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This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of The University of New Mexico in partial fulfillment of the requirements for the degree of

Master of Architecture

AN INTERDISCIPLINARY APPROACH TO THE ART EXPERIENCE

Title

ON AN URBAN UNIVERSITY CENTRAL CAMPUS

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AN INTERDISCIPLINARY APPROACH TO
THE ART EXPERIENCE ON AN URBAN
UNIVERSITY CENTRAL CAMPUS

BY
GEORGE LORING SANDERS
B.F.A., University of New Mexico, 1973

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of
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in the Graduate School of
The University of New Mexico
Albuquerque, New Mexico
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George Sanders, December 1975

AN INTERDISCIPLINARY APPROACH TO
THE ART EXPERIENCE ON AN URBAN
UNIVERSITY CENTRAL CAMPUS

BY

George Loring Sanders

ABSTRACT OF THESIS

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ABSTRACT OF THESIS

PROBLEM

As an interest in art appreciation by the general population grows it becomes more and more important that display techniques expand tremendously so as to allow the largest diversity of persons possible to participate.

The construction of university art museums has been extensive in recent years. However there has been no comprehensive body of work studying the implications of a project designed to totally immerse art experience in the educative process on a university campus. A university campus, by its very nature, is an elite institution. The problem then becomes how to make it less so by visually and physically providing an inviting atmosphere to the viewing of art, thus opening to the general community the possibility of sharing in the educative process through art.

SCOPE

This project represents an investigation of art's role in the educative process, a brief history of museums, the implications of making art experience accessible on the university campus and an investigation into the physical planning process of the art experience on a university campus. Architectural implications of these concepts are illustrated in a prototype planning process for the University of New Mexico campus.

PROCEDURE

The first undertaking was to develop a general understanding of art's role in society. This led to an investigation into an interpretation of art's potential role in the educative process. It was decided that this investigation should be illustrated with a real problem, that of the display of art on the University of New Mexico campus. A complete planning study was implemented which culminated with a series of proposals for the campus.

RESULTS

The results achieved by this work are an indepth study of the design process for the display of art on a university campus. A satellite system was decided upon. This concept utilized the entire university campus creating a living museum around a central nucleus museum.

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INTRODUCTION

In defining a new role of the university art museum it is necessary to examine the relationship between art and the university function. The relationship between art and the learning process must be understood before defining the museum's role on campus. Once the museum's objectives are understood the design process can begin.

It is the author's feeling that making art and viewing art go hand in hand in forming an "art experience." For the purpose of this paper the term "art experience" will be defined as any experience that deals with creating art objects, happenings such as dance and mime, or viewing art. Creating and viewing art are not separate but complementary to each other. It will be demonstrated how both are beneficial to the interdisciplinary educational experience. The purpose of this thesis will be to demonstrate how this relationship can and should be implemented both on a planning and a programming level.

CHAPTER 1

ART EXPERIENCE AND THE EDUCATIVE PROCESS

Life is a multiplicity of experiences, and artistic awareness can relate and make sense of some of these experiences. Out of this awareness we can frequently understand ourselves and our relationship to our environment. It must be realized that art is one of the basic tools for communication and personal expression. Art was our distant ancestor's first language and has endured throughout our history. Art experiences comprise a major lens for viewing reality.

The art experience can be both an intellectual and an emotional expression of an experience or attitude, usually presented in personal forms of communication where words are insufficient.

John F. Kennedy in 1963 said, "I see little of more importance to the future of our country and our civilization than full recognition of the place of the artist. If art is to nourish the roots of our culture, society must set the artist free to follow his vision wherever it takes him...Art establishes the basic human truths which must serve as the touchstones of our judgement."¹

¹E.B. Feldman, ed. Art in American Higher Institutions (Washington, D.C., 1970), p. 14.

The art experience should not be merely a pastime used to fill the leisure hours of an affluent society. It has an important place in a quest for fulfillment and improvement of man's view of his physical and social environment. Art experience can help us to understand man's concept of himself, his relationship with nature and the society in which he lives. Its role is central not marginal. Embodiments of man's spiritual and human values can be found within it. The art experience is a basic means of man's communication. It is able to provide raw material for concept forming. The art experience has a strong potential for developing our senses and sensitivities.

Man's love of beauty can be kindled and sensitized by art experiences. Aesthetic growth in the general public could have the effect of forcing a more responsive approach to the environment by the society as a whole.

In everyday experiences we are continuously sorting, discriminating, acting upon and transforming a tremendous amount of information. We act upon these stimuli on many different planes of consciousness. The simplest levels of action and decision constitute some type of learning. Any differences between learning and life experiences exist only in degree and are related to the intentional dimension of the experience.

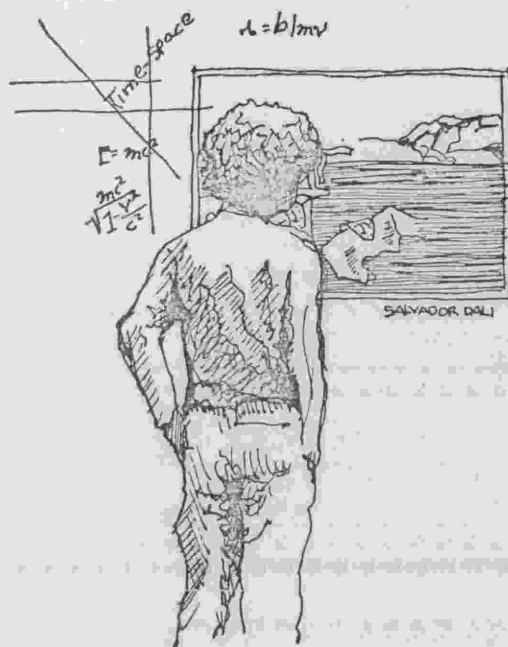
In The Culture Consumers Alvin Toffler stated, "The rise of a mass public for the arts, can, in its way, be compared with the rise of mass literacy in the 18th century in England."² If this is true then there is a desire for a certain growth by many people and this desire most certainly cannot be ignored.

If we may conclude from the preceding discussion that art experience can benefit the learning process, then the problem is how to reach people by using the art experience as a stimulus in the learning process.

Visual communication immersed throughout educational institutions has a potential of being a most comprehensive and effective educational means. In relating the art experience closer to the educative process it may be seen that the art experience can serve as a visual learning structure in all disciplines. It is able to supply symbolic structure to the other disciplines. Art experience can have intrinsic appeal to all people. Visual and tactile materials hold an important potential as a conveyer of meaning in all disciplines.

²Alvin Toffler, The Culture Consumers (New York, 1964), p. 41.

It is harder to define the contribution of the art experience to the educational system than that of conventional subjects. This comes partly from the archaic thought that artists are elitists



outside of society, fig. 1 Transfer of knowledge not doing anything for the society. It also stems from the misconception that one has to be "gifted" to be an "artist." The art experience, as can be substantiated in the previous pages, can offer the student and community an opportunity to personally discover, through creative imagination, the significance of qualitative experience.

As emphasis is placed in our culture on becoming more and more a "learned society," the post-secondary institutions need to assume a more active responsibility for developing public understanding of the art experience. In many small towns and cities the university functions as a center of culture and activity for the entire community.

The university, being situated at the end of the formal education series, possesses a potential of contacting large numbers of educated people. Because the colleges

and universities hold this potential for affecting a large body of education oriented people in the years ahead it seems logical that these institutions are ideal locations for the art experiences to flourish. Furthermore, colleges and universities are ideal locations for training artists and viewing the results of their work. The notion of art schools in the past tended to support a conviction that art was apart from the other disciplines. Not only does art experience have a strong role in educational institutions, art experience is education.

In summary, the responsibility to expand the art experience is shared by every educational institution. This responsibility to the art experience is inseparable from other educational roles. In the mind's attempt to make sense of stimuli, art experience can be an essential element. The art experience can be equally significant in the education of students of all disciplines.

Now that a connection between the educational process and the art experience has been established it is important to examine how a relationship between art experience and the educational institution can be achieved to best benefit the educative process.

A common ground of attitudes and interests which provides a basis for communication has tended to shrink as knowledge and skills become more highly specialized. An individual's pursuit of his specialization often

becomes an end in itself thereby lessening his contribution and personal gain within the learning situation and social environment. An interdisciplinary approach to education would provide the valuable tool for society of broadening the possibilities of communication.

H.A. Murray in his book, Explorations in Personality, stated that, "Thinking is a function of the entire personality, rather than an isolated faculty."³ In the past there has often been an uneasy relationship between the art experience and the university. Traditionally, the major purpose of education was a "cultivation of the mind" through a transmission of specific skills and knowledges. A learning experience is only meaningful if the individual is able to relate it to a larger configuration of his total living experience. An educative process is a process whose best model is the brain. The brain operates on an interdisciplinary system constantly relating experiences to one another.

The Greek historian Xenophon stated that "He who knows the theory but not the practice does not know the whole theory."⁴ There cannot be a complete technical education that does not deal with liberal arts and vice versa. A scientific, technical approach to education

³H.A. Murray, Explorations in Personality (New York, 1938), p. 740.

⁴Alfred N. Whitehead, The Aims of Education (New York, 1948), p. 58.

without any exposure to art experience can transform our population into an insensitive society.

The university can expand the scope of a liberal arts education by offering alternative ways of communicating and perceiving. The art experience on campus is then a valuable tool in the educative process. Unfortunately, in the minds of many administrators, the primary function of an art program is to produce works of art. The primary purpose should be the utilization of art experience to enrich the educational process. The presence of art experience on the university and college campuses can be advantageous to the art program in that it provides access to the whole community of scholars. This relationship provides an obvious advantage over most independent art schools for art students.

If, in fact, any art experience is to become inseparable from other disciplines it should be developed so as to allow a partnership to benefit all, not just an "elite" interested few who are art majors. There is a need to move art experiences closer to the lives of everyone and thus closer to the center of activity in the university and community. People must be encouraged physically to interact with the art experience. It must not be left up to the interested few.

Traditionally, art experiences have been kept separate from other disciplines. It is clear that no one is to benefit from this geographical separation. Students suffer if they accept the implication that this distinction between an art experience and "serious thought" is absolute.

Art experience is more accessible when the student has to make a conscious effort not to experience it, rather than making the conscious effort to see it, as it now exists at many colleges and universities. Art encounters could be opened up to many people who would not normally experience them by making facilities more accessible.

CHAPTER 2

VISUAL EDUCATION AT THE UNIVERSITY

There are many ways in which interrelationships between the art experience and the educational experience can be achieved. The development of art as a visual and perceptual language can be accomplished through a gradual immersion in art. Pictures on the walls, sculpture in open spaces, music in the air would create an extremely rich environment. This would have the effect of a gentle but persistent bombardment of the senses for everyone.

Care must be exercised not to limit the art experience to the traditional arts such as painting, sculpture and music. One result of this limitation would be to reinforce an already present conviction that experiencing art is a thing that is irrelevant to the normal pursuit of life. Someone who is unfamiliar with art experience who is suddenly buried in the viewing of masterpieces from the past could wonder how this relates in any way to his daily life.

Murals on the exterior walls of buildings, sculpture and happenings in open spaces are a few examples of ways to bring art experiences to more people. The murals shown

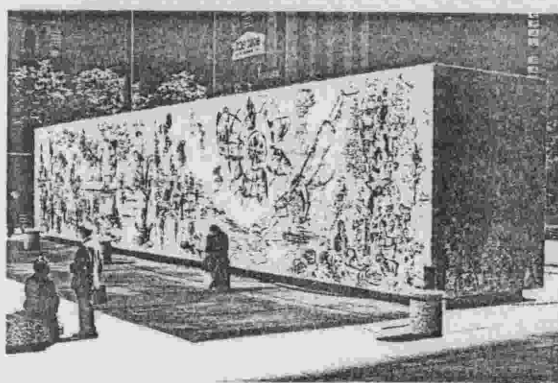


fig. 2 Chagall mural, Chicago

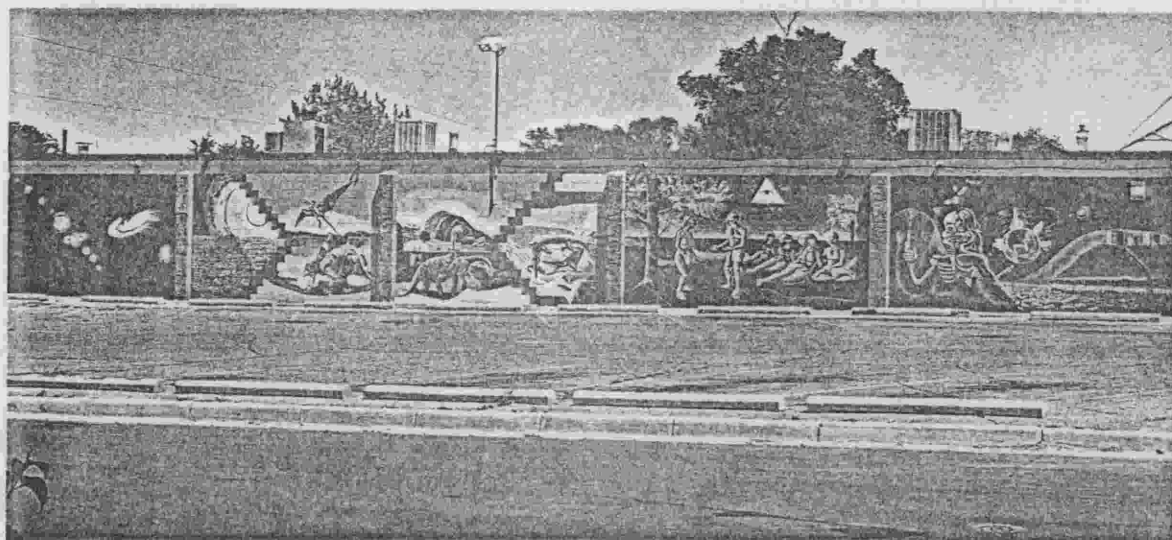


fig. 3 Mural, Model Cities Branch Library, Albuquerque here are examples of inner-city art that are being enjoyed and not defaced. The use of large blank walls of buildings for murals can bring the art experience closer to more people. The University of Mexico in Mexico City has become a living art museum in just such a way.

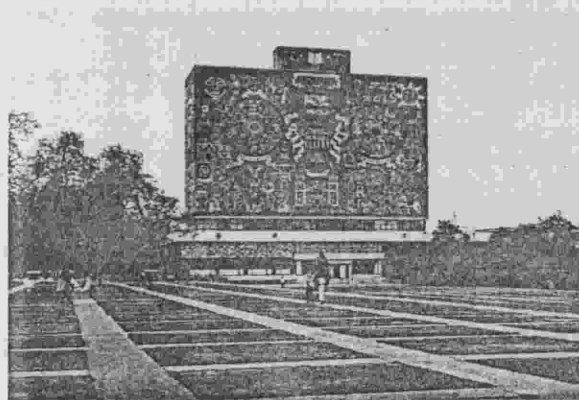


fig. 4 Mural, University of Mexico

Words have conventionally been the tools of educational institutions whereas stimulus of the senses is the traditional educational tool of museums. There is currently a great dissatisfaction with results in the public school systems. Consequently there is an active search for more effective ways to stimulate the learning process. Experiencing art offers a viable alternative to conventional teaching methods.

The traditional definition of an art museum is an institution with the primary function of collecting, exhibiting, preserving and interpreting the creative objects produced by man. This definition is a narrow view of the potential of what a museum can be. It makes no mention of such goals as an enhancement of awareness or the diffusion of knowledge and pleasure. It is also much too

constricting in that such a definition is limited to object art which is only part of the whole art experience. However, these purposes can and should be a part of the whole aspect of museums.

It should be remembered that a museum has the potential of expanding the mind as well as stimulating emotions. Museums can provide cultural and educational services to the university which classrooms do not provide.

Today, in our new social conditions, museums no longer are only a cultural pastime of the elite. Museums are expected to be accessible, understandable, appreciated and enjoyed by everyone.



fig. 5 Picasso sculpture
in Chicago

Visual education is learning through seeing, and it precedes any conceptual instruction by the means of text books. Visual education is a contribution of museums to society. Their potential of involvement is not yet fully accepted in western countries which place an emphasis on a conceptual learning approach. In Latin American, African and Islamic countries there is an emphasis on visual as well as conceptual teaching, in order to reach a large number of people. They are finding that the museum has much to offer as an educational tool.

In a letter on June 20, 1967 to the Committee of the American Association of Museums, President Johnson said, "America's five thousand museums are among our most precious cultural and educational resources. Their collections, their trained staffs, and their facilities contribute immeasurably to the enrichment of the nation's life and to educational advancement at every level."⁵ All museums are concerned with an educational responsibility, whether they realize it or not.

Museums offer a chance to experience art, even to criticize it, which can be a form of enjoyment. People react to art in positive or negative manners. By explor-

⁵Committee of the American Association of Museums, America's Museums: The Belmont Report (Washington, D.C. 1969), p. x.

ing this reaction the visitor's mind can be opened to a critical self awareness and a sensitivity to his surroundings. In serving an educative function, museums have a potential of providing a kind of growth that is presently unavailable elsewhere. Museums can be designed so that architecture and display provide delightful experience to the viewer or participant while providing an educative environment.

CHAPTER 3

A BRIEF HISTORY OF ART MUSEUMS

Before going further it is necessary to examine a brief historical review of museums. Public museums, as they exist today, are the result of a lengthy history of collecting by organizations, groups and individuals. Many specialized collections such as china, glass, silver, textile and folk art exist within the larger category of art museums.

The first museum in the United States was established in Charleston, South Carolina, in 1773, and was founded for the purpose of "promoting a natural history of their region."⁶

Grace Ramsey, in Educational Work in Museums in The United States, states that until 1873 the art museum in the United States had little or no popular interest.⁷ According to Theodore Low, it was during the years of 1870-1900 that the first real museum development occurred in the United States.⁸

⁶Committee of the American Association of Museums, p. 2.

⁷Grace Ramsey, Educational Work in Museums in The United States (New York, 1938), p. 2.

⁸Theodore Low, The Educational Philosophy and Practice of Art Museums in The United States (New York, 1948), p. 27.

From 1900-1930 there was a rapid development of educational practices in museums in the United States. During this period there were essentially three different philosophies of museum operation being tested: (1) dominance of aesthetic consideration, (2) an educational institution deriving its character from the desires and needs of the community, and (3) a balance between the first two. This period of thirty years was a time of expansion of educational programs in museums and programs that attempted to reach out to public schools.

John C. Dana, a museum director and writer, was an advocate of the consideration of the role of the community in museum planning. His influential book, The New Museum, was published in 1917.

The depression caused many museums to realize the advantage of public support. The realization that museums were not making the best use of their facilities was intensified by the Second World War. As a result, museums began catering more to the general public instead of just an elite, a trend that is still in need of expansion.

Numerous world seminars have been held to study the multi-aspects of museums. In 1952, at a UNESCO seminar in Brooklyn, New York it was recommended that "As museums establish respect for and understanding of the past and offer encouragement to creative process in the future...

they should be organized so as to be available to all."⁹
It was also established as essential that there be cooperation between the museum and the community that it serves.

Traveling and temporary shows have for several decades been supported by UNESCO as a beneficial tool in reaching people of differing needs and cultures. People in different locations have different likes and needs and it is possible to reach different needs by bringing art experience to the people instead of having people come to it. This practice has many uses whether on an international level or a university community level.

In 1965 in Sweden a government committee was set up specifically to investigate traveling exhibits. Another committee was created to investigate the role which the exhibitions played in contemporary society. A specific goal was to study how exhibits could reach people from all walks of life, and what would be the museum's contribution to education.

These seminars reflect a general trend in museums toward emphasis on participation by the public, integrating traditional functions into everyday concerns, and emphasizing education. Museums, realizing a changing role, have also recognized a need for research into visitor

⁹UNESCO, Museums, Imagination and Education (Paris, 1973), p. 138.

preferences, backgrounds and their reactions to different museum techniques.

Statistics in America suggest that there is increased demand from all segments of the population for the services a museum can offer. Thirty years ago museum attendance in the U.S. totaled fifty million visits a year. In 1966 a survey performed by the American Association of Museums showed that 2,754 museums reported 560 million visits per year. This is a percentage increase greater than the percentage increase of the population of the United States during that same period. 212 million of the visits from the 1966 survey were persons attending museum operated classes and study groups.¹⁰ Art museums reported leading all other categories in attendance with 212 million visits per year.¹¹ This points again to the potential that museums hold for educational possibilities.

In 1966 only about 11 per cent of all museums in the United States were part of an educational institution. In the same year it was also disclosed that art museums constituted only about 15 per cent of all museums in the United States. About one third of all museums in the United States reported some relationship with colleges and universities. However more than half of all art museums in the United

¹⁰UNESCO, p. 69.

¹¹Lola Eriksen Rogers, Museums and Related Institutions A Basic Program Study (Washington, D.C., 1969), p. 69.

States reported some connection or involvement with colleges or universities. Nearly 90 per cent of all museums reported some educational or cultural program taking place within their program.¹² Recent trends in education and museums show that museum connections with educational institutions should and will grow stronger in the future.

The curators of four museums in Sweden argue that any increase in attendance statistics are illusory, rather than being new visitors, there are just more visits by the same people. They stressed the importance of the museums extending their influence both geographically and socially. In 1973 a UNESCO study on the subject concluded that although museums are beginning to respond to this need to extend their influence it will take time because of the strain on resources.¹³

Even though museum attendance has multiplied greatly in recent years, it is still true that millions of people do not have easy access to museum services. There are several solutions, one is simply to establish more museums. Others are the creation of small branch or satellite museums, traveling exhibits, utilizing the mass media, and a further possibility is the combination of all or some of the above.

¹²Rogers, p. 73.

¹³UNESCO, p. 91.

As can be seen in this short coverage of the history of museums, the museum which was once a remote, elite institution has found a need to relate and be of value to everyone. Museums are finding that in order to reach our widely diversified modern society, tools such as television, radio, newspapers and films are valuable along with the more conventional media such as slides, prints, publications, catalogues, reproductions and reports. The Baltimore Museum of Art said, "We can observe a clear relationship between coverage of museum events and activities (by radio) and an increased attendance and participation in museum programs."¹⁴

The Columbus Museum of Arts and Crafts in Georgia has said, "Materials from interesting exhibits are booked; also, some art exhibits are discussed and paintings shown. Occasional film strips on these are made by the television stations, as well as on the new permanent exhibits."¹⁵

The Cincinnati Art Museum wrote, "Despite all, the daily newspaper remains perhaps the museum's most reliable outlet for information and popular education."¹⁶

Although many museums have made extensive use of the

¹⁴UNESCO, p. 124.

¹⁵Ibid., p. 127.

¹⁶Ibid., p. 128.

mass media, the majority have not. It seems to the best interest of the museum and to the public to involve the mass media both through administrative relations and through physical planning. Physical planning should be implemented in such a way as to make the museum more accessible to the use of necessary equipment.

American art museums have spent much time acquiring art work from all over the world. In a response to the awakening of the museum to the needs and demands of the expanding community, many museums are beginning to include the performing arts, and many other activities new to museums. At the same time they are continuing the more traditional museum functions such as preserving and displaying art objects.

An example of one of these new functions and responsibilities occurred at the Brooklyn Museum in the summer of 1969 where they offered a Black art seminar. With the interest at many universities in ethnic studies, there are ethnic art courses being taught at some universities and this trend should be encouraged. There is certainly enough demand for ethnic displays.

In a complete and possibly unwise break with traditional practices, some art museums have discontinued the practice of maintaining a permanent collection. They have placed their entire emphasis on showing contemporary work in order to encourage living artists.

In the past, a university with an emphasis on studio work usually used the museum primarily for their own purposes--to show only the contemporary styles they were teaching. This direction tended to retard any comprehensive approach. According to A.C. Ritchie in The Visual Arts in Higher Education it seemed the farther west the university was located the stronger the studio emphasis and the weaker the permanent collections became until in some places it became nonexistent.¹⁷

During the 1930's and until the present there has been a trend towards reemphasizing "art appreciation" rather than only emphasizing studio work. Recent years have seen growing interest in all of the art experiences. This interest has encouraged the development of educational facilities in art museums which try to use permanent collections as tools. This in turn has encouraged the development of enriching educational curricula with art experiences in other disciplines besides the humanities. If the university art museum is to fully serve the entire university and community at large, a strong, comprehensive permanent collection is essential.

A permanent collection raises the problem of conservation so that others in the future may enjoy it. Art museums have the largest conservation problem of all types

¹⁷A.C. Ritchie, Dir., The Visual Arts in Higher Education (Connecticut, 1966), p. 107.

of museums. Strict forms of temperature and humidity controls are necessary in the preservation of much of the visual arts. The inter-museum Conservation Association, founded in 1952, was organized to deal with problems in conservation from member museums.¹⁸

The considerations mentioned here are basic to a successful plan to make resources more available to more people through the university museums. In previous chapters it was seen that art experiences can be a valuable tool in the educative process and that an art museum can be a useful institution for bringing art experiences to people.

¹⁸Committee of the American Association of Museums, pp. 57-68.

CHAPTER 4
PLANNING CONSIDERATIONS OF ART EXPERIENCE
ON THE UNIVERSITY CAMPUS

University museums have the ability to become one of the major curators of the arts. This function of "curator of the arts" relates directly to the educative purpose of the university by exposing art experience to a community of scholars. It should be noted that during this century an incredible number of college and university galleries and museums has been built. More than four hundred colleges and universities in the United States have museums and many support more than one. This growth of new facilities has coincided with the integration of the art experience with the campus educative responsibility.

Along with this growing emphasis in art experience must come information to be used in planning and designing of campus facilities that allow everyone to share in the art experience. This is the purpose of this paper for there does not exist at this time a comprehensive body of information of this nature. Integrated into the rest of the body of the text will be an illustration of the design principles expressed herein.

The University of New Mexico has been chosen by this author to illustrate this design and planning process. There are many reasons for this decision. The primary

reason is the author's familiarity and accessibility to the campus. It is also a metropolitan campus and by its location relates to the community. Another reason is that many years ago the University of New Mexico displayed art works in each of the buildings on campus--making art accessible to more people. During the period of the late sixties when there was much vandalism these art works were all drawn into one central location. There is now a slow trend on campus to go the opposite direction and redistribute the wealth. This is taking the form of sculpture in plaza areas and murals in a few buildings.

With the growth in college and university art museums in this country also comes a growing relationship and cooperation between university art museums and art museums in town and all over the state. This relationship works to the advantage of all the cooperating institutions through exchange of art work and expertise.

On the map on the following page (p. 26) notice the density of art museums and universities in the Albuquerque-Santa Fe area. This close proximity should lead to strong ties between these facilities. A state map like this is a graphic illustration of where museum cores are. Their proximity should stimulate local traveling shows.

As educational instruments, traveling and temporary shows provide an important exchange of information and experience. This type of exchange is becoming more popular

UNIVERSITIES •

- college of santa fe
- eastern new mexico university - portales
- new mexico highlands university - las vegas
- new mexico institute of mining and technology - revere
- new mexico state university - las cruces
- St. John's college in santa fe
- university of albuquerque
- university of new mexico - albuquerque
- western new mexico university - silver city

MUSEUMS •

- arteria historical museum and art center
- colfax county society of art, history and archaeology - roton
- gallop museum of indian arts and crafts
- institute of american indian arts - santa fe
- international institute of iberian colonial arts - santa fe
- jonson gallery - albuquerque uam
- milichal, albert k, collection of western art - albuquerque
- museum of albuquerque
- museum of navaho ceremonial art - santa fe
- museum of new mexico - santa fe
- new mexico art league - albuquerque
- re-wall museum and art center
- rome parish museum
- university art museum - albuquerque uam
- folk art museum - santa fe

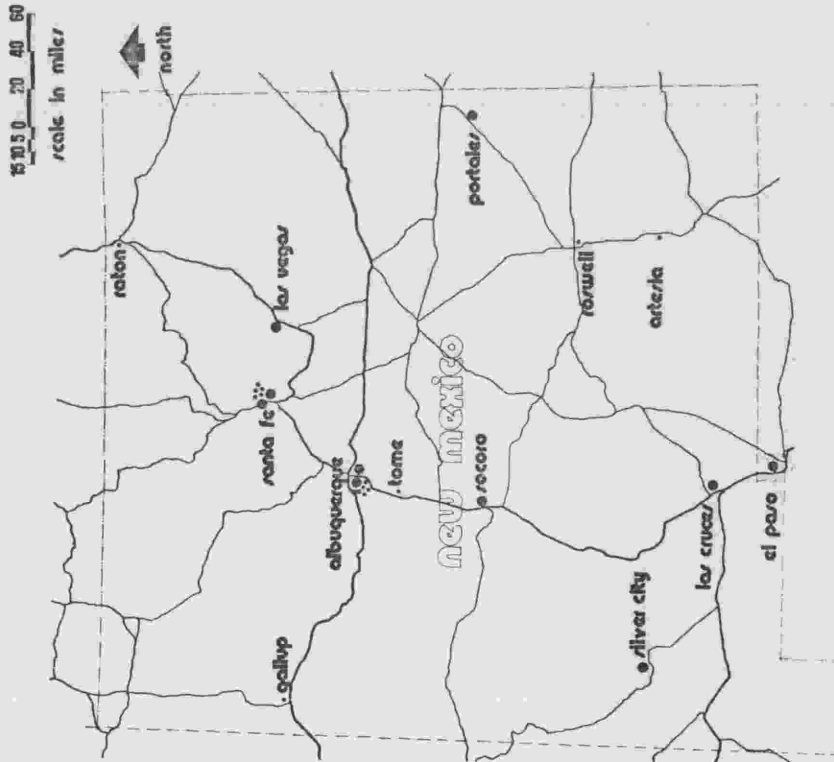


fig. 6

universities and art museums in new mexico

throughout the world, but because of the present economic situation they are being carried out on a relatively small scale in terms of size. With the ever increasing possibility of art being hijacked, vandalized or stolen there is a general feeling of not wanting acknowledged masterpieces lost to travel. The Mona Lisa will probably never travel to New York again. However a fine reproduction could. There is great enthusiasm over smaller more economical exchanges of art work.

The most significant new direction in museum design presently seems to be decentralization. This makes it more possible to take the activity of the museum closer to the people. The notion of satellite museums reaching out from a central complex seems to be especially appropriate on a university campus which is spread out over acres. This has a great possibility of making the art experience more accessible to everyone.

On one level the entire university campus and possibly the entire city would be a living museum with murals on the walls, sculpture in plazas, happenings and more. There would be small galleries in many of the buildings on campus and a full utilization of display cases. This would have the effect of getting the art to the people. There would be a central nucleus museum which would be situated so as to be fully accessible to both the university and the community.

A nucleus museum provides a new context for an old institution. The museum would be both a center for distribution of art work throughout the university community and a display and storage facility for this collection of works. The museum has a strong potential for awakening aesthetic sensitivity, and generating a stronger awareness of art experience through concentrated, centralized and practical use.

Sufficient planning is not being done for universities and their central museums. The first obstacle for the architect is the lack of interdepartmental cooperation. Recognizing the advantage of an interdisciplinary approach will be a major breakthrough in the advancement of education. The next obstacle is the lack of coordination in curriculum planning and physical design. This coordination is something that is often lacking and is necessary to achieve full success in education.

Museums must recognize the inhumanity of their architecture and change their physical image. Huge, impersonal, monumental facades and interior spaces while appropriate to places like Washington, D.C. are not conducive to a comfortable, inviting atmosphere in smaller, less tourist oriented cities.

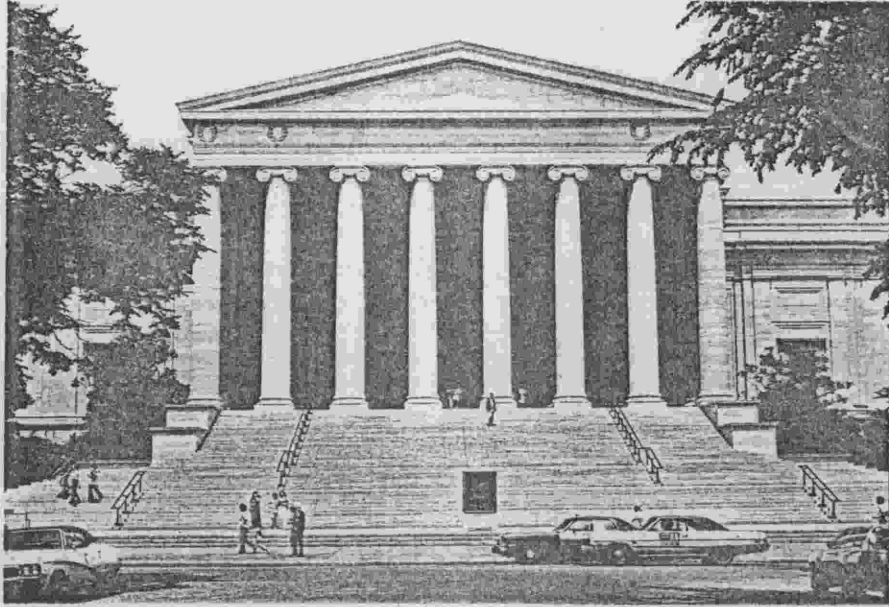


fig. 7 National Gallery of Art, Washington, D.C.

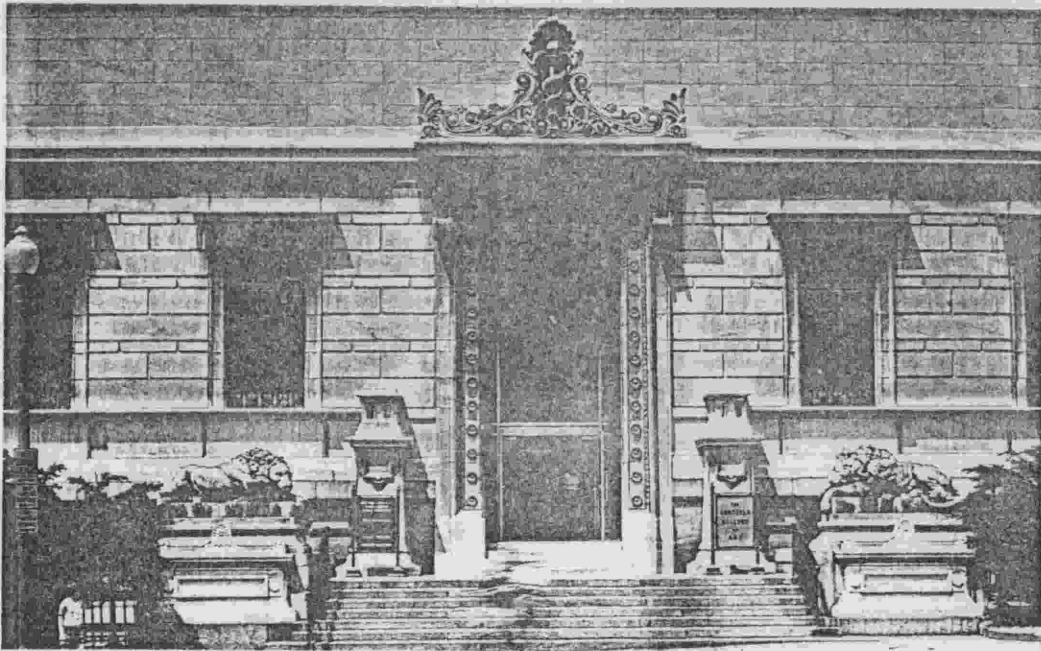


fig. 8 Corcoran Gallery, Washington, D.C.

The term "art museum" unfortunately carries with it stuffy misconceptions. It is therefore the responsibility of everyone connected with university art museums, both on planning and management levels, to give the "mental set" of an inviting, accessible, important and enjoyable place. At the same time we should redirect our ideas about museum design to facilitate the philosophy that the functions of these structures and facilities is an integrated part of the whole educational experience at the university. Physical design should take into consideration spacial demands of different types of art work. Museum structures should be made to accommodate as many people as possible on as human a scale as possible.

The 1968 Paris UNESCO International Symposium suggested that in addition to reevaluating physical design, sociological surveys could be conducted from time to time by museums in order to stay closer in touch with the interests and demands of the students.¹⁹ It has become clear, hopefully, that university art museums must seriously reexamine their roles. They must become more responsible to the whole community. They must become more accessible as an integral part of education. Art museums have a responsibility to integrate education with enlightenment through art experience. It should even be possible for museum planning

¹⁹UNESCO, p. 141.

to facilitate the task of changing the society's thinking about art objects from a purely monetary value to a social, cultural value.

There are some problems which must be attended to without regard to cost. Museums must meet a greater responsibility to the audience of the future by preserving their collections. Vandalism and theft are only a minor problem. It is widely recognized that changing conditions of the environment of an art object is detrimental to the work itself. This points out the importance of considering environmental controls in the physical design of the museum. If we are to encourage traveling shows, which seems beneficial in displaying variety and quality, then we must make the environment as conducive as possible to the long life of the art work displayed.

According to the conclusions of studies made by the Committee of the American Association of Museums in 1969, many exhibits do not make an impression on people. Among many reasons are too many displays crowded together or chaotic and monotonous displays. How much or how little a person can absorb in one visit to a museum is an important question. It has been shown through studies that an hour or hour and a half of walking through galleries is more profitable than longer periods of time.²⁰ There is a saturation level for most people. It must be realized

²⁰Committee of the American Association of Museums, p. 53.

that people view art works at different paces and different intensities. One design possibility is varying the exhibition spaces and making them interesting, thus cutting down on monotony. By employing many different spaces the viewer can go through one, two or however many spaces he cares to. Spatial variety avoids exhibitions stretching on in long corridors which leads to "space exhaustion." One tool that is widely used is the use of movable screens to create changable spaces which can add variety for the viewer.

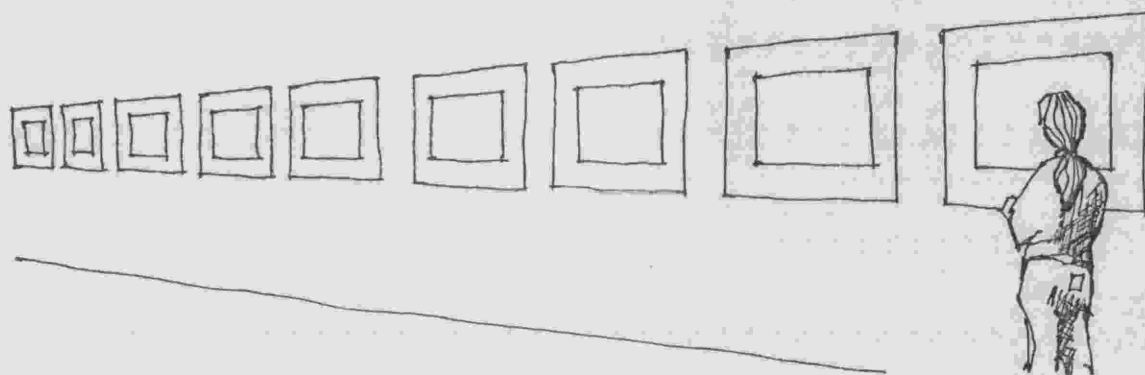


fig. 9 Space exhaustion

In the design of many art museums little thought is usually given to the possibility of new, different art forms

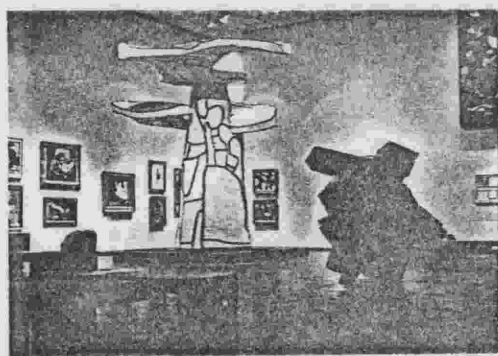


fig. 10 Chicago
Art Institute

demanding new types of spaces. For sometime now films have been recognized as artistic pieces. Films are being used more and more in museums both as illustrative tools and as pieces of art work in themselves. They require special considerations

in order to be viewed properly.

Original art works of good quality and quantity are essential in providing the full impact and feeling of having a direct experience with art. In order to maintain a constant source of original and varied works at the disposal of students, it is essential to maintain permanent collections. Different media require many different ways of storage and this must be considered in the planning stages.

If certain works of art are unavailable there are many different forms of reproductions that can give the student valuable information. While there is no substitute for an original piece, a fine reproduction is an invaluable second form of information.

There are only a few universities in the United States who own art collections, or have access to local collections, sufficient to provide adequate material for study. Chief among these universities are Harvard, Princeton and Yale, with the University of Chicago having access to the Chicago Art Institute, and universities in Washington, D.C. and New York having access to great museums in these cities.

A major problem of museums within universities is how to serve a large audience and maintain a standard of excellence on a generally small budget. Private organizations such as the Friends of Art, at the University of New Mexico, help the university art museum grow at a rate faster and steadier than can be achieved through a dependence solely

on university funds. As stated in the Friends of Art charter their purpose is "to assist in bringing important works of art to the museum, to help the museum build a permanent collection of art works through purchase or donation, to raise money for exhibitions of loaned works of art, and to serve as an educational medium for the public with reference to art." With the interest of finding out more about this organization the author joined the Friends of Art and was amazed to learn that the "Friends" raised \$10,000 in the past year alone for the museum.

Secondary materials such as motion pictures, slides, tapes, reproductions and photographs help the museum present a more complete picture of the art experience. Many forms of electronic media such as closed circuit television have been used as art forms themselves. Special considerations must be made to these forms of art experience. Rooms that can be made totally dark are a valuable asset in the relatively new field of electronic media.

Slide collections have been used for many years as supplements to exhibitions and as teaching tools for art historians. Slides can be made more accessible to users by designing a viewing area into a prominent position of the university art museum.

Films have not only been used as art forms but also as supplementary devices to the displaying of art work. It has been suggested by Jacques Durand in an article titled

"The Use of Cultural and Scientific Films in the Museums of the World" that films, which he terms "exhibitions in motion," are especially appropriate to appeal to modern visitors.²¹

Television is playing an ever increasing role in the everyday life of most Americans, some 93 per cent of the people according to Saturday Review.²² Museums have begun to take advantage of this habit, using the media to bring the art experience into the home. This has a tendency to increase museum attendance by creating more interest through increased exposure. Some museums use closed circuit television to record temporary exhibits. These recordings are made available to schools and people who might not have the opportunity to view the traveling shows. Such people might include the elderly and the handicapped. Lectures and documentaries about artists and their work bring people an inside view of the art experience.

There is a good possibility that cassette television will be in the future as wide spread as cassette stereo is today. If this does become a reality people could buy cassettes of exhibitions or lectures and view them at home.

²¹Jacques Durand, "The Use of Cultural and Scientific Films in the Museums of the World," Museum, Vol XVI, No. 22, 1963, p. 107.

²²Douglass Carter "Intellectual in Videoland," Saturday Review, May 31, 1975, Vol. 2, pp. 12-16.

Museums could go into television cassette production on as large a scale as that of their publications.

Youth comprises a large percentage of the university population and a major influence on this generation is the electronic media. There is certainly the possibility of a stronger relationship with the environment of this generation through the use of the electronic media used to relate art experience to them. X

One function of the art museum can be related with that of a library--to supply access to information and supply references to documents or objects. Because of the amount of information that is contained in art museums throughout the world there needs to be many access points for obtaining this information. Certain technical tools would provide easier access for all people to this vast volume of art.

The tools needed to help art museums are complex instruments. There are valuable art resources such as the Art Index, the Frick Archives, museum catalogues and many others that need to be brought to the disposal of every art museum and ultimately every person who desires their information. It has been suggested by the Metropolitan Museum of Art, in a book titled Computers and Their Potential Applications in Museums, that computers are a valuable tool

to be used for such a task.²³ The use of the computer has vast communication possibilities. A museum not located in a major city with major artistic resources would be provided access to the richness of extensive archives previously unavailable to it. Computer networks would not only facilitate an exchange of information but serve as regional centers for the individual museums.

Many of the references in this text have centered around the visual arts. If the goal of an art museum is, as it should be, to enrich as many people's lives as possible, unsighted people's potential enjoyment of art experience must not be forgotten.

In the southeastern corner of the Civic Center Plaza in Chicago there is a bronze braille plaque describing the plaza and a beautiful Picasso sculpture situated there. There is a scale model of the sculpture and the plaza that through the sense of touch a blind person can gain a sense of the space and design.

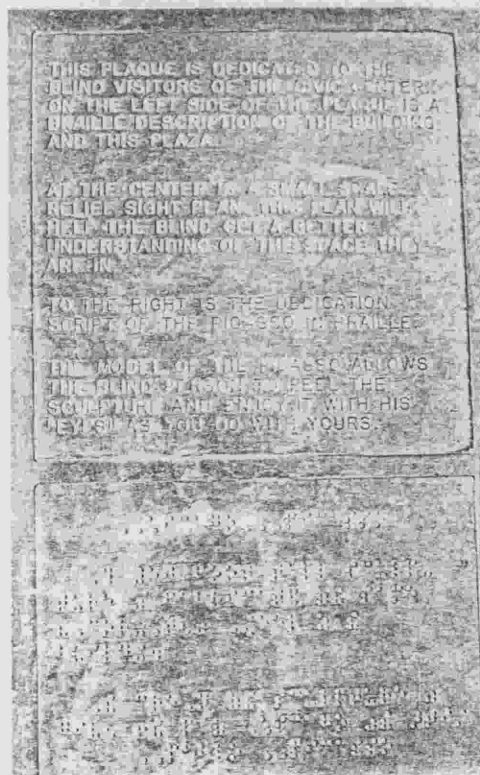


fig. 11 Braille plaque, Chicago

²³Metropolitan Museum of Art, *Computers and Their Potential Applications in Museums* (New York, 1968), p. 7.

During July and August of 1968 at the Moderna Museet in Stockholm, Sweden an exhibit titled "Art for the Blind" was first introduced. An entire room was completely blacked out so that even the sighted could experience the show in the same manner as the unsighted. The show consisted of sculpture that was specifically to be touched and felt. The public was guided through the room by means of a waist-high hand rail. The identification labels were in braille. For the sighted persons who could not read braille there were small lights that came on and only illuminated an inch square to allow them to read the identification. This kind of space and activity can be a valuable asset to the museum in the continuing reach to forgotten segments of the public.

An important statistic to take note of is the fact that only about six per cent of the museums in the United States reported any special programs for the physically handicapped. With the growing concern in the United States over the physically handicapped and how to make things more accessible to them, this is an area that is in need of some concern.

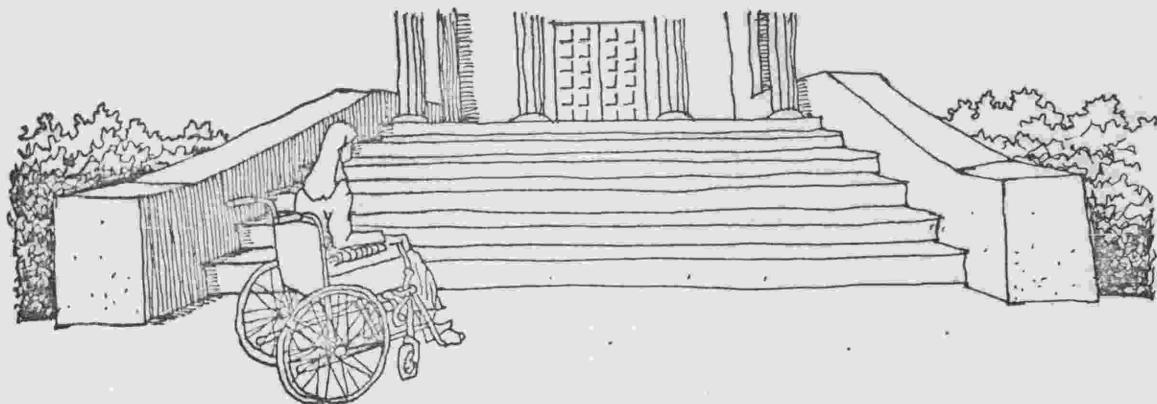


fig. 12 Barriers in architecture

Approximately 15 per cent of our population is 60 years old or over. According to Ms. Maggie Kuhn of a national organization of the aged calling themselves The Gray Panthers, individuals over 60 years old are the fastest growing minority in the United States. Older people do not want to be played up to but want to be given a fair opportunity.

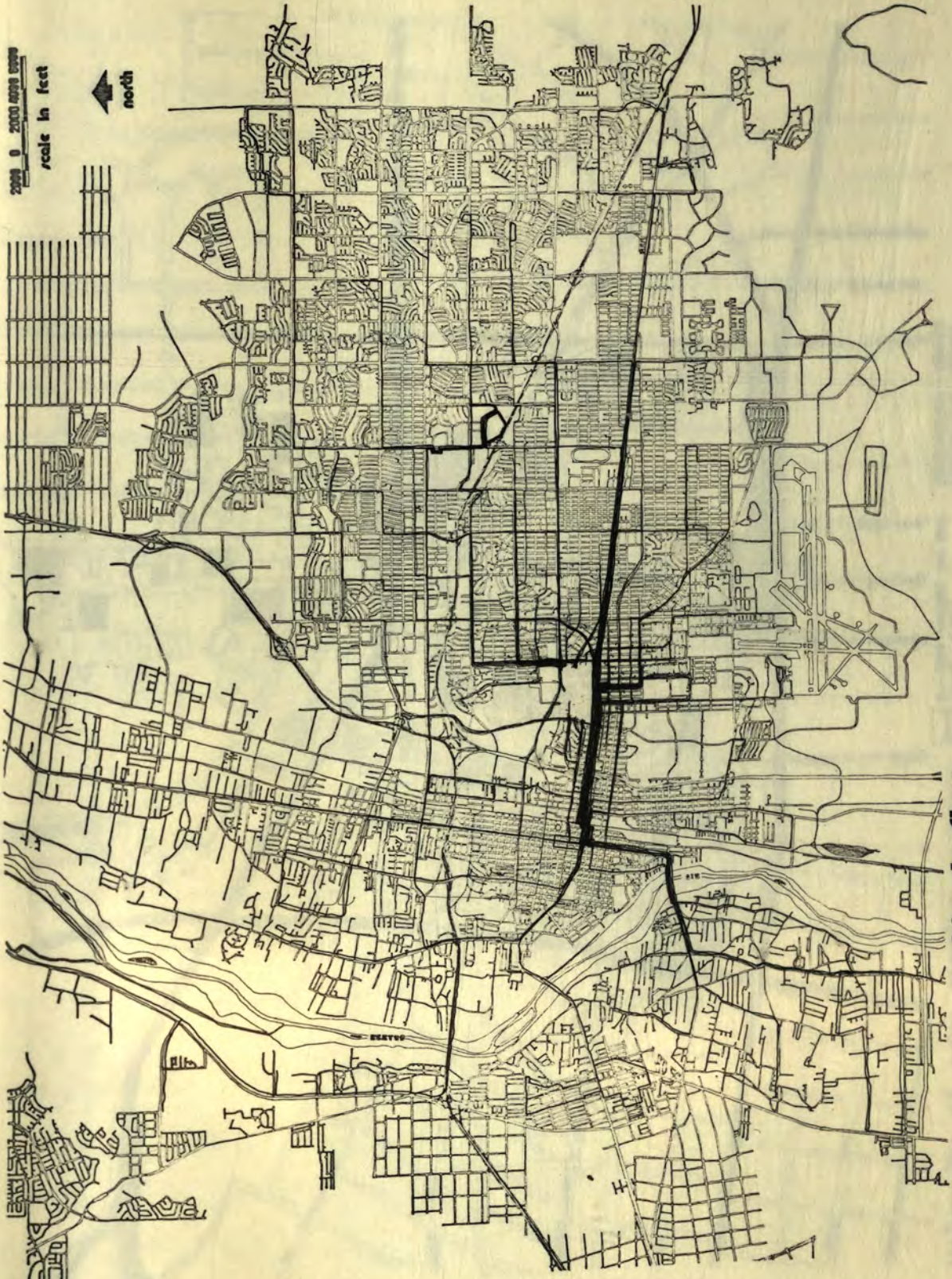
In attempting to meet the criteria of a successful art museum as stated in previous chapters, any planning process must consider these conditions discussed above. A university art museum must meet the unique needs of a growing audience.

CHAPTER 5
PLANNING STUDIES FOR ART EXPERIENCE ON
THE UNIVERSITY OF NEW MEXICO CAMPUS

The University of New Mexico campus, located just west of the central business district and in the geographic center of Albuquerque, provides much of the cultural activity for the city and surrounding areas. It is very important therefore for the core of art experience on campus to be easily accessible both by the students and faculty of the university and the surrounding community. The series of maps contained in this chapter are devised to graphically aid in the analysis of numerous forms of art display on campus.

The city and area maps (pp. 41 & 42) illustrate the implications of major transportation forms on site analysis and selection. The maps and layovers indicate that Central Avenue is the focus of activity for four main forms of transportation--bus, car, bicycle and pedestrian.

The Albuquerque transit system does not have an up-to-date map of city bus routes as of this writing. To compile the information on the bus routes layover it was necessary to obtain schedules of each individual bus route and draw it over the city map. Eight bus routes pass by the university campus on Central Avenue while only two travel by the university on Girard, one on Lomas and one on University Avenue.



city of albuquerque bicycle flow bus routes

fig. 13

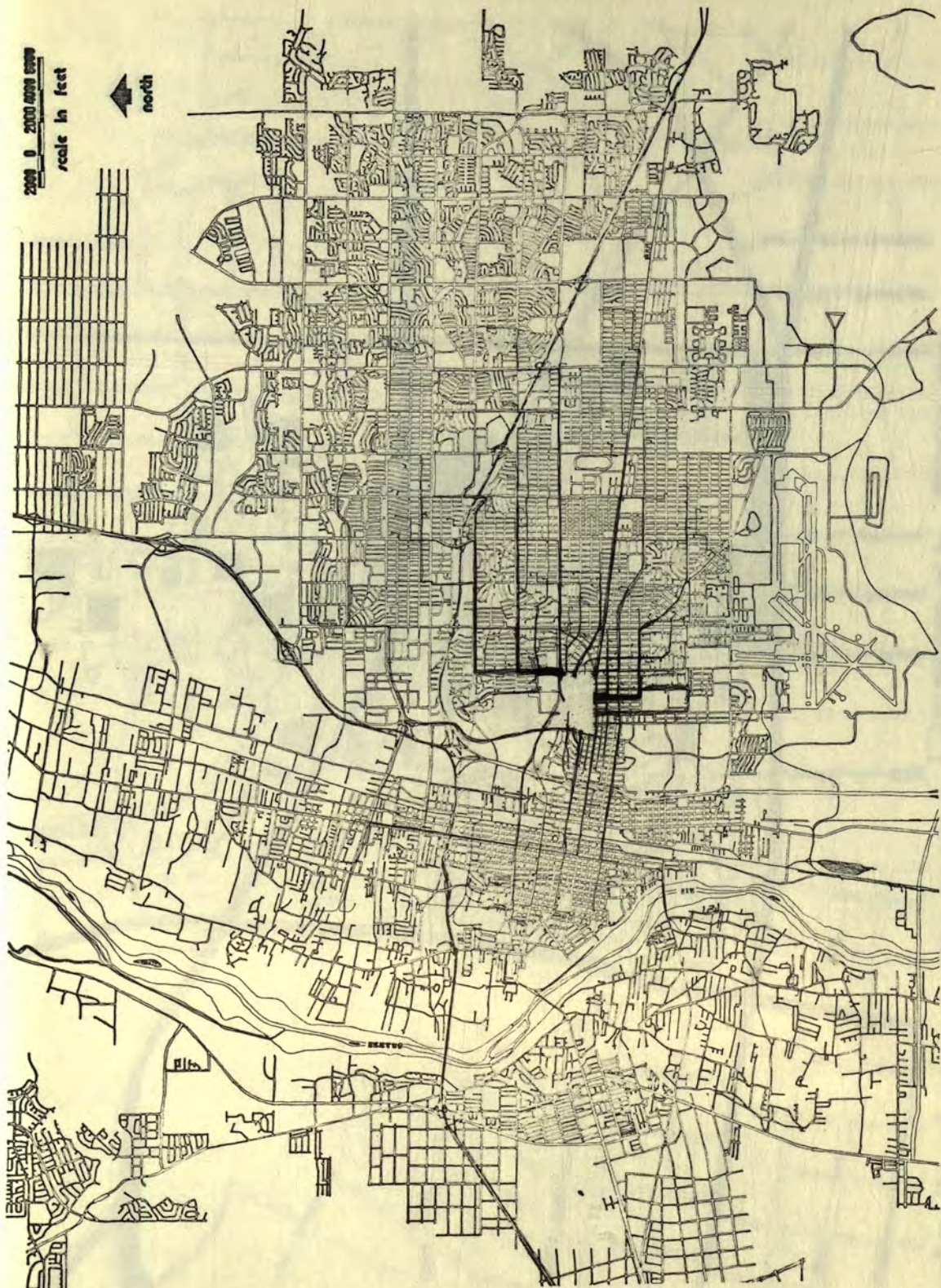


fig. 13

city of albuquerque bicycle flow



city of albuquerque

fig. 13

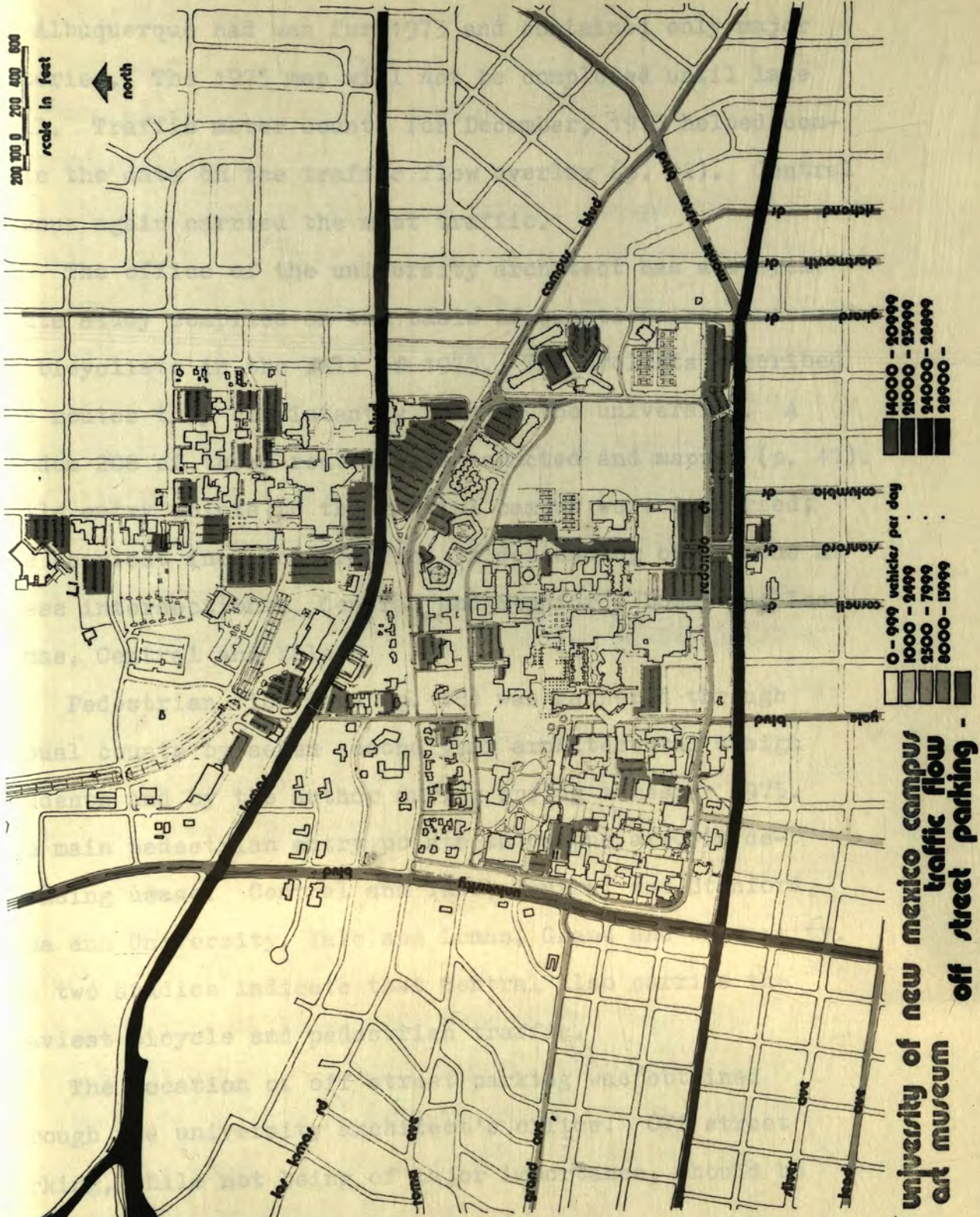


fig. 14

university of new mexico campus
traffic flow
art museum
off street parking

The most recent automobile traffic flow map the city

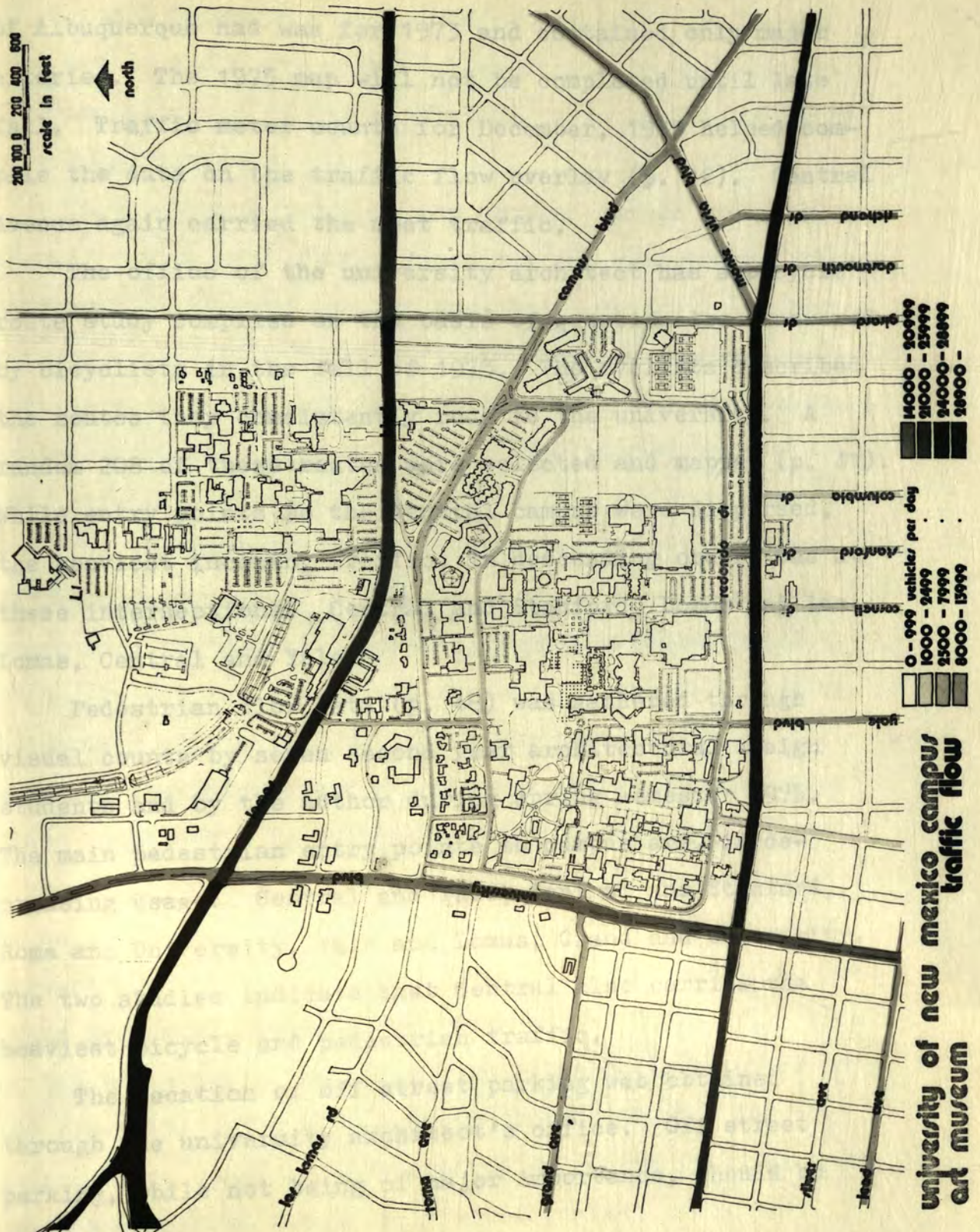
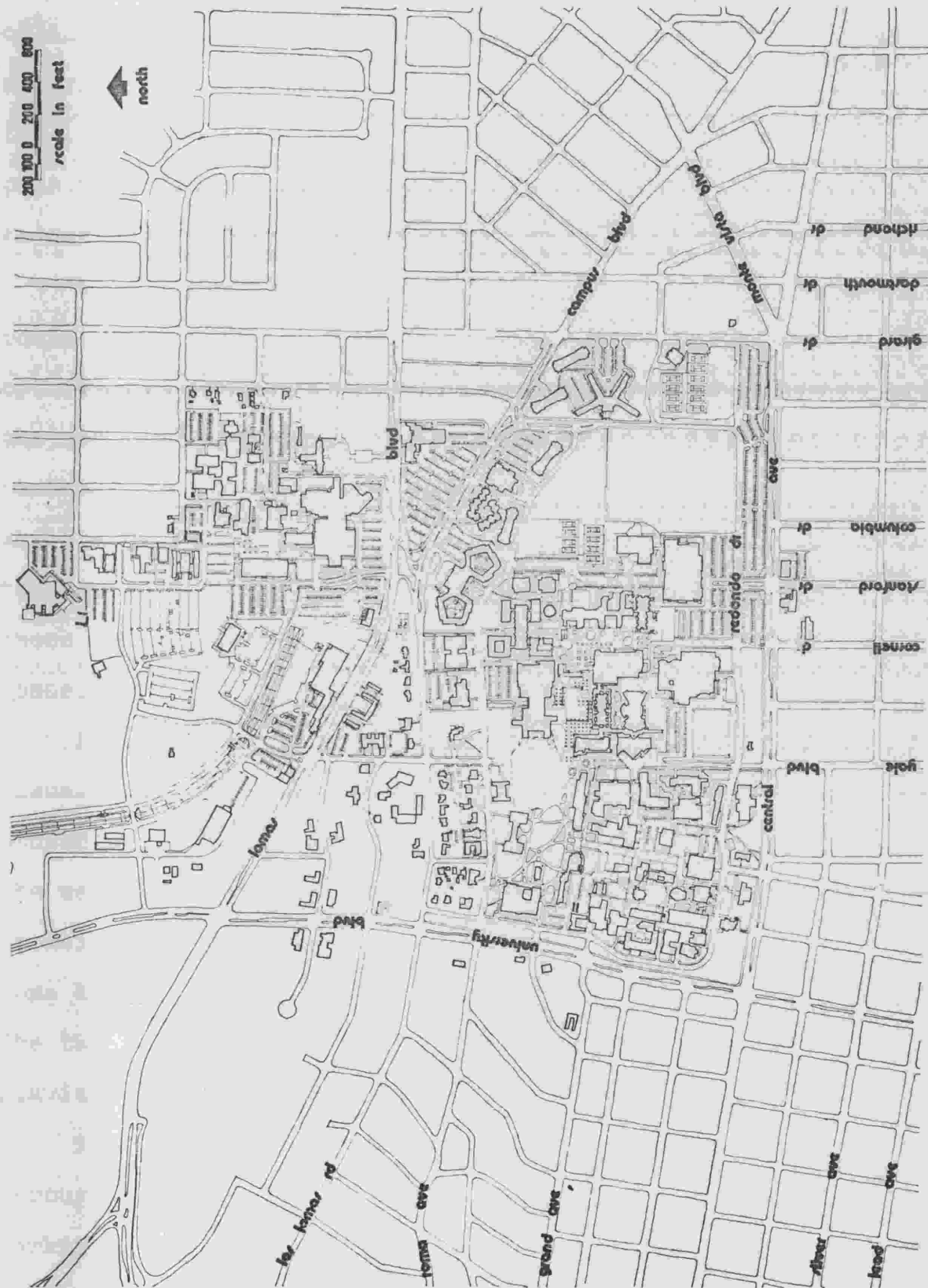


fig. 14



**university of new mexico campus
art museum**

fig. 14

The most recent automotive traffic flow map the city of Albuquerque had was for 1973 and contained only major arteries. The 1975 map will not be completed until late fall. Traffic meter counts for December, 1973 helped compile the data on the traffic flow overlay (p. 42). Central Avenue again carried the most traffic.

The office of the university architect has a bicycle route study compiled on the basis of questionnaires answered by bicyclists in the fall of 1973. The cyclists described the routes they consistently rode to the university. A random 208 of these routes were selected and mapped (p. 41). While entry points to the central campus were dispersed, the heaviest incoming traffic, in descending order, was at these intersections: Central and Stanford, Lomas and Las Lomas, Central and Yale.

Pedestrian flow data (p. 48) was gathered through visual counts by seven second year architectural design students and by the author during spring semester 1975. The main pedestrian entry points to campus are, in decreasing usage: Central and Yale, Central and Stanford, Roma and University, Yale and Lomas, Grand and University. The two studies indicate that Central also carries the heaviest bicycle and pedestrian traffic.

The location of off street parking was obtained through the university architect's office. Off street parking, while not being of major importance, should be

a factor in the planning of art facilities if the goal is to reach as large an audience as possible. While for most people there are viable alternatives to the automobile, for some segments of the population it is their only means of transportation.

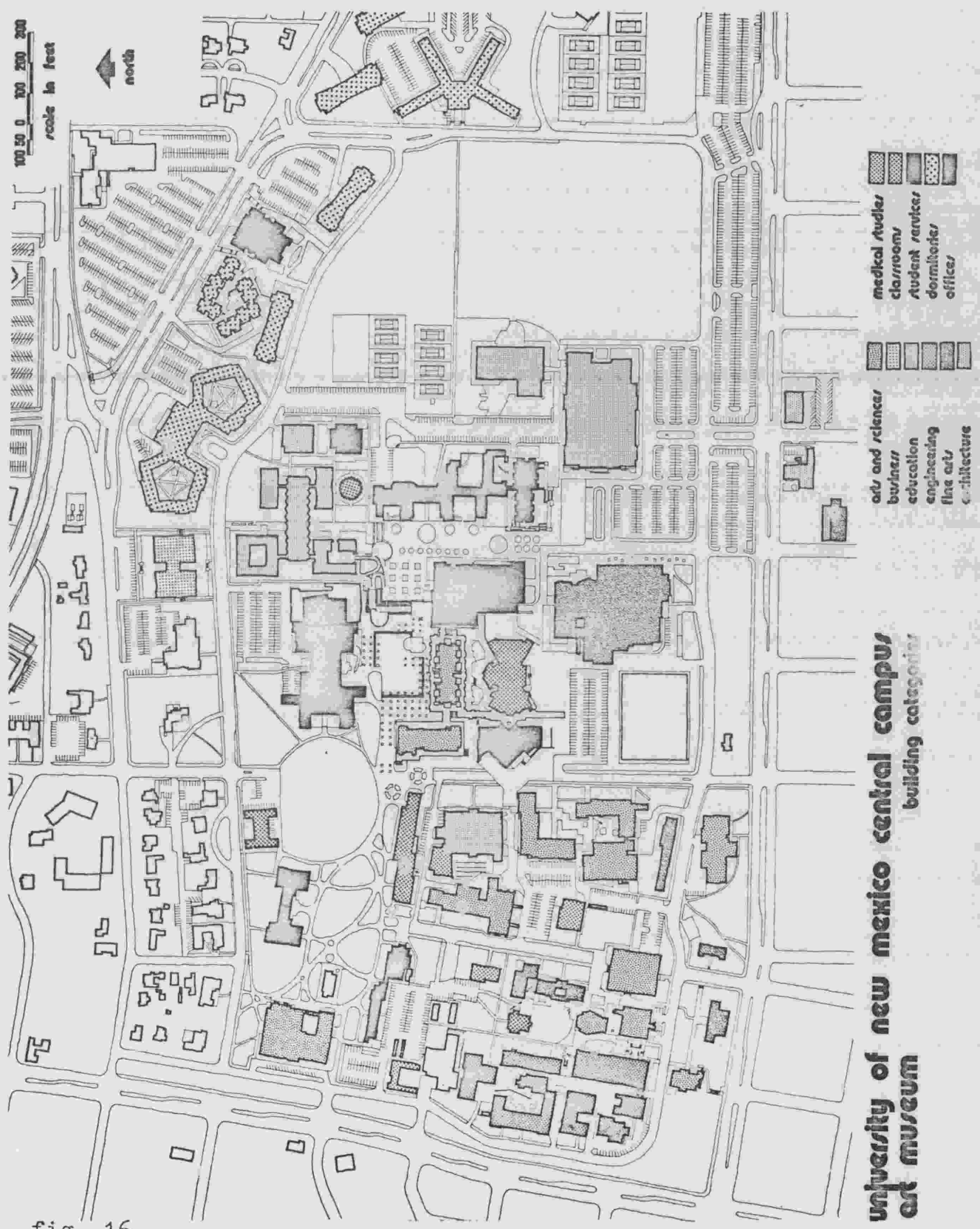
The next maps focus on the central campus with the identification of building functions and categories. These maps help illustrate spacial possibilities for interdisciplinary cooperation in the art experiences. Several schools, such as engineering and architecture have been physically isolated from the rest of campus. Sculptures, murals or satellite galleries could penetrate this isolationism.

The two layovers on p. 48 were devised to portray variable densities of people on campus. Student contact hours show the relative density of people inside buildings. Pedestrian concentrations analyze exterior density. A computer printout, supplied by the registrar's office supplied the information of how many people attended each class each week. By multiplying the number of hours each week a class meets in its assigned room by the number of students in the class it is possible to establish student contact hours for each room. Example: art studio 313 001 meets at 8 a.m. to 10:45 a.m. Tuesday and Thursday, a total of 5.5 hours per week. There are 14 students enrolled in the class, $14 \times 5.5 = 77$ student contact hours. Add together every class in each room of an entire building and it is possible to establish student contact hours for



university of new mexico central campus
art museum

fig. 15



university of new mexico central campus
art museum
building categories

fig. 16

that building. The statistics used in this map are for the spring semester of 1975. This information was only obtainable for classroom and lab buildings.

The library keeps turnstile counts at the main entrance. On an average week day during February 1975 approximately four thousand persons per day entered the library. Using a modest figure of one hour per person multiplied by seven days per week yielded 28,000 student contact hours for the library.

The director of Popejoy estimated that during the school year there are an average of four performances per week with an average of 1,000 persons each performance. There being approximately two and one half hours per performance, a total of 10,000 person contact hours per week was arrived at.

The number of persons living in each dorm was supplied by the housing office. This number was multiplied by twelve hours per day. Example: Hokona Hall, 319 persons x 12 hours x 7 days per week = 26,796 student contact hours.

Most, if not all, persons living in dormitories eat in La Posada. Using three hours per day, seven days a week, with the exception of Sunday with only two hours, yields 25,560 student contact hours.

The student union estimated that approximately 53,775 persons used their facility the average week of January 30 to February 5, 1975. A conservative 53,775 student contact

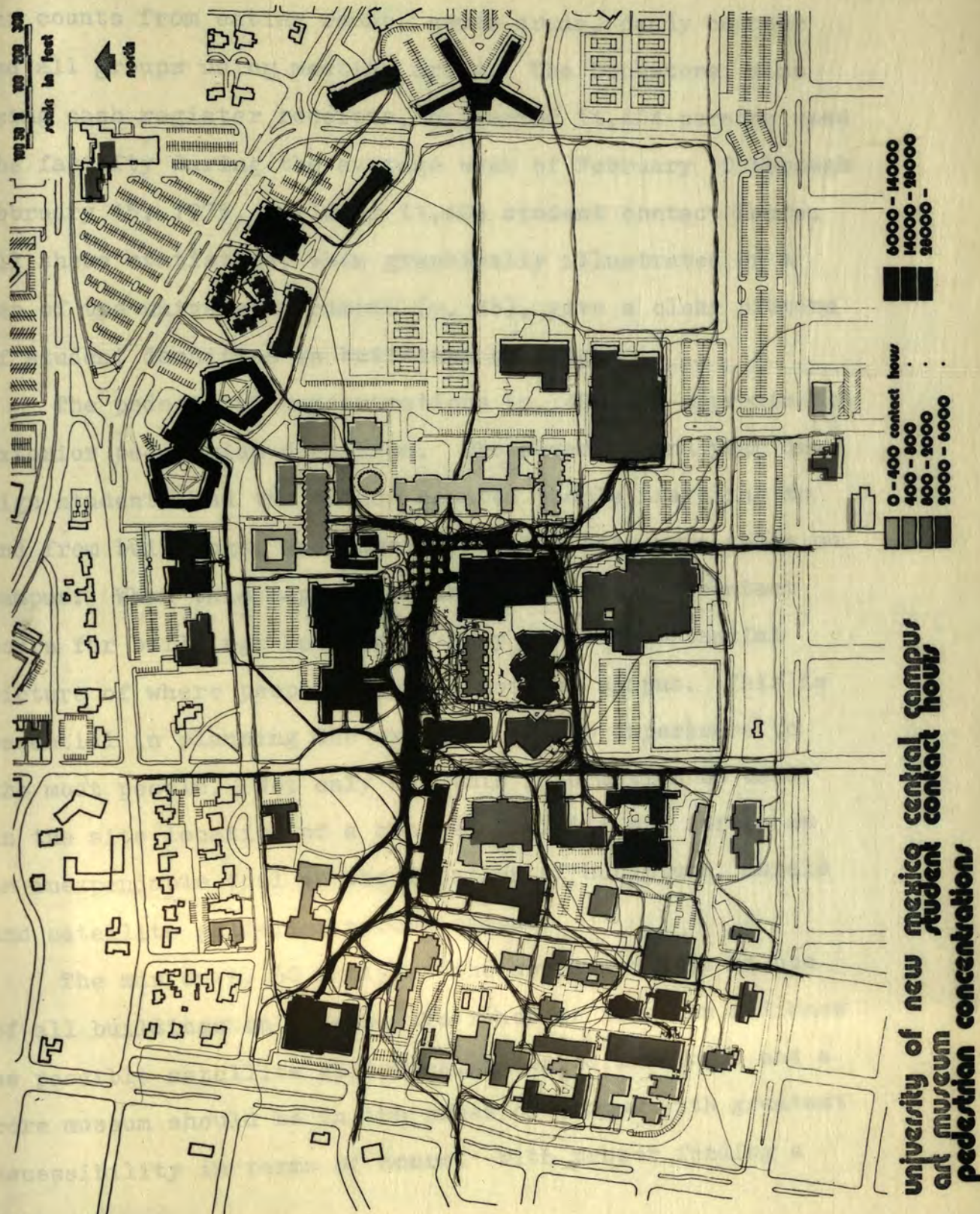
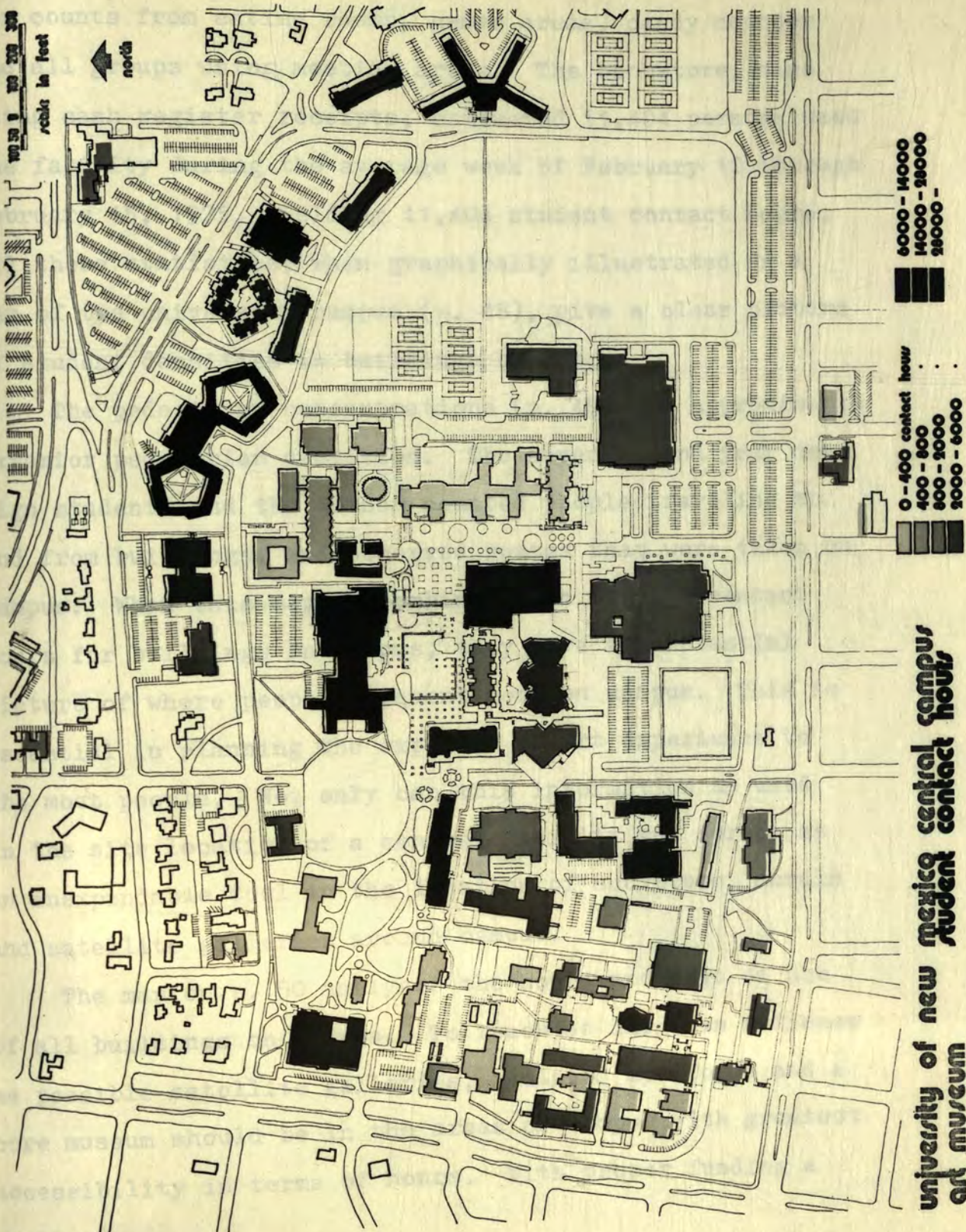


fig. 17



university of new mexico central campus
 student contact hours
 art museum

fig. 17



fig. 17

**university of new mexico central campus
art museum**

hours was used. The estimate was derived from cash register counts from eating rooms, games areas, candy counter and all groups using meeting areas. The bookstore, also using cash register receipts, estimated 11,404 persons used the facility during the average week of February 10 through February 15, 1975, yielding 11,404 student contact hours. All these statistics, when graphically illustrated on a map of the university campus (p. 48), give a clear picture of student densities in buildings on campus.

The pedestrian concentrations (p. 48) are approximated exterior pedestrian densities. The seven second year design students and the author counted people traveling to and from buildings, and observed routes that were taken on campus. When this map is combined with student contact hours for buildings on campus, they give a substantial picture of where people frequent most on campus. This is essential in planning the exposure of art experience to the most people. Not only can this information be used in the site location of a central facility but serves as an inexpendable tool in the location of sculpture, murals and satellite galleries around campus.

The map on p. 50 analyzes the hours and days of use of all buildings on campus. To reach as large an audience as possible satellite galleries, isolated art forms and a core museum should be in the areas of campus with greatest accessibility in terms of hours. With proper funding a

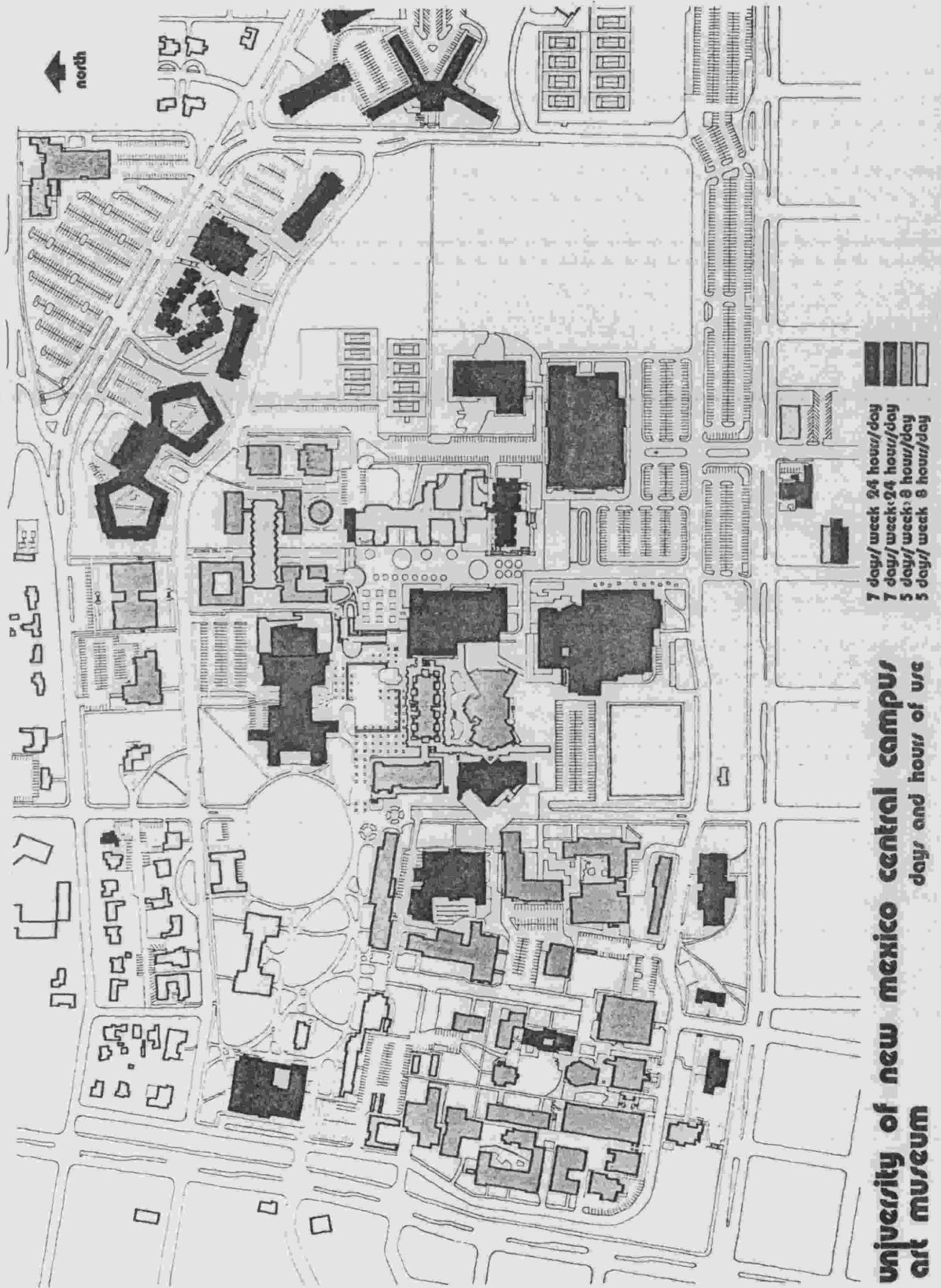


fig. 18

university of new mexico central campus
art museum
days and hours of use

museum or gallery could stay open longer hours and have an audience already in the vicinity. Isolated murals or sculpture, not subject to building hours, would be visually wasted in a 40 hour week zone of campus. Any art experience located in a short time usage area of campus would not attract as large an audience because the people simply would not be there.

In the attempt to make art experience more accessible, handicapped persons must be considered. The planning process should make special consideration in the placement of art objects on campus to be visually accessible to the handicapped. The art work must not block wheelchair routes (p. 52) thereby making easy flow difficult.

Environmental conditions are an important factor in both site selection and the design process. The elements can be an asset if used correctly. Many architects have gotten into much trouble by not considering wind, sun and precipitation.

The climate of Albuquerque is characterized as arid continental, with an average annual rainfall of approximately eight inches. Precipitation averages range from less than one half inch during the winter to over an inch and a quarter during the summer. During July, August and September Albuquerque receives almost half its annual moisture, mostly in the form of brief heavy thundershowers. According to the National Weather Service these summer

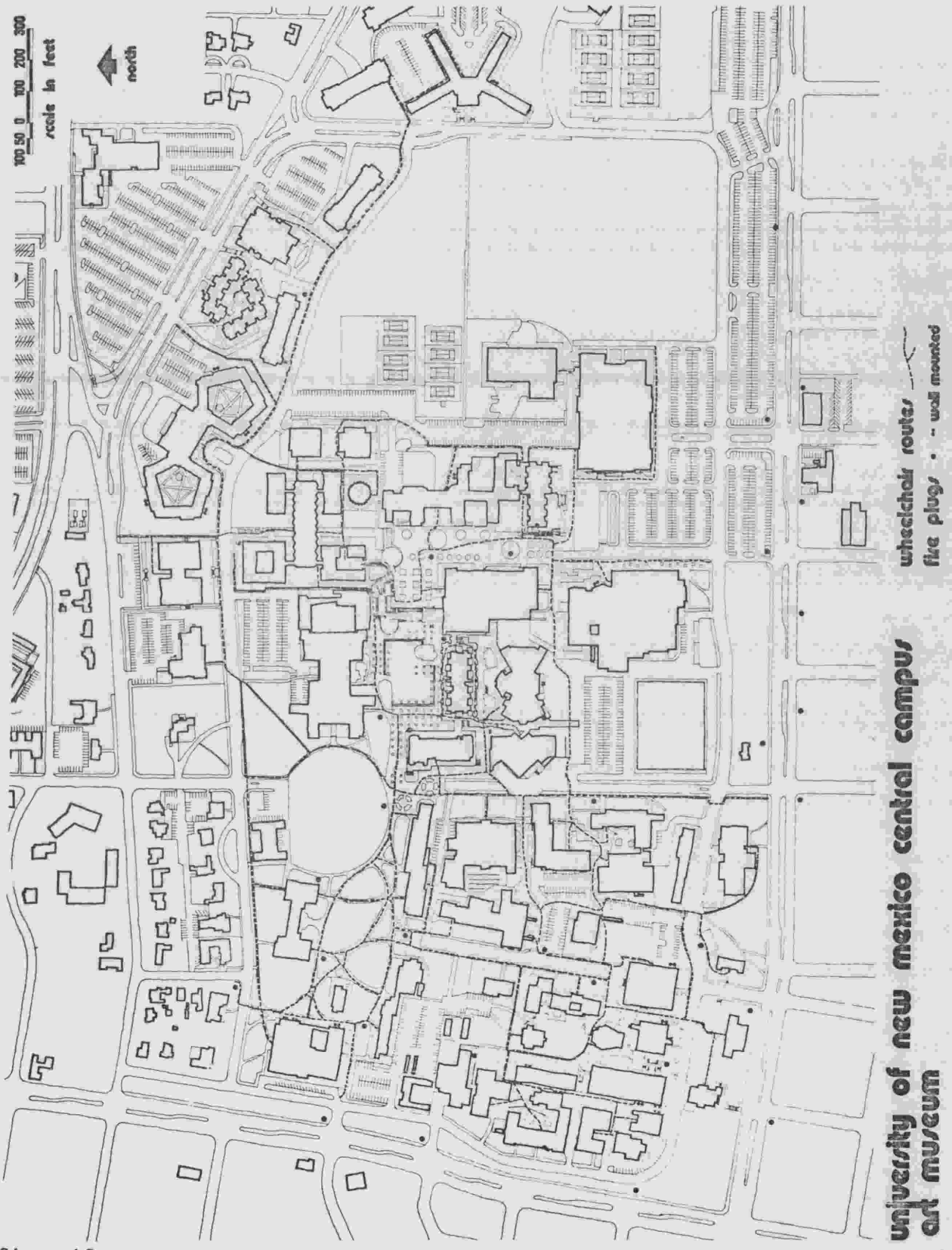


fig. 19

university of new mexico central campus
art museum

wheelchair routes - - -
fire plugs • - wall mounted

showers have a considerable moderating effect on summer daytime temperatures, while not materially interfering with outdoor activities. This fact may have significant design implications making it possible to view exterior art displays year round.

Another advantageous feature of Albuquerque's climate for viewing exterior art is the high percentage of clear days. Sunshine is present more than three fourths of the hours during the day for most of the year. If used correctly this sunshine can be an advantage, but it must be dealt with carefully. Much art work is subject to damage by excessive sun and this must be considered both in selection and display of the piece.

Winds throughout the year average 9 miles per hour, but during the spring months the average is somewhat higher. However, there are only an average of 46 days during the year when the maximum wind speed reaches 32 miles per hour. Winds are one of the most distressing environmental elements if not dealt with properly. The plan and design must block wind when and where it is necessary and yet allow a cool breeze where desired to combat the New Mexico sun. The annual wind rose covers

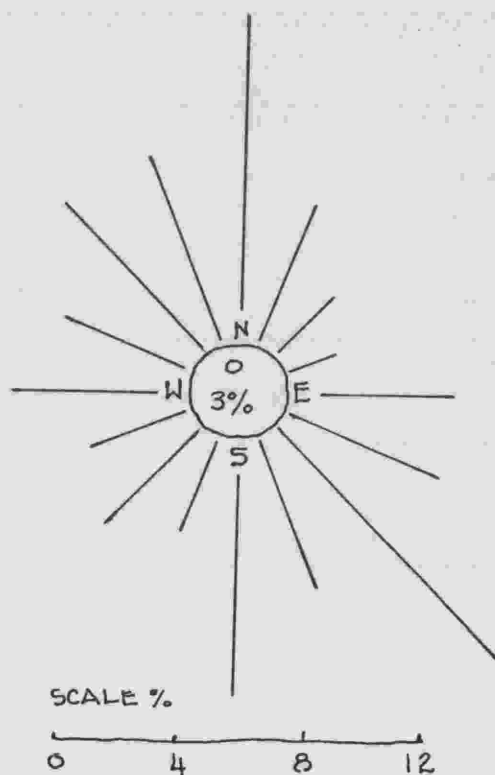


fig. 20 Annual wind rose

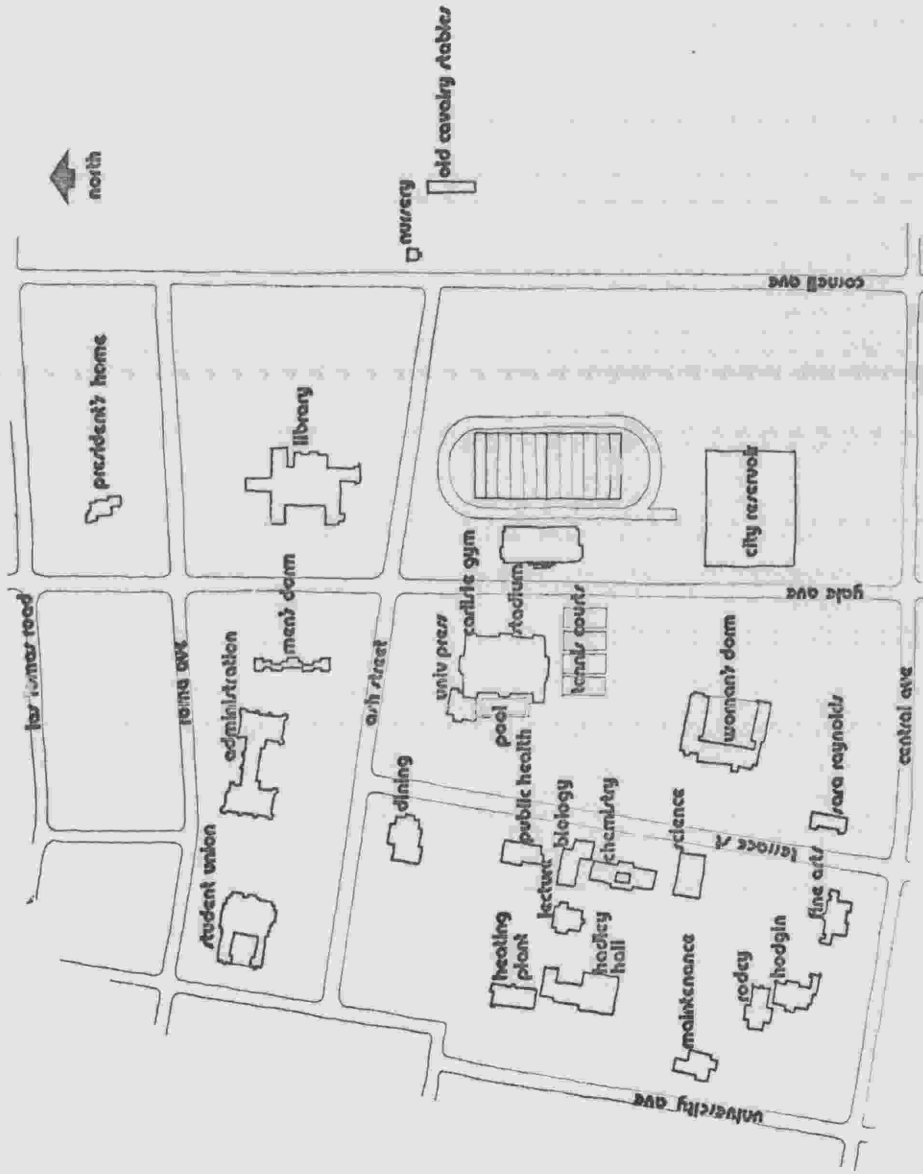
a 10 year period from January 1, 1949 through December 31, 1958. The records were made at the Weather Bureau Airport Station located at the municipal airport situated about $1\frac{1}{2}$ miles south of the university central campus. The predominant winds come from the north during the winter, the south during the spring, and from the southeast during the summer and fall.

A future master plan of the University of New Mexico does not exist. It was necessary to develop a prediction for the future with the purpose of planning facilities that will be in tune with future planning changes at the university. The future projections map (p. 56) was developed through conversations with Joe McKinney at the university architect's office.

The new art building, the new lake and the buildings slated to be torn down are the most important features of this map. The new art building will bring all the art departments together in one building. While the existing art buildings will continue to be used by the art department, the effect will be a larger density of student contact hours in this new area.

The lake will provide a new focus of student density for leisure hours. This area of campus is already relatively dense in pedestrian traffic. The lake will tend to slow the pace of traffic, making the area more

0 500 1000 2000 3000
scale in feet



university of new mexico 1938

fig. 21

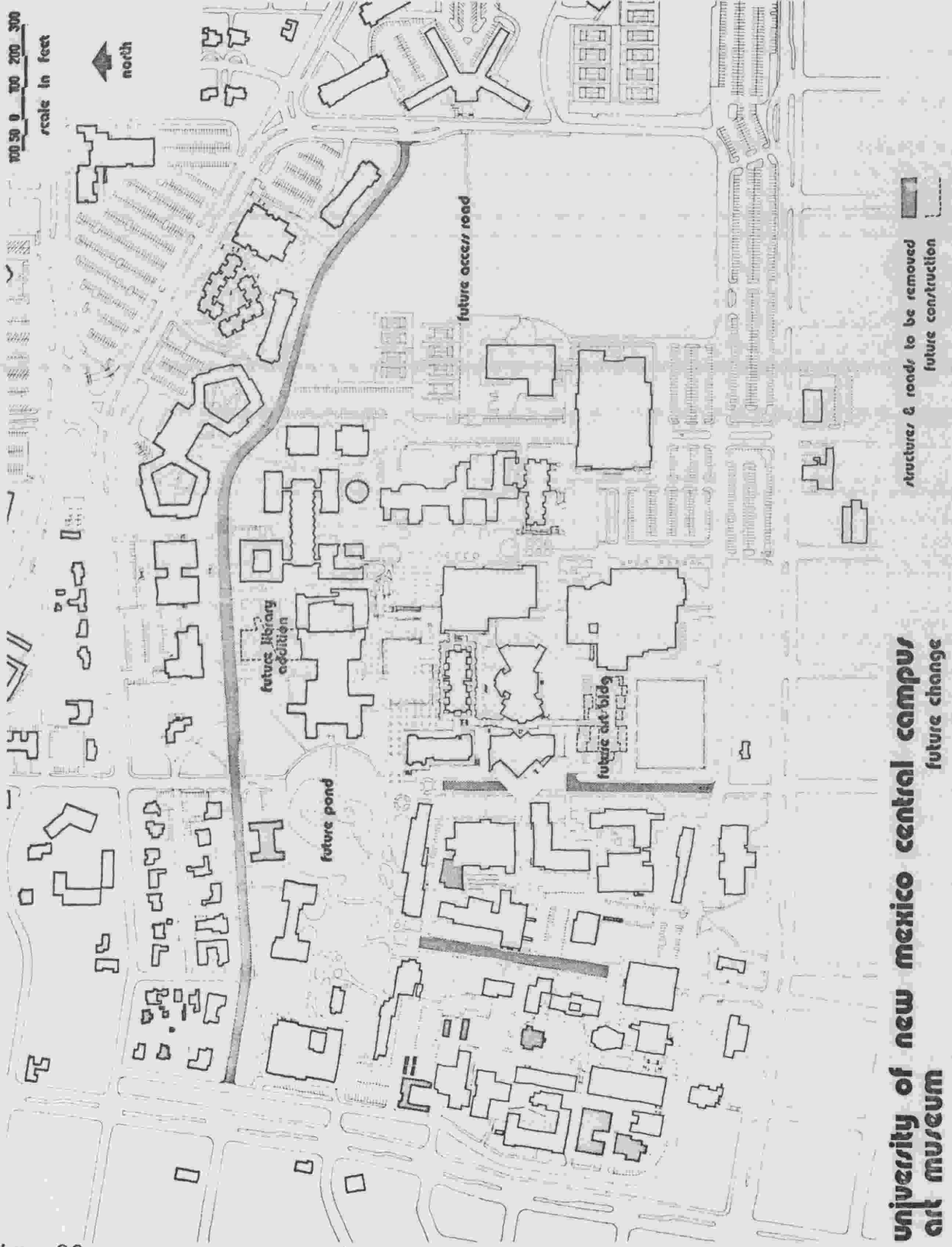


fig. 22

**university of new mexico central campus
art museum**
future change

receptive to the art experience. Buildings and areas to be removed will provide prospective sites to be considered for the core museum.

The map of the 1938 university campus (p. 55) shows where the campus is derived from. When viewed in connection with future projections, it can be useful in ascertaining direction of growth.

Hodgin Hall, the first building on the university campus, built in 1892, has been declared a university

historical land-

mark by the re-

gents. It is to

be restored to

its 1909 condi-

tion, when it was

remodeled in the

pueblo style of

architecture that

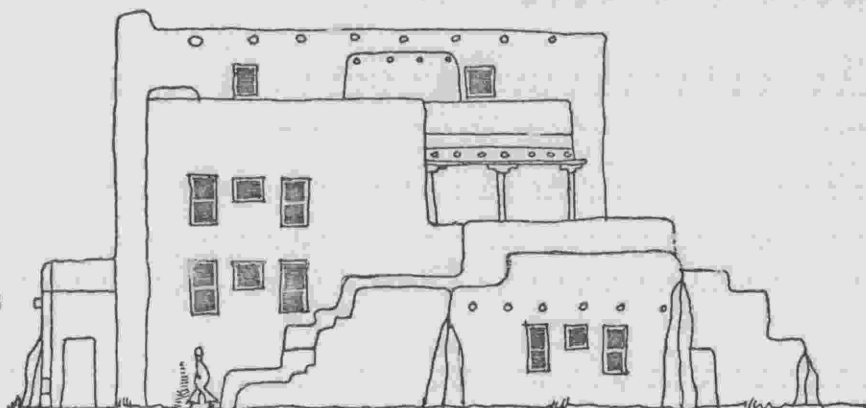


fig. 23 Hodgin Hall, 1909

is now a trademark of the university. The crafts annex, designed by the office of Frank Lloyd Wright, is being considered for this same honor. These two buildings and possibly others can be considered living, usable museum pieces. This is an important concept. The art experience does not have to be hung on walls to be enjoyed, in this case it surrounds us.

RECOMMENDATIONS

By using the preceding campus studies it was possible to formulate a series of recommendations for the display of art experience on the university campus. The primary concept is a satellite system. A central nucleus art museum serves

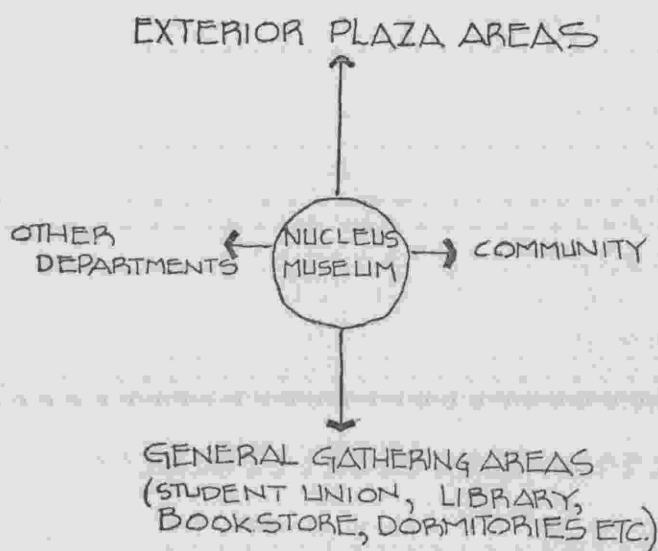


fig. 24 Satellite system

as a protectorate and supporter of art experience. The nucleus museum would not have control over policies such as what and how art is displayed but would give help through advice and expertise. The nucleus would have much the same relationship with the satellites as the university art museum now has with the Art Students Association (ASA) Gallery in the Student Union which has its own director. The university art museum provides the ASA Gallery with a rider policy on their insurance and supplies such materials as glass for hanging shows.

Through the use of exterior spaces on campus a living museum without walls can be a reality. The mall areas to the north and east of the Student Union are presently a living museum with theater groups performing, sword

swallowers entertaining and people selling crafts. These areas could be enriched further by the use of three dimensional art in open spaces and murals on the walls of buildings. A University of New Mexico graduate student, John Keyser, has been commissioned to build a sculpture for installation on the barren courtyard on top of the underground physics building. Also there is a George Rickey sculpture planned for the mall area between Ortega Hall and the library. The future pond area to the east of the administration building is also an ideal location for three dimensional pieces.



The University Architect, Van Dorn Hooker, while being

fig. 25 University campus art experience

enthusiastic about sculpture is opposed to murals. His negative reaction is based on the following objections: (1) murals are not a part of New Mexico's architectural history; (2) buildings on campus are not designed for murals; (3) murals tend to become outdated rapidly; (4) murals are easily defaced; (5) in commissioning murals it is easy to

end up with an unwanted product.

These objections are, in this author's opinion, unjustified. Murals are a part of New Mexico's architectural history. Man's early existence in New Mexico is recorded on the walls of his caves and cliff dwellings. There is a strong recent history of murals in New Mexico. In Albuquerque there are murals at the following locations and many more not mentioned: on Broadway Boulevard at the Model Cities Branch Library, at the Manpower Headquarters and at the San Jose Parish Church; on San Mateo Boulevard, Red Dog Dan's and Guyer's McDonald's art gallery; there are many inside buildings such as the library and administration buildings on the university campus. There are also many in Santa Fe and around the state.

The Architecture Building on the university campus was designed by George Wright specifically to have a mural on the north facade. Many other buildings on the university campus would be enhanced by the addition of murals. Free standing murals such as the Chagall in Chicago are a solution to the University Architect's second objection.

Any fine work of art should be timeless and will never become dated. There are many techniques available to protect these fine pieces from vandalism. If the subject matter is of a nonoffensive and noncontroversial nature there is not the present temptation for vandalism. Many of the murals that have been vandalized on campus are of

a racist nature. Murals high up on the sides of buildings are probably less accessible to vandals than paintings in museums.

An undesirable product should not be considered a problem. Artists for important public murals are usually selected either through competitions or personal review of their work and would submit a proposal to be reviewed. Previous performance in work of this scale would be a major factor in the selection of the artist. In the author's opinion places that could be considered for murals on the University of New Mexico's campus (locations shown on map on p. 62) are:

- 1) on all four elevations of the stacks of Zimmerman Library
- 2) around the base of Ortega Hall
- 3) on selected panels of the north facade of the Humanities Building
- 4) on the raised panel on the north facade of the Architecture Building
- 5) on exterior and interior walls of proposed core art museum
- 6) free standing murals placed at the new lake area and in the plaza between Zimmerman Library and the Humanities Building.

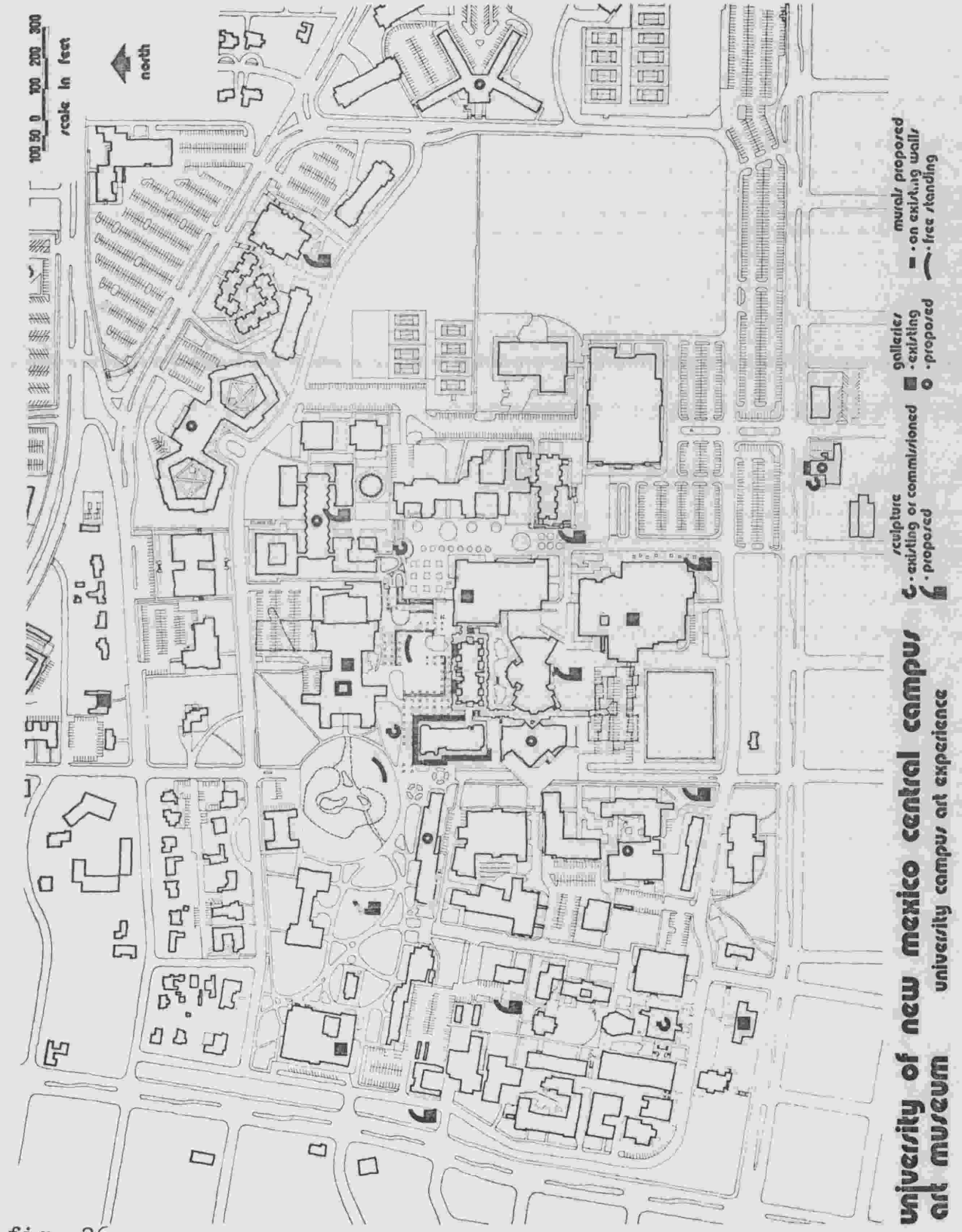


fig. 26

Areas between the future art building and Woodward Lecture Hall are ideal for sculpture because of the number of people passing through there. The landscaped area between Mitchell Hall and the administration building is appropriate for sculpture. Main entry points to the campus should be used to display exterior art. Cornell Drive north of Central, Yale Boulevard north of Central and Grand Avenue east of University Boulevard are areas with drawing power that can be increased through this use of exterior art. Finally, in and around the dormitories would provide ideal display areas for art experience because of the twenty-four hour student contact.

Satellite galleries should be established in as many buildings as possible (see map p. 62). The Student Union presently houses the ASA Gallery which is in danger of being removed. This is the most important place on campus for a gallery to be located both because of the numbers of people using the facility and because of the interdisciplinary nature of the union. The second floor of the library houses a small gallery. The library is another building that is an ideal space to house a gallery for the same reasons as the union. Visitors to the Biology Department's botanical garden, in its own way an art museum, could be exposed to other enriching art forms in the area. Since people come to see plants, why not see art too.

The Maxwell Museum of Anthropology, located in the anthropology complex, has a strong potential of being an

excellent educational experience. However it is rather poorly planned. Permanent display areas are secluded in such a way as to discourage all but the very interested from viewing them.

The Johson Gallery on Las Lomas Road is a recognized private museum with an impressive permanent collection. This gallery provides a much needed supplement to the university owned art museum. It is very important that this collection remain as a separate facility when the university inherits this fine collection, thereby functioning as a satellite facility.

Based on use the education complex, Mitchell Hall, the chemistry building, the university bookstore and the future art buildings should be the first buildings to gain galleries. Hopefully more will follow. All buildings on campus can begin displaying art by the use of display cases.

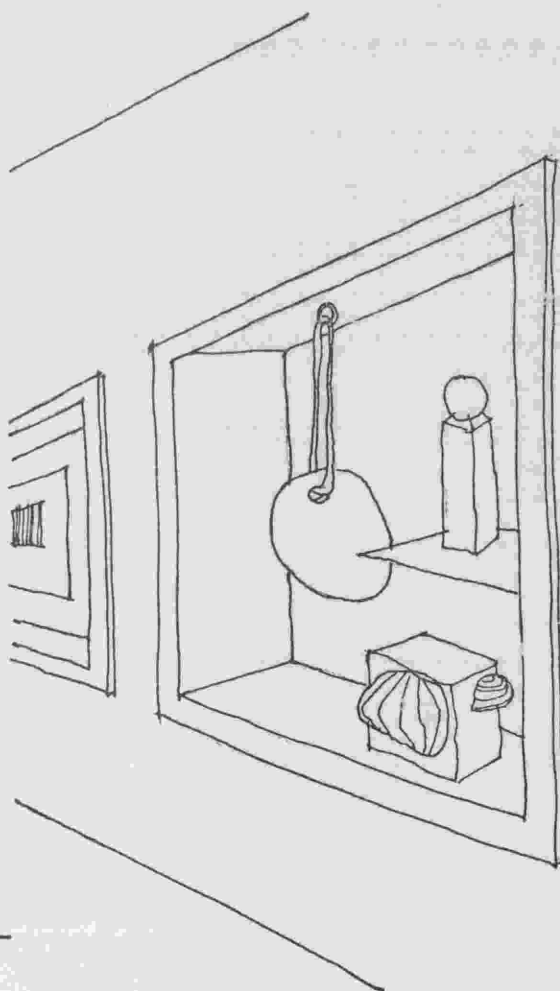


fig. 27 Display case

NUCLEUS MUSEUM

The central campus has many locations that could be considered potential sites for the nucleus art museum (p. 68). A site matrix (p. 69) has been devised to make the best possible selection. Some conditions were considered more important than others and were given more emphasis by assigning factors of two or three. Example: wheelchair accessibility, considered of major importance, was given a factor of three, proximity to the largest variety of other departments was given a factor of two, and the aesthetic value of the site was given a factor of one.

The eleven potential sites shown on p. 68 are described briefly below:

- Site #1 This site is situated just north of the anthropology building in a section of Roma Avenue that has been closed off recently. Its proximity to the downtown area and the exposure given by the proximity to the traffic on University Boulevard make it potentially a good site.
- Site #2 The site is an "L" shaped site located west of Bandelier Hall and in the area where the dental building is to be removed and provides much the same potential as Site #1.
- Site #3 The university has plans to remove the cooling towers from this location and this in combination

with the grounds south of Bandelier Hall and west of the chemistry building provide a potential site. It is located directly between the anthropology museum, the biology botanical garden and the fine arts complex. However this area is not a densely populated area in terms of contact hours.

Site #4 Located in the area of the proposed destruction of the lecture hall, this site has the same advantages and disadvantages as Site #3.

Site #5 This site makes use of the existing crafts building. Being an historically significant building of personal scale it provides a potentially interesting atmosphere for a university art museum.

Site #6 This site is situated on the area where the old engineering building and the Art Annex are located. This site has the advantage of being located close to the corner of University Boulevard and Central Avenue.

Site #7 This site is an open space to the northeast of the psychology building just south of the pharmacy building. This site provides much the same advantages and disadvantages as Sites #3 and #4.

Site #8 Similar to Site #5 this site makes use of an existing historical landmark, Hodgin Hall. An added advantage is its location along Central Avenue.

- Site #9 This site would utilize Sara Reynolds Hall and all land between Sara Reynolds and the journalism building. This site has the advantage of being situated along Central Avenue and in an interdisciplinary oriented area.
- Site #10 Situated between the Fine Arts Building and Johnson Gym, this site would close off the mall area to the east of the Student Union. At present this mall area has no definite boundary but spills into the parking lot along Central.
- Site #11 Being situated to the northwest of the library, this site is located between the anthropology museum and the library. The pond to the west could provide an outdoor area for display. A major disadvantage is that this area is heavily landscaped and any structure would destroy many large trees.

Site #10 received the highest rating and was subsequently chosen as the optimum site. Site #8 was chosen as an alternate site because of its high rating. Also it is an attractive site that makes positive use of an historical landmark.

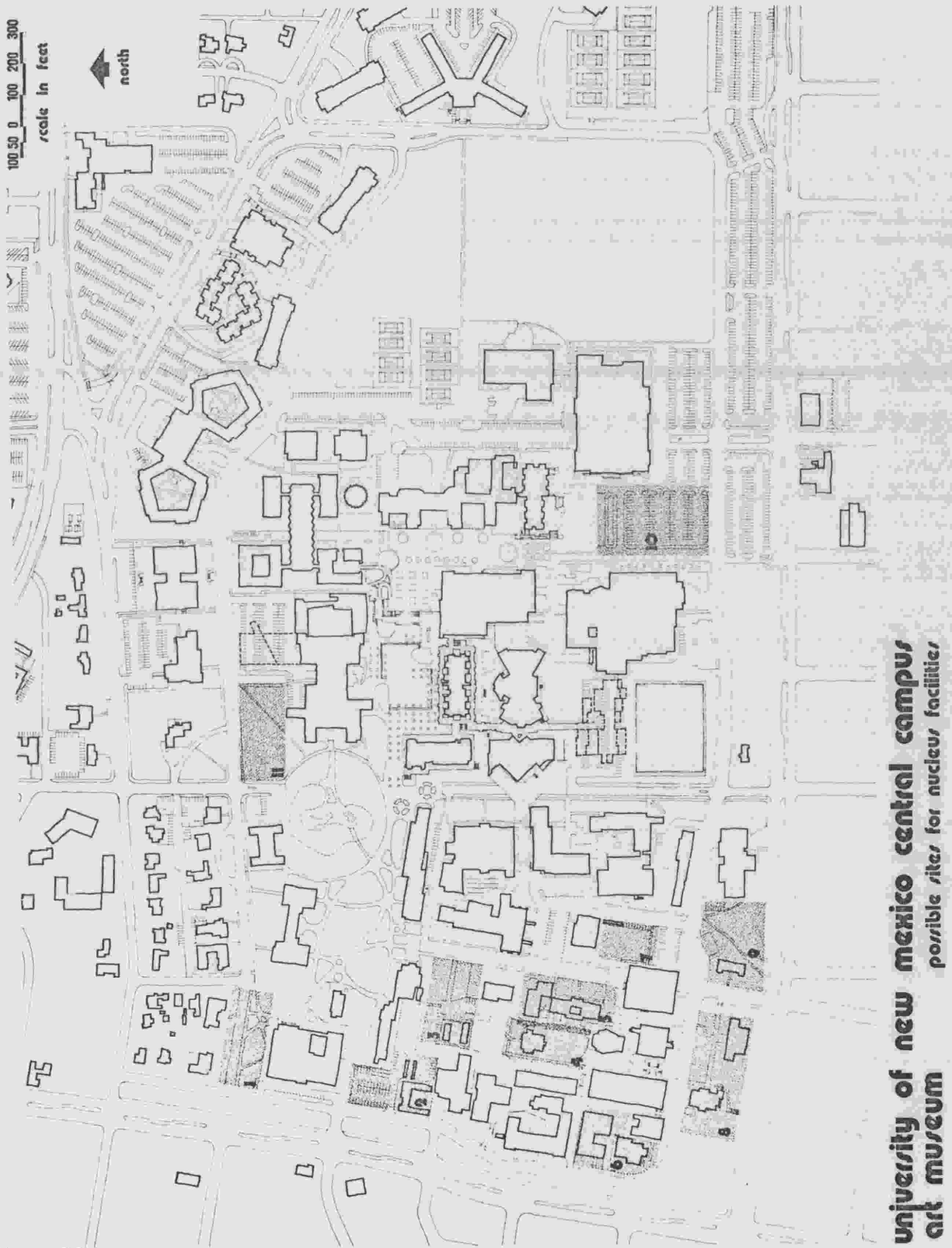
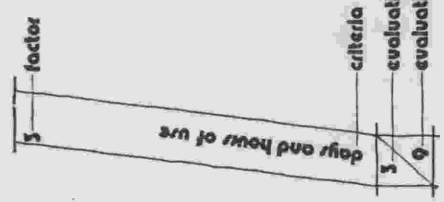


fig. 28

fig. 29

- factor:**
- 1 pertaining directly to physical characteristics of the site itself (could be altered in design)
 - 2 pertaining to external conditions of minor importance
 - 3 pertaining to external conditions of major importance



site	site criteria evaluation										total				
	wheelchair accessibility	orientation to the sun relative to energy conservation	existing aesthetic value	shelter from undesirable winds	days and hour of use	greater variety of department	surrounding community	building people density	bus routes	automotive traffic		bicycle flow	pedestrian traffic	parking	fire hydrants
1	3	5	7	7	5	4	10	6	5	9	6	6	5	10	188
2	3	5	4	5	3	6	10	3	2	9	6	7	10	10	177
3	3	7	5	5	5	7	4	3	2	2	5	4	10	6	156
4	5	7	4	6	5	7	4	4	2	2	5	5	4	5	141
5	3	7	7	7	5	6	4	4	3	2	5	5	8	10	155
6	5	8	3	3	3	4	10	3	4	9	6	1	9	10	163
7	10	2	8	7	5	7	4	6	3	3	5	5	10	6	163
8	5	2	9	7	5	6	10	4	10	10	8	3	4	10	201
9	5	2	9	6	8	7	10	6	10	10	7	6	6	10	225
10	10	9	8	3	9	6	30	18	30	20	21	18	6	10	279
11	10	2	9	9	9	7	3	9	2	3	9	7	10	6	205

CHAPTER 6

PHYSICAL PROGRAM FOR SPACES IN THE NUCLEUS MUSEUM

Preceding a design solution for the nucleus museum it is necessary to define basic goals, establish all known facts about the site, discuss any basic concepts the author has, and list the spaces needed.

BASIC GOALS

1. Provide space(s) for education through art experience.
2. Provide space(s) for sources of expertise, and encouragement for displaying the product of art experience for the living campus museum.
3. Provide secure and accessible space(s) to house art work.
4. Accommodate varying numbers of exhibits and people.
5. Provide unobstructed access to all, including handicapped, blind, elderly, poor, etc.
6. Provide an accessible permanent collection.
7. Maximize staff utilization through efficient layout of spaces.
8. Provide an educational facility to train people in conservation, museum management and related fields.
9. Provide space(s) for restoration work on art objects.
10. Preserve works of art.

11. Provide place(s) for local artists to exhibit their work and not be forced to conform to present accepted trends.
12. Provide environmental conditions conducive to preservation of art work and the comfort of people.
13. Provide space(s) for exterior activities.
14. Provide emergency exits to comply with the uniform building code.

FACTS

1. The amount of site area needed for the museum will depend on the building ground floor plan, whether or not parking will need to be provided and on the aesthetic setting. It appears that the site should be no smaller than two acres if parking and exterior areas are provided on site.
2. The site chosen (p. 72) is situated in the parking lot to the west of Johnson Gym and to the east of the Fine Arts Building.
3. Peoples Park borders the site to the north. This area is an attractively landscaped area.
4. To the south and southeast is ample existing parking, to the south of which is Central Avenue.
5. The site is a rectangle 220 feet along the north and south borders and 350 feet along the east and west

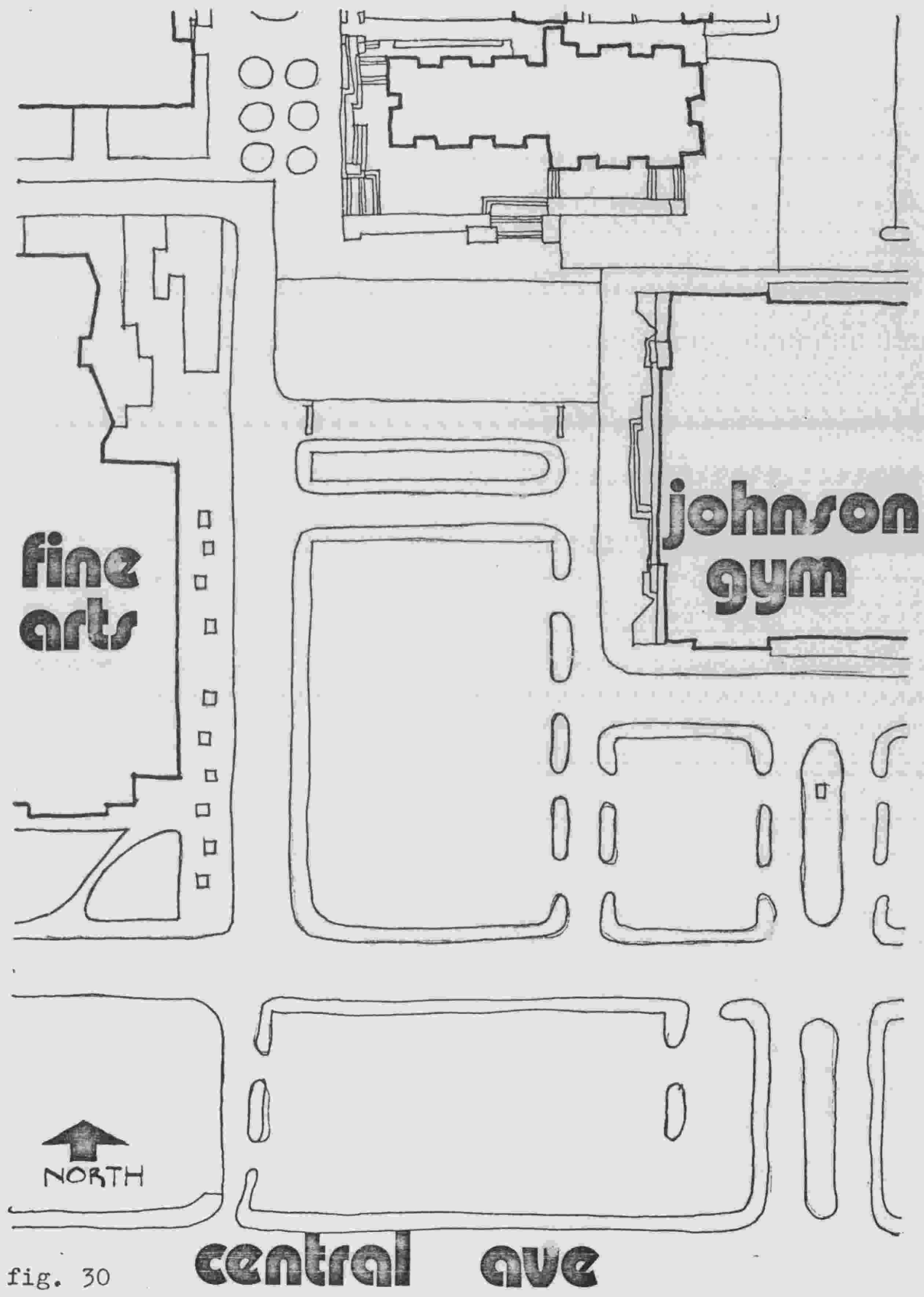


fig. 30

borders, There is a total of 77,000 square feet or 1,7676 acres,

6. The site is ideally located for solar application for heating and cooling of the facility.

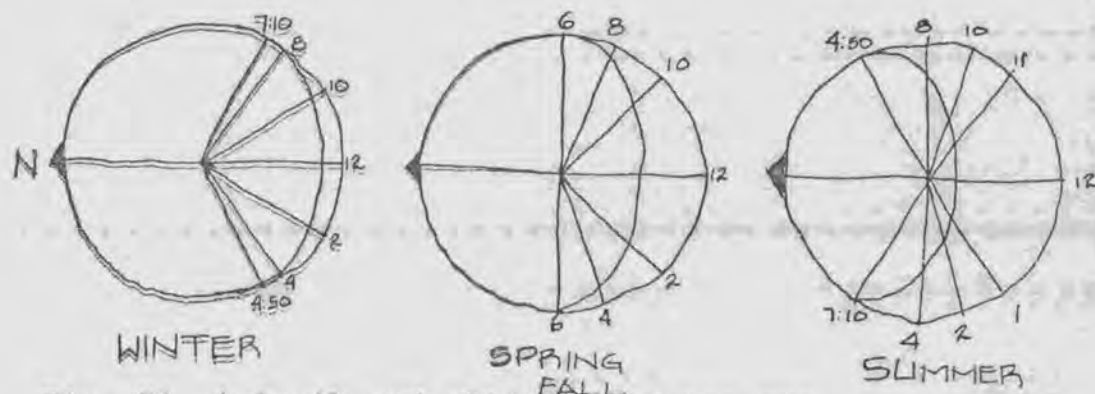


Fig. 31 Azimuth and altitude of the sun

7. The predominant winds come from the north during the winter, the south during the spring and the southeast during the summer and fall.
8. The altitude of the site is approximately 5,173 feet.
9. Albuquerque has a multicultural heritage that needs to be considered,

Per Cent of Population

Black	2.1
Indian	1.8
Oriental	.3
Spanish	30.4
Anglo	65.4

10. No budget has been set for this project at this date. However it is important for preliminary design purposes

to examine possible budget data. Antoine Predock, architect for the Museum of Albuquerque, is using the figure of \$48 per square foot for gross building construction cost. This building was chosen as an example because it is to house similar facilities and functions.

The university bookstore, bid in April 1973, designed by Jess Holmes, came in at \$26.03 per square foot gross building construction cost and \$35.74 total project cost. Escalate this to the present cost of construction in 1975 and it is comparable to Antoine Predock's estimate. For the purpose of this work the figure of \$50 per square foot will be considered.

A relationship diagram for the physical spaces required within the facility (p. 75) is a necessary next step. This diagram is not a floor plan. Its only purpose is to show visual and physical relationships between functions. Depending upon the design solution, many functions could be carried on in the same space.

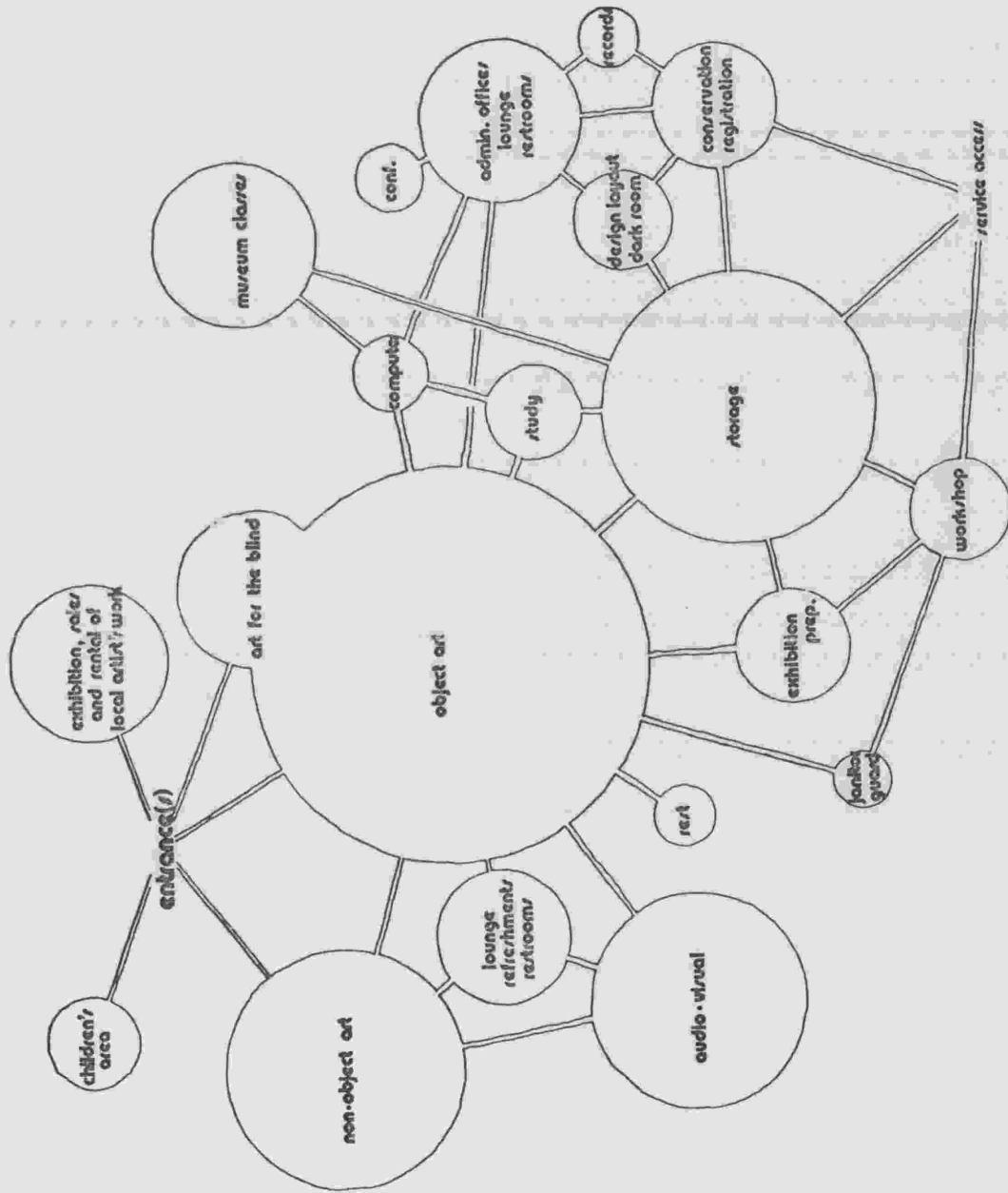


fig. 32

LIST OF SPACES REQUIRED

1. ENTRANCE(S)
 - A. Inviting
 - B. Provide easy access for all people
 - C. Allow for easy, unobtrusive security
2. DISPLAY AREA(S) FOR DIFFERENT FORMS OF OBJECT ART
 - A. 20,000 square feet
 - B. Accommodate large range of sizes of art
 - C. Display spaces suitably lit and yet secure from damaging light rays
 - D. Flexible lighting system for changing exhibit conditions
 - E. Flexible display system for stimulating spacial variety and changing exhibits
 - F. Flexible air distribution system to provide adequate temperature and ventilation for changing spaces, densities and uses, and preservation of art work
3. AREA(S) FOR NON-OBJECT ART
 - A. 7,000 square feet
 - B. Areas for dance and spontaneous happenings
 - C. Flexible lighting
 - D. Flexible spaces
4. AUDIO-VISUAL VIEWING AREA(S)
 - A. 5,000 square feet, can be divisible and/or dispersed

- B. Screen(s)
 - C. Projection area(s)
 - D. Acoustically isolated
 - E. Closed circuit TV
5. AREA(S) FOR EXHIBITING, SELLING OR RENTING LOCAL ARTIST'S WORK
- A. 1,700 square feet
 - B. Accessible storage
 - C. Flexible display area(s)
 - D. Flexible lighting system
 - E. Management area
6. SPECIAL DISPLAY AREA(S) TO ACCOMMODATE THE BLIND
- A. 1,700 square feet
 - B. Handrails
 - C. Braille plaques
 - D. Could be part of Item #2, display area
7. STORAGE FOR OBJECT ART
- A. 10,000 square feet
 - B. Major portion accessible to public upon request
 - C. Environmental controls (with emergency back-up)
 - D. 65^o-72^o F., 50% relative humidity
8. STUDY AREA(S)
- A. 600 square feet total
 - B. Acoustically private
 - C. Proper lighting
 - D. Can be dispersed

9. RESTROOMS
 - A. Public, men and women, 500 square feet total
 - B. Staff, men and women, 200 square feet total
10. LOUNGE AREA(S)
 - A. Public, 400 square feet
 - B. Staff, 150 square feet
11. REFRESHMENT SERVING AREA
 - A. 200 square feet
 - B. Adjacent to the display area(s)
 - C. Food storage
 - D. Food preparation area(s)
 - E. Running water
12. OFFICES
 - A. Director, 150 square feet
 - B. Assistant Director, 150 square feet
 - C. Museum staff, 150 square feet
 - D. Volunteer staff, 200 square feet
 - E. Research staff, 200 square feet
 - F. Part time staff, 200 square feet
 - G. Secretary, 200 square feet
 - H. Office machines space--noisy office machines should be isolated
 - I. Acoustical and visual privacy
 - J. Accessible
 - K. The above area(s) are for administrative purposes
 - L. Collating area

13. CONFERENCE AREA(S)
 - A. 200 square feet
 - B. Acoustically private
14. CONSERVATION AND REGISTRATION AREA(S)
 - A. Office for Conservator, 150 square feet
 - B. Office for Registrar, 150 square feet
 - C. General work area(s), 600 square feet
 1. Chemical bench w/exhaust
 2. Storage
 3. Hot and cold running water
15. RECORDS VAULT
 - A. 150 square feet
 - B. Fireproof
16. COMPUTER TERMINAL AREA(S)
 - A. 500 square feet
 - B. Computer terminal
 - C. Office for computer supervisor
 - D. Computer card punch machine
 - E. Private study area(s)
 - F. Acoustically isolated
17. DARK ROOM AND PRINTING AREAS
 - A. Silk screening provisions, 150 square feet
 - B. Offset
 - C. Copy camera
 - D. Dark room w/enlarger, 150 square feet
 - E. Hot and cold running water

18. WORKSHOP

- A. 600 square feet
- B. Carpentry area(s) will contain work benches, hardware storage, tool racks, table saw, radial arm saw, drill press, jointer, sander and power hand tools
- C. Special consideration for odor and chemical ventilation
- D. Service access
- E. Running water
- F. 3 phase 240 V electrical wiring

19. DESIGN LAYOUT

- A. 200 square feet
- B. Space for design layout of temporary exhibits, public relations materials and graphic designs
- C. Drafting table
- D. Light table

20. EXHIBITION PREPARATION

- A. 800 square feet
- B. Provision for spray painting and paint storage
- C. Access to loading dock
- D. 3 phase 240 V electrical wiring

21. SERVICE ACCESS

- A. Area(s) where varying sized crates can be loaded and unloaded from trucks
- B. Refuse collection

22. AREA(S) FOR MUSEUM CLASSES

- A. 1500 square feet
- B. Space(s) for classes (independently equipped)
- C. Student workshop
- D. Separate display facilities
- E. Separate preservation facilities
- F. Space(s) for 20 person seminar
- G. Hot and cold running water

23. CHILDREN'S AREA(S)

- A. 750 square feet
- B. Acoustically isolated
- C. Space(s) relative to a child's size
- D. Visual and sensual spacial stimulation for children
- E. Art workshop area(s)
- F. Safety
- G. Hot and cold running water

24. REST AREA

- A. 150 square feet
- B. Private
- C. First aid facilities
- D. Place to lie down
- E. Running water

25. PUBLIC TELEPHONES

- A. Acoustically isolated

26. JANITOR AREA

- A. 70 square feet
- B. Hot and cold running water
- C. Storage space for tools and clothes

27. GUARD AREA

- A. 70 square feet
- B. Storage space
- C. Hot and cold running water

Total net assignable	54,200 square feet
----------------------	--------------------

Tare (mechanical rooms, rest-rooms, records vault, janitor area, guard area, wall thickness, circulation)

35% of total	18,970 square feet
--------------	--------------------

Total gross	73,170 square feet
-------------	--------------------

@ \$50 per square foot= \$3,658,500 total gross building
construction cost

As has been mentioned, no budget has been established for this facility, therefore the university should use the above estimated cost figures as a basis for proposing a bond issue for its construction. The above estimated costs are for the summer and fall of 1975 and the effect of continuing inflation on construction costs should be considered for future construction.

With a new and greater demand by the general public to share in the art experience the responsibility is on the educational institutions and architects to adapt new ways of viewing art. With a rise in audience participation and a realization that art is universal, the isolated museum is no longer a sufficient answer to the art experience on a university campus. The nature of education at a university and the layout of the University of New Mexico over many acres suggested the dispersal of art rather than only an isolated facility which now exists. This thesis attempted to solve the problem on a specific campus but its techniques are applicable to most campuses. It is hoped that this study will help the university in its planning process to achieve a more responsive approach to the planning of art experience on campus.

APPENDIX

ALBUQUERQUE WIND SUMMARY

NATIONAL WEATHER BUREAU

Average Hourly Wind Velocity-mph

(Period of record Jan. 1, 1949 - Dec. 31, 1958)

DIR:	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
N	7.7	7.8	7.8	8.2	8.4	7.8	7.7	6.8	6.8	6.9	7.7	7.6
NNE	6.6	6.7	6.7	6.9	7.2	6.7	6.6	6.6	6.4	6.4	6.3	6.7
NE	5.2	5.1	5.3	5.9	6.5	5.9	6.7	6.2	6.0	5.5	5.4	5.3
ENE	7.5	5.7	7.5	9.8	9.0	8.5	9.5	9.1	8.8	8.3	7.8	6.4
E	11.7	13.8	13.9	16.5	15.1	15.4	14.7	12.9	14.2	12.9	13.1	9.7
ESE	9.6	11.3	9.2	14.1	12.5	12.4	12.4	11.1	11.9	9.6	8.4	6.9
SE	6.3	6.4	7.4	8.6	9.0	9.1	9.9	8.5	7.8	7.7	6.0	5.7
SSE	8.9	8.5	9.4	10.6	11.5	11.4	10.0	9.2	9.5	10.2	7.7	7.5
S	9.5	8.4	10.6	11.1	11.3	11.1	9.2	8.4	9.2	9.4	8.0	7.3
SSW	8.1	7.7	8.8	10.4	11.1	9.6	8.5	7.4	7.2	7.4	6.5	6.4
SW	6.6	7.4	9.0	9.7	9.1	8.8	7.5	7.0	6.9	6.3	6.2	6.8
WSW	8.4	8.4	10.2	10.9	9.5	9.1	7.5	7.2	6.7	8.0	8.8	7.4
W	9.3	9.3	12.8	12.0	10.4	8.6	6.8	6.5	6.6	7.9	7.6	8.3
WNW	8.8	10.9	13.5	13.1	11.1	9.4	7.9	7.4	7.4	8.4	8.1	9.7
NW	8.5	10.1	13.6	12.8	9.6	8.9	7.1	6.6	7.1	7.6	8.8	9.5
NNW	9.5	9.8	10.8	10.6	9.1	9.0	7.9	7.6	7.6	7.7	8.6	8.6

fig. 33

ALBUQUERQUE WIND SUMMARY

NATIONAL WEATHER BUREAU

Percent of Time Wind from Indicated Direction
 (Period of record Jan. 1, 1949 - Dec. 31, 1958)

DIR:	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
N	15	13	9	8	9	8	8	10	9	12	16	17
NNE	7	7	5	3	4	4	5	4	4	5	7	8
NE	4	4	3	2	2	2	3	3	3	3	4	5
ENE	2	2	1	2	2	2	2	2	3	2	2	2
E	4	4	4	7	7	6	7	7	8	7	6	4
ESE	5	5	4	7	7	7	7	7	7	7	6	5
SE	10	11	9	10	9	10	13	11	13	13	10	12
SSE	6	5	7	6	7	7	7	7	7	7	6	6
S	8	7	9	9	10	10	9	8	10	11	7	6
SSW	3	3	4	4	5	5	4	4	4	3	2	2
SW	4	3	5	5	6	7	6	6	5	5	4	3
WSW	3	3	5	6	5	6	5	5	4	4	2	4
W	4	5	8	8	7	7	6	6	5	4	3	4
WNW	4	6	8	8	6	6	5	4	4	3	3	3
NW	7	9	8	7	6	5	5	6	6	5	8	7
NNW	10	10	8	6	6	6	6	6	5	6	9	8
CALM	4	3	3	2	2	2	2	4	3	3	5	6

fig. 34

ALBUQUERQUE WIND SUMMARY

NATIONAL WEATHER BUREAU

Number of Observations by Direction & Velocity
(Period of record Jan. 1, 1949 - Dec. 31, 1958)

DIR:	Miles Per Hour								
	0-3	4-7	8-12	13-18	19-24	25-31	32-38	39-46	47+
N	1255	4229	3308	825	122	27	4		1
NNE	688	2356	1345	178	17	10			
NE	652	1506	452	63	10		2		
ENE	314	722	356	267	69	13	2		
E	479	977	801	1342	941	391	79	21	1
ESE	548	1754	1169	1008	576	210	51	15	5
SE	1214	4187	3191	693	182	66	20	6	
SSE	523	1871	1937	969	269	106	27	6	
S	825	2667	2205	1332	443	142	53	10	1
SSW	378	1278	906	423	115	44	4		1
SW	674	1869	1251	404	106	37	6	7	
WSW	503	1379	1120	507	147	42	16		1
W	859	1759	1121	755	315	128	29	4	1
WNW	564	1412	1099	791	368	139	35	4	2
NW	1002	2083	1101	921	464	175	27	6	
NNW	729	2312	1751	999	323	87	7	1	
CALM	2951								
TOT:	14158	32361	23113	11477	4467	1617	362	80	13

fig. 35

BIBLIOGRAPHY

1. Ackerman, James A., Peter Caws, Eric Larrabee, Norman Lloyd, Margaret Mahoney, Jon Roush, Robert Watts, and Kenneth White, with Margaret Mahoney and Isabel Moore, eds. The Arts on Campus, New York Graphic Society, Greenwich, Connecticut, 1970.
2. American Association of Museums. Museum Accreditation: A Report to the Profession, Washington, D.C. 1970.
3. -----Museums: Their New Audience, Washington, D.C. 1972.
4. Asihene, E.V. Introduction to Traditional Art of Western Africa, Constable, London, 1972.
5. Basin, Germain. The Museum Age, Universe Books, New York, 1967.
6. Brawne, Michael. The New Museum, Praeger Publications, New York, 1966.
7. Carter Douglass. "Intellectual in Videoland," Saturday Review, Saturday Review/World Inc. New York, May 31, 1975, Vol. 2, pp. 12-16.
8. College Art Association of America. A List of the Needs of the Visual Arts in Higher Education, Yale University Press, New Haven, Connecticut, February 1966.
9. Committee of the American Association of Museums. America's Museums: The Belmont Report, Washington, D.C. 1969.
10. Dana, John C. The New Museum, The Elm Press, Woodstock, Vermont, 1917.
11. Dennis, L.E. and R.M. Jacob. The Arts in Higher Education, Jossey-Bass Inc. San Francisco, 1968.
12. Dolloff, Francis W. and Ray L. Perkinson. How to Care for Works of Art on Paper, Boston Museum of Fine Arts, Boston, Massachusetts, 1971.
13. Durand, Jacques. The Use of Cultural and Scientific Films in the Museums of the World, Museum Magazine, Vol. XVI, No. 22, 1963.

14. Feldman, E.B. Art in American Higher Institutions, The National Art Education Association, Washington, D.C. May 1970.
15. Fenley, G.W. and Louise Miller. "Action Line" Albuquerque Journal, August 4, 1975.
16. Keck, Caroline K., Huntington T. Block, Joseph Chapman, John B. Lawton, and Dr. Nathan Stelow. A Primer on Museum Security, New York State Historical Society, Cooperstown, New York, 1966.
17. Kent, Robert and Mark Luca. Art Education: Strategies of Teaching, Prentice-Hall Inc. Englewood Cliffs, New Jersey, 1968.
18. KNME-TV (PBS). "Eye to Eye," Albuquerque, New Mexico.
19. Lifchez, Raymond. "Museums, Building Type Studies," Architectural Record, McGraw Hill Inc. New York, June 1966, pp. 175-190.
20. Low, Theodore. The Educational Philosophy and Practice of Art Museums in the United States, Columbia University Bureau of Publications, New York, New York, 1948.
21. Luce, Henry R. and Douglass Haskell, eds. "Frank Lloyd Wright," Architectural Forum, Time Inc. June 1959, pp. 116-134.
22. Lynes, Russell. "Modern Art Arrives on the Mall in a New Museum and Sculpture Garden," Smithsonian, Smithsonian Associates, Washington, D.C. December 1974, pp. 35-44.
23. -----"From Century Ago to Just Yesterday at the Hirshhorn," Smithsonian, Smithsonian Associates, Washington, D.C. January 1975, pp. 42-49.
24. Malraux, Andre. Museum Without Walls, Doubleday, 1967.
25. Marlin, William. "Two Splendid Fine Arts Centers by Roche Dinkeloo and Associates," Architectural Record, McGraw-Hill Inc. New York, July 1972, pp. 17-106.
26. The Metropolitan Museum of Art. Computers and Their Potential Applications in Museums, Published for the museum by Arno Press, New York, 1968.
27. Mumford, Lewis. Art & Technics, Columbia University Press, New York, 1952.

28. Murphy, Judith and Ronald Gross. The Arts and the Poor, U.S. Government Printing Office, Washington, D.C. 1968.
29. Murray, H.A. Explorations in Personality, Oxford University Press, New York, 1938.
30. O'Doherty, Brian, ed. Museums in Crisis, G. Braziller, New York, 1972.
31. Papenek, Victor. Design for the Real World, Bantam Books Inc. New York, 1971.
32. Pena, William M., John W. Facke and Caudill Rowlett Scott. Problem Seeking: New Directions in Architectural Planning, Caudill Rowlett Scott, Architects, Planners, Engineers, Houston, 1969.
33. Powel, Lydia. The Art Museum Comes to the School, Harper and Brothers Publishers, New York, 1944.
34. Ramsey, Grace. Educational Work in Museums in the United States, N.W. Wilson Co. New York, 1938.
35. Reinhearot, Nooley R. "Regents Adopt Alumni Recommendation," New Mexico Alumnus, February, 1975, p. 1, Vol. 47, no. 7.
36. Ritchie, A.C., Dir. The Visual Arts in Higher Education, College Art Association of America, Yale University Press, New Haven, Connecticut, 1966.
37. Rogers, Lola Eriksen. Museums and Related Institutions, A Basic Program Survey, U.S. Department of Health, Education and Welfare, Office of Education, U.S. Government Printing Office, Washington, D.C. 1969.
38. Russell, John. "Museum Shows of the 70's Will Have Less Art and More Content," New York Times, Art and Leisure Section, August 18, 1974.
39. Schmertz, Mildred F. "Museums for Today," Architectural Record, McGraw-Hill Inc. New York, July, 1972, pp. 97-111.
40. Toffler, Alvin. The Culture Consumers, St. Martin's Press, New York, 1964.
41. UNESCO. Museums, Imagination and Education, Paris, 1973.
42. Whitehead, Alfred N. The Aims of Education, New American Library, New York, 1948.

43. Wilson, R.N., ed. The Arts in Society, Prentice-Hall Inc. Englewood Cliffs, New Jersey, 1964.
44. Ziegfeld, E. ed. Art in the College Program of General Education, Teachers College, Columbia University, New York, 1953.

I have visited the following museums in connection with this report:

1. ASA Gallery--University of New Mexico
2. Chicago Art Institute
3. Corcoran Gallery--Washington, D.C.
4. Denver Art Museum
5. Hirshhorn Gallery--Washington, D.C.
6. Jonson Gallery--University of New Mexico
7. Maxwell Museum of Anthropology--University of New Mexico
8. Museum of Albuquerque
9. Museum of New Mexico--Santa Fe
10. National Collection of Fine Arts--Washington, D.C.
11. National Gallery of Art--Washington, D.C.
12. National Portrait Gallery--Washington, D.C.
13. Renwick Gallery--Washington, D.C.
14. University of New Mexico Fine Arts Museum

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4. Jim Kraft--Artist
5. Guiyermo J. McDonald--Artist, Muralist
6. Joe McKinney--University of New Mexico Architect
7. Beaumont Newhall--Past Director of the International Museum of Photography at George Eastman House and Professor at the University of New Mexico
8. Bob Peters--Professor of Architecture at the University of New Mexico
9. Michel Pillet--Professor of Architecture at the University of New Mexico
10. Antoine Predock--Architect