A FINE ARTS CENTER FOR BOZEMAN, MONTANA

PART I

Undergraduate Thesis in Architectural Design

By

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Bozeman, Montana

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NEED
Bozeman is one of the fastest growing towns in Montana. The cultural facilities available to the people of Bozeman haven't kept pace with this growth. Montana State University is a tremendous source of cultural wealth; however, this cultural wealth is primarily available only to the students and faculty. The university is, in fact, a community in itself.

If the city of Bozeman is ever to emerge with a cultural identity of its own, it is going to be necessary to organize its cultural resources and consolidate many of them into a well-organized physical core. Many of the citizens of Bozeman who have a desire to take part in such activities as painting, sculpting, ceramics, and theatre arts do not like the idea of having to turn to the university to do so. They feel that they would be intruding into areas where they don't belong, or simply wouldn't feel comfortable. The fact that these feeling exist was made very clear to me in a discussion with Ray Campeau who is the organizer and director of the Ketterer Art Gallery in Bozeman.

The Ketterer Gallery was started in April of 1969, and is housed in a large old residence on the corner of Mendenhall and North Grand in downtown Bozeman. The upper floors are used as areas for the display and sale of pieces of art work done by regional and local artists. The basement is used as a studio for classes in painting and ceramics.
It is not possible to have many shows of work done by nationally recognized artists because the facilities at the Ketterer Gallery do not physically lend themselves to such shows. Also, insurance costs make it financially not feasible to have such displays.

There has been a very good response by the local citizens to take part in the classes in painting and ceramics made available at the studio. Ten to fifteen people take part in these classes each night of the week according to Mr. Campeau. It is these classes and the sale of art work that make it possible for the Ketterer Gallery to survive.

The Pioneer Gallery and Meat Ball Gallery are two more small private galleries which provide the citizens of Bozeman with something that they aren't getting from the university.

The live-arts theatre is another facility that is lacking in Bozeman. The Loft Theatre, which is located above the Powderhorn store in downtown Bozeman has enjoyed a great amount of success despite its poor facilities. The lighting, always an important factor in drama, is very poor. The acoustics, layout of the stage, and support facilities are also extremely poor. There is little that can be said in favor of the existing theatre.

Summer and winter recreational opportunities are drawing an ever-increasing number of visitors to the Bozeman area. The growth of a well established summer playhouse, as well as a full winter program would greatly increase the entertainment opportunities for these guests and visitors.
The Bozeman city library was built in 1904. It is now completely outdated and inadequate for the needs of the city. The American Library Association recommends that public libraries which serve cities the size of Bozeman should have collections of from 2.75 to 3.00 volumes per capita. (15,10) However, based on the Public Library Statistics, the per capita number of volumes in the Bozeman library is 1.3 volumes. (14,2) Consideration must be given to the fact that there is a tremendous resource of books at the Montana State University library. The college library does provide a great supplement of technical and reference material that the city library can't afford to provide; however, it can't supply the type of fiction and non-fiction required by the city library.

Based on the recommendations of the American Library Association, **2.0 volumes per capita** is the minimum that the Bozeman library should have. Margaret Hileman, the librarian, stated that she would like to see the present collection doubled in size to 2.6 volumes per capita. If the collection were to be doubled to that size, it would impossible to provide space within the confines of the existing building to house such a collection.

Another facility which is needed in Bozeman is community meeting rooms. At present, many local organizations do not have adequate places available to hold their meetings. Many organizations meet in the individual member's homes or in churches, even though they may be unrelated to the activities of the church itself. The fact that the Bozeman Camera Club and the Gallatin Empire Garden Club meet at the Montana Power Building exemplifies the complexity of the meeting room situation in Bozeman.
It is apparent that there is a real need for the facilities discussed above. By consolidating these activities into one localized physical entity, a cultural environment could be created which would not only serve the various functions better than do the existing facilities—but would provide an atmosphere in which the cultural climate of Bozeman could be greatly improved.
LOCAL CONDITIONS
LOCAL CONDITIONS

Geographic Conditions--

Bozeman is located at 45° 40' north latitude and 111° 03' west longitude. The elevation of Bozeman is 4,856 feet above sea level. It is the county seat of Gallatin County, which has an area of 2,540 square miles. The area of Bozeman itself is approximately 7.5 miles. (10)

The city of Bozeman is surrounded by mountain ranges on the north, south, east and southwest. The city itself is relatively flat, being located on the floor of the Gallatin valley.

Historic--

In July of 1805, explorers Lewis and Clark arrived at the forks where the Gallatin, Madison, and Jefferson Rivers meet to form the Missouri. The explorers then rested their expedition at the forks, and named the rivers before departing to follow the Jefferson westward. The Jefferson River was named in honor of Thomas Jefferson, who was then President of the United States. The Madison was named for James Madison, then Secretary of State. The Gallatin River was named for Albert Gallatin, who was also in Jefferson's cabinet, as Secretary of the Treasury. The county name was later derived from the Gallatin River. (7,1)

People began coming to the Gallatin Valley in the 1860's. The first house was built in the Gallatin Valley in 1863. (7, 19) Montana was established as a territory on May 26, 1864. Bozeman was located and named for its founder John Bozeman in 1864, also. (2,3) Ten years later, Bozeman was incorporated. (7,53)
The location of Bozeman near the eastern mountain passes caused it to grow rapidly. "Traditionally, agriculture has been the basis for Bozeman's growth, and today it is the center of one of the most productive agriculture and stock raising regions in the state. It was chosen as the site for the Montana College of Agriculture and Mechanical Arts in 1893." (6)

Climatic Conditions--

The type of climate experienced in Bozeman varies from extreme cold in the winter months to very warm in the summer. The humidity is relatively low, providing a dry climate with clean, fresh mountain air. The growing season is usually about 100 days, with the last killing frost about September 20.

The wind doesn't usually become very noticeable in Bozeman, due to the fact that the town is well sheltered by the mountains. Many large trees within the city provide additional protection from the wind. Prevailing winds for the Bozeman area are from the west and northwest. Storm winds are generally from the east and northeast.

Population--

According the the 1960 U.S. Census, there were 13,361 people living in Bozeman. That figure doesn't include Montana State University. The total for all of Gallatin County was 26,045. The 1970 Census could easily approach 25,000 for Bozeman alone because the university is to be included in the census. In the five years that I have been
at Montana State University, I have seen its enrollment climb from about 5,500 students in 1965 to about 8,000 students in 1969.

If the "Big Sky" resort complex currently being proposed by Chet Huntley and Chrysler Corporation materializes, there could be a substantial increase in the number of visitors to Bozeman. Yellowstone Park and the various other vacation facilities already available in the greater Bozeman area draw many visitors yearly.
Sun Angles for Bozeman

**Vertical**

- March
  - 12:00
  - 45°
  - 5:00
  - 2°
  - 8:00
  - 9°

- June
  - 12:00
  - 68°
  - 5:00
  - 36°
  - 8:00
  - 26°

- September
  - 12:00
  - 45°
  - 5:00
  - 21°
  - 8:00
  - 9°

- December
  - 12:00
  - 22°
  - 5:00
  - 8°

**Horizontal**

- March
  - 79°
  - 67°

- June
  - 82°
  - 97°

- September
  - 79°
  - 67°

- December
  - 62°
  - 52°
SITE CONDITIONS

The site selected for the Fine Arts Center is located on the corner of 5th Avenue and Alderson Street in Bozeman. See map C-1 for location of the site. The site is now occupied by an ice-skating rink in the winter and is part of the area included in the South Side Park.

There are three tennis courts adjacent to the site on the south, and some fairly old pieces of playground equipment to the southeast of the site. Across the street to the west, north and east are wood-frame houses. There are a couple wood-frame residences occupying the southeast corner of the block that the site is located on.

The site is very level, due to the fact that it is currently in use as an ice-skating rink. There is a stone retaining wall about 30 inches high along the north edge of the site. This wall holds the fill dirt that was placed on the site several years ago when it was first set up as an ice-skating rink.

There are no trees on the site itself; however, there are large deciduous trees along the parking strip all of the way around the site at about 15'-20' on center. There are also many trees throughout the general area of the site.

Water, sewer, and electrical lines are all available on the corner of 5th Avenue and Alderson Street. (11)

The site is currently zoned as R-1 (residential area). (11) Regarding the R-1 zones, the following suggestion is made by the S.R. De Boer Co., "To protect this district, the provision is made that only single family homes,
Even though all of the facilities which are to be included in the fine arts complex are not included in the above statement, I feel certain that the City-County Board of Zoning Appeals would grant a variance to allow the Fine Arts Center to be built on the proposed site. Set-back requirements are 25' on the front and 8' on the sides. Parking for 120 cars will be provided on the east end of the site. Additional parking will have to be handled on the streets adjacent to the site.

The choice of the proposed site was made for several reasons: First of all, I feel that a complex of the nature such as a "Fine Arts Center" relates much better to residential areas of a city than it does to the central business district. Such facilities as a library, art gallery, art workshops, theatre for drama, and community meeting rooms have little in common with clothing stores and hardware stores. They are, after all, intended to serve the people of the community.

Secondly, the site is in an area in which the traffic pattern is fairly fragmented. However, it won't always be that way, according to a comprehensive study done by the city-planning consulting firm of S.R. De Boer. It states that College Street, which is the street to the immediate south of the block on which the site is located, is destined to become one of the major east-west thorough-fares in Bozeman in the future. Having lived adjacent to College Street for three years, I am well aware of the ever-increasing amount of traffic on the street.

Thirdly, the city already owns the land on which the
proposed site is located and will therefore be in a position to save a great deal of money.

Fourth, the city of Bozeman is growing basically in two major directions: south and west. The proposed site is therefore in what is rapidly becoming the geographic center of Bozeman. This can be seen on map C-1 in this section of the report.

Finally, many people probably feel that by building a Fine Arts Center at this location, the city would be robbed of a park. The park now includes about 2.5 acres of land. The proposed complex, including parking, would consume approximately 1.5 acres of this. The resulting balance of one acre is largely taken up by the existing tennis courts and playground equipment. The only park land that would be used for the complex is what is now the ice-skating rink. I feel that the ice-skating rink can easily be relocated at nearby Cooper Park.

The area now used by the rink isn't used for much else during other times of the year. Most of the park activities take place in Cooper Park, which is only three blocks away. Cooper Park could easily include an ice-skating rink in its winter activities.

In conclusion, I don't feel that the activities included in the fine arts complex are foreign to the functions of city parks. In fact, I feel that such a complex would be a worthwhile addition to the existing Bozeman Park System.
FUNCTION OF THE FINE ARTS CENTER:

Introduction—

The basic function of the Fine Arts Center is to provide the physical environment necessary for a public library, an art gallery, art workshops, a theatre for drama, and some community meeting rooms. However, to only provide the required spaces and facilities for such activities without considering how they can work together as a "center" would be an unsatisfactory solution to the problem. The creation of a center, rather than a conglomerate, is the real problem at hand.

By combining the various functions that are independently occurring into a center, a superior atmosphere for participating in each of the activities can be created. The success of one member of the whole will reinforce the success of each of the other parts.

A Library--

The foremost functions of a library are to (1) entice people to come to the library in order to increase circulation, (2) make it easy for people to select their reading material, and (3) provide effective places for people to read and study within the library. One of the most important criteria to consider in fulfilling those requirements is flexibility.

Flexibility of space will allow for changing needs which occur periodically. I feel that the best way to
provide flexibility is to create as much of an open plan as possible. This can be accomplished by avoiding unnecessary permanent walls and partitions, and also by providing portable shelving, desks, card catalogues, etc.

It is important to realize that sound control is critical in libraries, and an open plan may cause some noise problems. This situation must be carefully analyzed, and the relationships of the various spaces to one another is extremely important.

The following list contains the basic functions which are contained within the library portion of the Fine Arts Complex. (4)

(1) LOBBY AND MAIN ENTRANCE: These circulation areas will handle the largest volume of traffic, and should be situated so that traffic can move to and from various areas as directly as possible without crossing through or disturbing quiet zones; and the lobby should contain a public telephone, exhibit or display area, and casual chairs.

(2) LENDING DESK: This area will be the control and service center of the library; it should be near to and visible from the main entrance; it should afford visual control of the open stacks and reading areas; a card file, and telephone should be included.

(3) PROCESSING DEPARTMENT: This area will order, receive, and catalog books; it should be near freight delivery, easily accessible to card catalogs and stacks, and closely related to the librarian's office; and it should be adjacent to and allow visual control of the lending desk.
(4) EXHIBIT STORAGE AND PREPARATION: This area should be adjacent to the lobby.

(5) LIBRARIAN'S OFFICE: This area will be for general office work; it should be near the lending desk; and it will contain a desk, chair, and typewriter table.

(6) WORKROOM: Book repair and pocket pasting will be done in this area; it should be adjacent to the processing department; and it must contain shelving and counter space.

(7) STAFF QUARTERS: This area will consist of a lounge, kitchen, and staff cloak room; it should be convenient to the librarian's office; and should contain food preparation facilities, casual chairs, table, and straight chairs.

(8) REFERENCE DESK: It should be easily seen and accessible to the public; and it should be near and visible to the lending desk.

(9) REFERENCE BOOK COLLECTION: This area should be near the reference desk.

(10) Pamphlet files: This material should be stored at the reference desk in filing cabinets.

(11) STACKS: "The most efficient and economical shelving device for book stacks is a series of standard double-faced floor cases, 9 or 12 feet long, 18 inches deep, set at right angles to the rear wall of the reading room with a 3½ foot aisle between cases, i.e., the cases on 5 foot centers." (15,11)
(12) YOUNG ADULT AREA: This area should be apparent and easily accessible from the main entrance; it should also be near the adult area; and it will include stacks, tables, and chairs.

(13) ADULT AREA: This area should be similar to the young adult area and include a small, quiet, secluded reading area away from the young adult and children's areas.

(14) CHILDREN'S AREA: This area should be adjacent to the main entrance if on the ground floor; it it is located in the basement or on the first floor, it should have a stair near the main entrance; and it will include stacks, tables, and chairs.

(15) NEWSPAPER AND PERIODICAL AREA: These areas should be open to the general public and easily accessible from the main entrance; they should be visually controlled from the lending desk; the periodical area should include indexes and both areas should have storage and display racks, tables, and chairs.

(16) CARD CATALOGS: These should be visible from the main entrance; should be centrally located with respect to the general reading and reference areas; and be convenient to the lending desk, reference desk, and processing department.

(17) OLD NEWSPAPER AND RARE BOOK VAULT: It requires accessibility only from the reference desk.

(18) RESTROOMS: These will serve all parts of the library; they should be easily accessible and afford visual control of the entrances from the lending or reference
desk; and they should be located or acoustically treated so that they do not disturb the quiet zones.

(19) PUBLIC CLOAK ROOM(S): Facilities for coat and boot storage should be centrally located with respect to all reading area; ideally, the cloakroom(s) should be adjacent to the main entrance.

(20) TYPING ROOM: This will be a small, acoustically-treated room which will house a coin operated typewriter, table, and chair for public use; and this room should be visible from the lending desk if possible, but located away from the quiet zones.

The following list is a breakdown of the area requirements for the functions within the library. They serve basically as a guideline in determining how much area must be allocated for each of the various functions. (15)

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>REQUIRED AREA (in square feet)</th>
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<tbody>
<tr>
<td>(1) Children's stacks</td>
<td>1,000</td>
</tr>
<tr>
<td>(2) Children's reading</td>
<td>1,000</td>
</tr>
<tr>
<td>(3) Young adult stacks</td>
<td>2,600</td>
</tr>
<tr>
<td>(4) Young adult reading</td>
<td>1,400</td>
</tr>
<tr>
<td>(5) Adult stacks</td>
<td>4,500</td>
</tr>
<tr>
<td>(6) Adult reading</td>
<td>1,400</td>
</tr>
<tr>
<td>(7) Periodicals</td>
<td>300</td>
</tr>
<tr>
<td>(8) Indexes and catalogs</td>
<td>100</td>
</tr>
<tr>
<td>(9) Newspapers</td>
<td>50</td>
</tr>
<tr>
<td>(10) Reference stacks</td>
<td>200</td>
</tr>
<tr>
<td>(11) Reference reading</td>
<td>300</td>
</tr>
<tr>
<td>(12) Reference desk</td>
<td>50</td>
</tr>
<tr>
<td>(13) Lending desk</td>
<td>200</td>
</tr>
<tr>
<td>(14) Librarian's desk</td>
<td>100</td>
</tr>
<tr>
<td>(15) Processing workroom</td>
<td>200</td>
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A Theatre For Drama--

The basic function of this part of the center is the showing of plays. These plays are live performances done by local actors and actresses.

There are two very basic areas within a theatre: the public area, and the non-public area. The auditorium, or place where the audience sits, is the most important public space. The stage, or place where the actors perform, is the most important non-public space. The entire success of the theatre depends upon how well those two spaces interact with each other.

It is extremely important that once the production is underway, every person in the audience is aware of only the performance and nothing else. In order to achieve that
degree of undivided attention, many technical problems dealing with sight and sound must be solved. It is very important that the acoustical qualities of the space promote the transmission of sound from the performers to the audience, while at the same time restrict noises such as coughing and rattling paper which emanate from the audience itself.

There will be no mechanical means of projecting the voices of the actors, so it is necessary to provide the optimum conditions for the transmission of the human voice. It is equally important that the optimum conditions for visual contact of the performance by every person in the audience be attained.

There are, of course, many other facilities required in the theatre besides the stage and the auditorium. These are basically outlined in the following list of theatre functions. (1)

(1) PUBLIC AREA: This area is where the people attending the performances can go during intermission; wait to buy tickets; and take care of their coats, etc. Due to the fact that I plan to make other parts of the Fine Arts Center available to theatre patrons for the purpose of spending intermission, this public area can be fairly small. It need only provide ticket sales, coat room, and some sort of ready access to public rest rooms. A rough estimate for the area required by these functions is 300 square feet.

(2) AUDITORIUM: This is the area where the audience sits. It should have comfortable seats and should be acoustically controlled to minimize noise originating in the audience. It is desired to seat about 200 people
in the auditorium so that the size of the audiences will be relatively large, but yet remain on an intimate basis between actor and audience. Using a figure of ten feet per person (includes aisles, etc.), an area of about 2000 square feet is necessary for the auditorium.

(3) STAGE: This is the area from which the play takes place. It must include all of the facilities listed in the book Theaters & Auditoriums by Burris, Meyer and Cole relating to stages of this size and for this use. The area necessary for such an operation is about 1600 square feet.

(4) STAGE ENTRANCE: This entrance is used by all of the people involved with the production of the play other than the public. It should contain a clock, check-out board, bulletin board, telephone booth, and control desk. The area required for this function is about 100 square feet.

(5) DRESSING ROOMS: Used for clothing and costume changes by members of the cast, they should contain mirrors, benches and lockers. The proposed area for the men's and women's dressing rooms is 300 square feet each.

(6) MAKE-UP ROOM: There is only one make-up room required for all of the cast. It should be about 200 square feet in size and should contain tables, mirrors, electrical outlets, and benches.

(7) STAGE ANTEROOM: This is an assembly room for the cast, social room, location of pep talks, and place for last minute costume checks. It should contain lounge furniture, a table, and blackboard. It should be about 500 square feet in size.
(8) MEN'S BATHROOM: It is for the use of the actors and should contain showers, lavatories, water closets, urinals, and mirrors. It should be about 150 square feet in size.

(9) WOMEN'S BATHROOM: It serves the same functions as does the men's bathroom and should contain the appropriate fixtures. It should also be about 150 square feet.

(10) WARDROBE: This area is basically for inspecting, repairing and pressing costumes. It should contain the appropriate equipment for those functions. It should be about 150 square feet in size.

(11) OFFICE: This office is basically for receiving calls and conducting the business of the theatre. It should contain the usual office equipment and be about 50 square feet in size.

(12) SHOP: The shop is for the preparation and storage of sets and should contain the tools necessary to those functions. It should be about 500 square feet in size.

The preceding list is a basic outline of the functions and the area requirements for the theatre. The total of the proposed areas is approximately 5,800 square feet. This figure is only an estimate and is subject to change as the design progresses.

An Art Gallery--

The basic functions of the art gallery is to provide a physical environment in which pieces of art can be viewed.
Often, the pieces of artwork will be for sale. In some cases, the artwork on display may be of great value, and security will become an extremely important factor in such situations.

There will be two basic categories of artwork on display: (1) private collections on short-term loans from private collectors and (2) pieces of artwork on display and for sale by local and regional artists. All forms of artwork can be displayed, although a large portion would probably be paintings, ceramics, and various kinds of sculpture.

It is extremely important that the gallery be very flexible. There will be ever-changing needs for display areas.

It is also very important that the gallery itself does not compete with the pieces of artwork being displayed within it. The purpose of the gallery is to provide the best conditions possible for viewing artwork. Visitors to the gallery should have their complete attention directed to the displays and should be totally unaware of the gallery itself.

Circulation must be handled in such a way that the visitor to the gallery is able to make an enjoyable stroll through the display areas with the least amount of difficulty. Because much of the artwork will be for sale, it is very important that the visitor be subjected to a situation where he will be most likely to make purchases.

Because of the situation in which articles are for sale, a sales area must be provided. It should be located near the main entrance to the gallery so that one person can handle many functions such as sales, security, etc.
Other requirements of the art gallery include: (1) A security vault where extremely valuable pieces can be stored if necessary—50 square feet. (2) A storage room—150 square feet. (3) A preparation room for doing all of the carpentry, etc. necessary in the preparation of displays—200 square feet. (4) A small office to handle the gallery's business—80 square feet. The main gallery itself should contain about 2,500 square feet resulting in a proposed area of about 3000 square feet for the entire gallery.

It is desirable that the art gallery be located somewhat near the theatre so that patrons of the theatre might be able to visit the gallery during intermissions. This would serve the dual purpose of providing interesting intermissions for the theatre-goers and at the same time promoting art sales.

Art Workshops—

The main purpose of the art workshops is to provide the citizens of Bozeman with a place to take an active part in the creation of artwork. It will provide clubs as well as individuals with facilities which they could not easily have in their private homes.

Flexibility is once again a very important factor because the needs of the art workshops will be constantly changing. The best way to approach flexibility is through a fairly open plan, with as few partitions as possible.

Facilities for the following activities are required:
(1) Oil painting
(2) Water color painting
(3) Ceramics
(4) Sculpture of all kinds
(5) Jewelry making
Weaving

Graphic art (silk screens, printing, etc.)

There is little point in assigning specific size requirements to the various activities at this time because they will be extremely variable, depending upon the desires of those using the facilities. An area of 3000 square feet will be assigned to the entire art studio facility.

Community Meeting Rooms—

The purpose of the meeting rooms is to provide the various clubs and organizations of Bozeman with a suitable place to meet. Examples of the kinds of organizations which could use the facilities are: American Fed. of Musicians, Local 709; Montana Association of the Blind (Bozeman Chapter); Bridger Bowl Association; Bozeman Camera Club; Community Concert Association; Gallatin Empire Garden Club; Montana Institute of the Arts; Bozeman Symphony Society, and any others who might wish to use the meeting rooms.

There will be basically two meeting rooms. A small one of about 600 square feet will provide room for about 30 people and a larger one of about 1400 square feet will provide room for about 70 people. The partition which separates the two areas will be removeable to provide an area of about 2000 square feet and space for about 100 people.

In addition to the meeting rooms themselves, kitchen facilities will be available. However, these facilities will only be for the purpose of preparing coffee and light
lunches. Full banquet facilities won't be available in the meeting rooms. The area required for the kitchen facilities is about 100 square feet.

There will also be a cloakroom (100 square feet) and two restrooms (50 square feet each) bringing the total for the entire meeting room facilities to 2300 square feet.
AESTHETIC CONSIDERATIONS

At this preliminary stage within the design process of the Fine Arts Center for Bozeman, there is little that I can say about how it will look. I do, however, feel that it must reflect the spirit of the cultural core of a city. Within that framework, it must be inviting to the people who are to use it—a place where they can really enjoy going and being. The hard, cold structure that contains the existing library in Bozeman is anything but inviting, at least in my opinion.

I feel that the materials to be used in the building should reflect the resources of the area. Within that context, the wood and stone native to the Bozeman area seem to be worthy of a great deal of consideration.

I think that one of the most important aesthetic considerations to make is to be sure that the Fine Arts Complex does not dominate the neighborhood in which it is to be located. It should be completely integrated with the surrounding environment, so that it truly becomes a part of the people.
ECONOMIC CONSIDERATIONS

Due to the fact that this problem is primarily of an academic nature, there is no defined budget which must be adhered to. Typically, in a realistic problem, there is a set budget which is the primary factor in determining what and how much can be built. Because of the fact that the Fine Arts Center has not yet been designed, it is impossible to accurately estimate how much it will cost.

There are a vast number of variables which have a bearing on what the complex will cost. Some of these factors are: exact size of the complex, shape of the complex, materials to be used, labor market at time of construction, financial market (interest rates, etc.) and many others. For the purpose of obtaining a rough estimate of what the entire complex might cost, I will use a method of estimating which is similar to the calculator method used by the Marshall Valuation Service."(8)

The calculator method is based on a process of determining the cost of an "average" square foot of floor space within the given building. This factor is then multiplied by the number of square feet in the building which results in a value for the entire building. As an example, the square foot cost of an "average" library ("good brick, ornamental block, metal and glass, some trim... typical good neighborhood branch... high level lighting, adequate plumbing... warm and cool air") is $20.06. (8, 10/69) That figure is for a class "c" building which means that it would have masonry or reinforced
concrete exterior walls, and wood or steel roof and floor structures or slab or ground. (8, 12/67)

For the purpose of obtaining a "rough" estimate of the cost of the entire center, I will use a figure of $20 per square foot throughout the entire complex. The proposed areas (see "Functions of the Fine Arts Center") are as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library</td>
<td>17,500</td>
</tr>
<tr>
<td>Theatre</td>
<td>5,800</td>
</tr>
<tr>
<td>Art Gallery</td>
<td>3,000</td>
</tr>
<tr>
<td>Art Studio</td>
<td>3,000</td>
</tr>
<tr>
<td>Meeting rooms</td>
<td>2,300</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31,600</strong></td>
</tr>
</tbody>
</table>

Using the factor of $20 per square foot a total estimate for the building itself is $632,000. As was stated in the section of this report on "Site Conditions", the city already owns the land which the site is to occupy. Hence, there is no cost to be considered acquisition or demolition. I feel that a rough estimate of $18,000 should handle the cost of site work, which brings the cost of the entire complex to about $650,000. This is of course, is only a rough estimate for the purpose of determining the approximate cost of the complex.

Not only is it significant to determine the approximate cost of the Fine Arts Complex, but it is essential to determine how it could be paid for. The Library Services and Construction Act of 1964, as amended in 1966, makes federal funds available which could cover from a minimum of 33 per cent to a maximum of 66 per cent of the total cost of the library. The portion of the Fine Arts Complex which could come under this act would be the library, probably the community meeting rooms, and possibly the art gallery.
Depending upon the amount that could be financed through the Library Services and Construction Act of 1964, the balance would be financed by local funds. The people of Bozeman would have to hold a bond election, and retire the bond through additional property tax over a period of 20 or 25 years. Additional means of supporting the complex would include the sale of art works and the admission to the theatre.
Bozeman is rapidly growing. It is extremely important that the cultural facilities of the community maintain pace with its physical growth. Montana State University provides many cultural facilities for the members of the academic community; however, many Bozeman citizens don't feel that they are a part of the university circle. A new cultural center can provide them with the cultural atmosphere they seek.

Many of the existing cultural facilities in Bozeman are in need of physical improvement. A new fine arts center can provide the setting for these functions to occur. The facilities to be included are: a city library, a live arts theatre, community meeting rooms, an art gallery, and art studios.

Hopefully, a center of this kind, together with the resources of Montana State University, could set the pace for the development of Bozeman as the cultural heart of Montana.


