165</sup> Construction Administrator Ray McKinney, who monitored the work of 130 construction workers for Pratt Box Henderson, stated,

We wanted them to realize that the building itself is a work of art. It was an educational process for the subcontractors to see just how delicate every line they created was.<sup>166</sup>

Quality craftsmanship was achieved at times, Francell related, by "holding school," or having some aspect of the construction done over again if the workmanship was inferior.<sup>167</sup> This was corroborated by Kenn Hornbeck, Project Manager for the City of Dallas. Hornbeck, observing that "monuments take a lot of refinement," recalled that some of the detailing seemed nearly impossible, given the shortage of highly-skilled labor in Dallas. One of the biggest difficulties, he noted, was in achieving "forced" detailing of dissimilar building materials.<sup>168</sup> Steve Garrison, a carpenter employed by J.W. Bateson, recalled that the architects specified a one-fourth-inch opening between the sheet rock and stone on the walls, and a one-sixteenth-inch opening between the doors and floor, which were demanding tolerances to achieve. "Many times, we had to tear out walls three or four times before we got it right."<sup>169</sup> The hanging of the stone cladding required the

utmost precision, as no tolerance was permitted in its installation. Paul Lyons, On-site Representative for Pratt Box Henderson, explained the significance of these seemingly small details:

We provided careful coordination, because the minutest dimensions had an ultimate degree of importance . . . like a giant puzzle in which one piece misplaced could distort with a ripple effect.<sup>170</sup>

Dan Casey remarked, "When you're detailing something to look very simple and effortless, the real work is hidden. It was a difficult simplicity."<sup>171</sup> Coy Porter, Project Manager for the contractor, J.W. Bateson, commented, "The architects were very demanding--that's how they got the quality they wanted." Porter also remarked on the challenge of achieving flush surfaces and matching joinery using materials manufactured with different tolerances. Hand and machine-cut limestone cladding, glass, steel and aluminum made by different manufacturers all had to correlate in the end product. Porter recalled that the control of lines and grades inside and out of the building was particularly complex--all lines on the outside had to match inside.<sup>172</sup>

The roof system was complex enough that a specialist in the roofing industry was kept on site during roof construction. Porter remembered that museum trustees were "adamant" that the skylights must be watertight, so the skylights were flooded to check for leakage. The museum also needed to be assured that the courtyards would not

leak, particularly since one was positioned over an art storage area. These courtyards were also flooded by the contractor to check for leaks. Porter recalled that another challenging aspect of the project was the construction of the gallery ceiling. The entire ceiling and roof were cantilevered so that the corner skylights could remain completely free and open. Calculating the camber of the cantilevered steel beams was difficult, according to Porter. Porter stated, "There is a story for each detail. . . . I feel the quality is very high, and the detailing beautiful."<sup>173</sup>

An example of the unusually fastidious concern for the appearance of the museum was the detailing of the exterior roof of the facility. Francell explained the concern for the museum's appearance from above resulted from the architects' awareness that the museum would be surrounded by high-rises once the surrounding property became more valuable and the roofline would be very visible. He comments,

If you go up [in] LTV and look down [at the museum], or fly over it from Love Field, you'll see the cleanest roofline in Dallas. It's a work of art from the air.<sup>174</sup>

As the building was originally designed, the pedestrian's view from street level revealed nothing on the roof which projected above the parapet. As the building currently appears, the sole projection above the horizontal line of the parapet is the exterior squared form of the

central hall rising above the decorative arts wing. The overhead view of the museum from one of the adjacent towers shows a minimum of roof penetrations, which are designed with the utmost refinement (fig. 201). Even the exterior exhaust fans that were a later addition due to alterations in the smoke exhaust system were designed to be low, square, gray, and carefully aligned. Alistair Bevington, Associate-in-charge of the museum project, cites this "clean roof" as a characteristic feature of Edward Barnes's design approach. To achieve it, he explains, much of the equipment and appendages that are normally placed on top of a building were concealed below the museum's roof, along with ductwork, mechanical and electrical systems. Three large mechanical floors house most of the equipment used to operate the large facility.<sup>175</sup>

The construction period was even more challenging because it involved not only the relationship between architect and contractor with the museum as "client/user," but in addition, the City of Dallas as "owner" was providing funding. Nearly all important decisions regarding the project had to be approved by the City Council, including any change orders.

The drawings for construction were done on the fast-track design process. There was some risk in this method. It was used to speed up the overall bidding process, which saved inflation dollars, but in fast-tracking the design,

there was greater possibility for errors. Correcting the various problems which could arise during construction led to change orders, which could drive up the construction costs as sub-contractors revised their bids. Because the museum initially approved an austerity budget to arrive at the contractor's Guaranteed Maximum Price, many change orders were upgrades to improve the quality of the building.<sup>176</sup>

Ultimately, however, the museum was completed on time and the total construction costs were actually 1.5 million dollars below the original budget. Most of this savings was returned to the City of Dallas to help pay for unexpectedly higher land acquisition costs resulting from a lawsuit brought by a previous owner of a portion of the museum's site.<sup>177</sup> The Sculpture Garden was opened to the public on 10 October 1983, and the new Dallas Museum of Art building opened on 29 January 1984.

#### Initial Expansion Planning

From the inception of the architectural commission, Barnes has been involved with the provision for future expansion in the museum's building program. This aspect of the planning and design of the new museum was a part of the original requirements of the commission, as indicated to Barnes during his initial interview with the trustees.<sup>178</sup> The early spacial diagrams demonstrate that Barnes's

consideration of future expansion was integral to his site selection and early planning, as discussed in Chapter III and beginning of this chapter (figs. 138-140). That the museum can plan for future expansion on its site is due to Barnes's foresight in encouraging the trustees to acquire an additional block of land--more than they were initially considering purchasing. The museum could have controlled even more land around the museum if they had renewed their land options on adjacent sites after the defeat of the first bond election package in 1978.

Barnes's spacial diagrams dating from 1977 (figs. 138-140) represent expansion planning in an abstract sense. However, as previously noted, this early schematic planning suggests the approach that Barnes would take in the development of the museum design so that future expansion could be a logical and unified continuation of the original plan. Barnes's spacial diagrams indicate the repetition of courtyards in later additions, and an extension of the stepping motion of the building massing back and forth on the northern portion of the site.

A massing study for an expansion wing on the museum's parking lot was added to a model dating from 8 March 1979 (figs. 170, 171). The block-like mass of the addition comprises several stories, and is designed with details corresponding to the design of the museum building at that time, such as an upper level trellised courtyard and

semicircular windows. The large mass of the addition suggests the manner in which the largest bulk of the building would act as a buffer facing the Woodall-Rogers freeway.

Through the years since the original museum commission, Barnes's firm has undertaken additional expansion studies. One of these studies originated partly in response to the anticipated hiring of a master planner for the Arts District. Museum officials wished to have a master plan for the future development of their own site. In October 1981, Barnes was asked to study the new museum building and provide expansion plans targeting the timing and areas of the museum to be expanded. At this time it was also decided to investigate the addition of a floor above the children's wing.<sup>179</sup>

The expansion study was completed in November 1981. A letter from Daniel Casey, Project Architect, summarizes the conclusions of the study. The architects proposed a three-phase expansion program extending over the next fifty years, with the last phase of construction satisfying the museum's needs for an additional twenty-five years. Projections for the timing of expansion in different areas of the museum were indicated in an attached table.<sup>180</sup>

The table projecting future expansion over the next fifty years predicts Phase I expansion occurring in 1990/95, Phase II in 2000/2010, and Phase III in 2020/2030. The

Phase I expansion encompassed 15,000 square feet of space to be added as a second floor above the education wing. The total gross figures projected for the entire museum complex after the final phase of expansion totaled 503,000 square feet.<sup>181</sup> The ambitious scope of this expansion program is indicated by Casey's observation that

The end result is a building which is 2.6 times the size of the new museum but with 3.8 times the exhibition area. This brings the DMFA up to somewhere in size between the Chicago Art Institute, and the National Gallery including the East Wing.<sup>182</sup>

It was determined that the fifty-year building expansion program could be accommodated on the museum's own site, on its surface parking lot. This would eliminate most or all of the available surface parking, and the alternatives of off-site parking and underground on-site parking were considered. Due to the higher cost of additional land acquisition off-site, the construction of on-site underground parking was recommended as the best approach. Casey noted that there would be no conflict with underground utilities on the site, as these problems had been corrected for the construction of the initial museum building.<sup>183</sup> Barnes presented his three-phase expansion program to the Building Committee on 7 December 1981.<sup>184</sup>

Larry Francell was present during discussions with Edward Barnes and Dan Casey regarding possible methods of expanding the building. In these discussions, he recalled that Barnes expressed several basic concepts which shaped

all of the options considered for expansion. Among these, Barnes wanted the stepping back and forth of the building masses to be continued, all existing courtyards to be maintained, and new interior and exterior courtyards added in a similar fashion to the original plan. He also wished to retain the design features of the original building in the new wings, continuing the limestone cladding, and repeating the same window and door details.<sup>185</sup>

These concepts are reflected in the expansion studies dating from January 1982 (figs. 202-206) that illustrate how the plans had developed at that time for the continuation of the gallery floors and the proposed massing of the addition after the completion of the three-phase expansion (figs. 202, 206).<sup>186</sup> The plan of the gallery levels shows two additional gallery levels (shaded in gray) added to the north of the original building (fig. 203). The new gallery floor on the left represents one level of the Phase II addition, and the second gallery floor represents Phase III. The plan shows only the gallery levels, but the section drawings indicate that the gallery floors are located within larger blocks consisting of many floors (figs. 204-206).

The Scheme A plan shows that the two new wings are intended to duplicate the stepping motion of the first two permanent collection galleries (fig. 202). The first of the new blocks steps back to the east so that the window of the Triangle Terrace is left intact, while the next block steps

back to the west. The continuation of the stepping up of the "trays" of gallery space is suggested by the short flight of steps connecting each floor. As in the original design, the steps are aligned with courtyards, with the northernmost court abutting the facade. The view into this court from the exterior would add a new feature to the north facade. The alternation between building masses and open courts continues along Harwood Street. Overall, the addition is strongly linked to the logic of the original building through repetition of existing floor patterns and details and modular symmetry. In his planning of the original building with its underlying modular forms, Barnes anticipated and laid the groundwork for his eventual expansion of the facility.

The Phase I expansion is the most limited in size. As seen in section A-A (fig. 204), only one floor of exhibit and support space is planned above the existing education wing. Phases II and III greatly increase the amount of exhibition and support space, by 100,000 and 200,000 square feet respectively. In studying the elevations of the three phases of expansion (figs. 204-206), it can be seen that the intention is to gradually increase the height of building masses as each addition extends further out on the parking lot and closer to Woodall-Rogers. The Scheme B study (not illustrated) is similar to Scheme A (fig. 202), except that its Phase III addition is stacked in an even higher vertical

block extending nine stories above the adjacent block. In both, the Phase III expansion sandwiches exhibition levels between the upper floors of support space and the underground parking levels. In square footage, the Phase III expansion represents as much space as the original building.

In this preliminary expansion planning, Barnes has recognized that the great diversity of the Dallas Museum's various collections requires an overall unified treatment. A broken-up and disjointed approach would only underscore weaknesses in the permanent collection. A precedent for an individual wing honoring a donor would be set with the Reves collection. If this approach for recognizing individual donors is continued in the next addition, it is even more imperative that continuity in the supporting architectural framework is maintained, otherwise the museum could become an architectural melange like the Los Angeles County Museum of Art. The continued growth of the facility makes it essential to maintain the logical flow of the original circulation plan. Barnes's plan for the repetition of inner courtyards would be a significant orientation aid for the gallery visitor. The larger the museum grows, the more important that a means of interior orientation is clear.

#### Phase I Expansion--The Decorative Arts Wing

The Dallas Museum has already completed Phase I of its expansion program with the opening in November 1985 of the

decorative arts wing featuring the Wendy and Emery Reves Collection. The decorative arts wing was completed less than two years after the opening of the new museum. This new construction pushed the museum's expansion schedule forward by several years, as Barnes's 1981 expansion study projected the Phase I expansion in 1990/95. Many observers are unaware that an addition has been made to the original building, because the wing was so discretely accommodated by the existing structure. This first phase of Barnes's expansion plan for the Dallas Museum is the floor located directly above the education wing, on the east side of the spine.

The Phase I expansion was first anticipated in 1979, when steps were taken to accommodate a future floor over the education wing. In late 1979, details of the design of the new museum were being finalized prior to setting the Guaranteed Maximum Price with the Building Contractor. It was uncertain at that time whether a major new collection would eventually be acquired by the museum, but a decision was made at that time to include a built-in provision for an additional floor to be added above the education wing at a later date. Structural, mechanical and architectural considerations were examined, and the physical provisions for the addition of the future gallery were included in the initial construction plans.<sup>187</sup> Museum officials apparently intended to go "collection hunting" after the completion of

the new museum, so this expansion potential was considered necessary. By January 1982, negotiations between museum officials and Wendy Reves began in earnest.<sup>188</sup>

Wendy Reves presented Harry Parker and the museum trustees with an exacting list of conditions which had to be met in return for the gift of her collection of paintings, drawings, sculpture, porcelain, rugs and other objects. The most difficult of these, financially and architecturally, was her stipulation that the museum would have to construct a replica of portions of the Reves's home, the Villa La Pausa, in which to display the collection.<sup>189</sup> Among the rooms to be reproduced were the entry foyer, the Great Hall, the master bedroom, dining room, salon, library and a courtyard. While Barnes travelled to the Cote d'Azur, France, in March 1982 to determine whether this recreation of the Reves's villa was feasible, the trustees began to raise five million dollars from private donors to fund the building of the first phase expansion wing.<sup>190</sup> Barnes recalled:

Reproducing the Villa La Pausa in Dallas to house the beautiful Reves Collection--this was indeed a challenge. I vividly remember days in France at "La Pausa" with Harry Parker and Wendy Reves, looking out through ancient olive trees to the Mediterranean. We were wearing slippers so as not to damage the carpets, and we were sipping French wine. And we were checking every dimension of the house and measuring all of the important artifacts--to see if we could somehow reproduce the spirit of the place in Dallas.<sup>191</sup>

Barnes must have felt some misgivings when faced with the "challenge" of re-creating a French villa, considering

his personal aversion for historical embellishments of modern architecture. Replicating a period house must have seemed foreign to his more orthodox Modernist sensibilities. However, Barnes approached the task with good humor, reportedly describing the commission as "my bow to eclectic architecture without having to take it seriously."<sup>192</sup>

Despite this ironic comment, Barnes undertook the project with a serious determination to design the wing in a manner most advantageous for the museum's interests. For example, rather than turn the entire wing over to the display of the Reves collection, Barnes proposed that a portion of the gallery space be reserved for additional collections:

Our analysis indicates that we deliver considerable extra wall and floor space within the so-called house area. I believe that at least a third of the total floor should be reserved for other collections.<sup>193</sup>

Barnes achieved an important breakthrough in the development of the architectural plans which made it possible for Reves to accept the inclusion of other collections in the wing. Barnes made a 90-degree rotation of his first proposal for the floorplan of the wing so that the axis of the re-created house lay north-south along Harwood Street. In his revised plan, three galleries were aligned parallel to the spine, and of these, the middle gallery could be used as an approach to the Reves Collection (fig. 209, area J is entrance gallery). With this development, Reves indicated that the two galleries

positioned on either side of the entrance foyer could be reserved for collections other than her own.<sup>194</sup> Barnes also inserted a long entrance gallery leading to the foyer and connected to the upper level of the permanent collection by a walkway that crossed over the spine. This entrance gallery would be set aside for the Hoblitzelle Collection of English Silver. Within the Reves "house" Barnes also inserted two special exhibition galleries for drawings and porcelains. These spaces allow for closer inspection of works than is possible in the room installations.

The design of the new wing did pose some problems related to the exterior appearance of the art museum, and Barnes apparently had some reservations regarding the visual effect that the additional floor would have on the overall massing of the building:

The exterior massing will not be as good as it is now. The basic idea of the present design is to have the masses on each side of the spine step up on the St. Paul side and down on the Harwood side. The additional floor on the education wing will obscure this movement, and also conceal the vault from the north. Having said this, it must also be said that the new massing is by no means impossible. I am sure that if not today, someday the museum will be glad to have this capacity.<sup>195</sup>

As Barnes further noted, the new wing necessitated some sacrifice of space and light in the education wing and bookstore below.<sup>196</sup> The bookstore and the children's studios in the education wing were originally designed to receive daylight through three roof monitors. These monitors had already been designed, fabricated and

installed on the roof. The monitors had to be removed and artificial lighting was added to compensate. Elevator access to the new wing was possible from the third floor ethnic galleries with the addition of the walkway bridge overlooking the spine. For staff and fire escape access, it was necessary to add a stairway behind the bookstore and in the education studios.

Fortunately for the museum, there was apparently no stipulation in the agreement with Wendy Reves that the exterior of the new wing needed to be a recreation of any portion of La Pausa's exterior. Therefore, Barnes was able, and presumably insisted, that the exterior shell of the wing would assume the modest Modernist profile and limestone cladding of the rest of the building. Barnes offered a visual clue to the collection within by including a square opening in the east wall, which allowed a glimpse of the columns and red-tiled roof of the second story's courtyard. Described as Barnes's "touch of benign playfulness," the irony of the contrast between the view of the historically-derived court and the frank, modern simplicity of the exterior has been noted.<sup>197</sup> Reves later objected to the view from this window and it was filled in with an iron grill and frosted glass.

Barnes exercised some freedom in interpreting the interior of the villa re-creation. It was agreed by all parties "that the rooms need not be treated as replicas of

the La Pausa originals but could be changed and adapted as museum spaces which evoke the originals."<sup>198</sup> Therefore, Barnes could modify the dimensions and alignment of the various rooms so that they would fit over the education gallery. In his letter commenting on the plans for the new wing, Barnes described the anticipated appearance of his adaptation of the La Pausa villa:

Except for the "porch," the entrance hall, and the patio, I do not think the addition will look much like the house. Without fireplaces or windows, and with functional museum lighting and walls, it will appear as a succession of good decorative arts galleries. I see nothing wrong with this as long as everyone understands.<sup>199</sup>

However, at the time of this statement, Barnes did not foresee that Wendy Reves would decorate the wing. Antique fireplaces, draperies and lamps eventually found their way into the wing, increasing the effect of uneasy juxtaposition of various period objects within the sleekly-detailed gallery settings. However, the interiors of the rooms do differ markedly from galleries in the rest of the museum, as beautifully-crafted wooden wall paneling, cabinetry, door and ceiling moldings and parquet floors are found throughout the wing.

Barnes considered the flow and ambience of the new gallery spaces as a unique feature of the overall museum composition:

The interior flow, it seems to me, is good for a decorative arts collection. And like other "terraces" in the museum[,] a wholly new experience. The little

exterior patio and the overlooks north and south are delightful.<sup>200</sup>

Barnes gave thoughtful attention to developing a logical means of circulation through the rooms. In some cases, the orientation of the original villa's rooms was altered to facilitate movement, or to provide long vistas through the floor. An example of this realignment is the open view created through the center of the library, the grand central hall, and the master bedroom (fig. 209, areas D, B, and F). This feature heightens the dramatic sweep of the floor plan and further functions as an aid to circulation, in much the same manner as in the permanent collection galleries. The vista through other rooms of the wing gives the visitor a sense of where he is in the overall composition and entices him to continue the journey through the rooms. Similar views are provided from the salon and dining room into and through the courtyard.

Once the visitor enters the Great Hall of the decorative arts wing, the actual flow of circulation relates to the circular movement found in the other museum galleries. The difference lies in the division of space within the decorative arts wing into distinct rooms. Also, free movement within the rooms is restricted by glass barriers, keeping much of the art at a considerable distance from the viewer. While the courtyard is not positioned in the center of the wing, circulation around the courtyard is possible (if the connecting doors are unlocked). This

factor and the visual importance of the courtyard again relates it to the underlying function of this feature in the permanent collection galleries. The courtyard of the decorative arts wing repeats the pattern of alternating views of garden courts with exhibition galleries. This court, however, is given a distinctly unique character through the use of the colonnade and red-tiled roof.

The Dallas Museum proceeded with construction of the new floor and its reproduction of the Reves's villa, even though a legal agreement had not been reached with Wendy Reves and permission to export the art collection had not yet been given by the French government. The contract with the general contractor, J. W. Bateson, was signed in December 1982, and construction of the new floor began in February 1983. In May 1983, a Donation Agreement was signed by Wendy Reves and the Dallas Museum. Significantly, even though construction was already in progress, the Donation Agreement allowed Reves an escape clause if she did not approve of the architectural "re-creation."<sup>201</sup>

Objections raised by Reves to the design concerned Barnes's placement of windows in the perimeter walls of the wing. The most obvious of these was an square opening in the east wall that from the outside allowed a glimpse of the red-tiled roof and columns within the interior patio. A window also exists in the bedroom, overlooking the children's courtyard. Another window was placed in the

library, overlooking the formal entry court at Flora Street. The openings for all three windows remain visible on the exterior of the building; the windows in the library and the bedroom have been covered with paneling, and are no longer discernible on the interior of the wing.<sup>202</sup> One window that was left unaltered in the wing is located at the center of the balcony overlooking the great hall. This window now provides a view of Flora Street and the new Symphony Hall designed by I.M. Pei.

Barnes was not being capricious in including these windows in the wing, even though they were not found in the original villa. The windows provided the only daylight in the wing, other than that from the courtyard and a skylight in the Great Hall. Barnes apparently felt that some visual break within the decorative arts galleries was necessary to prevent fatigue. This was certainly a response to the density of the installation--with many varied objects demanding the viewer's attention, a rest for the eyes at intervals is important, perhaps even more so than in the other permanent collection galleries. An examination of the floor plan (fig. 209) shows that the windows in the library and the master bedroom precisely align with the visual axis created through the wall openings connecting room to room. The inclusion of the windows was consistent with the concept guiding the overall design of the museum, in which occasional views of the outside courtyards were created.

Judging from Wendy Reves's comments about the completed wing, there was not complete agreement between donor and architect regarding other details. Fortunately for the museum, there was not total acquiescence by the architect to the donor's wishes. Just as Barnes protected the museum's interests during the early planning of the Arts District, the challenge of the Phase I expansion for him was to satisfy the donor's requirements, yet keep the overall interests of the museum in mind.

One source of disagreement between Barnes and Reves was over the ceiling height of the wing. Reves commented:

It could have been better. The ceilings are far too low. And it wouldn't have hurt the building at all to have made it one story higher . . . Right now, the wing's a little flat. That's really the only thing wrong. Really, the only problems were those imposed on us by the architect; obviously he had his reasons, architecturally.<sup>203</sup>

Barnes did have reasons, architecturally, for maintaining a lower overall ceiling height for the wing. Just in practical terms, doubling the height of the ceilings would have added considerably to the heating and cooling expense of the wing, which was to be borne by the museum, not the donor. Also affecting design considerations was that the original massing scheme was being altered to accommodate the new wing. If the decorative arts wing was composed as a two-story mass placed on the one-story education wing, the combined three-story wing would have been equivalent in height to the south restaurant wing.

Since the facade of the building is very severe in style, most of the visual interest comes from the stepped forms of the building masses. This effect would have been negated at the Flora entrance, and the Harwood elevation would become more monolithic. Even more detrimental would have been the effect of the higher wing on the vault--intended as the focal point of the exterior and anchor of the Arts District, the vault would have been dominated to the northeast by the projecting three-story mass.

Barnes was able to add height to the great hall in the decorative arts wing by elevating the center section of the roofline, which appears as the rectangular form projecting up from the roof. This form was kept rather low in profile so that little can be seen projecting above the parapet--maintaining the overall horizontal lines of the building masses. While acknowledging that the donor wanted higher ceilings, Larry Francell commented:

The museum couldn't live with a massing that was obviously skewed. And [Barnes] knew that. . . . There are too many people whose sole contact with that building on a day to day basis is the [view of] the exterior, and that massing is very important.<sup>204</sup>

Ultimately, Reves gave her final approval to the reconstruction of the villa, and the gift of the Reves collection was announced to the public in April 1985. The new decorative arts wing opened the following November.<sup>205</sup> While the agreement to reproduce the villa and the positioning of art within the wing received criticism in the

Dallas press, it was noted, "given the restrictions of the commission, Barnes has done his job impeccably."<sup>206</sup>

#### Off-site Expansion Planning

Linked to the earlier on-site expansion study dating from November 1981, was the consideration of the manner in which off-site land belonging to the museum would be developed. To ensure that the museum would have additional land off its site for long-term future development, Margaret McDermott had purchased land on behalf of the museum directly east of the museum's parking lot, fronting Woodall-Rogers and Harwood streets.<sup>207</sup> Through land swaps and outright purchase, the museum acquired other strips of land along Harwood and Flora Streets so that the approach to the museum from the Arts District would be under the museum's control.<sup>208</sup>

The architect's fifty-year expansion plan, had indicated that expansion could occur on the museum's own site for some years to come. In December 1981, following the submission of the expansion plan, museum officials invited developer's proposals for this off-site land, seeing it as an source of funding for the museum through the leasing of the site, while holding it reserve for its long-term expansion. The invitation also reflected the trustees' concern that the handling of the Arts District master plan might not serve the museum's best interests. It was thought

that a development proposal for the museum's land which contained stipulations for height and density could be submitted to the City of Dallas and thereby ensure that the museum had some influence on the master plan. The trustees' concern regarding the museum's input resulted from the City of Dallas asking only the developers in the Arts District to finance the master plan, not the institutions. The museum would eventually share in the Arts District coordination costs.<sup>209</sup>

One development plan for the museum's off-site land was proposed and negotiated during a six-month period in 1982.<sup>210</sup> The resulting 1982 proposal included three zones for development: a high-rise office development at the north end of the site next to Woodall-Rogers, a hotel with condominium apartments south of Munger, and a retail zone south of the hotel and north of Flora. As a special inducement for the museum, the proposal also included plans for building an underground parking garage on the museum's site, under its surface lot. A requirement for the parking garage was that the developers would provide footings to support the future expansion wing.<sup>211</sup>

If this proposal had been accepted, the museum's architect would have exerted some influence over the development. The museum insisted that Barnes have input into the design process and approval over the final design.<sup>212</sup> Barnes indicated that he wished to confer about

the massing, and urged masonry walls for the structures on the off-site property. The Flora Street concept developed by Barnes was reiterated to the developers (fig. 198). Flora Street was "conceived as a dignified boulevard with large caliper trees in three rows along the sidewalk. Behind the trees would be a low rise retail zone."<sup>213</sup> A positive aspect of the developer's proposal which suggests Barnes's influence was the underutilization of the property to maintain a proper scale relationship with the museum.<sup>214</sup>

After several months of negotiation with the developers, a lease agreement was proposed for the museum's off-site property. The developers did not agree to all the conditions required by the museum, so the lease agreement was not approved by the museum's Executive and Building Committees. Since the plans for an underground parking garage on the museum's site were part of the proposal, they were also rejected at that time.<sup>215</sup>

Although the 1982 development plan was rejected, more recent negotiations have occurred over the use of the museum's off-site property. Other land on the blocks bounded by Woodall-Rogers, Harwood, Pearl and Flora Streets and abutting the museum's off-site land is owned by developer Trammell Crow. Concurrent development of the two tracts of land is a possibility, and from a master-planning standpoint, the most practical approach. This alliance would also be desirable for the museum because of Crow's

previous record as a sympathetic neighboring developer. His development of the LTV Tower, as designed by Richard Keating of Skidmore, Owings and Merrill, respected height limitations on Flora Street with its two-story pavilion. The pavilion has further supported the Arts District concept with its changing program of art exhibitions. Its minimalist masonry exterior complemented rather than competed with the museum's design. Dan Casey, Project Architect for the Dallas Museum, observed that of the developers the Barnes firm had worked with, Trammell Crow seemed particularly responsive to their concern for compatible development.<sup>216</sup>

A joint plan to develop the museum's off-site land with the adjacent Trammell Crow property was undertaken in 1985. Preliminary proposals called for two mid-rise office towers, designed by Barnes, to flank Munger Avenue.<sup>217</sup> Barnes and partner John Lee were engaged in preliminary designs for the project, but its progress is currently stalled because of the downturn in the Dallas economy. Barnes was very enthusiastic about his design concept for the towers, which featured the same materials used in the museum, and a transfer of the museum's checkerboarding of courts and buildings across the street so that the towers were stepping up with a series of set-back terraces. He described the terraces of the two towers stepping up and around like a spiral, continuing set-backs every four floors up to a point

at the top. This design would bring the scale of the towers down to the street, and would be a very sympathetic development next to the museum.<sup>218</sup>

Benefits for the museum if this future development transpires would be many--for example, the availability of a nearby parking garage that could be utilized by museum visitors. Other possible features of this project might include the compatible commercial development which had been urged by Barnes during the district's inception--restaurants and shops to draw visitors to the museum's end of the Arts District. Another benefit for the museum in this off-site development might be the inclusion of a special exhibition pavilion which could be used by the museum for traveling exhibitions, similar to the pavilion currently operated by the Trammell Crow Center (formerly the LTV Tower).<sup>219</sup> The rental income derived from the leasing of commercial space in the towers might prove to be a significant factor in the future financial stability of the museum--a precedent is the high-rise tower recently built by the Museum of Modern Art. Finally, the concern of Dallas museum officials regarding the aesthetics and scale of adjacent office towers would be allayed by the participation of their own architect.

Concurrently with Trammell Crow's development plans, the developers for Lincoln Properties, who controlled the block of land immediately west of the museum, also approached trustees with their development plans for a

hotel/office complex. Among their proposals was the inclusion of a footbridge connecting office towers on this site to the museum's sculpture garden. Museum trustees were concerned not only for the bridge's impact on museum security, but that the museum might be used simply as a shortcut to the Arts District. Barnes concurred, recalling that one proposal for the footbridge by the developers actually cut into the west side of the vault so that pedestrians from the hotel could pass directly through the museum to the Arts District.<sup>220</sup> This Lincoln Properties development ultimately was stalled, and its implications will be discussed in more detail in Chapter V.

#### Phase II Expansion Planning

Even as the new museum facility opened its doors and the Phase I expansion wing was under construction, the fifty-year expansion plan was taken up again for reconsideration. In July 1984, concern was expressed by museum officials regarding the possibility of a long-term lease on the museum's off-site property, undoubtedly in regard to the Trammell Crow development. In discussions between Peter O'Donnell, a Dallas investor, and Harry Parker, O'Donnell suggested that it seemed probable that the off-site property would be required by the museum within 60 years, citing the acceleration of Phase I and his belief that "the success of the new museum and the impact of the Arts District will lead to a much accelerated expansion

schedule overall."<sup>221</sup> O'Donnell suggested that the time schedule of the expansion plan should be advanced and "the off-site land should be reviewed carefully and considered as an additional expansion phase, perhaps in advance of Phases II and III as currently planned."<sup>222</sup> As previously described, the museum was being approached by developers on both sides of the museum property with proposals for development at this time. In October 1984, the Building Committee authorized the updating of the museum's expansion plan, so that these proposals could be evaluated in light of the museum's future plans.<sup>223</sup> Drawings dating from March 1985 record this new onset of planning (not illustrated).

Because of Barnes's familiarity with the original building and program and the time his firm has already spent engaged in preliminary expansion studies, it was logical that he would design the next expansion. His success in the fulfillment of the commission requirements is obvious in the extraordinary expansion of the many activities of the museum and the popularity that the facility enjoys with the public. Barnes's design work, both overtly for the museum or behind the scenes in his neighborhood planning, has always protected the museum's long-term interests. This was particularly the case in his involvement in the site selection and early neighborhood master planning which placed the museum as the focal point of the Arts District. Barnes's twenty-five year association with Martin Friedman

and the architectural design of the Walker Art Center has been very fruitful, resulting in a carefully integrated addition to the original structure and most recently, a new sculpture garden and conservatory.<sup>224</sup> There is every reason to assume that his continued association with the Dallas Museum will be of equally high caliber. The Dallas Museum was tailor-made from its inception to accommodate his addition.

The museum might well have regretted engaging a different architect to design the expansion wing. Too often, another architect would choose to make a distinctive statement with his addition, and develop it as a foil to the original building. When a "style war" results, new wings can fracture and diffuse the original concept guiding the design, and an unaesthetic hodge-podge can result, as in the case of the Los Angeles County Museum of Art, or the even more controversial proposed addition to the Whitney Museum by Michael Graves.<sup>225</sup> In many situations where museums develop over generations, stylistic differences in succeeding additions are inevitable. However, because of the extraordinary growth of the Dallas Museum, it has a unique opportunity to achieve a truly unified and integrated building program under one architect. This is particularly important for the Dallas Museum, because it does not have the comprehensive historical scope in its collection areas that larger and older institutions have. Since the

collections lack historical continuity, continuity in the architectural scheme is more crucial to unify and link the disparate periods.

The most recent developments in the Dallas Museum Phase II expansion planning were facilitated by a gift from museum benefactor Nancy Hamon. Hamon agreed to sponsor a feasibility study by Barnes and to fund a subsequent in-depth architectural study if preliminary plans were approved by the museum. The studies would investigate the design options for a 100,000 square foot addition "to be integrated into the present structure."<sup>226</sup> Her major gift of twenty million dollars toward the cost of construction of the addition was intended to stimulate matching private donations or City of Dallas bond funds, if public funding could be secured through a bond election. This gift was not publicly announced until December 1988.<sup>227</sup>

A significant interruption in the planning for the expansion occurred with the sudden resignation of Harry Parker as Director on 30 April 1987.<sup>228</sup> Clearly, Parker felt the major achievement of his thirteen-year tenure at the Dallas Museum of Art was the planning and construction of the new museum facility in downtown Dallas. Parker's final address to the Dallas Museum Board of Trustees included a revealing statement that he was leaving "with a sense of possessiveness for the building."<sup>229</sup> Parker also commented on the end result of his efforts:

I think a relationship exists between the public and the works of art in this museum. I think the art is easy to like in this museum. . . . Just to build a building would not have done the trick. We've created a very unusual environment for both people and art and that is quite a different thing from building a building.<sup>230</sup>

In spite of Harry Parker's departure, pre-planning for construction was urged by Vincent Carrozza, who was concerned that the museum be advanced enough with its planning to approach the City for funding in City bond issues scheduled for 1989-90. Barnes was therefore authorized to continue with preliminary studies and to build a model of the new wing. However, Barnes's partner Alistair Bevington observed that progress was slowed considerably until some time after the hiring of the new museum director.<sup>231</sup>

Rick Brettell was subsequently hired in February 1988 to become the new Director of the Dallas Museum of Art. His presence and approach to the position will clearly have a significant impact on the existing institution and planning for the new wing. Formerly the Searle Curator of European Painting at the Art Institute of Chicago, Brettell had undertaken a reinstallation of that institution's permanent collection. His involvement with the Dallas Museum of Art installations suggests his curatorial interests and determination to be a "hands-on" director. As he explains:

My whole mission, my vision of being an avant-garde museum director, is to create an environment in which

the permanent collection is as exciting and renewing as the exhibitions.<sup>232</sup>

One of Brettell's primary objectives appears to be a serious concern for making all information about the museum's collections more accessible to the public. His critical observation of museums in general is:

We do very little to educate people other than putting things on walls. Our files and our libraries and the things that we know are resources about works of art are in general chaotic and inaccessible. And I think that's a crime.<sup>233</sup>

This desire expressed by Brettell, to make education resources in a museum more accessible, already is being applied in the current planning for the new addition. In Brettell's vision for the Phase II expansion, almost an entire floor of the wing will be devoted to housing an Art/Architecture Resource Center (A.R.C.H.). Describing this concept as "a center of art information as sophisticated as the collection itself," Brettell envisions bringing together in this area the library collection, art object files, photograph files, computers to retrieve data on art objects, meeting rooms, and the curators themselves.<sup>234</sup> In this way, all available information and expertise that the museum can offer is located in one place. Nancy Berry, an experienced museum educator, has been hired to coordinate the development and planning for A.R.C.H.

Planning for the new wing is currently at the programming stage, in which a preliminary determination has been made as to the placement of activities in specific

areas of the new structure, and the space requirements necessary for each function. The basic priority uses for each level of the three-level wing have been established in preliminary planning. The upper level will be devoted to gallery space (fig. 207), the middle level includes A.R.C.H., the library, administrative and curatorial offices, and the street level includes a temporary gallery, public facilities such as a bookstore, auditorium, coatroom and lockers, and a new entrance containing a major atrium space that can be used for receptions (fig. 208). All upper levels will wrap around this open atrium. Below street level, a basement level will contain additional storage space, and at least two levels will be developed as an underground parking garage.

Together with this programming, the architects are engaged in studies to convert other areas of the original building to new uses. One renovation under consideration is to exchange the location of the restaurant with children's education (fig. 207). Children's education would then be consolidated within the south wing. Basement level offices, storage and service areas in the original building are being re-examined so that the new wing's basement spaces will be functionally integrated. For example, a separate art loading dock is indicated in the July 1989 preliminary expansion plans (fig. 208). Staff input is being sought during facility programming, and Ginger Geyer, Deputy Director for

Planning, is responsible for gathering space requirement information from the staff.

Several preliminary models have been constructed to illustrate and study options in the interior and exterior appearance of the new expansion wing. The basic form and features of the wing as developed in these models are closely related to concepts expressed in the July 1989 expansion study sketches (fig. 202), although the models pre-date the July drawings, and some aspects of the current massing have changed. In the models, for example, the mass of the addition is composed as a long rectangular module offset slightly to the east of the site to permit the retention of the triangular window in the present north facade, as in the 1982 expansion plan (fig. 202). This offset in the model occurs on the second and third floors only, while the first level extends out to continue the line of the western wall of the previous module. In the most recent plans, the triangular window is deleted, but a slight set-back of the fourth level gallery is maintained (fig. 207).

A key architectural feature of the new fourth level gallery is the presence of another interior courtyard. In plan, stairs lead up to the courtyard from the third gallery level of the original building, repeating this design element which was so integral to the development of the gallery plans (fig. 207). No perimeter skylights are indicated in the models. A dramatic pitched skylight is

drawn through the width of the wing, and aligns with a prominent tower form thrust out in front of the wing. The pitched skylight and tower also align with the original spine concourse, which connects to the atrium. The skylight demarcates the gallery module with its courtyard on the west end of the wing from another gallery on the east end that wraps around the atrium. The skylight is currently planned to provide top-lighting for a narrow gallery crossing the wing (fig. 207). The atrium is marked by a pyramidal skylight on the roof. A portion of this reception area is extended vertically as a three-story atrium in which an escalator will lead up to the entrance to A.R.C.H. This atrium first appeared in the 1985 expansion study (not illustrated). As an architectural pun, an arched doorway appears in the models as the entrance to A.R.C.H.

As prominent exterior features of the model of the new wing, views into this atrium are offered by a projected glass wall on the new north facade, and another glass wall on the south wall of the wing. Both window walls are detailed to match the original projected glass walls. The south window would give a view into the current children's court, thus continuing the dialogue already established between interior space and exterior views. However, the south window wall was deleted in the July 1989 plans. Shop windows are employed for street level views into the new building, and are seen in the converted dining wing (fig. 208).

An especially prominent feature of the new wing is the four-story tower projecting from the north facade. Ear-like block appendages at the tower's base house elevators that will transport visitors up to the entrance level from the parking garage below. The basic tower form is reminiscent of the tower used in the addition to the Springhill Conference Center (fig. 49b). The tower in the Dallas Museum wing identifies the primary entrance, provides transportation from the parking garage, and acts as an observation deck, giving views of the overall complex. The identification of the new entrance becomes more important as the overall mass of the large facility increases.

Two recent models dating from spring 1989 depict the western portion of the wing, and show variations of proposed fenestration in the tower. In one, the shaft of the tower is primarily composed as a closed rectangular form. In the other, the tower is opened on the second level with a large window divided into quadrants, while the fourth level is pierced on all four sides by the familiar semicircular windows previously incorporated in the early plans for the original museum. In this version, the conceptual development of the Dallas Museum seems to be brought full-circle. The expansion plans appear to successfully embody the primary design concepts that Edward Barnes had, from the outset, hoped to see repeated in subsequent additions to the Dallas Museum of Art.

NOTES FOR CHAPTER IV

<sup>1</sup>Building Committee minutes, 15 September 1977, 1-2.

<sup>2</sup>Board of Trustees minutes, 1 December 1977, 2.

<sup>3</sup>Building Committee minutes, 1 August 1977, 2.

<sup>4</sup>See Board of Trustees minutes, 1 December 1977, 3, Executive Committee minutes, 2 February 1978, 2, Building Committee minutes, 3 April 1978, 1.

<sup>5</sup>See Board of Trustees minutes, 1 December 1977, 2, and Executive Committee minutes, 19 April, 1978, 1-2, for discussion of alternate site scheme. See Chapter III for discussion of Barnes's concern for compatible surrounding development if the Symphony did not locate adjacent to the museum.

<sup>6</sup>See Barnes's presentation and discussion of the site in Building Committee minutes, 1 August 1977, 2-3.

<sup>7</sup>Building Committee minutes, 1 August 1977, 3.

<sup>8</sup>Barnes noted the importance of the "T-formation" in the minutes of the Board of Trustees special meeting, 19 June 1978, 7-8. He also discussed the importance of access to the museum at the center of its large site in an interview with the author, 27 March 1986.

<sup>9</sup>Edward Barnes, interview by author, 10 September 1988, Minneapolis, Minnesota, tape recording.

<sup>10</sup>Building Committee minutes, 1 August 1977, 2. Harry Parker recalled that the parking area was located on the north end of the site as a buffer against the freeway. Parker, interview by author, 26 July 1985, Dallas, Texas, tape recording.

<sup>11</sup>Daniel Casey, telephone interview by author, 17 March 1989.

<sup>12</sup>Daniel Casey, telephone interview by author, 10 March 1989. Executive Committee minutes, 19 April 1978, 1-2. The schematic design phase included development of land schemes, the mapping of the schematic layout of the building and overall organic flow, and the creation of a simple model of

the shell of the building. See Executive Committee minutes, 9 February 1978, 2.

<sup>13</sup>Many, but not all, of the surviving early design schemes are reproduced as figures in the Thesis. These plans are numbered consecutively, according to the date indicated on the plans. Each date represents a set of drawings from the office of the architect; each typical set consisted of three to five plans for different levels of the museum, alternate plans, elevations, etc. Not all of the drawings in each set are reproduced. The author wishes to thank Daniel Casey and Eugenie Devine for locating these plans and making them available for her study. The author also thanks Nathan Light for preparing the reductions of the drawings for reproduction in the Thesis illustrations. In many of the reduced plans, the parking lot which appears in the original drawing is cropped off. Directional indications for plans are as follows: north is right, south is left, top is west, bottom is east. For the sake of consistency, all drawing and textual references are to "Dallas Museum of Art," the institutional name adopted for the new building, rather than "Dallas Museum of Fine Arts."

<sup>14</sup>Edward Barnes, interview by author, 10 September 1988, Minneapolis.

<sup>15</sup>Edward Barnes, interview by author, 27 March 1986, New York City, tape recording. Barnes observes that the museum will always have a problem getting people entering from different ends to circulate through the whole building: "How do you get people to come to the whole museum? It's just its character--it stretches between two streets." He adds that a solution would be for people to enter the middle of the building, but this was not feasible on the site. Edward Barnes, interview by author, 10 September 1988.

<sup>16</sup>Ibid.

<sup>17</sup>Daniel Casey, interview by author, 27 March 1986, New York City, tape recording.

<sup>18</sup>Kim Devins, "Architecture and People in Harmony," Spectator (12 April 1984): 34. The author thanks Eugenie Devine for providing a copy of this article.

<sup>19</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>20</sup>Ibid.

<sup>21</sup>Harry S. Parker III, 31 May 1977 memorandum to the Board of Trustees, 6. See Appendix A.

- <sup>22</sup>Edward Barnes, interview by author, 27 March 1986.
- <sup>23</sup>Ibid.
- <sup>24</sup>Edward Barnes quoted by Masahiro Horiuchi, "Space Music Composed by Geometrical Forms." Space Design 250 (July 1985): 90.
- <sup>25</sup>Harry Parker, memorandum to Board of Trustees, 31 May 1977, 6. See Appendix A.
- <sup>26</sup>Harry Parker, interview by author, 26 July 1985, Dallas, Texas, tape recording.
- <sup>27</sup>Margaret McDermott, interview by author, 31 July 1985, Dallas, Texas, tape recording.
- <sup>28</sup>Building Committee minutes, 20 May 1978, 3. The minutes do not specify whether Barnes was speaking of wall or floor surfaces.
- <sup>29</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>30</sup>George V. Charlton to Harry S. Parker, "Notes on Trip to Scaife Gallery," 28 March 1977, 1, Memorandum from Architect Selection Committee files, Dallas Museum of Art. Charlton states, "The granite you see on floors and walls from Norway 'makes' the building."
- <sup>31</sup>Building Committee minutes, 20 May 1978, 1.
- <sup>32</sup>Building Committee minutes, 20 May 1978, 2.
- <sup>33</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>34</sup>Building Committee minutes, 20 May 1978, 3.
- <sup>35</sup>Building Committee minutes, 20 May 1978, 2.
- <sup>36</sup>Anne Bromberg, interview by author, 22 August 1985, Dallas, Texas.
- <sup>37</sup>Harry Parker, Memorandum to Board of Trustees, 31 May 1977, 6.
- <sup>38</sup>Carter Wiseman, "Architecture's Master of the Middle Way," Saturday Review 8 (Nov. 1981): 23.
- <sup>39</sup>Building Committee minutes, 20 May 1978, 1-2.
- <sup>40</sup>The large size of Spanish gallery is due to on-going negotiations regarding the possible inclusion of Algur

Meadows collection of Spanish art. See Building Committee minutes, 26 May 1978, 3.

<sup>41</sup>Building Committee minutes, 20 May 1978, 2.

<sup>42</sup>Building Committee minutes, 20 May 1978, 2.

<sup>43</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>44</sup>Harry Parker, Memorandum, 31 May 1977, 5.

<sup>45</sup>See discussion of Parker and Hoving in Chapter I. See also Grace Glueck's "The Ivory Tower versus the Discotheque," Art in America 59 (May-June 1971): 80-85.

<sup>46</sup>Daniel Casey, telephone conversation, 27 August 1985. Casey stated that much of the early design work was done with quick model studies, all of which now are lost. According to Sarah Mollman, Barnes himself prefers to use geometric modules to create models during design development, and only infrequently makes drawings. See Mary and Leigh Block Gallery, Architects' Drawings from the Collection of Barbara Pine (Evanston, Illinois: Northwestern University, 1987), 14, an exhibition curated by Elizabeth Shepherd.

<sup>47</sup>Building Committee minutes, 26 May 1978, 2. The deletion of the second level walkway may be related to the architects' developing interest in expressing the interior volume of the vault uninterrupted.

<sup>48</sup>Building Committee minutes, 26 May 1978, 1.

<sup>49</sup>Building Committee minutes, 26 May 1978, 3.

<sup>50</sup>Building Committee minutes, 26 May 1978, 1-2.

<sup>51</sup>George Charlton, interview by author, 2 July 1985, Dallas, Texas.

<sup>52</sup>See Janet Kutner, "DMFA Gets \$1 Million, Collection," Dallas Morning News, 16 June 1978, 4(D).

<sup>53</sup>Board of Trustees minutes, special meeting, 19 June 1978, 4-9.

<sup>54</sup>The members of the Building Committee during the schematic design phase were: Margaret McDermott, Chairman, Elizabeth B. Blake, Melba Greenlee, Betty Marcus, Vincent Carrozza, James Clark, Richard D. Haynes, John Murchison and Robert Dedman. Harry Parker, George Charlton, and Irvin Levy were ex-officio members.

- <sup>55</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>56</sup>Ibid.
- <sup>57</sup>Edward Barnes, meeting with author, 27 February 1989, Dallas, Texas.
- <sup>58</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>59</sup>George V. Charlton to Harry S. Parker, "Notes on Trip to Scaife Gallery," 28 March 1977, 2.
- <sup>60</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>61</sup>Ibid.
- <sup>62</sup>Margaret McDermott, interview by author, 31 July 1985. Vincent Carrozza also noted the benefits of having an additional year to consider the design. Carrozza, interview by author, 23 July 1985, Dallas, Texas, tape recording.
- <sup>63</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>64</sup>Casey recalled that the addition of another building block occurred when the architects realized that there was not enough space for the program in the earlier plans. The expansion out onto the site rather than stacking up additional floors reflected the architects' desire to keep the galleries terracing up, rather than having to take an elevator from one gallery to another. Daniel Casey, telephone interview by author, 11 April 1989.
- <sup>65</sup>Edward Barnes quoted by Bill Marvel, "'Country Look' Unveiled for New Museum," Dallas Times Herald, 17 May 1979, 4(B).
- <sup>66</sup>Daniel Casey, telephone interview by author, 17 March 1989.
- <sup>67</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>68</sup>Daniel Casey, telephone conversation with author, 26 November 1985. Casey estimated that the architects considered 50 or more quick model studies. Casey, telephone interview by author, 17 March 1989.
- <sup>69</sup>Daniel Casey, interview by author, 27 March 1986.
- <sup>70</sup>Edward Barnes, meeting with author, 27 February 1989, Dallas, Texas.

71 Margaret McDermott, interview by author, 31 July 1985, Dallas, Texas. McDermott indicated that she wanted the view of downtown Dallas emphasized more than Barnes did, "He said for art it wouldn't look right."

72 Vincent Carrozza, interview by author, 23 July 1985, Dallas, Texas, tape recording. It is not surprising that as a developer, Carrozza would particularly enjoy the view of downtown Dallas.

73 Harry Parker, interview by author, 29 July 1985, Dallas, Texas, tape recording.

74 Ibid.

75 Margaret McDermott, interview by author, 31 July 1985.

76 Board of Trustees minutes, 11 January 1979, 4.

77 Edward Barnes, interview by author, 10 September 1988.

78 Daniel Casey, telephone interview by author, 10 March 1989.

79 Larry Francell, interview by author, 12 November 1985, Fort Worth, Texas, tape recording.

80 Margaret McDermott, interview by author, 31 July 1985.

81 The only record of this model and the one illustrated in the preceding discussion exists in the slide and photograph collection of the Dallas Museum of Art Audio-visual Resource Center. The author thanks Slide Librarian Eileen Coffman for her assistance with these illustrations. The current whereabouts of several of the early architectural models is unknown. Apparently, some models were discarded and some were sold at the museum's 18 November 1983 "moving sale." From conversations with Larry Francell, 15 February 1989, Lee Hutchins and Russell Sublette, 1 July 1988. See also Dallas Museum of Art News Release, "Museum Plans 'Moving Sale,'" October 1983.

82 Board of Trustees minutes, 8 March 1978, 2. On this date, the trustees also requested the City of Dallas to hire a construction manager to work with the architect during the schematic and budget-establishment phases of continuing development of the museum plans, *ibid.*

<sup>83</sup>See Executive Committee minutes, 7 March 1979, 2. Memoranda dating from January, February 1980 from department heads to Harry Parker are included in Construction Correspondence files. Dan Casey held follow-up meetings with the staff to discuss their comments on the plans. Casey felt that there was more staff input into the programming process for the Dallas Museum than in many other projects handled by the architects, in which the architects found the clients to be reluctant to put anything in writing. He also pointed out that the department heads had many opportunities to review the plans as they developed. Daniel Casey, telephone interview by author, 27 March 1989.

<sup>84</sup>John Lunsford, interview by author, 2 July 1985, Dallas, Texas.

<sup>85</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>86</sup>Whereabouts of the original rendering is unknown. Illustration from files of Audio-visual Resource Center, Dallas Museum of Art. The rendering was based on the early 1979 plans and created as a presentation drawing for the Board of Trustees, perhaps for the important March 1979 presentation. It was later used in promotional displays related to the upcoming bond election.

<sup>87</sup>Le Corbusier: Oeuvre complete, 1946-1952 (Zurich: W. Boesiger, 1955), 183.

<sup>88</sup>Masahiro Horiuchi, "Architecture of Continuity," Space Design 250 (July 1985): 10.

<sup>89</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>90</sup>Daniel Casey, telephone interview by author, 17 March 1989.

<sup>91</sup>According to Larry Francell, this model was later referred to as the "suitcase" model, because a wooden case with a carrying handle was eventually built for it so it would be portable enough for Harry Parker to take it to France to show the museum design to Wendy Reves. The case was painted gray, no doubt as homage to Barnes. The model is still apparently in the possession of the Dallas Museum of Art. The staff is unsure of its exact whereabouts as of this writing, although it is currently believed to be in off-site storage.

<sup>92</sup>Margaret McDermott quoted by Janet Kutner, "DMFA Gets \$1 Million, Collection," 16 June 1978, 4(D). The construction of scale models to make the planned new facility tangible to voters was important to Phillip Seib's strategy, who as the

Assistant Director for Public Affairs was responsible for the museum's 1979 bond election campaign. See Janet Kutner, "Museum Learns Fine Art of Winning at Politics," Dallas Morning News, 22 July 1979, 1, 6(C). At least two models of individual floors of the museum were already available for public viewing in May 1979. These models were illustrated in an article covering a press conference Barnes held on the plans for the new museum. See Bill Marvel, "'Country Look' Unveiled for New Museum," Dallas Times Herald, 17 May 1979, 1, 4(B). The illustrated models included the second level permanent exhibition floor with an imposing double set of stairs leading to the entrance, and the floor devoted to children's education combined with the administrative offices, with the triangular south entry court outside. Because of the configuration of the interior rooms and entry court, both models appear to be based on the 8 March 1979 presentation drawings. The whereabouts of these floor models or whether they still exist is unknown.

<sup>93</sup>Edward Barnes, "Reflections," Architect's statement, 23 November 1983, Dallas Museum of Art Bulletin, Winter 1984, 5.

<sup>94</sup>As noted in 17 July 1979 East (Harwood) Elevation drawing (not illustrated).

<sup>95</sup>Executive Committee minutes, 6 September 1979, 2-3.

<sup>96</sup>Board of Trustees minutes, 13 September 1979, 5. This model still exists in possession of the Dallas Museum of Art. As of this writing, the model is housed in non-climate-controlled off-site storage. Dimensions of the model are 40" wide by 81" long by 6" high (at vault). Base dimensions are 100" by 54".

<sup>97</sup>David Dillon, "The New DMA: How We Got It," Dallas Morning News, 22 January 1984, 6(C).

<sup>98</sup>Executive Committee minutes, 6 September 1979, 4.

<sup>99</sup>McDermott quoted by Kutner, "DMFA Gets \$1 Million, Collection," Dallas Morning News, 16 June 1978, 4(D).

<sup>100</sup>Bill Marvel, "'Country Look' Unveiled for New Museum," Dallas Times Herald, 17 May 1979, 4(B).

<sup>101</sup>Larry Francell, interview by author, 12 November 1985. The upper court is now referred to as the "Tribal Court." The concept for it was developed by Dan Kiley. Casey recalled that Kiley's concept derived from Serpent Mound in Ohio and his desire to create a prime form. The

trees were added to the crest of the mound later. Dan Casey, telephone interview by author, 17 March 1989.

102 Daniel Casey, interview by author, 27 March 1986.

103 Ibid.

104 Ibid.

105 Author's interviews with John Lunsford, 2 July 1985, Dallas, and Barney Delabano, 23 July 1985, Dallas, tape recording.

106 See description of the nature of the commission and Fleischner's plan in the Dallas Museum of Art Bulletin Winter 1984, 36-37, and Susan Freudenheim's article on the Fleischner court in Art in America 72 (December 1984): 131.

107 Larry Francell, interview by author, 12 November 1985.

108 Edward Barnes, interview by author, 27 March 1986.

109 Daniel Casey, interview by author, 27 March 1986.

110 Harry Parker, interview by author, 26 July 1985. See Robert Venturi, "In the Center of Town: The Museum as Cathedral," Museum News 66 (May/June 1988): 22-23.

111 Don Leach, Bateson Company, Inc., Dallas, to Dan Casey, 27 March 1980, comment 3, Construction Documentation files, Dallas Museum of Art. The comment indicates that the dimensions of the limestone modules had been revised by the architects from 7'6" x 9'6" to 7'3" x 9'6". Casey explained that it became apparent that the blocks indicated in the large model were too vertical for the horizontal massing of the building. Casey, telephone interview, 10 March 1989.

112 Peter Papademetriou states, "These "stripes" . . . are ornamental, since they are independent of any real representation of interior levels." See "Dallas Museum of Art: Extending the Modernist Tradition of E.L. Barnes," Texas Architect 35 (January/February 1985): 46. Daniel Casey, telephone interview by author, 17 March 1989.

113 Daniel Casey, telephone interview, 17 March 1989. The limestone cladding is 4 inches thick.

114 Daniel Casey, telephone interview by author, 10 March 1989. Casey noted that the architects considered the way that the massing stepped into the side areas of the vault, and allowed for the thickness of the ceiling

construction: "You take the net height of the galleries and the thickness of the ceilings above them, and then you start the swing of the arc."

<sup>115</sup>Daniel Casey, telephone interview, 17 March 1989.

<sup>116</sup>Ledoux's House at the Source of the Loue was an unrealized portion of his Chaux project (1773-79), his ideal city, only part of which was actually constructed near the Forest of Chaux in Franche-Comte. The Inspector's House is a cylinder surrounding a tunnel through which the river passes. See Visionary Architects: Boulee, Ledoux, Lequeu (Houston: University of St. Thomas, 1968), 109-110, 133.

<sup>117</sup>Edward Barnes, interview by author, 27 March 1986.

<sup>118</sup>Daniel Casey, telephone interview, 10 March 1989.

<sup>119</sup>Ibid.

<sup>120</sup>Edward Barnes, telephone interview by author, 15 March 1989. Barnes previously employed the slot window in his Caribbean House project (fig. 36), and in the faculty housing at the Emma Willard School (fig. 206).

<sup>121</sup>See Helen Searing, New American Art Museums (Berkeley: University of California Press, 1982): 86-91.

<sup>122</sup>Board of Trustees minutes, 8 November 1979, 4.

<sup>123</sup>Ibid.

<sup>124</sup>"Project Cost History," c. December 1979, Construction Documentation files, Dallas Museum of Art. See J.W.[Bateson] First Estimate, 11 October 1979, comments 1 and 2. Dan Casey recalled that the color of the granite under consideration was a light gray, similar to the cobblestones in the entrance forecourt. Interview by author with Daniel Casey, 27 March 1986.

<sup>125</sup>George V. Charlton to Harry S. Parker, "Notes on Trip to Scaife Gallery," 28 March 1977, Memorandum in Architect Selection Committee files of Dallas Museum of Art.

<sup>126</sup>"Project Cost History", c. December 1979, Construction Documentation files, Dallas Museum of Art. See J.W.B. Revised Estimate, 26 November 1979, comments 1 and 2.

<sup>127</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>128</sup>"Calculation of Preliminary GMCA" [Guaranteed Maximum Cost Analysis], 18 January 1980, Construction

Documentation files, Dallas Museum of Art. See "Deductive Alternates Accepted by DMFA," item X, p. 1.

129"Project Cost History," see Recommended Budget, 26 November 1979, comments 1 and 2.

130Daniel Casey, interview by author, 27 March 1987.

131Ibid.

132Calculation of Preliminary GMCA, 18 January 1980, Construction Documentation files, Dallas Museum of Art. See item C, p. 1, Alternates accepted, no change in estimate of cost required.

133Architectural Alternates, 7 November 1979, and Architectural Alternates for Estimating, 26 November 1979; notes made by Dan Casey, Project Architect, compiled with "Project Cost History," Construction Documentation files, Dallas Museum of Art. Casey noted that the stone roof proved to be not as extravagant as the Building Committee members feared. Casey, telephone interview, 10 March 1989.

134Edward Barnes, telephone interview by author, 15 March 1989.

135"Project Costs and Scheduling," Minutes submitted by Dan Casey, meeting in office of Vincent Carrozza, 10 December 1979, item 7.

136Dan Casey to H. Parker, E. Barnes, Memorandum, 5 December 1987. Construction Documentation files, Dallas Museum of Art. See "Structural Considerations" and "Architectural Considerations".

137"Calculation of Preliminary GMCA [Guaranteed Maximum Cost Analysis]," 18 January 1980, Construction Documentation files, Dallas Museum of Art. See "Additive Alternates Accepted by DMFA", item Z, Roof Structure Strengthening For Future Floor Over Children's Gallery.

138Building Committee minutes, 16 July 1980, 2. Casey commented, "One thing you have to give Carrozza credit for, was that he never tampered with the design. Some clients, their idea of saving money is just to strip the building or not pay for things that are good design [features]. . . . He wasn't one of those people who thought all the savings should be achieved by cheapening the building." Casey, telephone interview by author, 10 March 1989.

139Comments regarding upgrades, Vincent Carrozza, interview by author, 23 July 1985. See also Executive

Committee minutes, 9 March 1981, 3. Usually, these upgrades were requested by the museum through change orders that were paid by a line item in the museum's construction budget called "savings to date." See Building Committee minutes, 3 February 1981, 2, for architect's suggestions regarding possible change orders and priorities for upgrades. For discussion of cuts in landscaping, see Building Committee minutes, 23 July 1981, 2, and Executive Committee minutes, 4 March 1982, 4, for ultimate restriction of landscaping budget.

<sup>140</sup>Building Committee minutes, 23 July 1981, 3. Technically, the redesigned window was simpler to carry out as specifications had already been determined for the similar window on the north facade. For this reason, the museum did not incur any additional expense for this change order.

<sup>141</sup>Paul Goldberger, "Architecture: Asia Society Building, a Design Full of Civilized Intentions," New York Times, 11 April 1981, 15(sec. 1).

<sup>142</sup>Douglas Davis, "Master of Sleek Restraint," Newsweek 18 May 1981, 126, 129.

<sup>143</sup>Margaret McDermott, interview by author, 31 July 1985. Dan Casey asserts that the idea to change the windows came from the architects, that it was not initiated by the trustees. He thought the windows were inappropriate and recalls urging Barnes to change them, noting that they made the museum look "like a Taco Bell." Casey, telephone interview by author, 10 March 1989.

<sup>144</sup>Building Committee minutes, 26 October 1981, 3.

<sup>145</sup>See Building Committee minutes, 6 October 1981, 2, and Building Committee/Sub-Committee on Interiors minutes, 6 January 1982, 1.

<sup>146</sup>Joseph Merriam of Cresap, McCormick and Paget, Management Consultants, to Harry Parker, 23 October 1981, 1, filed with 1981 Building Committee minutes, Dallas Museum of Art.

<sup>147</sup>See Building Committee minutes, 26 October 1981, 3-4, Building Committee/Sub-Committee on Interiors minutes, 6 January 1982, 1.

<sup>148</sup>Anne Bromberg to Harry Parker, 27 November 1979, Memorandum re Education Area of New Museum, filed with Preliminary Meetings--Space Usage, 1979-1980, Dallas Museum of Art. Anne Bromberg later observed that Barnes's design

of the combined entrance had proven to be satisfactory. Interview by author, 22 August 1985, Dallas, Texas.

<sup>149</sup>See report of meeting with Donald Stone, Harry Parker to Building Committee, filed with 31 January 1980 Building Committee minutes (regarding temporary shop in spine). See also discussions of temporary shop in Building Committee minutes, 26 October 1981, 4, and Building Committee/Sub-Committee on interiors minutes, 6 January 1982, 1-2.

<sup>150</sup>Margaret McDermott, interview by author, 31 July 1985.

<sup>151</sup>Design in America: The Cranbrook Vision, 1925-1950, (New York: Harry N. Abrams, 1983), 130. Original quote from interview with Baldwin by C. Ray Smith.

<sup>152</sup>Interviews by author, Steve Nash, 9 June 1988, Dallas, tape recording, and Edward Barnes, 27 February 1989, Dallas. See also Building Committee minutes, 23 February 1983, 1-2.

<sup>153</sup>Harry Parker, interview by author, 26 July 1985.

<sup>154</sup>Margaret McDermott, interview by author, 31 July 1985. The architect of the McDermott house, Scott Lyons, worked within the classic Modern vocabulary, utilizing simple materials, white walls, and flowing open space in the house design. The author thanks Mrs. McDermott for allowing her to tour her house on 31 July 1985.

<sup>155</sup>Edward Barnes, meeting with author, Dallas, Texas, 27 February 1989.

<sup>156</sup>Darren Dennis, interview and second building tour with author, Dallas Museum of Art, 22 August 1985, Dallas, tape recording. Barnes, Nash, and Delabano traveled to Europe to study installations in several museums. See Janet Kutner, "The Art of Moving," Dallas Morning News, 2 October 1983, 8(A), and Building Committee minutes, 26 October 1981, 2, for discussion of case design and installation.

<sup>157</sup>Building Committee minutes, 23 February 1983, 2.

<sup>158</sup>Interviews by author with Barney Delabano, 23 July 1985, and John Lunsford, 2 August 1985, Dallas, Texas.

<sup>159</sup>"Space Music Composed by Geometrical Forms," Edward Barnes interviewed by Masahiro Horiuchi, Space Design 250 (July 1985): 90.

160 See Building Committee minutes, 8 September 1980, 1-2, and attachment: Nathan Stolow, Ph.D., Ottawa, Canada, to Harry S. Parker III, 30 August 1980.

161 Edward Barnes, "Space Music Composed by Geometrical Forms," 90.

162 Ibid.

163 Francell is the former Director of the Wichita Falls Museum and Art Center, and was hired by the Dallas Museum as Project Coordinator to represent the museum during the period of construction. Francell subsequently became Director of Operations for the Dallas Museum. Currently, he is the Director of Fine Arts Express Southwest.

164 Larry Francell, interview by author, Texas, 12 November 1985, Fort Worth, Texas, tape recording.

165 Darren Dennis, interview and first building tour with author, Dallas Museum of Art, Dallas, Texas, 10 July 1985, Tape recording. Dennis would become Assistant to the Director of Operations when the new museum opened. When Larry Francell resigned as Director of Operations to head Fine Arts Express Southwest, Dennis became Building Manager for the Dallas Museum of Art.

166 Dallas Museum of Art Press Release, "Pratt Box Henderson & Partners: Consulting Architects for the New Dallas Museum of Art," n.d., p. 1, Publicity Department, Dallas Museum of Art.

167 Larry Francell, interview by author, 12 November 1985.

168 Kenn Hornbeck, telephone conversation with author, 26 August 1985.

169 Steve Garrison interviewed by Jane Wolfe, "Worker Sacrifices in the Name of Art," Dallas Morning News, 15 October 1983, 33, 38(A).

170 Dallas Museum of Art Press Release, "Pratt Box Henderson & Partners," 1.

171 Daniel Casey, telephone interview, 10 March 1989.

172 Coy Porter, telephone conversation with author, 27 August 1985.

173 Ibid.

- 174 Larry Francell, interview by author, 12 November 1985.
- 175 Alistair Bevington, telephone conversation with author, 3 March 1989.
- 176 Vincent Carrozza, interview by author, 23 July 1985.
- 177 Vincent Carrozza, interview, 23 July 1985. See Executive Committee minutes, 4 March 1982, 4, regarding negotiations with City of Dallas concerning construction budget, and Executive Committee minutes, 13 October 1983, 3, regarding savings on construction. Carrozza was credited with delivering the museum on time and under budget. See Dallas Museum of Art Bulletin (Winter 1984): 10.
- 178 Architectural Selection Committee minutes, Special Meeting, 31 March 1977, 3. See discussion in Chapter I.
- 179 Building Committee minutes, 6 October 1981, 3.
- 180 Daniel T. Casey to George Charlton, 12 November 1981, includes table: "Future Expansion--50 Years," Construction Correspondence files, office of the Director, Dallas Museum of Art.
- 181 Table, "Future Expansion - 50 Years." Casey notes in his 12 November 1981 letter to George Charlton that the table was prepared by Harry Parker.
- 182 Daniel T. Casey to George Charlton, 12 November 1981, 1.
- 183 Ibid.
- 184 Building Committee minutes, 7 December 1981, 2.
- 185 Larry Francell, interview by author, 12 November 1985.
- 186 Schematic plans and table from Dallas Museum of Art Construction Correspondence files, office of the Director. Table, "DMFA Future Expansion," dated 21 January 1982. Table and plans sent as telecopy transmittal to R. McKinney by D. Casey, 22 July 1984. Dan Casey retrieved a complete set of the 1982 expansion plans for the author after much searching, and she is especially grateful for his efforts.
- 187 These details are discussed earlier in this chapter, under "Revisions resulting from Guaranteed Maximum Price analysis."

<sup>188</sup>Thomas Hartman, "Have I Got a Collection for You," Texas Monthly, November 1985, 188, 192, 194.

<sup>189</sup>For other restrictions placed on the gift, see Bill Marvell, "The Art of Giving," Dallas Times Herald, 24 November 1985, 10(C).

<sup>190</sup>The members of the Building Committee were informed by Harry Parker in February 1982 that the space offered to house the Reves's collection was the Phase I expansion area. The Building Committee approved the continuation of negotiations with Wendy Reves. See Building Committee minutes, 16 February 1982, 3.

<sup>191</sup>Edward Larrabee Barnes, "Architect's statement," January 1985, The Wendy and Emery Reves Collection (Dallas: Dallas Museum of Art, [1985]), 8.

<sup>192</sup>David Dillon, "Setting for Reves Collection Faithful but Undistinguished," Dallas Morning News, 24 November 1985, 1(C).

<sup>193</sup>Edward L. Barnes to Harry Parker, 23 September 1982, item 4, p. 1, Construction Correspondence files, office of the Director, Dallas Museum of Art.

<sup>194</sup>Harry Parker to Members of the Executive Committee, re Reves Collection--Addendum Regarding Architectural Plan, filed with Executive Committee minutes, 15 October 1982. See also Building Committee minutes, 25 October 1982, 1-2.

<sup>195</sup>Edward L. Barnes to Harry Parker, 23 September 1982, item 1, p. 1, Construction Correspondence files, office of the Director, Dallas Museum of Art. Barnes's objections regarding the impact of the new wing on the massing of the museum were brought before the members of the Building Committee, who acknowledged that his comments were valid, but resolved that the value of the collection outweighed this problem. See Building Committee minutes, 25 October 1982, 2.

<sup>196</sup>Barnes to Parker, 23 September 1982, item 5, p. 2.

<sup>197</sup>See Dillon, "Setting for Reves Collection," 1(C).

<sup>198</sup>The Wendy and Emery Reves Collection, p. 69, footnote 5, Harry Parker, Memo to: Members of the Executive Committee, Dallas Museum of Art, 8 April 1982.

<sup>199</sup>Edward L. Barnes to Harry Parker, 23 September 1982, item 3, p. 1.

200 Barnes to Parker, 23 September 1982, item 2, p. 1. Apparently, at one point during the design negotiations, Barnes was concerned that the patio might have to be enclosed. He argued against this at a Building Committee meeting, noting that the patio "was in sympathy with the other outdoor spaces in the museum." See Building Committee minutes, 25 October 1982, 2. The "overlooks" to which Barnes refers were windows placed in the bedroom and the library. These were later covered at Reves's insistence, although they are still visible on the exterior walls.

201 The Wendy and Emery Reves Collection, 71.

202 The opening to the courtyard was filled in with an iron grille and frosted glass prior to the opening of the wing to the public. See before and after illustrations in Dillon article, "Setting for Reves Collection," 11(C). Reves strongly objected to the window in the library, because the La Pausa library did not have a window. Several months after the opening of the wing, the museum acquiesced, and a removable interior panel was fabricated to cover the window. In return, Reves provided the museum with a Manet painting on extended loan. See Nancy Smith, "Wendy Reves Adds Manet to DMA Decorative Arts Wing," Dallas Times Herald, 9 June 1986, 10(D).

203 Mitch Owens, "Why the Dallas Museum of Art?", Dallas Observer, May 16-29, 1985, 32.

204 Larry Francell, interview by author, 12 November 1985.

205 The Wendy and Emery Reves Collection, 74.

206 David Dillon, "Setting for Reves Collection," 11(C). See also Bill Marvell, "The Art of Giving," 1, 10(C).

207 Darren Dennis, interview by author, 10 July 1985, Dallas, tape recording.

208 Acquisition of off-site property discussed in Building Committee minutes, 14 February 1980, p. 1-2, and 14 July 1982, p. 2-3, also Vince Carrozza, interview by author, 23 June 1985.

209 See Building Committee minutes, 7 December 1981, 2. The architects' concerns related to the planning of the Arts District by the City Planning Department is reflected in a letter from Daniel T. Casey to Harry S. Parker, 16 February 1982, 1-3, "Attachment B," filed with Building Committee minutes.

210 Negotiations were on-going during this period with developers Young, Gentek and Luedtke, Aldridge, Pendleton (referred to as the Aldridge Group or LAP). For discussions of off-site property development, see Building Committee minutes, 7 December 1981, 2, 16 February 1982, 2, 22 March 1982, 1, 14 July 1982, 2, and "Attachment A," a memorandum from Harry Parker to Vincent Carrozza, 28 April 1982, filed with Building Committee minutes, 28 April 1982.

211 Harry Parker to Vincent Carrozza, 28 April 1982, 1-2, "Points discussed at the April 27th meeting of the Sub-Committee on Off-Site Development." Memorandum filed with Building Committee minutes, 28 April 1982.

212 Minutes of the Sub-Committee on off-site development of the Building Committee, 22 March 1982, 2.

213 Harry Parker to Vincent Carrozza, Memorandum, 28 April 1982, 1.

214 Minutes, Sub-Committee on Off-Site Development, 22 March 1982, 1.

215 Minutes of special meeting of the Executive Committee and the Building Committee, 14 July 1982, 2 (filed with Building Committee minutes). Provisions were made to go ahead with landscaping plans for the museum's surface lot and to combine parking lots on the museum's off-site land. See Building Committee minutes 16 February 1982, 2; 12 May 1982, 2-3; 14 June 1982, 1-2; and 20 July 1982, 1; and 28 April 1982 memo from Harry Parker to Vincent Carrozza, 1-2 for discussions of parking garage proposal and use of combined off-site property.

216 Daniel Casey, telephone conversation with author, 25 October 1985.

217 David Dillon, "Is there a place for the arts in the Arts District?" Dallas Morning News, 13 October 1985, 1, 6(C). See site illustration, 1(C) for possible scale and placement of towers. The anchor tenant in one of the towers would be Henry S. Miller Company Realtors. See Steve Brown, "Rush to Lease Sends Developers Scrambling to Build Downtown," Dallas Morning News, 20 August 1985, 1, 5(D) for mention of Miller Company's proposed relocation of headquarters.

218 Edward Barnes, interview by author, 10 September 1988, Minneapolis.

219 New Dallas Museum Director Rick Brettell supports the concept of a satellite museum for contemporary art. See

Colleen O'Connor, "High Profile: Rick Brettell," Dallas Morning News, 28 August 1988, 3(E).

220 Edward Barnes, interview by author, 10 September 1988. See also Building Committee minutes, 19 February 1985, 3-4.

221 Harry S. Parker III to Edwin L. Cox and Vincent Carrozza, 24 July 1984, report on discussion with Peter O'Donnell. Construction correspondence files, Dallas Museum of Art, office of the Director.

222 Ibid.

223 Building Committee minutes, 11 October 1984, 3.

224 See author's discussion of design history of Walker Art Center in "Design Clarity and Urban Synthesis," Architecture 78 (February 1989): 64.

225 See Lynn Nesmith, "Whitney Museum Unveils Graves's Third Scheme," Architecture 78 (February 1989): 22.

226 Executive Committee minutes, 16 April 1987, 2.

227 Anne Belli, "Nancy Hamon Gives \$20 Million to DMA," Dallas Morning News, 18 December 1988, 1, 23(A). For profile of Nancy Hamon, see Diane Reischel, "High Profile: Nancy Hamon," Dallas Morning News, 23 October 1988, 1-3(E).

228 See Dallas Morning News, 30 April, 1987: Janet Kutner, "Parker Resigns as Director of Dallas Museum of Art," 1, 27(A), Bill Marvel, "Parker Enhanced Stature of DMA," 27(A), and Editorial, "Thanks, Harry," 30(A). See also Bill Marvel, "Parker's Exit Poses Another Challenge for the DMA," Dallas Morning News, 3 May 1987, 1, 7(C), and Bruce Nixon, "Parker's Departure Reflects Conflict of Art and Business," Dallas Times Herald, 5 May 1987, 1, 4(E). Parker was subsequently hired as Director of the Fine Arts Museums of San Francisco. See Mary Barrineau, "Parker's Challenge," Dallas Times Herald, 20 May 1987, 1, 26(A).

229 Board of Trustees minutes, 21 May 1987, 2.

230 Harry Parker quoted by Ron Boyd, Dallas Times Herald, 31 May 1987, 1, 7(D).

231 Alistair Bevington, telephone conversation with author, 3 March 1989. See also Executive Committee minutes, 18 June 1987, 2. The author thanks Dan Casey for his assistance with the 1982 expansion study drawings (figs. 202, 204-206). The author appreciates very much Rick

Brettell's cooperation, and the assistance of Emily Sano and Ginger Geyer in facilitating her access to the most current plans available in July 1989, when this thesis was being completed. Alistair Bevington and Uiko Zecha helpfully provided the 5 July 1989 preliminary expansion study sketches (figs. 207-208) on very short notice. These drawings incorporate proposed renovation work for the original building and the new Hamon wing. The proposed renovations include the relocation of the restaurant to the children's wing, and the consolidation of all children's educational facilities in the south block currently housing the restaurant and the temporary exhibition gallery.

<sup>232</sup>Rick Brettell quoted by Janet Kutner, "Director Seems Certain to Make His Presence Felt in Dallas," Dallas Morning News, 7(C).

<sup>233</sup>Milton Esterow, "Perspective: A Letter to President Bush," ARTnews 88 (January 1989): 168. Esterow quotes Brettell's comments from a panel discussion at the Guggenheim Museum in which he was a participant. The discussion concerned the current state of museums.

<sup>234</sup>See Janet Kutner, "DMA Members Told of Need for Expansion," Dallas Morning News, 21 May 1988, 7(C), and Colleen O'Connor, "High Profile: Rick Brettell," Dallas Morning News, 28 August 1988, 3(E). Additional information about A.R.C.H. was provided to the author in an interview with Nancy Berry, A.R.C.H. Director, 24 February 1989, Dallas, Texas. For discussion of the potential applications of the video disc computer technology that Berry hopes to incorporate in A.R.C.H., see William H. Honan, "The Museum of the Future: It's All in the Chips," New York Times, 27 November 1988, 1, 9(sec. 2), and letter to the editor, Maria Manhattan, "Museum Computers: Two Cheers," New York Times, 25 December 1988, 3(sec. 2).

## CHAPTER V

In January 1989, the Dallas Museum of Art celebrated its fifth anniversary. The institution has been greatly affected by the relocation and creation of its new museum facility. The museum is now one of the top tourist attractions in Dallas. Attendance and interest in the museum's programs has increased so dramatically that it has strained the resources of the staff and the museum's budget. The unprecedented growth in staff and the art collection has made serious consideration of expansion inevitable. As discussed in Chapter IV, the planned Phase I expansion has already been completed, and Phase II expansion is now being designed.

One concern that is always raised as a building grows older is whether the integrity of the architectural concept will be preserved over time. This issue as it relates to the realm of museum design has come to the forefront of national news recently in the battles over additions being considered to the Guggenheim Museum and the Whitney Museum in New York. In both cases, the buildings were designed by well-known architects, now deceased, and controversy erupted over planned additions which were considered by some parties to be inappropriate or insensitive to the original designs. Such matters are complicated when the original architect is

not available for consultation. In both cases, the controversy has been protracted, resulting in reconsideration of the plans and delaying work for several years.<sup>1</sup> The preservation of the integrity of the aesthetic quality of architectural design as an independent work of art, even in these relatively recent buildings, has become an important issue today and can create tremendous problems.

The Dallas Museum of Art has avoided many of these pitfalls, however, because there was careful consideration given to future planning from the inception of the design. The architect of the original building, Edward Barnes, is now engaged in designing the second addition to the museum. Even so, it should be recognized that there is a danger that the original architectural intentions can be undermined within a very short period of time after a building is completed. Sometimes changes in the original design can result because of practical adjustments, programmatic or policy revisions, or continued growth of the institution. Adjustments not in sympathy with the design aesthetic may result from a misunderstanding of the design concepts underlying the architecture.

The Architectural Selection Committee of the Dallas Museum invested months of effort to select a nationally recognized architect for the museum commission. Edward Barnes was selected because of his previous experience and his reputation for museum design sensitive to the display of

art. The Dallas Museum of Art has received almost universally favorable reviews, unlike many museum commissions undertaken by Barnes's contemporaries. The new museum has added highly to the prestige of the Dallas Museum in the international arts community, just as the Trustees had hoped. It has made it possible for the museum to attract major traveling exhibitions and has provided quiet display space which focuses attention on the permanent collection, rather than competing with it.

Perhaps an inherent risk in Barnes's self-effacing design for the Dallas Museum is that it can be forgotten that his architectural design is an aesthetic statement in itself and exists as an artistic work that should merit the same concern for preservation as any artwork in the collection. If financial considerations add to the value of a work of art, it should be pointed out that the museum facility is, in fact, the most expensive work in the museum's collection. Conservation of the architect's aesthetic as reflected in the design of the Dallas Museum should continue to be upheld, just as the Guggenheim's design has been defended, even though as a museum building, the Guggenheim is much less sensitive to the needs of its art collection.

It may appear to those unfamiliar with the whole of Barnes's design career that he does not have an obvious "signature" style when compared to an architect like Richard

Meier, who has repetitively used the same forms, color and materials for the majority of his projects. Barnes takes a more individual approach to each commission and bases his selection of materials and forms on the context of the site and surrounding built environment. The resulting buildings do appear different from one another, and this creates some confusion about the Barnes "style" for those looking for obvious connections. Barnes likes to observe that underlying all of his designs is a basic clarity of thought.<sup>2</sup>

In fact, Barnes's stylistic approach through the forty years of his practice has been surprisingly consistent. The major shift, as he himself has noted, occurred after his trip to Mykonos during the early 1960s, at which time he made a serious commitment to the consideration of contextual issues and simplified his use of materials. He has followed this approach very consistently ever since that time.

The essence of Barnes's stylistic approach derives, in part, from the design principles developed by the early Modern architects such as Le Corbusier and Mies van der Rohe. This vocabulary has been synthesized with refinements growing out of Barnes's own career development, his interest in reductive expression and even historical reference, when deemed appropriate.

Barnes's use of the open plan in the Dallas Museum galleries and his highly refined expression of architectural

detailing is also typical of Modern design, yet his extremely minimal presentation and heightened emphasis on seamless surface effects places his work as Late Modern. These characteristics are further refined by Barnes to include the reduction of structural emphasis and any intrusion on open, flowing interior space. As Dan Casey explains, the emphasis in the Dallas Museum is on the expression of walls, not columns.<sup>3</sup> This approach strongly contrasts with a building such as the Kimbell Museum by Louis Kahn, in which Kahn draws attention to the concrete structure by contrasting it with the infill travertine walls.

Barnes's personal emphasis has been on the expression of the geometric volumes used in the creation of architectural forms. The impression of the pure geometric forms of the Dallas Museum is heightened by the continuous expanses of limestone cladding. All is reduced to simple volume and unadorned surfaces, which Boulee would have described as "the skeleton of architecture by means of a wall totally bare"<sup>4</sup> (fig. 50). The historic continuity of this reductive approach has previously been noted in Spanish and Aegean architecture (figs. 71, 18-21). Barnes's use of continuous white interior walls in the Dallas Museum and continuous limestone paving inside and out contrasts sharply with Kahn's combination of materials in the Kimbell Museum.

In Barnes's museum designs, another significant characteristic is the physical flow created within the building's spaces. As Barnes states, "flow is as important as form. . . [the visitor] will appreciate the museum not in an instant, like a monument, but in time" (see appendix E).

Related to Barnes's desire for open, flowing space is his expression of visual continuity. Again, this is supported by his use of single, continuous materials throughout the building. It is characteristic of the visual flow he creates between indoor and outdoor spaces, separated only by glass walls. Continuity is apparent in the interior vistas Barnes created within the gallery floors, from one gallery level to another and in indoor/outdoor vistas through the glass walls. As a result, the building has a much more open feeling indoors than it would appear to have from the outside.

#### Spine as Introductory Space

The importance of the interior vista and Barnes's expression of visual continuity is nowhere more obvious than in the area of the pedestrian concourse. Representing the primary introduction to the museum for visitors, as the most-used entrance, this "spine" is the architectural tour-de-force of the building. It is one the most significant architectural spaces of the building, and makes an indelible impression on the visitor. Combined with the insertion of the cantilevered staircases at both north and south

entrances, the spine is the most flamboyant and dramatic area in the museum, where Barnes let go of the constraints that he felt when designing other areas of the building for art display.

Functionally, the spine serves an important purpose as a connecting device that leads visitors from the entrance circulation system to a secondary system passing through the gallery spaces. The spine was intended to be an area of low security and high traffic, from which different museum services branch, maintaining their own schedules "like shops on a street" (see appendix F). The armature of the Dallas Museum's spine relates the design to similar connecting devices in several of Barnes's camp designs such as Haystack School of Arts and the Wye Institute, and the Duke University School of Business (figs. 31-34, 149, 150).

While related to these designs in function, it is a totally unique space in his career output. While Barnes has at times pierced the interior volume of a building with a pedestrian path, as in the Duke School of Business and the IBM building in New York City, the Dallas Museum is quite remarkable for the length of its extraordinary vista, stretching 456 feet from north to south entrances. This view is particularly dramatic at night, when the interior of the building is lit. The glass entrance walls seems to disappear, and the vista extends straight through the interior to the street. The development of this straight

vista through the spine, as noted by the author in chapter IV, occurred as a gradual process during the period of design. Dan Casey, who was instrumental in influencing this change, recalled that "the whole idea of promenading inside a public building" was missing in the segmented scheme. He also spoke of developing the spine "as a space in its own right" and making it a connected space so that the placement of facilities along the spine was more clearly understood.<sup>5</sup>

The combination of the long vista with the interior ramping of the spine is unique in Barnes's oeuvre. The ramped passage results from the architects's desire to make all entrances located at different grades on the sloped site accessible to the handicapped. The ramped passage adds greatly to the experience of entering the museum. The visitor is immediately caught up physically by the building as he ascends the ramp. The straight axis and the upward movement of the spine is compelling and exhilarating. Few visitors pause to wonder where it leads; it is obvious that it is a significant passageway because of its grand scale. It seems logical to follow it up to the juncture of the Great Hall which forms a grand entrance to the permanent collection.

While the sloping concourse has been criticized for not being "amenable to art," Barnes actually never intended it to be used for art display.<sup>6</sup> The high-ceilinged entrance lobbies at either end of the spine were the only areas in

which installation of two oversized works--the Oceanic bis pole and the Rufino Tamayo mural--was originally planned. The spine concourse was, by definition, a low-security area not particularly "amenable" to art for that reason alone. However, Barnes also thinks that sloping floors are unsuitable for art display areas and should be avoided (see appendix E). The architect felt that the spine was better utilized as a means of engulfing visitors in simple white space, purging impressions of the busy, congested urban scene they had just left. The entry into the formal coolness of the spine signals that a different and special environment has been entered, and prepares visitors for art viewing by immediately removing them from clutter and distractions. The ascension through white space represents an almost ritual progression, as the visitors' glimpses of the outside world are carefully framed, and they are borne along by the uninterrupted expanse of stone paving and white flow of space--the Barnesian signature of single, continuous materials.

#### Design as Historical Synthesis

To a certain extent, the Dallas Museum's design was affected by the cultural aspirations of the citizens who envisioned it, inevitably becoming an expression of its symbolic role in the community. Barnes's consciousness of the symbolic significance of the new museum in Dallas is reflected in his synthesis of historical concepts in the

museum design to further underscore that expression. While reference to historically-derived concepts is discerned, the overall expression is of an aesthetic thoroughly grounded in a Late Modern sensibility.

The heart of the initial design Barnes derived from the axial plan he drew into the neighborhood to link the museum to developing plans for an Arts District. The core of the plan resulted from the creation of the Flora Street axis and its termination in the museum's formal entrance court and Great Hall. Dan Casey recalled Flora Street as being basically a "small alley spinning off to one side" that was seized upon by the architects to create the T-formation which gave access to the center of the long, narrow site.<sup>7</sup> The significance of this decision was that this east/west axis would become, in Casey's words, "a major form-giver for the building."<sup>8</sup> The architects's placement of the drop-off court required in the program answered this need by creating a formal entrance at this point.

At the same time, Barnes was responding to the slope of the site and considering how the building and galleries would go up and down the hill. Drawing in the primary circulation routes became the other major component of the initial plan and became the counterbalance to the pitched site. Barnes recalled, "many of the early thoughts were concerned with the two circulation movements--the one through the spine which goes down, and the one through the

galleries which goes up."<sup>9</sup> These parallel paths intersected with the Great Hall in a double cross axis--one line drawn from north to south entrances created the spine concourse and one implied line drawn through interior and exterior exhibition spaces, cut through the center of the vault.

Barnes's development of the core of the initial plan with its cross-axial, symmetrical parti and grand entrance hall is strongly suggestive of Beaux-Arts design concepts. As historian Neil Levine describes the design principles of the Ecole des Beaux-Arts:

In its ideal form of the Greek cross, [the cross-axial scheme] was the plan-type preferred perhaps above all others for representational buildings of a lofty and didactic character.<sup>10</sup>

The Dallas Museum design embodies in principle the favored Beaux-Arts compositional technique for monumental buildings:

Two axes embodied in two enfilades and intersecting at right angles at a major central space, the whole compressed within a circumscribed rectangle.<sup>11</sup>

Perhaps the most suggestive Beaux-Arts feature is the enclosure of the entrance forecourt with projecting wings. Its prominent development as part of the core plan of the museum follows in concept the French Baroque paradigm of directional planning, in the sequence of cour d'honneur (forecourt), corps de logis (principle block), and garden.<sup>12</sup> However, the garden, due to the constricted width of the site, could not be placed on the primary axis, but was located to one side. A Beaux-Arts connection

was further underscored by the south wing's original semi-circular windows, a favored Beaux-Arts detail that appeared in the early stages of the Dallas Museum of Art design.

While there is a strong symbolic link in the vault's form to the traditional Great Hall in 19th and early 20th-century American museum designs (fig. 210), of far greater significance to Barnes was the need for a fixed point within the fluid spaces of the rest of the building. The symmetry and scale of the central vault and cross-axis anchors the overall composition, making it, as Barnes explains, "the center of gravity of the whole building."<sup>13</sup> He further explains:

I would say that the vault and the Flora connection, that Beaux-Arts court, all of that was a very important countermove against what is a much more villagey, informal approach to levels and terracing which was going in the other direction. I felt it was very important to anchor the building in the city and to stop the end of Flora, and to have a place where everything came together in the building--a memorable room as an orientation point.<sup>14</sup>

There is a strong evocation of ecclesiastic architecture in the vault, its form and plan suggesting the nave and transept of a church. As previously noted in Chapter IV, even the requisite apse not present in the interior is subtly introduced in the sculpture garden, as the sculpture niche terminating the cross-axis of the first sculpture court. Given Barnes's characteristic use of white interiors and severely reductive architectural forms, the

Dallas Museum reflects his fondness for Cistercian religious architecture:

The absence of color for the Cistercian, or more accurately the predominance of white, evident in the habits worn by the monks, in the clear window glass, in the color of doors, suggests a distinct iconography of light. The relationship of light to architecture, specifically the way it conditioned a new luminous and spatial quality in the buildings, became in fact one of the most prominent features of the Cistercians' churches. Clear, white light complemented the simple forms and fine proportions of the buildings to produce interiors of coolness, quiet and serenity.<sup>15</sup>

Barnes indicated that he especially likes the simplicity of the continuous stone vaulting in Cistercian churches, and was very moved by his visit to Thoronet Abbey in southern France.<sup>16</sup> A completely different church also provided inspiration: Barnes acknowledges that the slot window in the vault is related to the side chapel windows in Le Corbusier's Chapel at Ronchamp<sup>17</sup> (fig. 188, 189). The slot window had been incorporated previously in Barnes's designs (fig. 211). The lack of articulation in the vault recalls yet another analogy to the vernacular white vaulted cell structures of Mykonos (figs. 20, 21), which were so inspirational to Barnes's early career.<sup>18</sup> The connection to the Aegean vernacular is reinforced in its comparison with the treatment of the Dallas Museum's roof parapets, each slightly raised to outline the building components (figs. 201, 212).

Barnes's affinity for both Cistercian and Aegean architecture derives in part from his appreciation for the

quality of light in white rooms:

I like the light. Love the light. Especially for museums, I think the light is absolutely beautiful. I love to go into a white room . . . and see that the whites are all different. One wall is gray and one is warm. I love white rooms--and Walker has white floors, too, which are wonderful. . . .I just think white really gives you all the colors in reflected light, so to speak. . . .In a museum, when you want to get the subtleties in a picture, the general white light brings out everything.<sup>19</sup>

While these historical parallels are relevant and underscore the continuity of history in Barnes's approach, it was apparent from discussions with the architects that any historic connections were tangential to the initial design process. Instead, the basic forms evolved from the underlying concerns for form, circulation and site-planning, while the awareness of precedents such as Ronchamp, Beaux-Arts concepts and Aegean vernacular were brought into play later as reference points rather than starting points.

#### Permanent Collection Galleries

Truly one of the highlights of the new museum and the envy of other museums is its extensive network of interconnecting indoor and outdoor gallery spaces. The 1.2 acre outdoor sculpture garden is an unusual amenity in an urban environment. The interior galleries for the permanent collection comprise 70,200 of the building's 215,000 square feet. The spacious and modestly-detailed galleries drew unqualified and unanimous praise from the critics. A few of these remarks:

The museum's interior is designed for unusual ease of movement . . . Arranged on three levels, the permanent collection flows through the history of art like a calm river. As Barnes and the museum's chief curator, Steven Nash, have designed the displays, there are no needlessly harsh and categorical boundaries between cultures, ages and styles.<sup>20</sup>

Space begets space . . . The most striking thing about the galleries is their simplicity--their clean lines and logical progression.<sup>21</sup>

The new Dallas Museum of Art is elegant, spacious and comfortable. Its collections . . . are displayed with logic and grace. . . . The installation is superb, characterized by meticulous attention to detail and an easy flow.<sup>22</sup>

The beauty of the plan is that it is clear and logical, but also surprisingly varied. Except for the vault, the galleries are all sufficiently self-contained to create a feeling of privacy, yet open enough to provide a sense of continuity. . . . the building's great strength: its logic, craftsmanship and genuinely welcoming interior spaces.<sup>23</sup>

While Barnes defined one kind of space in the symmetry of the cruciform plan, he chose to strongly contrast this fixed space with the easy flow of the open plan of the terraced upper levels of the permanent collection. Describing the vaulted cross-axis as "a positive anchor point," he observes, "It's static and the spacial relationships in the rest of the building are more fluid."<sup>24</sup> This spacial contrast between the box-like galleries of the contemporary collection and the flowing openness of the large terraced levels is effective in preventing the processional through the galleries from becoming monotonous.

To achieve the open plan employed in the upper terraces, Barnes inserted what he described as "Miesian

screens" to subdivide the floor levels of the galleries (see appendix F). In commenting on the partitioned open plan, Arthur Drexler has characterized the permanent collection galleries as "pseudo-Miesian."<sup>25</sup> Drexler's observation is informative, as he makes the distinction that Barnes did not merely copy a Miesian prototype for the Dallas Museum galleries. Instead, Barnes adapted selected elements of the classic Miesian vocabulary to enhance the gallery as a setting for art display.

In describing his Museum for a Small City, an unbuilt project of 1942 (fig. 213), Mies van der Rohe emphasized that the steel frame construction of the building reduced the necessary elements to three basics--the floor slab, columns and the roof plate. Because the roof would be supported by the columns, Mies proposed that interior free-standing walls could be arranged with great flexibility to display paintings.<sup>26</sup> Within the museum was placed an "inner courtyard," daylit by an opening in the roof plate (area 7). The steel structure permitted the museum's outer walls and the walls of the inner court to be made of glass.<sup>27</sup> This method of construction was typical of Mies's approach for all building types, and he described what he saw as the advantages of the open plan for museum display:

. . .In this project the barrier between the work of art and the living community is erased by a garden approach for the display of sculpture. Sculpture placed inside the building enjoys an equal spatial freedom, because the open plan permits it to be seen

against the surrounding hills. The architectural space thus achieved becomes a defining rather than a confining space. . . .<sup>28</sup>

Mies also followed this same design prescription for a glass-walled exhibition pavilion in his New National Gallery, Berlin, Germany, completed in 1968 (fig. 214), and the Brown Wing, Museum of Fine Arts, Houston, Texas, 1973.

An obvious distinction between Mies's museums and Barnes's approach in Dallas is that Barnes did not create exhibition galleries with exterior walls of glass, for conservation reasons. He also prefers a more insular approach to reduce distractions within the gallery space:

What's in a museum is more important than what's outside. You don't want to build a glass museum just so you can dress up the street. That would be terrible. A museum is a retreat, a momentary escape from daily life, and for that you need doors and walls.<sup>29</sup>

For this reason, Barnes traces the Miesian influence in the Dallas galleries to the early court houses by Mies, dating from the 1930s, which were basically composed of screen walls within rectangles (fig. 13). He explains:

I think that that kind of movement through a room is one kind of space, and a wonderful way to see art. You're not in rooms, but just in one continuous flowing space.

I thought [of] each of these terraces [as] a confined room, a clear room with a flight of steps arriving and a flight of steps leaving, that was framed by a skylight. Then within that, you made each of the terraces a more coherent space if you didn't break it up into rooms, but simply put three screens in there. It's partly to provide this free-flowing space and partly to emphasize the character of the whole terrace room with its own courtyard. . . . that the other walls within each terrace are screens.<sup>30</sup>

Rather than replicating the Miesian court house model, however, Barnes simplified the interior space of the galleries by combining two elements--the interior steel supporting columns are enclosed within three of the gallery partitions. This is one means by which Barnes suppresses multiplicity to achieve a quieter space. If he had truly emulated Miesian design, the screen walls would have been interspersed with expressed columns to support the roof plane. In Mies's designs, these columns were often chrome-plated or otherwise richly set off. Revealing the supporting columns within the Dallas galleries would have impeded visual and spacial flow and would have added unwanted additional forms to complicate the design and layout of the galleries. In fact, throughout the museum, the supporting columns are generally not visible.

The supporting columns in the galleries are located in the structural bay that contains the courtyard. The three partitions, two short and one long, form three of the courtyard's side walls, and are twice as thick as other partitions in the galleries because they encase the thick supporting columns. For this reason, these "screen" walls are not free-standing like true Miesian screens, but extend from floor to ceiling to conceal the columns. These three partitions are permanent walls within the galleries, while the other floor to ceiling partitions are described as semi-permanent, and are removable. The functional distinction is

clearly expressed in the contrasting thicknesses of the partitions.

While Casey observes that there was "an infinite variety of ways" in which the other partitions could be positioned within the gallery floor, the placement of these walls was not arbitrary.<sup>31</sup> The positioning of the semi-permanent walls was critical to ensure orientation within the galleries, and to aid, rather than impede movement through the floor. Barnes emphasized the importance of ensuring that the screens did not intersect with the perimeter walls, "so that you sense the whole space with the courtyard in the middle."<sup>32</sup> This was not only for conceptual reasons, but more importantly, so that the visitor retains a clear sense of where he is within the overall gallery level. Barnes expressed the full size of these large gallery rooms by leaving an open vista along each of the perimeter walls, reiterating the openings of the perimeter skylights. In this way, a visitor entering the gallery or passing near a corner of the floor, can perceive the width of the gallery floor by sighting along each of the side walls with a turn of his head. Even though many visitors may not do this consciously, the impression of the "room" is still often absorbed unconsciously, and can aid the visitor in remaining oriented within the floor.

The inclusion of the courtyards in the Dallas Museum gallery plan represents a significant development in

Barnes's museum designs, and is a unique and highly attractive feature of the building. Barnes liked this feature so well that several of his subsequent museum designs employ courtyards within gallery spaces. These include his early scheme for the Fort Lauderdale Museum of Art (fig. 122), the Georgia Museum of Art design (fig. 126), and the Armand Hammer Museum.<sup>33</sup>

The courtyards represent the other element Barnes adapted from the Miesian plan--the concept of the "garden approach" for art display. In Barnes's own work, the Scaife Gallery's central sculpture court is the precedent for the Dallas Museum courtyards (figs. 105-107). In Dallas, garden courts appear not only in the galleries, but Barnes also describes the two entrance ends to the spine as "garden rooms." He considers the floor-to-ceiling glass walls overlooking the Fleischner court and the sculpture garden to be extensions of these outdoor spaces, and for that reason, the interior walls in these areas are sheathed in limestone.<sup>34</sup>

Barnes's stated intention for the gallery courtyards was to provide "a counterpoint by relating art to nature" (see appendix F). Barnes recalled much discussion with the curators, trustees and artists as to whether the courtyards would be distracting when combined with art display spaces. The critical consensus has been supportive of the inclusion

of courtyards, and Barnes's reaction to the completed galleries has been:

I think that putting courtyards in a museum in no way detracts from the art, as opposed to doing something heavily architectural. . . .I think nature, daylight, and sky, even flickering shadows--these things are a foil to the art--not like other architectural ego trips.<sup>35</sup>

In this respect, Barnes acknowledges the influence of Louis Kahn's courtyards in the Kimbell Museum in Fort Worth (1972) (fig. 215), in which he notes that Kahn included the courts as "his own little release from all the art."<sup>36</sup> For both Barnes and Kahn, the glass-walled interior courts are expressions of a shared Modern vocabulary whose ultimate prototype is found in the Miesian museum plan.

However, Barnes's deployment of the courtyard in the interior space of the galleries differs significantly from both Mies's Museum for a Small City and Kahn's Kimbell Museum. Barnes's plan expands on the basic concept of the courtyard as a pleasant counterpoint to art viewing to seriously consider the incorporation of the courtyard into the overall circulation scheme. It was observed in the Chapter IV study of early design schemes that the courtyard was always paired with a staircase, making it an integral feature of the processional through the galleries (figs. 196, 224). By strategically placing the courtyard at the top of each staircase, Barnes invites the visitor to move upward through the terraced gallery floors, as they respond to the welcoming well of light and greenery. This aspect of

the design was one means by which he sought to entice the viewer along, and it represents a far more subtle approach to circulation than he previously employed in the Scaife Gallery, in which visitors are literally channelled through the galleries.

The courts further contributed to orientation within each gallery level by functioning as a "pivot" around which circulation revolves. For this reason, the architects attempted to place the screen partitions so that occasional glimpses of the courtyard were permitted during the circuit through the gallery. As Dan Casey observed, "We wanted to orient people toward the court, so you would have the sense of going around the court and realizing once you'd made the circuit, you'd probably seen that level."<sup>37</sup> To establish the courtyard as a familiar element, the basic plan of staircase, court and surrounding permanent walls was repeated exactly in both gallery terraces. Barnes explains: "There's a lot of separate little spaces in the building, and you need some sort of major episodic ideas as you go through to give [it] coherence."<sup>38</sup>

Peter Papademetriou notes the lack of "visual reference between the galleries and the principal spine," and suggests that this aspect leads to disorientation because the "impression of one's position within the spacial progression is not sustained."<sup>39</sup> Dan Casey responded,

We really didn't think it was terribly important to keep people oriented in the galleries with respect to the spine. The spine is simply a connecting kind of device that was servicing the rest of the building. The courts, I think, were the device that we were more interested in. Rather than just pure orientation, we wanted to give people this feeling that they were near the outdoors somehow. That they were on the top floor of the building.<sup>40</sup>

The desire for orienting museum visitors was balanced by an equally strong desire to keep the galleries as quiet as possible. Openings into the active spine from the galleries would have been visually distracting and noisy. The Guggenheim Museum and the High Museum, both of which have galleries surrounding or opening off a central atrium, are examples of this effect. As Dan Casey recalled that for this reason too, the architects did not feel it was necessary to keep connecting with the spine:

The galleries--especially the permanent collection galleries--we wanted those to feel very sheltered and quiet. Part of the reason for having the spine was to collect the traffic, and give people a chance to walk without worrying about what they're missing, or how much noise they're making. It's a more casual way to go through the building on the way to someplace where you're more engaged.<sup>41</sup>

While the views of the courtyards and vistas along the perimeter walls are crucial to maintaining a sense of orientation within the galleries, it might also be observed that due to the large expanse of the gallery floors, circulation is inevitably not as tightly controlled as in the Walker Art Center and the Scaife Gallery. Some visitors might wish for a more highly structured processional. The open plan offers many more optional paths for the visitor to

take, adding variety to each visit, but also resulting in some confusion for the first-time visitor. Once the circuit around the court has been made, some back-tracking may be necessary to return to the entrance to the next gallery level. However, in the balance, the "looping" circulation through the galleries may also be considered a positive feature, as it naturally leads to a relaxed, unhurried perusal of the art, which mirrors the expansive, rambling character of the building itself. The easy flow in the Dallas Museum is one of its singular features, an experience unlike that offered in many other galleries. Truly, "flow is as important as form."

The views from gallery to gallery within a floor are significant in enticing people through the installations. In a similar manner, the vista through the wide entrance to the adjacent gallery level is important, for the glimpse of works on the next floor may encourage the visitor to continue the progression upward or downward. This is a common design feature of both Barnes's Walker Art Center and the Scaife gallery that seemed to particularly appeal to the Dallas Museum trustees. George Charlton remarked on this during his visit to Pittsburgh, commenting, "once again, as at the Walker, Barnes uses those wide, large entry-ways between galleries so you can see pictures in one room from another room."<sup>42</sup>

As previously discussed in Chapter IV, Barnes pointed to the concept for the daylighting in the galleries as ultimately deriving from the "subdued chapel-like" light at Ronchamp.<sup>43</sup> However, the physical concept for the suspended ceilings in the Dallas Museum galleries (fig. 220) first appeared in Barnes's work in the Neiman-Marcus Department Store in Fort Worth, Texas (1963). In outdoor courts of this building, Barnes first employed cantilevered openings around the perimeter of the roof to allow sunlight to wash down the side walls (figs. 115-116). This concept of perimeter skylights with the addition of curved coves was reiterated in the Sarah Scaife Gallery, Pittsburgh (1974) (figs. 108, 109), and in the Dallas Museum (fig. 221).

The Dallas Museum curators were not in agreement over the effect of daylight on the artworks. Former Deputy Director Steve Nash expressed some concern that the daylighting scheme was not sensitive enough to the ethnic collections, and that perhaps light levels were too high in those galleries.<sup>44</sup> However, John Lunsford, retired Senior Curator, expressed less concern about light levels, observing that any exposure of the collection to light is a compromise between long-term conservation of the objects and allowing them to be seen and enjoyed by the public.<sup>45</sup> Light levels in the permanent collection are controlled enough in certain sections, however, to permit the exhibition of works

on paper alongside paintings. This flexibility is not always possible in all museums which use daylight.

While the minimal detailing of the galleries has sometimes been described as severe, Steve Nash observed:

Actually, [it is] more lush than one might think, with the carpeting and the treatment of light, and the interior/exterior partnership that you get in the galleries. It isn't just stark and hard and minimal, it has a gentleness to it which is very tangible and inviting, and art tends to look extremely well in it.<sup>46</sup>

Senior Curator John Lunsford recalled that the curators were "surprised" that the museum opened with "full" galleries, when there had been the assumption that the new building would be able to absorb new collections.<sup>47</sup> Steve Nash observed that this was due in part to many items in the collection being brought out for display that had not been exhibited previously for lack of space. This was certainly the case in the ethnic collections, where a comprehensive assemblage of works was shown, rather than a carefully-selected sampling of objects. He commented, "There is a lot which is out that doesn't necessarily demand to be out," and noted that the installation would become tighter as more important pieces entered the collection.<sup>48</sup>

However, Nash also suggested that perhaps the desired projection of gallery space had been undercalculated, even though the new exhibition space represented a tripling of that available in the old Fair Park facility. He asserts that it was somewhat misleading to simply plan the new exhibition areas in terms of additional square footage. Nash pointed

out that the installation in the new building ended up being less dense, due to the nature of the interior partition walls. He observes, "it's a building which really calls for fairly sparse wall installations."<sup>49</sup> He recalled that originally more divisions within the galleries were planned, but the additional partitions crowded the space and were removed, reducing the available wall space.

Nash noted that any attempts to place partitions crossing the skylight trough to the side walls were not only difficult to attach physically, but the partition also made an objectionable visual break in the base limestone molding and the skylighting cove (fig. 220). The height of the ceiling cove resulted in partitions which appeared very oddly-proportioned and "strangely vertical."<sup>50</sup> This difficulty was encountered when partitions were introduced into the lighting coves in the Scaife Gallery, as discussed in Chapter II. Barnes was very disturbed by the alterations to the Scaife Gallery that blocked the interior vistas and obscured the clarity of the architecture by creating the false impression that the cantilevered ceiling was supported by the gallery partitions.<sup>51</sup>

As related by Nash, the goal of the original installation in the museum was to take advantage of those features of the new galleries that made them "congenial to art" and yet respect "the building's integrity" and the inherent discipline of the gallery spaces:

. . .Very crucial to that design is that continuity of the ceiling throughout, of the floor treatments, of the space--the long vistas. The flow of the building with the light in it, the space in it is meant to be a gradual, soft, continuous one. And it's a strong element which is built in and has to be reckoned with--which is beautiful in a lot of ways, but it makes it a little less adaptable in terms of what you do within those permanent gallery locations.<sup>52</sup>

The flow of the interior permanent collection galleries continues uninterrupted views out into the sculpture garden, where the formality of the indoor exhibition spaces is repeated in outdoor galleries (fig. 196). While the initial sculpture court reiterates the cross-axis of the vaulted contemporary galleries, the rest of the garden forms the counterbalance to the permanent collection galleries, continuing the Miesian open plan with long screen dividers offset on either side of a long water channel (fig. 217). Several changes in elevation occur within the garden, and the screen dividers provide a graceful place to step the grade. Again, vistas are significant features of the garden, as in the long view extending between the walls and the water channel. The simplicity of the planar divisions and the subtle introduction of water evoke the work of Luis Barragan, whom Barnes acknowledges as a current influence.<sup>53</sup>

Two sculptures were commissioned for the garden during the museum's construction, and Barnes was involved in consultations with the individual artists. These commissions included Scott Burton's Granite Settee, and Ellsworth Kelly's Untitled from his "Rocker" series. The

Education Courtyard, discussed in Chapter IV, was designed by Richard Fleischner, and includes limestone sculptures, platforms, and a grove of trees.<sup>54</sup>

In spite of these new works, the museum's sculpture collection has not yet fully realized the potential of this 1.2 acre outdoor museum space. Steve Nash observes:

The permanent collection just doesn't measure up--it doesn't have enough meat to it to really occupy those outdoor galleries . . . . When we had the Nasher collection in it . . . it was full of material and color and movement and volume . . . and everyone saw how beautiful those areas could be. I think it did prove that they are tremendously handsome spaces--there's something about the formality of it all which [when] empty, seems rather dry and arid, but when properly filled, is a beautiful foil for modern sculpture.<sup>55</sup>

The garden is still immature, needing the lushness and color of mature plants to counterpoint the geometry of planes and walls. This softening of the sculpture garden will take years, as the landscaping was constrained by construction budget limitations, resulting in smaller caliper trees being obtained for the garden. In time, however, the mature trees will form the shady green canopy over the garden envisioned by landscape architect Dan Kiley.

#### Fulfillment of Initial Concepts

The completed museum was very successful in fulfilling the original criteria voiced by the director and the trustees. The Late Modernist style of the building expresses the desired sense of classical restraint and

eschews the trendiness of a post-modern style which would soon have made the structure appear dated. The permanent collection galleries and the decorative arts wing provide the setting of an "elegant house"<sup>56</sup> for the artwork which is supportive and insular. Daylight is controlled, yet the combination of top-lighting and glass-walled courtyards provides for variety and modulation of the atmosphere within the galleries and offers a release from art viewing. The expansive interior exhibition spaces are complemented by the generous sculpture garden, an unusual feature for an urban museum, yet one considered essential by the trustees.

Harry Parker's early statements concerning the building program can be reviewed in the context of the completed museum. Barnes was very successful in achieving the "easy indoor/outdoor flow" called for by Parker (See appendix 5c, 75). In terms of building access for the public, including those whose mobility is impaired, the museum has proven to be, as Parker notes, "very user-friendly."<sup>57</sup>

The physical indoor/outdoor flow is further supported through visual means. Harry Parker comments:

We've done a lot of public visitor profile surveys, and the public opinion rating of the building is very high--I think that's because of the sunlight and views out and the openness of everything. The reaction has generally been that it is a very pleasant, welcoming-type building.<sup>58</sup>

A comparison of the intimate "Gold room" to the soaring scale of the vaulted gallery and concourse demonstrates the wide range of spaces Barnes was able to

incorporate in the museum, and his fulfillment of Harry Parker's call for "areas of awe and areas of intimacy" (see appendix A).

Most importantly for the overall success of the museum design, Barnes was notably adept in achieving Parker's goal of combining the active and the insular activities of the museum into "separate and carefully connected" facilities (see appendix A). Barnes's incorporation of the "spine" concourse was the key element in making the variables of separation, linkage, and circulation work. Parker observes:

I think that's where I made the most personal contribution to the whole finished product--in getting Barnes to incorporate a diversity of purposes and functions. . . .

There are those who feel [the children's wing] is too inconsistent with the rest of the building--that it is one kind of thing and the museum is another type of thing. I feel that the museum should be able to incorporate these different kinds of spaces. That yes, a museum is a community center, it's a restaurant, it's an auditorium, that it has all these different functions. But there are some more traditional types who look at the children's museum and say it should be somewhere else, it shouldn't be part of an art museum.

. . . But [the museum] does embrace a lot of different kinds of activities. And they are separated so they don't intrude so much. I think it's a good plan. [The spine really] seems to make it work.<sup>59</sup>

Rather than emphasize the separateness of the different facilities, Barnes sought to quiet their meeting in the spine with an uninterrupted expanse of white space. The continuity of white walls unifies the building and creates

smooth, rather than choppy, transitions. The continuation of the limestone floor physically reinforces the concept of the galleries as a "river of art" by flowing through all public display areas of the museum. Likewise, the carpeting in the permanent collection galleries serves to smooth transitions, both physical and historical, and also keeps the galleries very quiet.

A compromise was achieved in the expression of the Barnesian white aesthetic and Parker's call for both "bright and subtle colors" in the museum (see appendix A). Bright colors were reserved for the installations in the children's wing and the bookstore--the most active areas of the museum. Barnes worked with interiors designer Ben Baldwin in his deployment of a restrained palette of colors in other public areas of the building. In the color for the walls of the galleries, Barnes and Dan Casey developed a subtle progression from white to off-white to gray. David Dillon commented on the striking change in the new gallery installations:

Anyone who remembers the moody installations at Fair Park, with dramatic shafts of lights and blood red backgrounds will be astonished by the simplicity and directness of the new galleries. The individual objects jump out from their neutral gray backgrounds.<sup>61</sup>

Stronger color was incorporated the display cases for the Pre-Columbian works, reflecting input from the curators who desired more color in this area.<sup>60</sup> A pale gray was used for the carpeting in the galleries. Barnes's preference is to

have white or light-colored floors that will bounce light upward, rather than absorb it.

The effect of natural light within the galleries is quite beautiful, and adds immeasurably to the visitor's experience at the museum. The use of daylight grows progressively more controlled as one ascends up through the galleries. The non-Western collections are displayed in very subdued lighting, and selective use of dramatic spot-lighting enhances the installation (fig. 218). The Impressionist paintings were displayed next to the first courtyard in the original installation, so that they had the full benefit of changes in natural lighting, just as the original program stipulated (fig. 200).<sup>62</sup>

The completed building successfully met most of the requirements of the 1977 Program and Space Study. The schematic phase of the design was approved in March 1979 by the Board of Trustees, who noted that the design fulfilled the space requirements given in the Program and Space Study.<sup>63</sup> As discussed later in this chapter, a revision was made to the original program following the determination of the Guaranteed Maximum Price that impacted on the service program. Where current problems exist, the cause was not that the original Program and Space Study was not fulfilled, but rather that the staff involved in the planning studies that determined allocations of square footage could not foresee the unprecedented use and growth of certain areas.

The success of the new museum led to greatly-increased demand for exhibitions and educational programming. In the first year following the museum's opening, attendance jumped to 700,000, nearly triple that the previous year at Fair Park. Public participation in education programs, such as tours, lectures, and film series more than doubled to 300,000. Greater emphasis was placed on generating in-house exhibitions, many of which traveled to other cities, and many more publications were produced by the museum staff.<sup>64</sup>

The photography and design studios are two examples of areas whose use was underestimated. The photography studio was not even proposed in the 1976 staff-generated preliminary study of space requirements, and there was no full-time photographer on the museum staff to provide input into the planning of this area for the 1977 Program and Space Study. At the time of the 1977 study, the assumption was that the use of the photography studio would be limited, and some work would continue to be done at commercial studios. However, in practice, the studio is used for all in-house photography necessary for publicity and art documentation purposes. If this had been known from the beginning, it would have affected the size and furnishing of the studio. A similar situation developed for the design studio, on which unprecedented demands were made for in-house work once the new museum opened with its suddenly increased pace of exhibition scheduling.

The unexpected demand for growth in staff and services affected many other areas of the new facility, but the primary impact was that the sudden increase in staff rapidly filled the available office space. Of all departments, education has experienced the most dramatic growth. This increase in staff greatly exceeded the initial projections upon which the design had been based. The total growth, to date, has been from approximately 40 employees early in 1983 to 189 in 1988. By the end of 1983, in preparation for the move to the new facility, the staff had grown to 74, including 21 part-time workers. Growth continued to 90 in 1984, 141 in 1985, and to a high of 189 in 1986. A hiring freeze was enacted in 1987, and total staff dropped to 158 during 1987-1988, and it remains at this level as of April 1989.<sup>65</sup>

There is evidence to support the conclusion that at the time that the building was being designed, museum officials did not foresee the tremendous staff expansion which would occur when the new facility opened. In 1977, the Study Committee for a New Museum compiled a five-year projection of income and expenses which included a section titled, "Increased staff in new building 1980-1981." This estimate of staffing needs was based on recommendations by department heads, and it projected an increase of twenty-seven employees to staff the new museum. Among those listed were a curator, a building superintendent, a slide

librarian, three departmental assistants, five clerical/secretarial positions, a shipper, an installer, a head guard, eight guards and five janitors.<sup>66</sup> Only a few of these anticipated positions would have required offices, so clearly the greatly-expanded growth in office staff was not anticipated in 1977. Yet 1977 was the year that the Program and Space Study was compiled, upon which the museum design would be based.<sup>67</sup> While the five-year projection was reasonably accurate in predicting the initial growth spurt, the continued acceleration in staff growth was not included in the critical early planning. Even though the initial program goal was to provide for at least fifteen to twenty years of museum development,<sup>68</sup> the author did not find evidence of any definite figures projected for long-term staff growth. Apparently, long-range growth was simply not envisioned or predictable at that time.

The overall size of the facility was ultimately constrained by finite financial resources available for the initial construction push. In evaluating the physical planning for the new museum, it is also apparent that strong emphasis was placed on the most actively-used public areas, such as galleries, education facilities, restaurant, bookstore, auditorium, reception and circulation areas. Because of the failure of the first bond election, the trustees were very conscious of the need to "sell" the idea of the museum to the public, and this factor may have led to

greater emphasis on the public areas, rather than to continuing analysis of the needs of support areas.

Even though the Program and Space Study noted that attendance could be expected to double at the new facility, based on the experiences at other institutions, it seems probable that neither the department heads nor the trustees could have predicted the resulting enormous spurt in growth and the extent to which individual departments would be affected. The museum was not just planning an addition, it was planning an entirely new expanded facility in a different part of the city, which made it difficult to estimate the demands of the new users within Dallas, and the museum's potential as a tourist attraction. Viewed in the context of staff figures in 1979, when the design was finalized and the commencement of construction in 1980, it is perhaps not surprising that the staff of 40 did not anticipate the jump in growth within a few years to 190 employees.

The overflow in staff has been accommodated to some extent by the conversion of the art studio in the children's education wing to office space. It is possible that if the Phase II expansion does not transpire, the entire children's wing could be converted for offices, although this would be a major sacrifice in the museum's original intended outreach to this audience.

One solution to the office shortage which has been considered is the finishing out of a U-shaped portion of the sub-basement lying underneath the print and textile gallery, auditorium entrance, and library. This project would also involve some excavation under the library.<sup>69</sup> Because of low ceilings and lack of daylight, this area is not particularly suitable for offices, but may be useful as a short-term solution. Now that interest in building a new addition has developed, this option may not be necessary. However, this sub-basement space could be utilized to connect the lower level of the original building with the new addition's basement level.

Undoubtedly, some of the shortfall in office planning reflected the trustees's desire to control the expected increase in expenses following the opening of the new building. Staffing estimates, because of their impact on the operations budget, were very conservative and this was reflected in the designated office space in the new facility. It is obvious, however, that even the limitations on office space did not control staff growth at the museum. Any new construction stimulates public interest and will predictably have a major impact on staff needs. In planning for the Phase II expansion, this effect needs to be carefully considered to ensure that office areas are adequate for long-term growth.

In addition to the need for more office space, the library is one area in which more attention needs to be directed in satisfying functional requirements. Originally projected to accommodate 40,000 volumes, it is currently nearing capacity at 25,000 volumes. The library's collection has grown into unforeseen areas, such as decorative arts, since the opening of the facility, and this growth will undoubtedly continue to parallel the museum's collection expansion.

Some space reduction in the library occurred within the first year in the new facility with the loss of the library's workroom to house the greatly-expanded education staff. This in turn led to the loss of a seminar room for the library, as it became the workroom space.<sup>70</sup> The design of the original library, however, is successful in achieving good light and visibility for supervision of researchers, and it is one of the most attractive work areas of the museum.

It appears that the space shortage in the library will be solved if an addition to the building is built. Current expansion plans locate the library on the second level of the new wing. It will be important in planning the new library to anticipate substantial expansion of the library's holdings. To allow for long-term growth, an electric compact shelving system, which would eliminate wasted aisle space might be considered for the library. However, the

floor would need to be reinforced in the initial construction to permit its installation. If the Art/Architecture Research Center is implemented in the new wing, the library will be a key hub for the public research activity, and will need to be designed to accommodate increased usage.

One of the major components of the building program was the provision for storage of not only of art, but also general storage of materials such as packing crates, office files, cleaning supplies, and other needed materials. The stated desire was to have ample space in the new facility to house all of these materials on-site. However, soon after the Program and Space Study was completed, and as schematic designs progressed, it became apparent to both client and architect that compromises and choices would have to be made in satisfying the proposed space allocations and keeping the cost of museum construction within budget.

An early decision was made regarding site excavation which limited the total storage space available in the facility. Dan Casey recalled that to reduce construction costs, a portion of the basement designated for storage that lay under the temporary exhibition gallery was left unexcavated. He observed, "We hate to see clients do that, because they always want storage space later. . . .To make any cuts is always difficult for architects and owners."<sup>71</sup>

Other reductions in basement storage eventually were made.

As Dan Casey explained:

It was a difficult, but carefully considered choice that has to do with priorities. . . .When there are only so many dollars and so many square feet you can build, then you have to decide how you're going to allocate those square feet. It's awfully hard to say that you're going to cut down gallery space in order to have a few more closets. . . .It's just a tremendous luxury to build new space for something as undemanding as storing wooden boxes. . . .The first [to go] are things like storage or offices because the reason for building the museum is for the art. The galleries are the interface with the public and that's always the first priority.<sup>72</sup>

Noting that there was little difference in cost of building gallery space and storage space, Casey recalled that it was Harry Parker's opinion that the primary reasons for building the facility were too important to dedicate space to empty crate storage. After much discussion, it was decided that supplementing the museum's storage with off-site storage would be the best solution to keep the museum construction within budget, yet not sacrifice more important spaces.<sup>73</sup> Financial considerations ultimately placed storage at a lower level of priority than other museum services.

Following the schematic phase of design and the determination of the Guaranteed Maximum Price, an analysis of square footage allotments was compiled that compared the space requirements given in the Program and Space Study with the actual square footage achieved in the schematic design. In this area analysis of the schematic phase, changes in the

service program are noted that involved the reduction of permanent crate storage and file storage. As a result, permanent crate storage was to be handled off-site and some of the file storage was distributed throughout the administration and curatorial offices.<sup>74</sup>

The area analysis of the schematic phase indicates that the only substantial cuts were made in the service program that included workshops, general storage and receiving, reducing the square footage from 14,000 to 9,000. Half of the space reduction was in permanent crate storage. Even with this reduction, the service program was nearly doubled over the same space in the Fair Park facility. Office space was not cut, but was actually increased by 1500 square feet. Space increases of 1,000 square feet occurred in the museum shop and children's education, and an increase of 2,000 square feet in the restaurant and kitchen. The service program was also changed to allocate an additional 1,000 square feet of miscellaneous storage to the museum shop. The programmed space allocation for permanent collection storage of 45,000 square feet was increased by 1,500, while the 10,000 total footage allotted for temporary exhibition was reduced by 600 square feet.<sup>75</sup>

Art storage space, however, was not decreased from the original program study requirements. While published reports indicate that the museum has developed a shortage in art storage space,<sup>76</sup> this is disputed by members of the

staff, who assert instead that the art storage capacity of the vault and temporary vault has been more than ample. In addition to accommodating an accelerated pace of acquisitions for the permanent collection since the opening of the new building, the art storage area housed not only the Reves Collection prior to its installation in the new decorative arts wing, but also the Bybee Collection of American furniture.<sup>77</sup>

Undoubtedly, museum officials now wish more general storage space had been included in the new facility, and as foreseen during the schematic planning, it has been necessary for the museum to rent off-site storage. Other factors have contributed to the shortage of storage space. Many of these factors are attributable to the pressure to increase revenue for the museum. The various income-producing activities of the museum have grown far beyond the original planning data compiled in 1977. Since the museum's opening, there has been a tremendous increase in the entertainment functions to which the building is used, particularly the food service facility. These functions include not only the numerous openings accompanying each new exhibition, but also corporate cocktail parties, wedding receptions, and other social events for which the building is rented out.<sup>78</sup> While these events generate income for the museum, the housing of large tables, chairs and other entertainment-related equipment have placed an unforeseen

burden on the building's storage facilities. Compounding the storage problem is that the storage rooms are high-ceilinged areas in which vertical space is not always as efficiently utilized as it might be.

The expansion of the variety of merchandise sold in the bookstore has overburdened its programmed storage space. Even though the original service program was revised following the schematic design phase to allot an additional 1,000 square feet to the bookstore,<sup>79</sup> the bookstore lost storage space when the stairwell to the decorative arts wing was added, and the large increase in bookstore staff has also consumed storage floorspace.

The increasingly ambitious programming of exhibitions has led to an increased demand for crate storage space. For example, the concurrent scheduling of exhibitions such as the 1988 Georgia O'Keeffe retrospective and "Images of Mexico: the Contribution of Mexico to 20th Century Art," was not foreseen in the initial planning. The temporary exhibition gallery was provided so that the permanent collection would not be displaced by traveling exhibitions, as had been previously the case in the Fair Park facility. The Mexican exhibition will dislodge the permanent collection from the second level galleries for the first time since the opening of the new museum. The desire of museum officials to accommodate more exhibitions will need to be addressed in

the next building expansion, both in terms of additional exhibition and storage spaces.

Steve Nash, after working in the new museum for four years, observed that a "big plus" of the facility is "that it does work." He noted that it functioned very well, particularly in the location of freight elevators and the way in which art is handled in the basement. It is possible to service different sections of the building from this central art receiving/service level.<sup>80</sup> Due to this consolidation of art receiving, inspection and unpacking activities, daylight was sacrificed in the registrar's office so that it would be conveniently located nearby. However, it is one of the few planned offices that does not receive daylight. Unlike many museums, an obvious effort was made in the design of the Dallas Museum to ensure that staff offices were positioned along exterior walls so that they could have windows.<sup>81</sup>

The museum is equipped with state-of-the art equipment to control temperature and humidity, and to monitor security. An automated computerized system for environmental control samples 140 zones throughout the building and adjusts the building environment accordingly. Similarly, the fire detection system is sophisticated and warnings are quickly transmitted by computer. In addition, halon gas protects art storage areas, "deluge" water walls prevent fire from spreading through the galleries, and

sprinklers are located in all non-art areas.<sup>82</sup> Dan Casey was responsible for conducting the lengthy negotiations with the City of Dallas fire code officials to receive special variances for art display areas. All of these specialized building services represent an enormous improvement over the antiquated museum facility in Fair Park.

Joseph Chapman was the consultant for the computerized security system. The numerous access points and entrances to the building created special demands on building security. The number of entrances was dictated, not only for convenient access, but by building codes. Initially, as Parker acknowledged, the surveillance equipment was not adequate, and the museum suffered several instances of vandalism. Parker noted that "the security problems are not architectural," and additional cameras were installed and more security personnel were hired.<sup>83</sup>

One disadvantage of the downtown location has been the loss of free parking which museums patrons enjoyed at Fair Park. Parking charges are necessary because the proximity to downtown high-rise office buildings has resulted in competition between office workers and museum visitors for spaces in the museum parking lot. The cost of parking, combined with admission fees for special exhibitions may discourage some visitors from attending, or from making frequent visits to the museum.

One of the least satisfactory aspects of the new museum has been the size of the on-site parking lot. Originally projected to have 250 spaces,<sup>84</sup> the surface lot as completed has a total of 210 spaces, which has proven to be inadequate even during periods of average attendance to accommodate the staff, docents and visitors. During the schematic design phase, the building components were developed more horizontally on the site than originally planned, thus consuming some of the intended parking area.<sup>85</sup> Part of the parking problem also resulted from the tripling of the size of the museum staff and docents since the opening of the new facility. The staff lot on the west of the museum could not contain the overflow, so much of the visitor's lot is used by the docents and some staff. Fortunately, at least for the time being, there are other surface parking lots available on adjacent sites.

It was never planned to build a parking garage on the museum's site during the first phase of development. This was due in part to the client's desire to put as much of their financial resources into the ambitious building program for the museum facility itself, rather than undertaking the additional costs of excavation and construction of a parking garage. These costs would have been substantial--in the architects's 1982 study for expansion, it was estimated that the excavation and construction could cost as much as four million dollars, if

the area below the entire surface lot was utilized.<sup>86</sup> The on-site surface parking lot was the area planned for future expansion, which would have been an unknown variable if a decision had been made to construct a parking garage. To reinforce the garage structure adequately, and provide a proper foundation, it would be necessary to know how many stories the addition would be composed of.

The other factor was the original assumption that an adjacent off-site shared-cost parking garage would be developed. For various reasons, including the current slow-down in the Dallas economy, this has not yet transpired.<sup>87</sup>

In the meantime, a city garage has been built adjacent to the Symphony Hall, alleviating some of the demand on the museum's current lot. The unattractive appearance of this above-ground garage demonstrates the prudence of the museum trustees in fielding various proposals by area developers, and in ultimately insisting on an underground parking facility for the museum's expansion. The parking problem will be solved if current expansion plans are carried out. In preliminary planning, the new wing to the north of the present building will cover half of the current surface parking lot, with a four-level underground parking garage built beneath the new structure.<sup>88</sup>

#### Vault Art Installations

The great central vault of the Dallas Museum appears as the most distinctive feature of the restrained exterior,

and, next to the concourse, is the most dramatic interior space. Further, because of the congruence of interior and exterior volumes, even the first-time visitor can anticipate this space from the outside. The exterior form of the vault has become the immediately recognizable symbol of the museum in Dallas and is also frequently associated with representations of the Arts District.

In spite of this recognition of the memorable visual qualities of the vaulted hall, the grand scale of the 45-foot space has also been criticized for overshadowing the museum's current collection of contemporary art.<sup>89</sup> Some of the difficulties inherent in displaying art in the Great Hall can be attributed to the ambiguity of its primary function. This space ultimately has been required to satisfy several diverse needs, not all of which are completely compatible. Among these, the vault functions as: a gallery in which to display large-scale artworks, a major ceremonial entrance and signature form anchoring the western terminus of the Arts District, a significant link and orientation point for circulation through the museum, and a reception area for museum parties.

The vaulted hall has not proven to be entirely satisfactory for the entertainment activities for which it has been employed. The curved surface of the vault amplifies noises, leading to problems at receptions. This effect is common within concave structures, as even the

lower vaulted spaces of the Kimbell Museum exhibit a similar problem during receptions. The architects clearly thought of this area of the museum as primarily for art display, observing that the differing functions of galleries and entertainment facilities were essentially incompatible. It was assumed that the restaurant facility would serve for receptions.<sup>90</sup> The best solution would be to have separately designated entertainment facility, although this might seem an extravagance in a publicly-funded museum. Apparently, the new atrium entrance planned for the Phase II addition will satisfy this requirement.

As Harry Parker has noted, the inclusion of a Great Hall in the plans and its utilization as a display space for the contemporary art collection was a given factor from the beginning of the design.<sup>91</sup> While architectural considerations clearly were significant in establishing the size of the vaulted room, Dan Casey also noted that it was the architects' directive that "the contemporary galleries had to be scaled to accommodate the very largest artist's works."<sup>92</sup> Barnes recognized the necessity of designing the vaulted space to be used as a gallery:

In some museums, like the Guggenheim, and the National Gallery and a number of others, [they] have a high-ceiling space and design it so it doesn't work for art. . . . Unlike all the other halls you can think of, which are ego trips for the architect, this is designed to be used. And so that makes it vulnerable, and also useful. Vulnerable, because if [it's not utilized properly], it doesn't become a central [element] anymore.<sup>93</sup>

It was the museum staff's intention to commission a large-scale artwork to be installed in the new vaulted contemporary gallery, in addition to sculptures commissioned for the sculpture garden. Barnes recalled that the architects's early concept was for a large Calder mobile to be suspended in the vaulted hall.<sup>94</sup> This proposal is reflected in a rendering of the proposed vault's interior (fig. 176), dating from the 1978-79 period of design. An advantage to a mobile installation would have been that the flexible use of floor space would not have been hindered. However, an major underlying problem in the creation of this grand space for display of the Dallas Museum's contemporary art collection was that it was a situation of putting the cart before the horse. At the time of the architectural design, the only truly large-scale painting held by the museum was Robert Rauschenberg's Skyway. Essentially, the nature of the art installation in the vault was an uncertain factor during the design of the museum, yet the desire was stated for the future acquisition of large-scale art works. William Rubin has observed that since the construction of I.M. Pei's East Wing of the National Gallery, the tendency today in new museum construction seems to be to first create the architectural space, then commission art to fit in it.<sup>95</sup>

Subsequently, Claes Oldenburg and Sol Lewitt were commissioned to produce art for the vaulted gallery in the Dallas Museum. Claes Oldenburg collaborated with Coosje van

Bruggen to produce the Stake Hitch, which was installed in April 1984, following the opening of the museum. Barnes also worked with Oldenburg in the planning of the work, suggesting to the artist that he would like a sculpture that would tie the large vault together with the surrounding space.<sup>96</sup> The sculpture, a monumental steel stake, appears to be driven through the limestone floor of the vault, and is secured to the ceiling by a giant "rope" formed of twisted flexible ventilation ducts filled with rigid urethane foam.<sup>97</sup> The lower portion of the stake is installed in the basement and is visible through the door to the loading dock. Oldenburg is masterful in the employment of scale in his work, and the Dallas sculpture is extraordinarily successful in responding to the scale of the architectural setting.

While the Oldenburg sculpture is undeniably effective as a singular work, it is equally obvious that it is an overbearing presence in the space, completely dominating all work around it. Of even more serious consequence for the display of art in the vault, is the impracticability of removing such a large piece if a new installation is desired in the vault.<sup>98</sup> This aspect of the Oldenburg commission has subverted the original intention of both trustees and architect to have the vault function as a flexible space. Because of the expanded and more ambitious nature of the Dallas Museum's exhibition scheduling, and the need at times

for more than one space for temporary exhibitions, this inflexibility caused by the permanent installation of large-scale artwork in the vault is especially unfortunate.

A case in point was the 1986 Treasury of San Marco, Venice exhibition installation in the vault, which created a jarring juxtaposition of the museum's Oldenburg, Rauschenberg and LeWitt works with flamboyantly high-tech pyramidal display cases filled with intricately-detailed Byzantine and Medieval ecclesiastical objects. The installation itself strangely attempted to obscure the cathedral-like space of the vault, rather than make a logical connection between the objects and a seemingly natural context. Yet the installation could not conceal the totally unrelated contemporary pieces looming over the small-scaled Medieval works.

A more problematic installation of artwork at the Dallas Museum, from Barnes's viewpoint, was the Sol Lewitt wall drawing installed in 1985 in the vaulted contemporary gallery. Barnes was consulted during the consideration of the Lewitt commission and initially expressed serious reservations due to the special nature of the work. Like the Oldenburg sculpture, the resulting Lewitt commission was site-specific--it was designed only to fit the unique curved wall above the ceremonial entrance. It would not be appropriate to install it on another wall in the museum just as the Oldenburg cannot be reinstalled in the sculpture

garden. If the Lewitt is painted out, its reinstallation is not as simple a matter as hanging a painting, because the work literally has to be repainted.<sup>99</sup>

Although Barnes has often stated that he intends for his museum architecture to defer to the art contained within, the unusual nature of the Lewitt commission prompted him to point out that the architecture had its own identity which needed to be taken into consideration. Barnes's defense of the architectural integrity of the vault is of interest, and is recorded in his letter to Harry Parker, dated 21 May 1984 (see appendix G).

Following a discussion with Curator Sue Graze and Sol Lewitt, Barnes expressed his objections to the placement of a Lewitt in the vault because the painting would be directly applied to the wall, in the manner of a mural, rather than existing as a movable art object similar to the the other artworks in the vault. Barnes stated, "fixed permanent installations in the vaulted space run counter to the spirit and intention of the architecture" (appendix G). His objection was consistent with his previous intervention during the fabrication of Oldenburg's Stake Hitch to request that it be redesigned so that it would not leave large permanent holes in the floor and ceiling if a decision was ever made to remove the work from display.<sup>100</sup> Barnes observed that this might someday be practical necessity, as

the museum's staff changed and art installations might be rethought. He continued:

But equally important is the conceptual consideration--that the architecture itself has its own being, always free and disengaged from the art.

In the same spirit, I oppose a fixed wall painting that forever sets the tone of the room. The vaulted space is not a lobby which calls for fixed murals. It was designed as a gallery; for changing display. To plaster the walls with murals is all wrong (see appendix G).

Graze and Lewitt countered Barnes's objection to the wall drawing as a permanent installation by suggesting that the installation would not really be permanent, that it could easily be painted out and repainted whenever desired. Graze asserted that this process was "no different than hanging a painting above the entryway."<sup>101</sup> While Graze disputed the permanent nature of the installation, Lewitt himself had previously stated, "The wall drawing is a permanent installation, until destroyed. Once something is done it cannot be undone."<sup>102</sup> In fact, as Barnes surmised, the Lewitt has remained continuously installed since 1985.

Dan Casey gives further insight as to why the architects objected to a mural painted directly on a wall of the vault:

Just in purely spacial terms, we were always interested in the idea of the line between the [intersection of the] walls disappearing, and having that full volume as a backdrop for art.<sup>103</sup>

This description is consistent with Barnes's aesthetic notion of volumetric architecture. The volumetric form of the vaulted ceiling is that of a half-cylinder. Expressed in Barnes's concern for the integrity of the volumetric form of the vault was the realization that the intersection of one colored wall with the surrounding white walls would not enhance the understated expression of this form. The Lewitt commission, extending to the edges of the curved end wall, draws a hard line in its intersection with the vault, where previously only a subtle juncture existed in the meeting of the two white wall planes. Further, the placement of the drawing disrupted the original interplay between the open and closed white volumes of the two opposing end walls.

For these reasons, Barnes strongly objected to the installation of the wall drawing in the vault, and suggested instead an alternative placement of the work in the concourse. He further expressed concern and suggestions for the selection of a drawing design that would be less detrimental to the architecture (see appendix G). The curators and artist did not think that an alternate location would be prominent enough, and the drawing was ultimately installed in the vault.<sup>104</sup> While the Lewitt installation bears no resemblance to the simple line drawings Barnes suggested as models in his letter, the architect expressed no major dissatisfaction with the final installation,

observing that the washes were more acceptable than he initially anticipated because of their transparency.<sup>105</sup>

The Lewitt was an acquisition that was obviously prestigious and technically cumbersome enough to be considered as a long-term installation. Major commissioned works such as the Lewitt and Oldenburg have a strong impact on the architecture, and the museum architect should be consulted to ensure that the architectural concept is protected. As Barnes noted, "The architecture has done a great deal to defer to the collection. But the architecture also is part of the collection, and as such should also be respected" (see appendix G).

Now that the vault is filled with the contemporary collection, it is the Oldenburg and the Lewitt which dominate the other works. Prior to their installation, the vault acted as a high white ceiling which opened up above the visitor's peripheral view. The ambiguity of the height of this space was an advantage, in that it could accommodate both large and smaller works, as can be seen in an original installation view (fig. 219), in which the Rauschenberg figured prominently, yet a more residential-scaled David Smith sculpture and smaller paintings were also included more successfully than they can be now. The "shrinking" effect on these modestly-scaled works, upon which Arthur Drexler has commented, became pronounced following the installation of the Oldenburg commission.<sup>106</sup> The

Rauschenberg painting lost the impact it had in the original installation, and had to be rehung off-center so it could have an unobscured view. The Oldenburg sculpture literally "ties" itself to ceiling and floor, admirably filling the space, but at the same time, heightening one's awareness of the height of the space through its attachment to the ceiling. Parker himself characterized the current installation in the vault as "a blunder--we're left with the Oldenburg and the Lewitt dominating [the space]."<sup>107</sup>

Rather than being viewed as a difficult space, however, it should also be recognized that the vault provides the museum with great potential for future contemporary acquisitions. Even though the museum's spaces of the Great Hall and concourse have been criticized for their monumentality, these spaces have made it possible for the museum to display such large-scale works such as Pat Steir's The Brueghel Series (A Vanitas of Style), and Vernon Fisher's Lost for Words. Fisher choreographed his installation to respond to the different levels in the concourse, likening them to "natural resting places, like eddies in rivers."<sup>108</sup>

It has been frequently observed that today's contemporary art keeps growing in size, and that many of today's museums simply were not designed to accommodate these enormous works.<sup>109</sup> The contemporary galleries of the Dallas Museum, together with its sculpture garden, were

designed to support an extraordinary range in size and diversity of art. Since the recent dominant acquisitions for the vault have been large-scaled pieces, this trend needs to be pursued if a balanced installation is desired. As Sue Graze stated, "We never intended the Oldenburg to outscale everything, but to work within this space. Now slowly we will develop a group of works that we commission or purchase especially with this space in mind."<sup>110</sup> Undoubtedly, future curators at the museum will be thankful that the museum has this capacity for large-scale paintings and sculpture.

#### The Museum and the Arts District

Because the museum was the first major arts organization to build a new facility in the downtown core, as recommended in the Carr/Lynch report, Barnes had a major opportunity in the selection of the museum's site and the development of its design to pinpoint where the Arts District would take shape. He clearly picked the best of all possible sites for the museum in the area, one that ensured easy accessibility. His impact on the early development of the district has not been adequately assessed, yet the concept of Flora Street becoming the tree-lined center of the district was established in his early master plans (figs. 141-143, 198). The creation of a major museum entrance facing down Flora toward Pearl Street, the widening and straightening of Flora, the centerline of Flora

taken from the centerline of the museum's vault, all of these developments strengthened the initial Arts District concept and gave it a tangible place in the city. The subsequent progress of the hoped-for revitalization of this area of the city is obvious when aerial photographs dating from the 1970s are compared with today's high-rise developments along the Woodall-Rogers corridor.

Some of the architects' recommendations were not carried out. Several of the streets in the district were never straightened, and Harwood was eventually changed into a one-way street, contrary to their wishes (see appendix D). However, Barnes's design ensured that the museum would assume a major visual presence in any subsequent development along Flora Street. With the Symphony Hall nearing completion, the Trammell Crow Center arts pavilions abutting Flora, and the Dallas Museum of Art providing the terminus to Flora, enough basic construction has been completed to make the Arts District concept tangible, and the street will fill in with more development as the Dallas real estate market picks up again. However, the original concept for the Arts District has changed, and it may ultimately only accommodate major arts facilities and office buildings. The District has been described as "more of a office park with an arts theme than a cultural district."<sup>111</sup> The initial idea promoted the district as a haven for artists and small arts organizations, however, land costs have since escalated

from \$20 per square foot in 1977 to \$200 a square foot.

David Dillon observed:

This remains one of the crueler ironies of the Art District's evolution. The original Carr-Lynch report urged the city to bank land in the district in order to prevent small arts groups from being squeezed out. Loathe to compete with private enterprise, the city refused.<sup>112</sup>

The few artists who managed to find studio space on the edge of the district five years ago have since been displaced, and the exorbitant land costs have made it impossible for other artists to afford space in the district.<sup>113</sup> Dillon suggests that one solution might be for arts groups to ally themselves with private developers in mixed-use projects, an idea successfully implemented in other cities. Otherwise, "the Dallas Arts District will likely be more institutional and corporate than the public was initially led to believe."<sup>114</sup>

So far height limitations around the museum's Flora Street entrance have been respected, particularly in the sympathetic arts pavilion constructed as part of the Trammell Crow Center. The museum has purchased the frontage on both sides of Flora near Harwood Street to control future development near the museum entrance. The City of Dallas passed an ordinance to control development in the Arts District, but has already violated the spirit of it by building a large parking garage across from Symphony Hall. While the ordinance specified underground or screened

parking,<sup>115</sup> the unattractive above-ground garage with its exposed concrete footings for a future office tower and a trivialized barrel vault motif detracts both from the new Symphony Hall and the vista down Flora Street.

#### Future Off-site Development

As discussed in Chapter III, Barnes had early voiced his concern that the museum might be "drowned" by surrounding development or competition with the nearby freeway. He liked the museum's proposed Ross Avenue site because the Woodall-Rogers freeway ring was depressed in that area, commenting:

There are some things an architect can do and some things he can't do. There is no way to overcome the dark ambience of a site low down overpowered by freeways or high buildings. Here, on this rise, there is open sky, and the towers of Dallas at arm's length (see appendix C).

In recent years, it appeared that Barnes's fears regarding nearby high-rise development might come to pass. Of all neighboring developments, there is no site that should be of more concern to the long-term future of the Dallas Museum of Art than the property immediately to the west of the museum, which is bordered by Ross, St. Paul, Akard and Woodall-Rogers. The potential damage to the museum from an overly-dense development on this site is enormous and irreparable if action is not taken by the museum at the appropriate time to safeguard its interests. The land is currently occupied by the low-rise Southwestern

Life Insurance building, a parking garage, and a surface parking lot. The property was largely ignored by the museum until Lincoln Property Company announced a massive development project for the site in December 1984, designed by the New York architectural firm of Kohn Pedersen Fox.

David Dillon, architectural critic for the Dallas Morning News, first raised public alarm in July 1985 over the potential adverse effects of this development.<sup>116</sup> Dillon reported on William Whyte's shadow studies which indicated that just the 100-foot-high base of the project would eliminate midday sun from reaching the sculpture garden during the months of October to March. The rest of Lincoln Properties's proposed development consisted of three massive forty-five and fifty-story towers, a twenty-story hotel, retail and restaurant facilities. The even larger shadows cast by the office towers could stretch as far as two blocks away and would block daylight from the museum's courtyards and skylit galleries.<sup>117</sup> Barnes expressed deep concern in particular over the base of the structure:

That bustle [base] along St. Paul will mean no sun at all for much of the winter. Worse than that, it introduces an enormous break in scale. There's no transition at all between the museum and the surrounding buildings.<sup>118</sup>

Dillon, in some of the strongest criticism he has ever leveled at a Dallas architectural design, added his comments on the project's effect on the street and surrounding neighborhood:

The base of the proposed project, in addition to casting large shadows, overwhelms the street and treats the art museum as though it doesn't exist. It is a scaleless

affront to traditional values of urban design, more surprising in that it comes from a firm with a deserved national reputation for sensitive and thoughtful responses to difficult downtown sites.<sup>119</sup>

In token response to belated pressure from the museum, the project was redesigned so that the base, which was originally twice the height of the museum's vault, was reduced to "two or three" stories in height.<sup>120</sup> However, the overall site plan remained unchanged, with two of the three towers sited hard on St. Paul Street, with no setbacks or any means of relieving the crushing proximity to the sculpture garden. The staggered position of the central tower made it difficult to determine whether any sun would be able to pass through between the towers. Whyte noted that "the positioning of the towers is crucial."<sup>121</sup> A plan that would set all three towers back on the site and separate them with more generous spacing would greatly reduce the oppressive bulk on the museum's side, and allow more light to penetrate to the museum. The museum, as a significant cultural facility within the city, should not have to settle for less of a compromise than this.

When it appeared that the temporary slump in office construction had stalled the project, a subsequent plan was proposed by the developer to utilize the property as a downtown shopping mall combined with a hotel and office development. This proposal is one of several considered in a competition for a city subsidy.<sup>122</sup> The addition of retail space to the Lincoln Properties proposal was not an

improvement, as the massive towers were retained for the connected office complex. Particularly, if city funding were to be used for this kind of development, the City of Dallas should reasonably expect a sympathetic development next to the taxpayer-funded museum. The responsibility for monitoring the appropriateness of the design rests with museum and city officials. While the museum's architect can act in an advisory capacity, pressure needs to be exerted on the local level, either from the museum or the City of Dallas to have the most influence on the developer. Even after Dillon's article appeared, only minimal changes were made to the Lincoln Properties proposal in response to museum and public pressure. This was surely due to the lateness of the response by all concerned parties. The time to have a significant impact on development plans is when the project is in the preliminary design stages.

The developer, Lincoln Property Company, was forced to give this property west of the museum back to its lenders in January 1989.<sup>123</sup> This change in ownership leaves the future development of this critical site in doubt, but gives museum officials the opportunity to begin planning discussions anew with the next developer. Although future development of this site may not occur for several more years, the museum needs to closely monitor future planning, and get involved very early in the design process so that the public interest in this public amenity can be protected. It would be

unfortunate if daylight, so integral to the atmosphere in the galleries and the beauty of the sculpture garden, is impeded by the gigantism of a nearby development.

#### The Future of the Museum: A New Partnership

Interesting questions relating to the nature of architecture and art display are posed by Rick Brettell's new approach to the directorship of the Dallas Museum of Art. In several ways, his goals for the institution and their expression in the building and gallery design contrast with the original programming that shaped the structure. The forging of a new collaboration between Brettell as director and Barnes as museum architect could prove to be a fascinating and challenging experience for both men.

In one example of Brettell's fresh conception of the museum's program, he commented that his mission would be

. . .to create an environment in which the permanent collection is as exciting and renewing as the exhibitions. In this place, one has to build the collection and then play with it. But you can't put the collection on one side of the museum and the exhibitions on the other and expect things to work. Both sides of the street have to mix.<sup>124</sup>

This statement obviously alludes to the physical division created by the spine concourse that was employed to separate the facility into an active side and a contemplative side, in response to Harry Parker's program directive. The Dallas plan reflects Parker's role as heir to Thomas Hoving's "legacy" of the 1970s--the institutionalized blockbuster

exhibition--which required a separate facility so as not to intrude on the permanent collection. In the opinion of some museum professionals, this polarization oversimplifies the conflicting roles of today's museums,<sup>125</sup> and a reassessment of its application in Dallas would no doubt come eventually.

The original installation of the permanent collection in serene white space had remained basically unchanged for five years. Brettell's stated desire is to rotate the permanent collection in the "permanent" space, creating temporary installations rather than long-term ones. This new approach to the "permanent" galleries seems to demand a different sort of flexibility from the architectural setting in contrast to the custom-designed original installation developed by Barnes and Steve Nash, in which certain areas of the floor were planned around specific paintings or groupings of paintings. Barnes's initial response to the rotating installation concept that Brettell desires is to propose that he may need to create a different architectural envelope in the exhibition spaces of the new wing. Barnes currently thinks that a more flexible shell containing "tougher space" may be required to house the varied installations that Brettell envisions.<sup>126</sup>

Brettell has expressed reservations about the "homogenized" appearance of the galleries, indicating that he desires a more dramatic approach:

There's a sense of it all being so beautiful and uniform and in such good taste that an observer has to be very aware to notice certain objects.<sup>127</sup>

It is to be hoped that director and architect will be able to resolve any conflict over aesthetics without undermining the positive qualities of the building. The use of single, continuous, homogeneous materials is integral to the character of Barnes's architectural expression and is essentially a trademark of his personal style. For example, simple details such as walls unified in color, the continuous expanses of carpeting on the gallery floors, and continuous limestone borders running along the base of walls, enhance spacial flow and support Barnes's visualization of a "great river of galleries" terracing down to the Great Hall. But Barnes's "style" was developed to serve more than as the statement of his particular aesthetic. Many of the details in the building, such as the interior vistas, the courtyards, the flow of materials and single colors, were consciously developed to both encourage circulation within the galleries and to keep visitors oriented within very large gallery floors.

Brettell's expressed interest in adding more color to the installations<sup>128</sup> may bring the museum back full-circle to the approach used in the Fair Park facility, indicating that cycles of taste affect museums as much as the art they display. There is no consensus among art professionals regarding the use of color in installations, as this is

primarily a subjective determination. Barnes's own preference is to create supporting space with neutral background colors. Barnes, whose architectural signature is the creation of smooth spacial flow, thinks that the insertion of strong color can undermine this effect-- "chopping up the space," as he terms it.<sup>129</sup> His characteristic interiors are comprised of white walls, or a very subtle progression of delicate tonal variations, so that changes in color are nearly imperceptible, rather than overt and sudden. Barnes, who studied painting before he turned to architecture, observes that strong background color can "kill" or deaden the effect of colors in the painting itself.<sup>130</sup> Barnes's preference for white or off-white walls is due to his understanding that the quality of reflected light is the product of the colors and materials in a room, and he thinks that white rooms and floors reflect the clearest light to enhance paintings and sculpture.<sup>131</sup>

While some of the concepts held by Brettell and Barnes seem at opposite ends of the spectrum, undoubtedly a compromise will be ultimately be achieved. Barnes is noted as a sensitive museum designer, very responsive to the requests of his clients. This observation has been made by several museum directors who have collaborated with Barnes on varied museum designs, including Martin Friedman, Harry Parker, and Richard Schneiderman.<sup>132</sup> For his part, Brettell's new approach to the Dallas Museum should be

invigorating, which is important to the continued growth of the institution and its constituency. It will be important for Barnes to respond with fresh solutions to the changing demands of a new museum program and art installations.

The development of the design concepts for the Dallas Museum of Art and their expression in the completed museum building reflects the input not only of the architect, Edward Barnes, but also his close collaboration with the dedicated Building Committee Trustees and former Director Harry Parker. Key personnel in Barnes's firm also contributed significantly to the completion of the project. Daniel Casey provided continuity and meticulous coordination of project details by serving as Project Architect for the duration of planning, design and construction. John Lee was Associate-in-charge during the schematic phase of design, and Alistair Bevington was Associate-in-charge during design development and construction. All three architects still work with Barnes. Lee and Bevington are now partners, and Casey is an Associate in Barnes's firm, recently re-named Edward Larrabee Barnes/John M.Y. Lee & Partners.

Edward Barnes's final design for the Dallas Museum of Art represents not only the fulfillment of the initial concepts and program requirements, but the completion of a civic facility that became a significant catalyst for urban redevelopment in Dallas and a manifestation of public commitment to the arts in that city.

NOTES FOR CHAPTER V

<sup>1</sup>Douglas C. McGill, "Institutions' Expansion Plans Inch Ahead," New York Times, 18 October 1987, 28(E).

<sup>2</sup>See Barbaralee Diamonstein's interview with Edward Barnes, American Architecture Now (New York: Rizzoli, 1980), 27.

<sup>3</sup>Daniel Casey, telephone interview by author, 17 March 1989, tape recording.

<sup>4</sup>David Van Zanten, "Architectural Composition at the Ecole des Beaux-Arts from Charles Percier to Charles Garnier," from The Architecture of the Ecole des Beaux-Arts (New York: Museum of Modern Art, 1977), 159.

<sup>5</sup>Daniel Casey, telephone interview by author, 17 March 1989.

<sup>6</sup>Janet Kutner, "Talking Pictures," Dallas Morning News, 5 February 1987, 5(C). Edward Barnes, interview by author, 10 September 1988, Minneapolis, tape recording.

<sup>7</sup>Daniel Casey, telephone interview by author, 17 March 1989.

<sup>8</sup>Daniel Casey, interview by author, 27 March 1986, New York City, tape recording.

<sup>9</sup>Edward Barnes, telephone interview by author, 15 March 1989, tape recording.

<sup>10</sup>Neil Levine, "The Competition for the Grand Prix in 1824," from The Beaux-Arts and 19th-Century French Architecture (Cambridge: MIT Press, 1982), 95.

<sup>11</sup>Van Zanten, "Architectural Composition at the Ecole des Beaux-Arts from Charles Percier to Charles Garnier," The Architecture of the Ecole des Beaux-Arts, 118.

<sup>12</sup>Ibid.

<sup>13</sup>Edward Barnes, interview by author, 27 March 1986, New York City, tape recording.

<sup>14</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>15</sup>Peter Fergusson, Architecture of Solitude: Cistercian Abbeys in Twelfth-Century England (Princeton: Princeton University Press, 1984), 13.

<sup>16</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>17</sup>Ibid. Dan Casey also noted that the vernacular inspiration for Le Corbusier's slot windows was derived from the "arrow loops" common in ancient fortified structures. Casey, telephone interview, 17 March 1989.

<sup>18</sup>Barnes discussed the Mykonos connection in an interview with the author, 27 March 1986, New York City. See also John Morris Dixon, "Art Oasis," Progressive Architecture 65 (April 1984): 134.

<sup>19</sup>Edward Barnes, interview by author, 10 September 1988, Minneapolis, tape recording, and telephone interview with author, 15 March 1989, tape recording.

<sup>20</sup>Wolf Von Eckardt, "Nine Lively Acres Downtown," Time, 13 February 1984, 57.

<sup>21</sup>Tim Allis, "Modern Masterpiece," D Magazine 11 (January 1984): 108.

<sup>22</sup>Patricia C. Johnson, Houston Chronicle, 29 January 1984.

<sup>23</sup>David Dillon, "Severe Exterior Vs. Warm Interior," Dallas Morning News, 29 January 1984, 4(C).

<sup>24</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>25</sup>Arthur Drexler, "Response," from Building the New Museum, (New York: The Architectural League of New York, 1986), 57.

<sup>26</sup>Mies van der Rohe, "1943: A Museum for a Small City," from Philip C. Johnson, Mies van der Rohe (New York: Museum of Modern Art, 1978), 202.

<sup>27</sup>Ibid., 160, see also illustrations, 161-164.

<sup>28</sup>Ibid., 202.

<sup>29</sup>Barnes quoted by David Dillon, "Severe Exterior Vs. Warm Interior," 4(C).

<sup>30</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>31</sup>Daniel Casey, telephone interview, 17 March 1989.

<sup>32</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>33</sup>Barnes notes, however, that the courtyard for the Hammer Museum was included at the client's request. Barnes, interview by author, 10 September 1988, Minneapolis.

<sup>34</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>35</sup>Ibid.

<sup>36</sup>Ibid.

<sup>37</sup>Daniel Casey, telephone interview, 17 March 1989.

<sup>38</sup>Edward Barnes, telephone interview, 15 March 1989.

<sup>39</sup>Papademetriou is Contributing Editor to Texas Architect. See Peter Papademetriou, "Dallas Museum of Art: Extending the Modernist Tradition of E. L. Barnes," Texas Architect 35 (January-February 1985): 46. Contrary to Papademetriou's assertion, there is a long rectangular window overlooking the spine in the uppermost gallery, providing a reference to the spine for orientation. The large window in the African gallery also orients visitors to the north side of the building.

<sup>40</sup>Daniel Casey, telephone interview, 17 March 1989.

<sup>41</sup>Ibid.

<sup>42</sup>George Charlton to Harry Parker, memorandum, "Notes on Trip to Scaife Gallery," 28 March 1977, 1.

<sup>43</sup>Edward Barnes interviewed by Masahiro Horiuchi, "Space Music Composed by Geometrical Forms," Space Design 250 (July 1985): 90.

<sup>44</sup>Steve Nash, interview by author, 9 June 1988, Dallas, Texas, tape recording.

<sup>45</sup>John Lunsford, interview by author, 2 August 1985, Dallas, Texas. For a discussion of daylighting as a technical issue in recent museum design, see Barbara Knox, "Lighting Design and the Life of Museums," Architecture 76 (February 1987): 58-59.

<sup>46</sup>Steve Nash, interview by author, 9 June 1988.

<sup>47</sup>John Lunsford, interview by author, 2 August 1985.

<sup>48</sup>Steve Nash, interview by author, 9 June 1988.

<sup>49</sup>Ibid.

<sup>50</sup>Ibid.

<sup>51</sup>Edward Barnes, interviews with author, 10 September 1988, Minneapolis, and 15 March 1989, telephone.

<sup>52</sup>Steve Nash, interview by author, 9 June 1988.

<sup>53</sup>Edward Barnes, interview by author, 10 September 1988, Minneapolis. See also Barnes interview in "Space Music composed by Geometrical Forms," Space Design 250 (July 1985): 89.

<sup>54</sup>The commissions are illustrated and discussed by Anne R. Bromberg, Dallas Museum of Art: Selected Works (Dallas: Dallas Museum of Art, 1983), 194-197. After consulting with Barnes, Kelly rejected a tall vertical piece for the garden and instead produced the folded stainless steel form. See Janet Kutner, "Sculpture Made to Order," Dallas Morning News, 24 September 1983, 1, 13(C).

<sup>55</sup>Steve Nash, interview by author, 9 June 1988.

<sup>56</sup>George Charlton described the trustees's desire for an "elegant house", interview by author, 2 August 1985, Dallas, Texas.

<sup>57</sup>Harry Parker, interview by author, 29 July 1985, Dallas, Texas, tape recording.

<sup>58</sup>Ibid.

<sup>59</sup>Harry Parker, interview by author, 26 July 1985, Dallas, Texas, tape recording.

<sup>60</sup>Barney Delabano, interview by author, 23 July 1985, Dallas, Texas, tape recording.

<sup>61</sup>Dillon, "Severe Exterior Vs. Warm Interior," 4(C).

<sup>62</sup>See "The New Dallas Museum of Fine Arts: Program and Space Study," 15 September 1977, 22, 24, office of the Director, Dallas Museum of Art, Dallas, Texas.

<sup>63</sup>See Board of Trustees minutes, 8 March 1979, 2. Following the completion of the new museum, Darren Dennis was given the task of measuring the square footage throughout the building, which also confirmed that the given space requirements had been satisfied.

<sup>64</sup>Janet Kutner, "On Its Anniversary, DMA Can Celebrate," Dallas Morning News 27 January 1985, 8(C).

<sup>65</sup>The author particularly wishes to thank Phil Jones, Acting Director, Division of Cultural Affairs, Department of Parks and Recreation, Dallas, and Gloria Martinez, Administrative Assistant, for their generous assistance in providing personnel summary listings for the Dallas Museum of Art. Information regarding staff growth was also provided by Jean Falwell, Director of Finance, and Melissa Berry, Associate Museum Educator, Dallas Museum of Art.

<sup>66</sup>Study Committee for a New Museum, 14 March 1977, "Five-year projection of income and expenses," 5. The study did not include the proposed photography and conservation departments.

<sup>67</sup>By September 1977, when the Program and Space Study was completed, a revised projection increased the added staff from twenty-seven to twenty-nine, and it was noted that this projection would increase museum staff from 43 to 72. See "Program and Space Study," Dallas Museum of Fine Arts, 15 September 1977, Appendix D, 81, "Projection of Staffing Requirements of the New Museum."

<sup>68</sup>"Program and Space Study," 15 September 1977, 1.

<sup>69</sup>See Building Committee minutes, 9 October 1986, 1; 28 September 1987, 1; and Executive Committee minutes, 16 April 1987, 1.

<sup>70</sup>Librarian Amy Schaffner, interview by author, 9 June 1988, Dallas, Texas.

<sup>71</sup>Daniel Casey, telephone interview, 10 March 1989.

<sup>72</sup>Daniel Casey, telephone interview, 17 March 1989.

<sup>73</sup>Ibid.

<sup>74</sup>"Dallas Museum of Fine Arts: Area Analysis of Schematic Phase," n.d., Construction Documentation files, Dallas Museum of Art. Project Architect Dan Casey indicated that he compiled this chart at Building Committee member Melba Greenlee's request to demonstrate how close the architects came to fulfilling the program goals. He recalled that the chart was compiled following the determination of Guaranteed Maximum Price. Dan Casey, New York, to author, Fort Worth, 29 March 1989.

<sup>75</sup>"Dallas Museum of Fine Arts: Area Analysis of Schematic Phase," n.d., Construction Documentation files, Dallas Museum of Art.

<sup>76</sup>See Ydoyga, Ray, "Mending Loose Ends: DMA Users' Report Card," Texas Architect 35 (January-February 1985), 55, and Janet Kutner, "DMA Members Told of Need for Expansion," Dallas Morning News, 21 May 1988, 7(C).

<sup>77</sup>Author's conversations with Steve Nash, 9 June 1988, Dallas, Texas, and Ginger Geyer, 14 April 1988, Fort Worth, Texas.

<sup>78</sup>Janet Kutner, "On Its Anniversary, DMA Can Celebrate," 27 January 1985, 8(C).

<sup>79</sup>"Area Analysis of Schematic Phase," see item A.

<sup>80</sup>Steve Nash, interview by author, 9 June 1988.

<sup>81</sup>For a review of research pertaining to the psychological impact of daylighting design, see Jacqueline C. Vischer, "The Psychology of Daylighting," Architecture 76 (June 1987): 109-111.

<sup>82</sup>The specialized preservation features of the new building are detailed by Jane Albritton, "Preserving Art for the People," American Way (January 1984): 120-125.

<sup>83</sup>Ibid.

<sup>84</sup>"DMFA Program and Space Study," 15 September 1977, 3.

<sup>85</sup>See Chapter IV to compare June and September 1978 plans (figs. 160-163).

<sup>86</sup>Daniel T. Casey to George Charlton, 12 November 1981, 1, Construction correspondence files, office of the Director, Dallas Museum of Art.

<sup>87</sup>See discussion in Chapter IV regarding development of proposals for on-site and shared use of off-site parking garages.

<sup>88</sup>See Building Committee minutes, 8 November 1988, 2.

<sup>89</sup>As in Arthur Drexler's observation: Big pictures do not necessarily look better in very big rooms. Quite often they look best in small rooms where the sheer concentration of space forces the energy of the picture to come at you full blast. This is the case with Jackson Pollock, and it is the case with a

number of pictures hanging in Barnes' glorious barrel-vaulted hall in Dallas. Some of these large paintings seem to have shrunk to the size of postage stamps. Arthur Drexler, "Response," from Building the New Museum (New York: The Architectural League of New York, 1986), 57.

<sup>90</sup>Edward Barnes and Dan Casey, interviews by author, 27 March 1986, New York City.

<sup>91</sup>Harry Parker, interview by author, 26 July 1985. Also see his comments in Chapter III.

<sup>92</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>93</sup>Edward Barnes, interview by author, 27 March 1986.

<sup>94</sup>Ibid.

<sup>95</sup>William Rubin has observed that since the construction of I.M. Pei's East Wing of the National Gallery, the tendency today in new museum construction seems to be to first create the architectural space, then commission art to fit in it. William Rubin is the former Director of the Department of Painting and Sculpture at the Museum of Modern Art. See Rubin, "When Museums Overpower Their Own Art," New York Times, 12 April 1987, 31(H).

<sup>96</sup>See Janet Kutner, "DMA's Bold New 'Stake': Oldenburg Work Fills Main Gallery," Dallas Morning News, 29 April 1984, 1, 6(C). Oldenburg related that an earlier concept for the sculpture involved three nails driven through the ceiling of the vault.

<sup>97</sup>See Alfred G. Lippincott to Sue Graze, 27 June 1984, 1-2, Oldenburg Stake Hitch object file, Dallas Museum of Art. This letter details materials, construction and directions for installation, removal and reinstallation of the sculpture.

<sup>98</sup>Modifications were made at Barnes's request during the fabrication of the piece so that it is possible to remove the sculpture without leaving large permanent holes in the vault and floor. A cradle was also fabricated to hold the deinstalled sculpture. Instructions for deinstallation of the piece, as previously noted, are included in the Oldenburg Stake Hitch object file, Dallas Museum of Art. Even so, removing and storing the huge work would be problematic.

<sup>99</sup>Lewitt's wall drawings, executed by his assistants from his plans, are applied directly to the selected wall. When the drawing is deinstalled, it is painted over. To

reinstall the drawing, a trained individual works from the original plans to repaint the drawing on the wall. As described in the museum's Bulletin, the original installation "required an elaborate construction scaffold and a full week in order for the artist and a team of four to execute [it]." See Dallas Museum of Art Bulletin (Spring 1986): 6.

<sup>100</sup>Sue Graze to Harry S. Parker III, 16 February 1984, memo re: Oldenburg, Oldenburg Stake Hitch object file.

<sup>101</sup>Sue Graze to Harry Parker and Steve Nash, 25 May 1984, memo re: Sol Lewitt proposal, Lewitt object file, Dallas Museum of Art. To generate support for the Lewitt commission, letters from gallery dealers were also solicited, which reiterated the idea that the work would not necessarily be a permanent installation. See John Weber's letter to Sue Grange [sic], 13 September 1984, Lewitt object file. However, Barnes's response to the suggestion that the Lewitt would be easily painted out and repainted by museum staff, was, "I wonder"--suggesting his perception that the painting, once installed, would indeed become a permanent fixture of the vault. See Edward Barnes, New York, to Harry Parker, Dallas, 21 May 1984, 1 (appendix G).

<sup>102</sup>Lewitt's quote appeared in the Dallas Museum of Art Bulletin (Summer 1985): 2. Lewitt has also stated, "The difference between temporary and permanent is unclear." Interview in Sol Lewitt Wall Drawings 1968-1984 (Stedelijk Museum, 1984), 21.

<sup>103</sup>Daniel Casey, interview by author, 27 March 1986.

<sup>104</sup>Steve Nash, interview by author, 9 June 1988, Sue Graze to Parker and Nash, 25 May 1984, 1.

<sup>105</sup>Edward Barnes, interview by author, 10 September 1988.

<sup>106</sup>Drexler, Building the New Museum, 57.

<sup>107</sup>Harry Parker, interview by author, 26 July 1985.

<sup>108</sup>Fisher quoted by Ann Jarmusch, "'Lost for Words' an Eloquent Show," Dallas Times Herald, 23 January 1988, 6(G). See also Dallas Museum of Art Bulletin (Fall 1986): 27, "Concentrations 14: Pat Steir, November 1 [1986]--January 4 [1987]."

<sup>109</sup>See Robert Hughes, "Discussion," Building the New Museum, 31.

<sup>110</sup>Graze quoted by Janet Kutner, "DMA's Bold New Stake," 6(C).

<sup>111</sup>David Dillon, "Is There a Place for the Arts in the Arts District?" Dallas Morning News, 13 October 1985, 1(C).

<sup>112</sup>David Dillon, "The Dallas Arts District: Can It Deliver?" Texas Architect 35 (January/February 1985): 59.

<sup>113</sup>Bill Marvel, "An Arts District Without Artists?" Dallas Morning News, 3 April 1988, 1, 10(C).

<sup>114</sup>Dillon, "The Dallas Arts District," 59.

<sup>115</sup>Ibid., 58.

<sup>116</sup>See Dillon's architecture commentary, "Can Sculpture Keep Its Place in the Sun?--Giant Skyscrapers Threaten to Overshadow DMA Garden," Dallas Morning News, 2 July 1985, 1-2(E).

<sup>117</sup>Ibid., 1(E). See illustration of shadow study 2(E).

<sup>118</sup>Ibid., 1(E).

<sup>119</sup>Ibid., 2(E).

<sup>120</sup>A. Eugene Kohn, lecture at Dallas Museum of Art, Dallas, Texas, 17 July 1986. Dan Casey recalled that Kohn Pedersen Fox's plans were well advanced before Barnes's office was informed. Telephone conversation with author, 30 May 1986. Board minutes do not indicate that Barnes was authorized to negotiate with Lincoln Property's architect until February 1985, and these negotiations primarily concerned the footbridge that Lincoln Property wished to use to connect the center office complex to the museum. See Building Committee minutes, 19 February 1985, 3-4.

<sup>121</sup>Dillon, "Can Sculpture Keep Its Place?" 2(E).

<sup>122</sup>See Steve Brown, "West End Deal May Not Happen," Dallas Morning News, 18 March 1988, 1, 2(D); Bronson Harvard, "Aggressive Developers Vie for Mall," The Downtown Dallas News, 1-7 February 1988, 1, 4; and David Dillon, "Shopping for a Downtown Mall," Dallas Morning News, 4 December 1988, 1, 8-9(C). As of this writing, none of the proposals has yet been selected by the City of Dallas for city funding. See Dillon, "Wrangling Continues Over Downtown Mall," Dallas Morning News, 4 December 1988, 1, 12-13(A).

<sup>123</sup>Sally Giddens, "Heads Will Roll at Lincoln," D Magazine 16 (February 1989): 30.

<sup>124</sup>Rick Brettell quoted by Janet Kutner, "Director Seems Certain to Make His Presence Felt in Dallas," Dallas Morning News, 14 February 1988, 7(C). Brettell's desire to consolidate, not separate, the temporary exhibition gallery and the permanent collection is reflected in the July 1989 expansion studies (figs. 207-208). In these plans, the temporary exhibition gallery is incorporated into the new Hamon Wing, two floors below the 4th level permanent collection gallery. The entire 2-level south wing is converted from temporary exhibition and restaurant to house the children's educational facilities, including a gallery, library, and studio space.

<sup>125</sup>Michael Conforti, "Hoving's Legacy Reconsidered," Art in America 74 (June 1986): 21, 23.

<sup>126</sup>Edward Barnes, interview by author, 27 February 1989, Dallas, Texas. As seen in the July 1989 expansion studies (figs. 207-208), Barnes plans to continue the stairs, courtyards and projected stairwells originally planned in the 1982 gallery level study (fig. 202). The space he provides for temporary exhibition is a simple, flexible, open room with four supporting columns.

<sup>127</sup>Brettell quoted by Janet Kutner, "Director Seems Certain to Make His Presence Felt," 7(C).

<sup>128</sup>Ibid.

<sup>129</sup>Edward Barnes, interview by author, 27 February 1989.

<sup>130</sup>Ibid.

<sup>131</sup>Ibid.

<sup>132</sup>Harry Parker, interviews by author, 26 and 29 July 1985, Dallas, Texas; Martin Friedman, interview by author, 8 September 1988, Minneapolis; Richard Schneiderman, telephone interview by author, 22 November 1988. See also Director's Statements by Martin Friedman, John R. Lane, Harry S. Parker, and George S. Bolge in Edward Larrabee Barnes Museum Designs (Katonah, NY: The Katonah Gallery, 1987), 30-31.