

3-1-1984

VRAB Volume 11, Issue 1 & Supplement, 1984

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Recommended Citation

(1984) "VRAB Volume 11, Issue 1 & Supplement, 1984," *VRA Bulletin*:Vol. 11: Iss. 1, Article 1.
Available at: <https://online.vraweb.org/vrab/vol11/iss1/1>

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VRAB Volume 11, Issue 1 & Supplement, 1984

Abstract

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Keywords

conferences, professional development, computerization, microcomputers, cataloging, Asian slide collections

Author Bio & Acknowledgements

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- Susan Filipiak - University of Michigan
- Eleanor Mannikka - University of Michigan
- Helen Miller - University of Michigan
- Marjorie Panadero - University of Michigan

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- Bridget Kinally - Design Center, London
 - Susan Taylor - University of Michigan
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 - Patrick Young - University of Michigan
 - Carla Freeman - New York State College of Ceramics
 - Suzanne Babineau-Siminauer - New York University
 - Christine Sundt - University of Wisconsin, Madison
 - Ursula Stammer - University of Kansas
 - Ruth Philbrick - National Gallery of Art, Washington, D.C.
 - Kathy Snyder - Colorado College
 - Margaret Webster - Cornell University
 - Christina Updike - James Madison University
 - Norine Cashman - Brown University

In the supplement:

- Luz Maria Aveyra - University of North Carolina - Charlotte
- Jean Gallagher - University of Tennessee at Chattanooga
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INTERNATIONAL BULLETIN

for Photographic Documentation of the

VISUAL ARTS

Journal of the Visual Resources Association

Vol. 11 No. 1 Spring 1984

VRA



The Elect Ascending into Heaven. Luca Cambiaso, Italian, 1527-1585

Visual Resources Association Conference Reports

INTERNATIONAL BULLETIN FOR PHOTOGRAPHIC DOCUMENTATION OF THE VISUAL ARTS is published in spring, summer, fall, and winter. Subscription is included with the \$10.00 annual membership fee to the Visual Resources Association. News items and articles are welcome, and should be sent to Joy Alexander, Slide and Photograph Collection, History of Art, 107 Tappan Hall, The University of Michigan, Ann Arbor, MI 48109. Deadline for the summer issue is May 15, 1984. Please submit all articles and correspondence double spaced, typed, on 8 1/2 by 11 inch paper. To ensure conformity, all contributors should consult the *Chicago Manual of Style*. Articles requiring extensive editing will be returned to the author for approval.

Editor: Joy Alexander, University of Michigan

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ISSN no. L097-8020

Copyright Visual Resources Association 1983

OCLC 6125705

Cover: Courtesy The University of Michigan Museum of Art, gift through the estate of Edward Sonnenschein

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SECAC Correspondent: Christina Updike, James Madison University

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Circulation: 541

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ASSOCIATION NEWS

Conferences

VRA BUSINESS MEETING MINUTES

The second annual business meeting of the Visual Resources Association (VRA) was called to order by the president, Christine Sundt, on February 23, 1984 at 5:10 PM at the Sheraton Centre, Toronto. The minutes of the first VRA business meeting that took place last year at the Franklin Plaza Hotel in Philadelphia, were read by the secretary, Fran McGinnis. These were accepted and seconded by Karl Cole and Evy White, respectively. Nancy Schuller reported on the status of the VRA treasury and stated that the funds were officially transferred from an account at the University of Missouri-Kansas City to a 5¼% interest-bearing checking account in the name of the VRA in Austin, Texas. She reminded members that if their dues were being paid by their institutions, they should be sure that the applications accompanying the checks carry their personal names as well as the name of the institution.

Joy Alexander, editor of the *Bulletin* reported that for printing and mailing \$1053.00 and \$924.00, respectively, were expended. She reminded contributors that the deadline for the next issue was to be "as soon as possible after the conference."

Ira Bartfield was introduced to the membership by the president. As the recently appointed chairman of the membership committee, Ira presented his plans and ideas for a membership drive. He also spoke about his newly prepared membership brochure ("You Don't Have to Re-Invent the Wheel...Join the Visual Resources Association Instead"), copies of which were distributed for the first time during the conference. Ira asked the members to assist in promoting membership in the VRA by taking home copies of the brochure to be shared with friends and colleagues. In preparation for a membership campaign to be commenced soon, he asked for assistance and input from the members. One of the ways being explored to disseminate information about the VRA is to make copies of the new membership brochure available during the annual meeting of the American Association of Museums (AAM) to be held in Washington, DC, in June.

Last year's unfinished business was reviewed by the president and it was reported that the VRA Constitution and Bylaws were ratified unanimously by the members. In addition, the VRA has since received approval from the IRS for not-for-profit status in tax matters.

As decided last year, an election of at least one new officer will take place during 1984. The president announced that a nominating committee will be appointed by the VRA shortly to begin the process. She asked for volunteers to work on this committee.

New business was next on the agenda. Norine Cashman, who will edit the new *Slide Buyers' Guide* will be assisted by Mark Braunstein of the Rhode Island School of Design in preparing the index. The Guide, along with other titles being prepared for this series, will be published by Libraries Unlimited. These are the *Guide to Equipment* by Christine Sundt, the *Guide to Management of Visual Resources Collections* by Nancy Schuller, and the *Guide to Automation* by Suzanne Babineau-Simenuer and Marybeth Koos. Under our present arrangement with our publisher, the VRA will be able to offer a reader's fee to those who read and review the manuscripts before publication. Likewise, a percentage of the royalties earned by the publications will be paid to the editors of the Guides.

Jim Bower inquired if there were any plans to publish a copyright guide. Christine Sundt suggested that this might be a subject better handled as an informational feature in the *Bulletin*. An author would be sought to work on this project.

It was announced that the *Bulletin* would begin accepting advertisements to be included in the journal. Information about the rates

and specifications will be available from the editor, Joy Alexander.

A committee to survey the issue of professional status among visual resources curators was discussed. Since it is now ten years since the last survey was conducted, it was argued that a new report was needed. Deborah Tinsley and Ira Bartfield offered comments in support of the survey and in the end, Nancy DeLaurier volunteered to organize such a committee. Deborah Tinsley later suggested that a report on the professional status survey be included as part of our 1985 program.

Regarding our next meeting, which will take place in Los Angeles in 1985, the president stated that she had been approached by a representative of ARLIS/NA for the purpose of working together with the ARLIS/NA-VRSIG in preparing a program. A week-end workshop on automation at the Getty Museum was mentioned. Other topics for consideration included: a roundtable discussion with slide producers (Ira Bartfield); a panel dealing with indexing of iconography (Helene Roberts); a session on subject indexing (Jim Bowers). It was suggested that visual resources programs be planned for the time between the conclusion of the ARLIS/NA regular program and the beginning of the CAA conference so that both the art librarians and artists/art historians could participate. Luraine Tansey proposed a session for graduate students who are interested in learning more about the management of visual resources collections and Suzanne Babineau-Simenuer introduced the idea of a session on visual resources management as a career option for graduate students. This was supported by a comment from the president who stated that because visual materials are used in corporate as well as academic situations, the opportunities for employment seem to be quite promising for individuals willing to acquire such skills through basic visual resources training and apprenticeships.

It was suggested that the VRA consider charging a registration fee for its annual programs. It was argued that this would help members who wish to attend only VRA programs when they are scheduled in conjunction with other associations' meetings. The president stated that this would be discussed by the Executive Committee, but that, in her opinion, such an arrangement could be effective only if the VRA were formally affiliated with the program-sponsoring organization. Otherwise, it should be assumed that the general conference fee (for the entire program or by the day) should be paid in order to participate in the VRA sessions that occur during the regular program at the conference facility.

Following Jim Bower's announcement about the upcoming conference in Pisa (September 24-27, 1984) on Automatic Processing of Art History Data and Documents, the president indicated that the VRA would try to acquire a copy of the program abstracts so that the proceedings could be reported to VRA members in the *Bulletin*. Suzanne Babineau-Simenuer, who is planning to attend the conference, will secure a copy of the abstracts.

Nancy Kirkpatrick informed the members that the ARLIS/NA VRSIG will be conducting a salary survey in 1984. She also indicated that the *Standard for Staffing Fine Arts Slide Collections* is available for purchase from ARLIS/NA for \$10.00. Another booklet, on reference tools for fine arts visual resources collections, is being prepared by Christine Bunting and should be available soon from ARLIS/NA.

A discussion of the formation of a CAA committee to study reproduction rights and fees followed. It was suggested that the VRA get involved in this committee; the president said that the VRA would look into how this might be accomplished.

Before adjournment, Christine Sundt expressed her thanks on behalf of the VRA to Cathy Jonasson of the Art Gallery of Ontario and Michele Metraux of York University for hosting the VRA tours to their respective institutions. The meeting was closed at 6:00 PM at which time the scheduled program was commenced.

VRA TOURS

On Thursday, February 23, a group of about 30 VRA members were led on a tour of the Edward P. Taylor Audio-Visual Centre at the Art Gallery of Ontario. Cathy Jonasson, Head of the Audio-Visual Centre, gave us an informative session on the work of the Centre which features, besides a large slide collection with special emphasis on Canadian Art, video-tapes and media kits with cassettes. Films are also available for use in the Centre. A large part of the AGO Audio-Visual Centre's collection circulates to the public throughout the province of Ontario.

Ms. Jonasson prepared for the tour a very useful and thoughtful folder of material on the Audio-Visual Centre which was distributed to all who attended. After the group had spent some time browsing through the slide collection, we were accompanied to the Photographic Services Department located in the underground levels of the Gallery. There we spoke to the photographer about techniques and materials used to photograph original works of art from the gallery's collection. We thank the staff of the AGO for giving us all such a memorable and interesting afternoon.

On Friday, February 24, thirty-five VRA members were escorted to the Campus of York University, about 45 minutes west of Toronto, to tour the Slide collection under the supervision of Michelle Metraux. We were met at the bus, which was generously provided by the university, and given a complete tour of the new Fine Arts Building with its marvelous open air architecture. We saw the student gallery, the spacious and well-lit studios, and classrooms. The smell of linseed oil and paint was in the air. We concluded the visit by spending some time in the slide collection, where Ms. Metraux spoke about her work in the collection of 160,000 slides. We were given a lovely wine and cheese reception at the art gallery before returning to The Sheraton Centre.

ROUNDTABLE DISCUSSION

A roundtable discussion on computer related topics was held at the Sheraton Centre on Friday, February 24. Twenty people attended. The basic concern of the group centered around communication of computer users and computer interested visual resources professionals. Marybeth Koos and I decided to work out a questionnaire which we have included below. The wide variety of hardware and software being used by the twenty who attended reflects just a sample of what is going on in the rest of the profession. The range extends from mainframe applications to small personal computers; with the range of software going from complex specialized programs to the simplest word processing packages. Everyone who attended said these kinds of informal sessions in which users and interested parties could exchange ideas and communicate problems was very valuable. Chris Sundt suggested that computer users get in touch with local user groups to communicate further their needs and ideas. Often these user groups publish their own newsletters and meet frequently to provide a forum for problems and experiences.

I urge anyone currently using a computer, whether on the job or at home, to please fill out the following questionnaire. The goal is to provide a handbook of users in the visual resources profession.

VISUAL RESOURCE CURATORS: CALL FOR PRESENTATIONS AT SECAC 1984

The Visual Resource Curators (VRC) Group of the Southeastern College Art Conference (SECAC) is planning two sessions at the 1984 annual meeting to be held at Virginia Commonwealth University in Richmond, Virginia on October 18-20. "Visual Resource Topics / Problems" is the theme for the first session which will be held Thursday afternoon, October 18. Papers and presentations might include such topics as classification of difficult subjects, computer-

ization in the slide library, operations policies, administration problems, slide production films, and slide preservation. Please send a rough outline of your 15-20 minute presentation to the session chairwoman: Christina B. Updike, Art Slide Curator, Art Department, James Madison University, Harrisonburg, Virginia 22807 (office phone 703-433-6588) by June 1, 1984. Please send the outline as early as possible to help facilitate planning. Any VRC topic or problem will be considered.

The second VRC session will be an informal "Round Table Discussion/Workshop", to be held Friday afternoon, October 19. Professional standards for visual resource curators in the Southeast, and the establishment of a VRC information network are two topics that will be discussed. Submit other topics for group discussion to the session leader: Joan L. Muller, Director of the School of the Arts Library, Virginia Commonwealth University, 325 North Harrison Street, Richmond, Virginia 23284.

The conference will be held at the Holiday Inn adjacent to the VCU campus. Many events are currently in the planning stages, including a "Get Acquainted" VRC reception as well as a tour of the VCU slide library facility. Additional activities will include numerous studio and art history sessions, receptions at the Virginia Museum and the Best Products Headquarters, openings at local galleries, and an exhibition by OFF CENTER, the 1983 SECAC Artist Exhibition Grant recipient.

Full details of the conference program and preregistration material will be available by late August. If you would like to receive this material or have any questions about the VRC Group, contact the VRC Group chairwoman, Christina B. Updike, at the address listed below.

Christina Updike
James Madison University
Harrisonburg, Virginia 22807

MISSOURI-KANSAS VISUAL RESOURCES CONFERENCES

The Eighth Annual Missouri-Kansas Visual Resources Conference will be held at Southwest Missouri State University in Springfield, Missouri, on April 26, 27, and 28.

The conference will include discussions on classification systems, automation of slide collections, and photographing of student works. There will be time for tours of Southwest Missouri State University's Art Department and Slide Library, as well as the Art Department and Slide Library of Drury College.

Included in the conference will be an introduction to the Ozarks that will include a viewing of *Sassafras: An Ozarks Odyssey* - an automatic, computer-driven slide presentation played through twelve projectors and utilizing stereophonic sound. The conference will conclude with a trip to the Annual Spring Ozark Mountain Crafts Festival in Silver Dollar City.

People from neighboring states are welcome. For further information please contact Teresa Rohrabough, Art Department Slide Library, Ellis Hall, Southwest Missouri State University, Springfield, MO 65804-0089.

IFLA ART LIBRARIES SECTION: ART OF EAST AFRICA SLIDEPROJECT

The 1984 IFLA annual conference will take place in August in Nairobi, Kenya. On that occasion the Art Libraries Section will present a collection of slides of East African art to a designated library in Nairobi.

In keeping with the Section's mandate to encourage awareness, understanding and discussion of art through art library collections, the Section is planning a project whose purpose is to contribute to the

cultural life of Kenya and to the library community there. The aim of the project is to gather from as many sources as possible a group of slides representing the arts, crafts, design and architecture of present day and historical East Africa. The slides in the collection will be accompanied by a computer-produced catalogue and further documentation in the form of journal articles and other printed sources.

The Section is requesting donations in the form of slides from any collection in a position to contribute. Slides of objects within a collection or slides made from book illustrations are equally welcome. All donations will be acknowledged in the presentation catalogue.

Unbound slides together with cataloguing information should be sent by *May 31* to:

Mary F. Williamson, Fine Arts Bibliographer
Scott Library
York University
4700 Keele St.
Dounsvew, Ontario M3J 2R2
Canada

Notes from the President

REFLECTING ON TORONTO

Members attending the Visual Resources Association (VRA) Business Meeting and Program during the College Art Association (CAA) annual conference at the elegant Sheraton Centre in Toronto were greeted with warmth and friendliness on all fronts. The city sparkled in the unusual springlike weather making both our walk to the Art Gallery of Ontario and our bus trip to York University very pleasurable and rewarding experiences. Within the confines of the conference hotel, we enjoyed an excellent location for our information table and a comfortable room for our second official annual business meeting which was followed by a superb program arranged by our vice-president, Suzanne Babineau-Simenauer. All in all, the conference seemed to function exceptionally well and for this, of course, the credit goes to the very able CAA staff, especially Rose Weil and Minerva Navarette. Our thanks to all who participated in the Toronto program. Its success is a direct reflection of your excellent work.

Several important matters were introduced during the course of the meeting. I will highlight a few of these.

BALLOT: PROPOSED AFFILIATION WITH THE CAA

The ballot included with this issue of the *Bulletin* is for determining the opinion of our voting members regarding proposed application for affiliation with the College Art Association. As you may know, such an alliance has been an important issue and goal for many of our members for quite some time. To some, the CAA represents the primary force behind our early existence and ultimate decision to become a bonafide organization and, therefore, affiliation represents a natural course of action to complete our identity. Others find that the mutual interest in visual materials used for teaching, research, or documentation, allies artists, art historians, slide curators, archivists and photographers. For them, affiliation represents sanction in our ongoing quest to improve the quality, availability, and management of visual materials.

Affiliation will cost us nothing. To be gained are certainly the benefits of having our activities and achievements more widely known among CAA members. We would also stand to gain an increase in our membership numbers and the ability to communicate more directly with everyone who works with slides, photographs, or any of the new technologies that help to enhance our use of visual materials.

I urge you, therefore, to respond with your vote so that your opinion will be heard. For your convenience, the ballot is stamped and addressed. Ballots must be signed and postmarked by June 30, 1984 in order to be valid. Use your privilege as a member and vote.

NEW VRA MEMBERSHIP COMMITTEE

The VRA is pleased to announce that Ira Bartfield has agreed to chair our new membership committee. As his first assignment in this new office, Ira, who is Coordinator of Photography for the National Gallery of Art in Washington, put together a handsome and informative brochure describing the VRA that also includes a membership application. Copies of the new brochure were distributed during the CAA conference and from the responses heard, the membership approves. His next project will be to begin promoting membership in the VRA — or even more basically, spreading the word that the VRA exists. Ira's efforts would be aided significantly with some help from our members. If you would like to be active on the membership committee and share some of your good ideas and energy, contact Ira at the National Gallery, Office of Photographic Services, Washington, DC 20565.

NEW PROFESSIONAL STATUS SURVEY PLANNED

In order to determine the current trends in professional status among visual resources personnel, a new survey is being prepared by Deborah Tinsley of the Kansas City Art Institute along with her committee, under the very able direction of Nancy DeLaurier of the University of Missouri-Kansas City. It has been ten years since the last survey was conducted, and many feel that it is time for an update. You will be receiving this survey in the near future. The results will be published in this journal.

COMPUTER COLUMN FOCUS TO BE EXPANDED

Joining Suzanne Babineau-Simenauer in editing and producing the "Computer News" column for the *International Bulletin*, will be Marybeth Koos, Slide Curator of the Department of Art, Northern Illinois University in DeKalb, Illinois. In response to the growing interest in automation of visual resources collections, this column will also be expanded to allow for greater exchange of information by including a running directory of institutions or individuals involved in automation. Through this medium, we hope to enable people using similar set-ups or goals to share information and experience with hardware or software independently. Another feature to be added is a "profiles" section in which specific applications will be described in depth. Suzanne and Marybeth welcome your suggestions and ideas. Let them know how we can best assist you in your automation needs.

NOMINATING COMMITTEE BEING FORMED

The VRA is compiling a list of members who would be willing to serve on the nominating committee for this year's elections. Please contact me if you would like to work in this very important committee. A list of members appointed to the committee will be published in the next issue of the *Bulletin*.

MARGARET NOLAN APPOINTED TO VRA ADVISORY BOARD

We are honored to announce the appointment and acceptance of Margaret Nolan, Chief Librarian, Photograph and Slide Library, of The Metropolitan Museum of Art, as the first member of our Advisory Board. Other appointments will be announced in the near future. We are pleased to have an individual as skilled and experienced as Margaret Nolan in this important position.

VRA 1985

Plans are already underway for our next VRA meeting to be held in Los Angeles in February of 1985 in conjunction with both the

ARLIS/NA and CAA annual meetings. Based on the continued interest and success of the "Round Table" format for discussion of current issues, this will become a standard feature in our upcoming programs. While our program is still being planned, we invite you to let us know if you would like to take part in any way. If you have an idea for a paper that could be developed into a formal presentation, send me a copy of your abstract as soon as possible. The abstract should be no longer than one page, typed, and double-spaced. Should you prefer to discuss your ideas before you prepare the abstract, please feel free to call or write. My address is 20 W. 31st Avenue, Eugene, OR 97405 (phone 503-485-1420). At this time, a theme for the program has not been established. Therefore, I invite you to bring your ideas to us without delay to assure that time will be available for all who want to participate.

Christine Sundt

TECHNICAL INFORMATION

Ask the Photographer

LANTERN SLIDES

A number of slide curators are presently faced with the problem of what to do with the glass lantern slides in their collections. These old and outdated slides present a number of problems. Since the photographic emulsion is coated onto the glass itself, lantern slides are quite fragile and easily broken. The 3 1/4 x 4 inch glass slides take up considerable space, while their weight can be the cause for even greater concern. A recent study by structural engineers at the University of Michigan found that the floor of the slide collection room was inadequate to hold its present weight load. The slide curators have consequently undertaken a long term project to reduce significantly the number of lantern slides in the collection. I would like to share some of our ideas and plans in the event that some readers may have similar problems with their lantern slides.

The glass slides we have found in our collection thus far can be placed in one of three categories: A. valuable original images; B. good quality slides whose source or origin is unknown; C. slides of poor quality and/or questionable value.

A brief history of lantern slides may help you select the more important or valuable slides from your collection.

Dry plate lantern slides first came into use around 1881. The transparency image made for projection is actually a dry plate glass negative that has been contact printed from another dry plate glass negative. (A negative of a negative makes a positive. Photography Math 101.)

British and American made lantern slides measure 3/4 x 4 inches while European made glass slides are approximately 3/8 x 4 inches. You may have noticed this discrepancy in size when placing the slide in the carrier of a lantern slide projector. Incidentally, lantern projectors are still available from Beseler. The Slide King 3/4 x 4 inch projector holds a 750 watt bulb that projects an extremely bright and sharp image — even with slides of dubious quality.

Glass lantern slides became extremely popular for home entertainment around the turn of the century while slide collections continued in this format until the 1940's when 35mm transparencies became readily available.

The most valuable lantern slides from a collector's point of view include the early wet plate collodion glass transparencies that are found in a variety of sizes in addition to 3/4 x 4 inch. The earliest such examples date back to 1850. Scenes of architectural structures that no longer exist are, of course, quite valuable. Also important are images of structures in their original condition before later deterioration, renovation, or additions. 3/4 x 4 inch examples of early color processes, such as Autochrome, Paget color, and Finlay color, are historically significant in the field of photography and should be kept in archival storage without further use.

The original lantern slides that are considered valuable because of their age, source or subject matter are being retired from active use as a precautionary measure. This rather effectively eliminates the risk of accidental breakage. The images are first duplicated on 35mm black and white film for future use in the collection. The original lantern slides are then placed in slotted wooden boxes for archival storage.

The majority of lantern slides in our collection fall into the second, somewhat less than valuable, category. The images themselves are quite good and worth retaining through 35mm duplication, although the glass slides have no particular value. A good number of these slides are actually copy slides that have been taken from books or photographic prints. When the original material is known and accessible, a 35mm copy slide is taken from that source rather than duplicating the glass transparency onto 35mm film.

The University of Michigan slide collection also appears to contain a fair number of third category lantern slides. These are generally copy rather than original slides. The quality may be poor as a result of the original photography, such as poor focus, or as a result of inept processing, which has created a noticeable deterioration of the image. Third category slides may also duplicate images that are already in our collection in 35mm format. Third category slides are simply discarded without duplication of the image.

My next article will cover some specific methods for duplicating lantern slides onto 35mm film.

Patrick Young
University of Michigan

Computer News

ATTENTION! COMPUTER USERS!

A directory of computer users is being compiled to enable users of compatible systems to exchange information. If you are interested, please complete the form and send it to Marybeth Koos, Slide Curator, Visual Arts Bldg. Rm. 217, Northern Illinois University, DeKalb, IL 60115, by April 20.

NAME _____
AFFILIATION _____
PHONE _____
HARDWARE _____
SOFTWARE _____

Asian Slide and Photograph Collections

INDIAN PAINTING

Indian painting is one of the most difficult areas for a non-expert to catalogue. At the University of Michigan, our first line catalogue number defines a slide as to medium (300 = painting) and country (054 = India; 354 = Indian painting). Normally, the second line divides a painting by time period or artist, but not in India. In India, strong

regional styles have to be broken down chronologically. Just as French painting has its own development in relation to Spanish or Italian painting, so Jain painting is separate from Buddhist or Rajput painting. Therefore, the second line breakdown of Indian painting at Michigan has been given the following categories:

- | | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 2....Buddhist | Covers all types of Buddhist painting, in all regions, through all time periods. |
| 3....Jain | All Jain art, with the vast majority of paintings reflecting the Jain style in NW India. |
| 5....Medieval | All painting which is directly "pre-Rajput" and "pre-Mughal," includes works such as the Chaurapanchasika, and Laur Chanda. |
| 6....Mughal | |
| 8....Rajput | |
| 10....South Indian | |
| 12....Deccani | |
| 14....Orissan | |
| 16....Company Style | |
| 17....Folk | |
| 20....Modern, anonymous | |

These categories are both adequate for the field, and broad enough so as not to demand that the cataloguer draw fine chronological or demographical distinctions.

There are inherent difficulties in attempting to trace the influence and movement of individual artists in India. Temple records may show where families of artists migrated and resettled, but the data from these records has yet to be fully assembled and published. Because it is sometimes impossible to retrieve adequate information on any given artist, we do not list works by artist except for modern painters. In that case, a Cutter number is used for the second line identification. These paintings would all fall at the end of the Indian painting section, just after anonymous 20th century artists.

In the next column on Asian cataloguing, a further breakdown of Rajput painting will be discussed, followed by Mughal art.

Eleanor Mannikka
University of Michigan

COLLECTIONS

Collections Outside

Art History Departments

The Fall 1983 issue of the *Bulletin*, I included in this column a questionnaire designed to help me identify my readers. The responses were interesting and varied. Respondents included curators of visual resource collections (not limited to slides) dealing with the following topics: humanities and social sciences; theater; biology; a historic landmark and related local history; geography, cartography, and energy; and engineering and environmental science. There were a number of responses from curators of architectural collections, and of art slide collections in museums and art schools. Special holdings were mentioned in Canadian art and architecture, landscape architecture, interior design, musical instruments, graffiti, industrial design, neon signs, product design, illustration, Inuit art, African art and field slides, video, dance history, and collections related to specific museum holdings.

Most mentioned under "topics you would like to see discussed" were cataloguing and classification (including non-art collections, and non-traditional art forms) as well as subject indexing and access. Other suggestions included: reference service to users without art history backgrounds; reclassification projects; circulation control; book reviews; critiques of new products; a "readers' exchange" of services and slides; suggestions for sources of visual materials and slide donations; sources of funding for small slide libraries; information on storage and labelling techniques; and descriptions of videodisc documentation projects. Readers are invited to share their thoughts, questions, and suggestions on these and other topics of interest through this column by writing to me at the Scholes Library, New York State College of Ceramics, Alfred, N.Y. 14802. If you did not return the questionnaire earlier, please feel free to send it along now if you wish, as I am still collecting returns.

Carla Freeman
New York State College of Ceramics

REVIEWS

Photographic Journals

Hershenson, Martin, "Color In Your Darkroom: Quality home color film processing is easy — just think and act like a pro," *Popular Photography*, February 1984, 8ff.

Processing E-6 color slide films, though relatively simple, can be fraught with unexpected problems resulting from faulty equipment or sloppy procedure. These problems can be circumvented by following directions explicitly and by checking some critical equipment for accuracy.

Since the temperature of the chemicals is vitally important when processing with E-6, using a thermometer that can register to within one quarter of a degree is essential. Digital thermometers are the most accurate and the most expensive. The standard choice among photographers and photo-finishing labs has been the Kodak Process Thermometer Type 3. Obtaining a quality thermometer will eliminate the possibility of ruining rolls of film due to incorrect chemistry temperature. Another piece of equipment that is subject to variation is the plastic graduate cylinder used for mixing and measuring. Washing it in hot water can alter its accuracy. Therefore, using a stainless steel graduate that will not be affected by hot water is recommended.

Many problems result from not following the directions that accompany each processing kit for mixing and storing the chemicals. To avoid contamination, equipment must be thoroughly rinsed at different stages in the development process. Also, the chemicals must be stored in the recommended container to guarantee their stated life span. In-house color slide processing is economical and can result in consistently high quality transparencies if proper procedures are followed.

Rothschild, Norman, "Polachrome 35mm Color Slide Film," *Popular Photography*, December 1983, 73-75ff.

Polaroid's Polachrome CS 35mm Transparency film for color slides has an advantage over other types of slide films in that slides can be ready for mounting and projection in less than sixty minutes and processing does not require a darkroom. The autoproccess system which Polaroid has developed eliminates the exact chemical and temperature monitoring required by E-6 process color slide films. Although Polaroid's new film and method of producing slides greatly accelerates the developing process, is Polachrome comparable in

quality to other chrome films?

Structurally, Polachrome is essentially different from all other color slide films. It is an "additive" color material whose image contains not only "color elements but also a monochromatic silver image." Consequently, Polachrome demands experimentation to understand how it will react under various conditions. The resulting slides have a distinctive appearance that varies markedly from other color transparencies.

Polachrome is balanced for 5,500K illumination and has an ISO of 40. No filtration is needed in sunlight and excellent results are obtained with electronic flash. When correctly exposed, the slides are slightly darker than those made on more familiar color films. Thus to correctly judge the quality of the image Polachrome slides must be projected. "In general, Polachrome renders colors quite accurately, making it a valuable tool" for scientific and medical photography and perhaps art.

Information is not available on the archival quality of Polachrome slides, and testing has not been done to determine its ability to withstand long periods of projection without extensive color change. Cost is another factor to consider. Currently, the AutoProcessor sells for \$83.25 and a single, thirty-six exposure roll of Polachrome costs \$14.85. For these reasons Polachrome would at present have a very limited usefulness in an art slide library.

(Note: Polaroid also markets two black and white instant slide films — Polapan CT 35 mm Transparency Film for continuous tone and Polagraph HC 35mm Transparency Film for high contrast slides. More information can be obtained from polaroid by calling 800-526-7843, ext. 400.)

Schwalberg, Bob, "1984 Color-Film Roundup," *Popular Photography*, February 1984, 86-90.

Over the past several years the variety of color films has increased tremendously. With so many films available, it is difficult to know which one to use in a specific environment. Students and faculty who are involved in creating a slide portfolio of their work are particularly concerned about using the right film type. "1984 Color-Film Roundup" is a clear, basic explanation of color film and the variables that affect the final results.

Although both color slide and print films are discussed, the majority of the article concerns itself with slide films. The most basic information is covered, such as defining a slide and the preference of photographers for slides over prints. Additionally, excellent explanations of the color temperature of light and tungsten-balanced slide films are given. The filters needed for conversion from tungsten to daylight balance are fully discussed thus clarifying a topic that is confusing and can lead to unexpected results.

Copy photography for the production of slides to be used for art history courses demands exact color rendition. Professional films, as Schwalberg explains, provide the photographer with such precision. They are manufactured without the color bias of non-professional films and consequently must be refrigerated to delay changes in the films' characteristics. Maintained at a temperature of 55 F or lower, "the chemical composition of the film remains within professional tolerances." Schwalberg further points out that professional films can withstand storage at room temperature for several weeks without any noticeable color shift.

Included in "1984 Color Roundup" are useful charts listing available color slide films. The charts also show type of processing required, ASA and filtration needed with various light sources.

Kathy Snyder
Colorado College

Conservation in the Library: A Handbook of Use and Care of Traditional and Nontraditional Materials. Edited by Susan Garretson Swartzburg. Westport, Connecticut: Greenwood Press, 1983. Pp.234. \$35.00.

As stated by its editor, the purpose of this book is "to assist the librarian, archivist, and curator in all aspects of the care of materials to be found within a library." The book fulfills this purpose admirably. The eleven chapters, authored by fourteen contributors (some are jointly authored), contain a potpourri of information. A listing of the chapter titles indicates the breadth of subjects: "General Care," "Paper," "Books and Bindings," "Photographs," "Slides," "Microforms," "Motion Picture Films," "Videotape," "Sound Recordings," "Videodiscs," and "The Computer: When Tomorrow Becomes Yesterday."

This journal's area of specialization explains our special interest in chapters four and five, titled "Photographs" and "Slides," respectively. The twenty-three pages devoted to photographs provide an overview of the history, principles, photographic processes, and conservation of photographic materials. Gary Albright covers these topics in a very readable, and highly informative manner. Nancy Carlson and Christine Sundt have authored the chapter on the care of slides, and their expertise in this field is well in evidence. A list of keeping characteristics of various films is included, as is information on the storage, projection, handling, and binding of slides, photographic processes, and the environmental controls necessary in the slide collection. Also included is the "Statement on Slide Quality Standards" issued jointly by ARLIS/NA and CAA Visual Resources Groups.

Other chapters provide equally useful information on the care of books, artworks on paper, and other materials that our readers may have in their collections. These can be recommended for their generally informative and readable presentations, even to those who may not have direct responsibility for such materials.

Two chapters in this book recommend the development of a disaster preparedness plan, with the suggestions in "General Care" by Susan Swartzburg being especially comprehensive. Every curator and librarian would be well advised to check present plans against the recommendations outlined in four formats: 1) factors for inspection of facility, 2) fire prevention, 3) general objectives of disaster plan, and 4) notebook preparation. Any curator presently without a disaster plan may want to fashion a plan based on these recommendations, and those with plans of questionable value will want to measure existent procedures against these suggestions for thoroughness.

All of the contributors have excellent credentials in their fields. The compilation therefore presents more creditable information than if a book of this scope were attempted by an individual author. Each chapter concludes with a helpful bibliography of "Suggested Reading."

This volume is a handbook, and as such covers a variety of subjects, some of which will inevitably lie beyond the primary interest of most readers. However, the material is conveyed forthrightly, making a foray into unfamiliar subjects a pleasant experience. I was unacquainted with record and tape recordings before reading Chapter 9 on sound recordings, but found this unfamiliar subject made interesting and comprehensible.

Newly assigned staff members as well as library science students will find *Conservation in the Library* an especially valuable introduction to the tasks and challenges confronting (and sometimes confounding) librarians and curators. Experienced professionals will find information to assist them in the accomplishment of those tasks.

Joy Ann Alexander
The University of Michigan

Books

FOR YOUR INFORMATION

Slide Market News

A RUNNING UPDATE TO THE 1980 SLIDE BUYERS GUIDE

American Craft Council: 44 W. 53rd St., New York, NY 10019. ACC has announced four new slide kits: "Towards a New Iron Age," an international collection of functional and sculptural metalwork from the 1983 exhibition organized by the Victoria and Albert Museum (57 slides, \$96.90), "Art to Wear," from the American Craft Museum exhibition of clothing by 25 nationally prominent fiber artists (32 slides, \$54.40), "The Art of Woodturning," from the American Craft Museum exhibition (29 slides, \$49.30), and "Czechoslovakian Glass: Seven Masters," from the American Craft Museum exhibition (20 slides, \$34.00)

Bonanza Group, Inc.: 220 East 54th Street, New York, NY 10022. Black-and-white slides and prints are available of historical art and architecture of Mexico, Nicaragua, Costa Rica, and Honduras. Subjects included are churches, houses, haciendas, hospitals, chapels, interiors, and museum collections. Holdings include 5,000 negatives shot in Mexico, and 1,500 in Central America. Prices are given on request.

Boston Museum of Fine Arts: A set of 100 slides is available for \$100.00, duplicates on Ektachrome 5071 produced from camera originals of the exhibition "A New World, Masterpieces of American Painting 1760-1910." Individual slides may not be purchased from this set. Reproduction agreements permit it to be sold only until July, 1984.

Budek: New sets include "Christo" (93 color slides of representative works), "Christo: Surrounded Islands" (20 color slides), "Botero: Magic & Reality" (40 color slides and audio cassette), "Recent Latin American Drawings" (110 color slides and bilingual audio cassette), and "Caribbean & Afro-American Women Artists" (78 color slides representing seventy artists). All these sets are produced on low-fade Eastmancolor film.

A slide curator from a major state university wrote to me recently to express his dissatisfaction with Budek's five-set series "The Artist Was a Woman." I quote from his complaint: "On inspection, I noted that all the slides (about 200) are off-color — most leaning to pink or sepia, a large percentage are out of focus, and many are processed backwards on the film stock. I called Budek to inquire about the poor quality, and asked about recent publicity regarding transfer of all Budek slides to better low fade Eastman film, and was told that these indeed, were on the new film. It seems the slides were simply transferred to the new film from their existing POOR quality originals. My warning then, to others is not to purchase these slides unless absolutely necessary. Budek has done some nice research in compiling the sets, which are available at a most reasonable price, but they are so poor many will simply have to be discarded. Admittedly, Budek has a liberal return policy which is to their credit, but the slides I received (and begrudgingly kept, at the request of my faculty as "... poor slides are better than none, in some instances"), were hardly worth the money and effort needed to process them into the collection."

The curator went on to note that, on the contrary, he had been greatly pleased by Budek's set on Christo's "Surrounded Islands." Purchasers should be aware that Budek's slide quality is variable, even on new film stock, and that it is prudent to order sets on approval. The company does accept returns when customers are dissatisfied.

Finally, Budek is offering a sale of Series aIII: "The History of American Art" (297 black-and-white slides covering the period up to

the 1940's). As long as the stock lasts, the set is priced at 50% off.

Burstein, Barney: 2745 E. Atlantic Blvd., Suite 305, Pompano Beach, FL 33062. A supplement #2 to catalogue #3 has been released (30 pages). Included are slides of painting, sculpture, and minor arts from museums, galleries, and private collections in Vienna, Basel, Brussels, C. io, Essen, and Boston.

Creative Concepts: The 1984 catalogue is available for \$.50.

Dunlap Society: A brochure describing twelve sets has recently been mailed. New to the list is a 60-slide set of still-life paintings by John F. Peto, selected from the 1983 exhibition at the National Gallery of Art (price: \$75.00 plus \$5.00 shipping).

Hannibal Slides: New stock on stable film will be ready by the end of 1984. Many sets listed in the catalogue are out of stock during the meanwhile.

Hartill Art Associates: Two lists of slides taken since the release of the new catalogue are available: 149 slides of Canadian architecture and 73 slides of architecture, sculpture, and stained glass (by Tiffany and LaFarge) in Buffalo. Early house designs by Frank Lloyd Wright are included. The Hartills plan a trip to Europe this year, including photography in France and Florence. At present, some items from the catalogue can be supplied only as duplicates until the stock of originals is replenished. The price of duplicate slides rose to \$2.50 on January 1, 1984. Originals are still priced at \$3.50. The minimum order is 20 slides. Price of the catalogue is \$9.00. Photography in Rome, Pompeii, Herculaneum, Paris, northern France, and Germany will be undertaken in 1984. Please advise the Hartills as soon as possible of any specific requests.

KaiDib Films International: New sets, both on low-fade Eastman-color film, are "National Cooling in Building Designs" (130 slides) and "Costumes of the 18th Century" (100 slides). The former set is a selection of slides chosen by William Holmes, AIA, to illustrate various principles of cooling as they have been used in actual buildings.

Landslides: 77 Conant Road, Lincoln, MA 01773. Individual slides (\$3.00) may be purchased from each of three volumes, any of which will be mailed to you for selection:

vol. 1: 595 slides from the California Bay area, Sacramento Valley, and Sierra Foothills

vol. 2: 537 slides of the southern Great Lake cities from Buffalo to Chicago

vol. 3: 580 slides of cities, etc. between Baltimore and Orlando.

Catalogues may be ordered at \$5.00 per volume.

Messana, Joseph: A new catalogue of religious structures has been issued recently, covering architecture and stained glass in the U. S., Canada, Mexico, Brazil, and Europe. A supplement lists other architecture and monumental sculpture. Together, the new catalogue and supplement include more than 5,000 new slides. A charge of \$3.00 for both is made to cover printing and mailing costs.

Miniature Gallery: Numbers 59 and 60 of *Art Slide News* have been issued. The six new sets featured are "Claude Lorraine" (76 slides from the exhibition in Washington, D. C., and Paris, 1982-1983), "Peter Blake" (63 slides from the 1983 exhibition in London), "Landscape in Britain 1850-1950" (130 slides from the 1983 exhibition in London and three other British cities), "Essential Cubism 1907-1920" (74 slides from the 1983 exhibition in London), "The Hague School — Dutch Masters of the 19th Century" (53 slides from the 1983 exhibition in Paris, London, the Hague), and "New Art at the Tate Gallery 1983" (48 slides).

Miranda, Dan: P. O. Box 145, Brookline, MA 02146. Seven sets of original slides of postcards in Mr. Miranda's personal collection are offered, ranging in price from \$130.00 for 50 slides to \$640.00 for 400 slides. Two sample slides sent to me are very good quality. Film used is Ektachrome Tungsten 50 Professional Film #5018. Each set is accompanied by "full descriptive information." The sets available are: "Black Stereotypes on Antique Picture Postcards, 1900-1920"

"The Miranda Collection of Anti-Semitic Picture Postcards, 1890-1920"

"Women's Suffrage on Antique Picture Postcards, 1905-1920"

"Representations of Women on Antique Picture Postcards, 1890-1930"

"Stereotypes of Women on Antique Picture Postcards, 1890-1930"

"Japanese Antique Picture Postcards, 1900-1930"

"Architect's Delight — Boston on Antique Picture Postcards, 1900-1920"

Nicklas, Steven: Central Avenue, Avis, PA 17721. Four catalogues describing 28 sets are available for \$1.00. Subjects are ancient sites in Egypt and the Near East. Sample slides appear over-exposed. Film is Ektachrome #5071. The sets may be ordered on approval.

Palm Press, Inc.: 27 Gold Smith Street, Littleton, MA 01460. Slide sets are available of the work of prominent photographers, including Robert Adams, Harry Callahan, Camera Work Gravures, William Christenberry, Edward Curtis, Harold Edgerton, Walker Evans, Francis Frith, Olivia Parker, August Sander, Aaron Siskind, and Garry Winogrand. Production using internegatives for both black-and-white and color is carried out in the Palm Press shop, to ensure the highest possible quality.

Pictures of Record: New sets listed in the 1983-1984 catalogue are "Early Caddoan Cultures," "Delphi," and "Mycenae," each consisting of approximately 65 slides. Tentatively scheduled for release in spring, 1984, are sets on Madaba and Jerash.

Rosenthal Art Slides: As mentioned in the December Bulletin, volume III of Rosenthal's catalogue is in preparation. It will contain listings of almost 10,000 slides, of which about 3,000 will be architecture (1,000 miscellaneous; 2,000 English and French Medieval). The slides to be listed in volume III are ready now and may be purchased as sets (price per slide approximately \$1.50), accompanied by a xeroxed listing. If 300+ slides are to be purchased (at \$1.80 each), the listing will be lent to the customer. Smaller orders cannot be filled until publication of catalogue volume III (early 1985?). When the new volume is ready for distribution, complimentary copies will be sent to all customers who have placed an order for 50 slides or more within the last two years. Additional slides from the following museums are now ready as well (available in sets only): Cleveland Museum of Art, National Museum of American Art, Philadelphia Museum of Art, Los Angeles County Museum of Art, Albright-Knox Art Gallery, Toledo Museum of Art, and the Terra Museum of American Art.

Sandak: Five new sets are ready for 1984; brochures with listings of individual slides may be requested. The largest set, #796, consists of 250 slides to accompany the text *The Visual Arts: A History*, by Honour and Fleming. Two sets cover Museum of Modern Art exhibitions: Set #793, "Prints from Blocks" (62 slides) and Set #795, "Big Pictures by Contemporary Photographers" (32 slides). The 1983 Whitney Biennial is documented by 41 slides (Set #794). Finally, a set of 91 slides of works in the Yale Center for British Art is available (Set #797). When an entire set is purchased, the per slide cost ranges from \$1.75 to \$2.00.

Saskia: As of January 31, 1984, the price of original slides has increased to \$3.85 each. Slides offered to subscribers in November included Greek and Roman art from the National Museum in Naples, highlighted by details of the Alexander Mosaic and various views of the Doryphorus (Pompeii copy). Also featured were northern European paintings in the Kunsthistorisches Museum, Vienna.

Siggraph: Association for Computing Machinery, Inc., ACM Order Dept., P.O. Box 64145, Baltimore, MD 21264. This source was suggested by Marybeth Koos of Northern Illinois University. Siggraph publishes slides from its annual international exhibition of computer art. A set of 78 slides (order #915831) from the 1983 Art Show is available for \$30.00. The slides are numbered and are accompanied by an information sheet listing artist, title, date, size, medium (hardware, software), and location of production. Informa-

tion about film stock and production method is not available. Designate set title and order number to avoid confusion with other sets of slides of computer equipment.

University of Edinburgh: The Department of Fine Art, 16-20 George Square, Edinburgh EH8 9JZ, Scotland, offers 11 slides in two small sets: five slides of Raeburn portraits (3.00 pounds) and six slides of miscellaneous subjects, including paintings by Pannini and Procaccini and sculpture by Giambologna, Duquesnoy, and Adriaen de Vries (3.60 pounds)

University of Michigan Slide Distribution: Two new slide sets have been released, each consisting of 150 slides for \$150.00. One set contains works in the New Orleans Museum of Art — 80 full views of paintings with 65 details, plus 5 slides on 20th century sculpture. The other set features the High Museum in Atlanta; besides the 150 slides of its holdings, 6 slides of the museum building are included free of charge. Send orders or inquiries to Joy Alexander, 107 Tappan Hall, Ann Arbor, MI 48109.

Winterthur Museum: 31 slide lists are available from the Photographic Services Office. For most lists, there is a charge of \$1.00 to \$2.00, deductible from orders of 25 slides or more. Slides are priced at \$2.50 each, plus postage and handling. The following types of objects from the museum's collection are depicted: furniture (7 lists), ceramics (4 lists), metals (5 lists), pictures (8 lists), rugs and textiles (3 lists), and other (4 lists). Price list of slide lists is available on request.

Worcester Art Museum: A set of 20 slides (\$21.00) is available, representing selections from the exhibition "The Collector's Cabinet: Flemish Paintings from New England Private Collections." The slides in this set are of excellent quality. A list of sixty slides documenting the permanent collection is also offered. Price per slide is \$2.00. Address requests of orders to Photographic Services.

World Microfilms Publications: 62 Queen's Grove, London NW8 6ER, England. Approximately 250 color slides in sets of 12 (per slide cost \$1.60) are available of five manuscripts in the Lambeth Palace Library. In addition, several sets of slides of the *Winchester Bible* are in preparation. Historic houses and other buildings in the United Kingdom are represented in more than 500 sets, each containing five slides for 3.00 pounds. Pidgeon Audio Visual has released Series 9 of its tape/slide talks, all distributed by World Microfilms. Architects recorded and illustrated by 24 slides each are Walter Segal, Terry Farrell, Gino Valle, Angelo Mangiarotti, Paolo Portoghesi, and John Johansen. Each tape with slides is priced at 45.00 pounds (about \$80.00).

Norine D. Cashman
Brown University

Professional News

PROFESSIONAL STATUS SURVEY

A professional status survey of visual resources personnel is now in the planning stages as a follow-up to the 1974 Professional Status Report. A committee of six volunteers, which was formed at the VRA business meeting at the College Art Association conference in February, will design and distribute the survey. Serving on the committee are Nancy DeLaurier, as advisor, from the University of Missouri-Kansas City; Evelyn White of the California Institute of the Arts; Mary Lampe from the Amon Carter Museum; Karl Cole from Rosenthal Art Slides; Brenda MacEachern of the University of Western Ontario; and Deborah Tinsley from the Kansas City Art Institute.

The 1974 report confirmed statistically the perceived need to upgrade the status of professionals in the visual resources and led to a statement of professionalism and eventual sanction from ARLIS and

CAA. It is the intention of the committee that the survey provide a progress report.

Sections of the survey will focus on job description; profile of the institution; personal qualifications; and present status (including title, rank, salary, benefits). The survey will be subdivided further by type of institution and by region. If you have any suggestions for the questionnaire, please contact Deborah Tinsley, Kansas City Art Institute, 4415 Warwick Boulevard, Kansas City, MO 64111.

The survey will be sent to the entire VRA membership by May 1, 1984. It will be anonymous, and all information will be confidential. It is important that each member complete and return it so that the information collected will be accurate.

Deborah Tinsley
Kansas City Art Institute

BASIC TRAINING WORKSHOP FOR VISUAL RESOURCE CURATORS

An intensive basic training workshop, covering all aspects of the management of fine arts and architecture slide and photograph collections, will be held for all interested curators from June 17 through 23 at the University of Texas in Austin. The program for the workshop has been expanded from past years and will include more lectures and demonstrations on current trends in microcomputer technology in visual resource collections. In addition, several new sessions will deal with special topics in architecture such as classification and cataloguing for areas such as energy and technology, indigenous architecture, city planning, landscape, construction methods and materials.

The design of cataloguing schemes and cross reference for diverse users will be included in the program, along with an investigation of the feasibility of the use of advanced technology such as video disks. An optional session on basic instruction in the operation of a 35mm camera will be offered on June 17, before the workshop begins.

The workshop is designed especially for those beginning in a position as a slide curator in an educational institution, museum or the private sector, as well as for those curators wishing to refresh their training and to acquaint themselves with new developments.

Instructors include Nancy S. Schuller, curator of the slide and photograph collection in the University of Texas Department of Art. She was a coordinator of the advanced studies in visual resources seminars held at the University of Texas in 1981 and 1982. This will be her fourth year to instruct in the basic training workshop.

Also on the workshop faculty will be Christine Sundt, an independent researcher and visual resources consultant from Eugene, Oregon. She served ten years as curator of the art history slide and photograph collection at the University of Wisconsin-Madison. Since 1979, she has been the author of a quarterly column on conservation in the *Bulletin*.

Completing the workshop teaching team is Susan R. Hoover, who has been director of the Architecture Reference Center in the University of Texas School of Architecture for the past ten years. In that capacity, she manages a collection of 125,000 architectural slides, provides visual material for publications and research, and works closely with other visual resource collections in architecture. She was a coordinator of the advanced studies in visual resources conference on color materials.

Tuition for the workshop will be \$225. Workshop housing and meals will be available on campus for an additional fee. For complete information and registration materials, write Jack Brannon, University of Texas Division of Continuing Education, Thompson Conference Center, Austin, Texas 78712 or call (512) 471-3121.

INTERMEDIATE LEVEL WORKSHOP IN CLASSIFICATION AND CATALOGUING OF ART SLIDE OR PHOTOGRAPHIC COLLECTIONS

A one-week intensive intermediate level workshop on classification and cataloguing will be offered at the University of Missouri at Kansas City from June 24 - June 29, 1984. Designed for curators with at least three years of art slide and photograph collection experience or who have attended a basic training workshop, this program is designed to foster an understanding of classification and cataloguing for the purpose of organizing one's own collection most efficiently. A Chancellor's Certificate will be awarded upon successful completion of the course. Enrollment is limited to 24.

The course of study will cover the three major classification/cataloguing systems used in slide collections in the United States, as guides for adaptation. Other topics will include special problem areas, the logistics of making changes, and the groundwork for automation. Automation requires a workable and consistent system and cannot in itself solve the inefficiencies of many cataloguing systems. Work on automation itself will not be featured, but the "groundwork" will be useful for any collection, even if automation is never contemplated. Morning sessions will consist of lectures and discussions; afternoon sessions will consist of labs, followed by discussion periods. The workshop will close with a banquet and presentation of certificates.

Nancy DeLaurier, program coordinator, has been curator of slides and photographs for the department of art and art history, University of Missouri - Kansas City for 22 years. She organized both the CAA and MACAA visual resources organizations in 1971 and 1972, and is now an officer in the new Visual Resources Association. DeLaurier has edited the visual resources professional journal for ten years and all four editions of the *Slide Buyers Guide*. She has taught in the art history program at UMKC since 1974, and now directs the visual resources section of the M.A. program. She began the Art Slide Curator Workshops in 1976. Specialists will handle the three major systems and special subjects.

The fee for the five-day workshop is \$250.00. Housing is available at the UMKC residence hall. Rates are \$8.50 per person per night for double occupancy, \$10 for a single.

For more information, write to Arts and Sciences Continuing Education; 417 Royall Hall, University of Missouri - Kansas City, 5100 Rockhill Rd., Kansas City, MO 64110.

POSITION OPEN

University of Missouri-St. Louis. Slide Curator. Salary dependent on qualifications and experience. 0.75 FTE. Late August. Previous experience in slide curatorial work, including copy photography, required. BA Art History, MA preferred. Send letter of application and three letters of recommendation. A/D April 27. AA, EOE. Thomas C. Pickrel, Art Department, UMSL, 8001 Natural Bridge Road, St. Louis, MO 63121.

Miscellaneous

Sixteen high quality original slides of the Ashburnham Pentateuch (Bibliothèque Nationale, Paris; nouv. acq. lat. 2334) with complete information are available for exchange or purchase. Contact:

Steven Kowalik, Slide Librarian
Hunter College, Art Department
695 Park Avenue
New York, NY 10021

MEMBERSHIP APPLICATION

Annual VRA membership dues include your subscription to the *International Bulletin*, supplements, and a Directory of Members.

1984 Membership dues	\$10.00	Mail to: Nancy Schuller
Surface postage outside U.S.A	\$3.50	Department of Art
Airmail outside North America	\$8.75	University of Texas
Enclosed is my check for _____		Austin, TX 78712

All payments must be made in U. S. currency and payable to the Visual Resources Association.

PUBLICATIONS ORDER FORM

International Bulletin for Photographic Documentation of the Visual Arts,

_____ 1983/vol. 10/\$7.00	_____ 1977/vol. 4/\$4.00
_____ 1982/vol. 9/\$7.00	_____ 1976/vol. 3/\$1.50
_____ 1981/vol. 8/\$7.00	_____ 1975/vol. 2/\$1.50
_____ 1980/vol. 7/\$5.00	_____ 1974/vol. 1/\$1.50
_____ 1979/vol. 6/\$4.00	_____ 1974-79/Index/\$1.50
_____ 1978/vol. 5/\$4.00	

Slide Buyers Guide,
ed. Nancy DeLaurier
_____ \$9.00

Guide to Management of Visual Resources Collections,
ed. Nancy Schuller
_____ \$7.00

Guide to Equipment for Slide Maintenance and Viewing,
ed. Gillian Scott
_____ \$11.00

Guide to Copy Photography for Visual Resources Colls.,
eds. Rosemary Kuehn & Zeldia Richardson
_____ \$7.00

Guide for Collections without Curators,*
ed. Eleanor Collins
_____ \$3.00

Introduction to Automation,
eds. Zeldia Richardson and Sheila Hannah
_____ \$8.00

(*This Guide is also included as a chapter in the Guide to Management for Visual Resources Collections)

Prices include postage and handling, for orders outside North America, please add \$2.00 per volume. All payments must be in U.S. currency. Payment is to the *Visual Resources Association*. Please include this form with your payment. All checks or money orders should be sent to:

Nancy Schuller, Treasurer
Visual Resources Association
Department of Art
University of Texas
Austin, TX 78712

PREPAYMENT IS REQUIRED ON ALL ORDERS

Mail to:

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Street Address

City, State, Zip

SUPPLEMENT

SOUTHEASTERN COLLEGE ART CONFERENCE - VISUAL RESOURCE CURATORS

PROBLEMS IN PHOTOGRAPHING WITH A MODELSCOPE

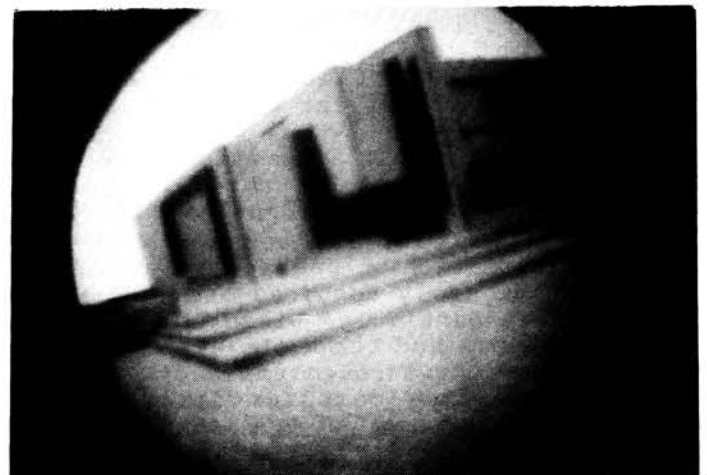
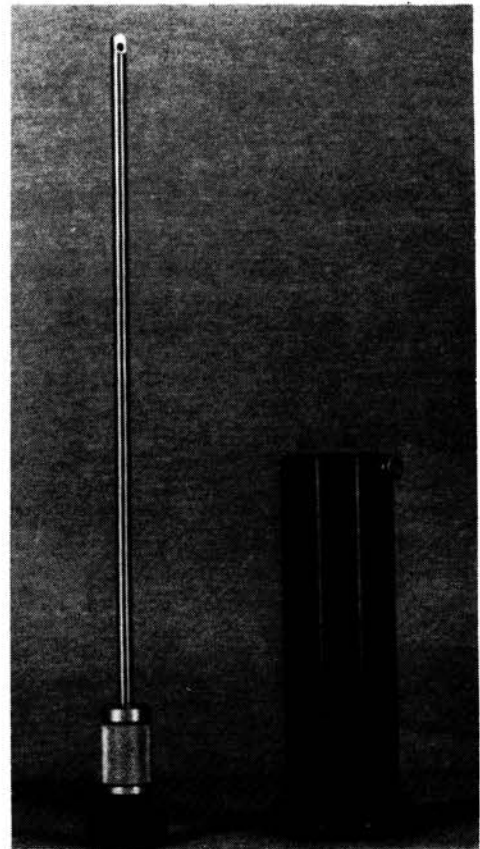
The modelscope is a lens used for viewing and photographing architectural models. It is a thin metal tube 1/4 inch in diameter and 12 inches long and has an eye piece for viewing, a tiny lens opening at the tip and a rotating knob for focusing. Its uniqueness makes it possible to focus on objects from 1/8 inch to infinity. It has an adaptor tube which enables the modelscope to be attached to a camera for photography.

For viewing, the modelscope is placed inside a model (the small lens should be inside), viewed through the eyepiece and focused by rotating the metal knob. The viewer has the impression that he is standing inside and is in the same scale as the model.

In order to take pictures, the modelscope is attached to the adaptor tube and the tube is fastened to a Nikon camera body. Since the modelscope has no f-stop settings, a hand held meter must be used to get light readings. In order to get the correct reading, the exposure meter should be set at f/16 and the corresponding shutter speed is multiplied by 64 (a reading of f/16 at 1/30 second: $1/30 \times 64 = 2.13$ seconds). The lens is placed inside the model and because it is so tiny a great deal of light is needed for photographing.

There are several disadvantages in using this lens:

1. For viewing it is difficult to get a clear view of the subject because the lens opening is so small;
2. For photographing it is impossible to view the subject through the camera lens because the adaptor tube blocks out the light;
3. It is very difficult to attach the camera on to a tripod when using the modelscope;



4. Time exposures are so long and it is difficult to hold the camera steady and impossible to use the tripod.

In spite of the difficulties I did take some slides and black and white photographs. The photograph of the model was taken with Kodak Tri-X 400. I used two 3200K, 500 watt lamps and gave it a two-second exposure. Other films that can be used are Kodak Daylight ASA 400 slide film, Kodak Tungsten ASA 160 slide film and 3-M 640-T slide film. I did not try the new Kodak ASA 1000 color print film - it would be worth a try.

Luz Maria Aveleyra
University of North Carolina — Charlotte

HARD DISKS ARE FOR THE BIRDS THE USE OF HARD DISKS IN COMPUTERIZED SLIDE COLLECTIONS

The title is not meant to infer a negative meaning for hard disks but that indeed a hard disk is used to catalogue a unique collection of bird photographs called VIREO, Visual Resources for Ornithology, at the Academy of Natural Sciences of Philadelphia. VIREO is a scientific library of bird photographs which provides visual resources for research, art and education in Ornithology.

Although a highly specialized photo library, VIREO performs acquisitions, accessions, and retrievals daily similar to many slide libraries.

The main challenge in organizing a slide collection to optimize accessibility and use is establishing a catalogue to store the information of each image and an index for easy acquisition and cross-referencing. Any standard log book and index card catalogue might be acceptable, yet to be efficient both in time usage and ease, a computer database is far more suitable.

VIREO selected a computer database as both the catalogue and the index. The computer database or "catalogue" can be easily proofread, edited, and updated with additional information on previously accessioned slides or on newly acquired ones. The index can locate a particular piece of information in two seconds and complete cross-referencing can be done through unlimited searches. Moreover, with a computer database additional storage is always possible without sacrificing a significant amount of space,

<https://online.vraweb.org/vrab/vol11/iss1/1>

unlike traditional paper and index card catalogues.

In December 1983, I began using VIREO's IBM personal computer to establish the slide collection database. Once this database occupied more than one floppy diskette, a crucial problem arose. It was not possible to index the complete file since it was not all in one storage unit. Even if the database is broken up to allow subfiles and subindexes, a two second data search becomes meaningless if one needs to shuffle through and test multiple floppy diskettes. The hard disk gives you the storage capacity necessary not only to store the data conveniently, but also to manipulate it efficiently. No matter what size the database is, provided it is indexed, information is retrievable within a few seconds.

A hard disk reads and writes much faster than a floppy diskette, thus programs are performed in less time. A few seconds saved per slide entry of 5,000 records eliminates up to four and a half hours data entry time. That's quite an advantage when you consider your slide collection is composed of at least 25,000 slides.

Another benefit of a hard disk is that it is structurally a "hard" disk. Those of you who work with floppy diskettes are very familiar with the dangers which fingerprints, magnetic clips, or spilled coffee pose to a "floppy." Because of these dangers, there is a greater chance of damaging and losing information from floppy diskettes than from a hard disk. Most hard disks are packaged in a neat rectangular box protected from the hazards of the office environment. When operating smoothly, there is little sound except a few beeps while it is reading or writing.

Ultimately, the hard disk offers ease of operation. You turn the switch on and once "booted," meaning the system is on, you have all your files at your fingertips almost effortlessly. No more fussing with floppy diskettes, loading and unloading them. Your wordprocessing operations and letters are in one section of the hard disk and your database files and programs are in another. Many people would agree, that once you've worked with a hard disk, floppy diskettes feel like primitive stone age storage units.

The alternative to a hard disk is using your PC as a terminal to a mini or mainframe computer if it is financially feasible. One may ultimately need to use a mainframe computer if the collection grows beyond the hard disk capacities available. Even if you are presently using modem communications to

upload and download information, a hard disk may be more cost efficient and convenient for local searches and to have sections of the main database right at hand. It would eliminate much of the expensive on-line modem time.

The advantages of a hard disk over multiple floppy diskettes or costly modem time seem ideally all that one could ask for; however there are some drawbacks.

Having all the information at your fingertips can also mean losing all the information in less than a second. Yes, it has happened to me, not once, but on several occasions. There are no warnings, no beeps, just silence. The only messages I had received, on different occasions, to indicate the system had "crashed," was a screen message which read "The Hard Disk drive is not ready" and the hard disk system's operating light went out.

If accidentally erasing or damaging a floppy diskette is a very disappointing experience, how can one describe the horror of losing ten megabytes, an equivalent of thirty-three floppies, in a flash? It can destroy all your faith in technology. To avoid this, you must protect yourself with floppy diskette backups just as one should when using multiple floppy diskettes. Four months of VIREO's work was successfully restored in one hour because I had made floppy diskette backups. You need only have the system fail once to teach you the dire importance of having a backup copy of everything which is in the hard disk.

It is also possible to lose information within a section of the hard disk similar to losing a file on a floppy diskette. When erasing or deleting material you must be sure you indicate the proper drive and the proper file. Lawrence J. Magid describes an erase safety loop he designed for his hard disk in a PC World article appropriately entitled "Hard Times" (May, 1983). The article also deals with keeping files organized, so efficiency can be maintained and there is less chance of losing information. This is another reason to support having floppy diskette backups.

A hard disk itself is hard, yet the hard disk system has many delicate parts. The compact rectangular box can be deceiving. It is sensitive to magnetic fields, power surges and static, as is the PC terminal and other sensitive electronic equipment. A complete crash of the system can occur due to these unsuspected exterior forces. The hard disk system is like a phonograph where the slightest movement can cause damage. Proper computer handling and

maintenance can reduce these problems if the precautions are known.

Despite the drawbacks, the hard disk is still worth its weight in "megabytes." The hard disk is advantageous based on efficiency, flexibility and ease but only if you learn to operate it properly, become aware of the sensitivities of the machine and are extremely rigorous about making backups.

References

Magid, Lawrence A., "Hard Times," PC World, vol. 1, no. 4, May 1983.

Sachs, Jonathan, "Hard Disk Roundup," PC World, vol. 1, no. 6, September 1983.

Martine A. Culbertson
Academy of Natural Sciences of
Philadelphia

DOCUMENTATION OF MULTIPLE MEDIA ART

Marcel Duchamp's ready-made questioned the function of art and consequently changed the focus of art from morphology to idea. Jackson Pollock's posture of self identification as artist rather than painter further disengaged the matrix of media categorization. Other artists such as Yves Klein investigated non-traditional processes in art making as exemplified by his use of human paintbrushes.

Joseph Schillinger, in his 1948 book, The Mathematical Basis of the Arts, examined the historical evolution of art and proposed that the last two phases of art will be characterized by experimental and novel art, and an art product that will be characterized by a fusion of art forms and materials, respectively. If one examines the work of the contemporary artists Judy Pfaff and Jonathan Borofsky, one can discern that the unyielding blend of media transcends the conceptual nature of the work.

Today, the once simple categorization of art into chronological media areas must be largely expanded to encompass contemporary technological and conceptual progress. A two, three, four-D (time continuum consideration) must be considered. Since there

is such a proliferation of media, one might consider a newly designed system that isolates works into "-isms" subdivided by designated mediums.

Several Southeastern artists - Maria Artemis, George Brett, Jim Edwards, Jean Gallagher, Roy Gary, Wiley Hicks, Ronald Jones, Craig Pleasants, Andrew Polk, Rat and Duck Playhouse, Veronica Ruedrich, David Sedaris, Jewel Stern, and Jo Wright Whitten - function with idea as the premise and multiple media as the means. Examples of all these artists' work were viewed and objectives of the work and ideas concerning categorization were reviewed. Ronald Jones, from the University of the South, was quoted, "At present the circumstances in which classification may be useful are so marginal that it is often reduced to rhetoric." Most of the artists' rejection to attempt to categorize his or her work reinforced Dr. Jones's statement. Roy Gary, a graduate student from the University of South Carolina, was also quoted. His was a sensitive and perceptive remark: "The exploration of non-object art (self-reference) rises out of a time of dissatisfaction with traditional forms of art and a dissolution of established organizations of artists. Recognized as a spirit of an age these works (non-object art, process art, performance, happenings, documents and video) open a new and singular category."

SLIDE LIST

PART 1. ORIGINS

SLIDE 1. FOUNTAIN MARCEL DUCHAMP 1917

The function of art was first questioned by Marcel Duchamp. The ready-made, as discovered by Duchamp, made possible for artists to speak another language and still make viable statements. With the ready-made, art changed its focus from the form of language to what was being said, i.e., it changed the nature of art from a question of morphology to function. This change from appearance to conception constituted that all art produced after Duchamp as being conceptual in nature.

SLIDE 2. POLLOCK IN ACTION

Allan Kaprow made this statement concerning the work of Jackson Pollock in "The Legacy of Jackson Pollock":

"What we have then; is a type of art which tends to lose itself out of bounds, tends to fill our world with itself, an art which, in meaning, looks, impulse, seems to break fairly sharply with the tradition of painters back to at least the Greeks. Pollock's near destruction of this tradition may well be a point where art was more

actively involved in ritual, magic and life that we know in our recent past....Pollock, as I see him, left us at the point where we must become pre-occupied with and even dazzled by space and objects of our everyday life... the young artist of today need no longer say, 'I am a painter or a poet or a dancer.' He is simply an artist."

SLIDE 3. A PANTRY BALLET JOSEPH CORNELL 1942

Again, materials and concept are questioned as indicated by the work of Joseph Cornell. Cornell's work exemplifies the statement made by William C. Seitz in a book written in connection with the "Art of Assemblage Show": "Figuratively, the practice of assemblage raises materials from the level of formal relations to that of associational poetry, just as words and numbers, on the contrary, tend to be formalized." (William C. Seitz, The Art of Assemblage, New York, 1961, p. 84).

SLIDE 4. MONOGRAM ROBERT RAUSCHENBERG 1955-59

John Cage, composer at Black Mountain College in North Carolina, implanted in Rauschenberg's mind the notion of "acting in the gap between art and life" which resulted in Rauschenberg's making combine paintings and sculpture. Andrew Forge, critic, stated: "Life has penetrated his work through and through, and each work, rather than impose a definition of art, springs from a questioning of all the possible contexts in which art can happen." (Andrew Forge, Rauschenberg, New York, 1970, p. 15). Later at Black Mountain College, Rauschenberg produced a series of all white paintings in which the only figuration was the result of moving cast shadows.

SLIDE 5. THE GREAT BATTLE YVES KLEIN 1960

Yves Klein, from the New Realists group, crossed the categories of materials by producing works in which natural forces achieved his effects. He used a flame thrower, rain falling on a canvas which was first tied to a roof of a car, then driven through the wet. He also made use of "living brushes" which were bodies of models covered with paint and made to move over the paper.

In 1948, Joseph Schillinger, a minor American Cubist, wrote a book called The Mathematical Basis of the Arts, in which he divided the historical evolution of art into five "zones": 1. Pre-aesthetic, biological stage of mimicry; 2. Traditional-aesthetic, a magic ritual-religious art; 3. Emotional-aesthetic, artistic expression of emotions, self-expression, art for art's sake; 4.

Rational-aesthetic, characterized by experimental and novel art; and 5. Scientific, post-aesthetic, which will make possible the manufacture, distribution, and consumption of a perfect art product and will be characterized by a fusion of the art forms and materials, and, finally, a "Disintegration of Art," and the "Abstraction and Liberation of the Idea." (Joseph Schillinger, The Mathematical Basis of the Arts (New York: Philosophical Library, 1948, p. 17).

Lucy Lippard in collaboration with John Chandler in the article "The Dematerialization of Art" referred to this framework as a basis of speculation of the art being produced at that time, 1968. It is stated: "...we could now be in a transitional period between the last two phases, though one can hardly conceive of them as literally the last phases that the visual arts will go through." (Lucy Lippard and John Chandler from the "Dematerialization of Art" in Art International, Vol. XII, no. 2, February, 1968).

PART II: RESULTS: OLD MEDIA, NEW MEDIA OR COMBINATIONS TO PRODUCE NEW IDEAS (note: multi: that which involves more than one medium)

<u>2D</u>	<u>3D</u>
Drawing	Sculpture
Painting	Earthworks
Photography	Holography (some)
Prints	Site Sculpture
Xerox	Process Art
Conceptual (some)	Body Art
Artists' Books	Architectural Sculpture
	Conceptual (some)

<u>4D</u>	<u>Multi</u>
Happenings	Installations
Performance	Conceptual (some)
Conceptual (some)	Environmental
Holography (some)	Combine
Video	
Film	
Audio	

All efforts on the part of the contemporary artist to bring art as close to life as possible. Conceptual considerations are of primary concern with a material or materials or no materials as a means to an art end. Yet for the sake of categorization for educational purposes the traditional categories must be expanded and/or redesigned. Consider:

SLIDE 6. FRIDAY NOVEMBER 28, 1977, FROM TODAY SERIES NO. 27 ON KAWARA
Medium: Painting (acrylic)
Category: Conceptual 2D

SLIDE 7. ONE AND THREE CHAIRS JOSEPH KOSUTH
1968

Media: A photograph of a chair, the dictionary definition of the work, and an actual chair.

Category: Conceptual multi

SLIDE 8. A 36" X 36" REMOVAL TO THE LATHING OR SUPPORT OF PLASTER OR WALLBOARD FROM A WALL

Medium: Subtractive?

Category: Conceptual 3D

Weiner states "I do not mind objects, but I do not care to make them." (Lawrence Weiner, October 12, 1969 in conversation with the editor from Conceptual Art by Ursula Meyer (New York: E.P. Dutton and Co., Inc. 1972, p. 217).

All conceptual in idea with diverse materials used for production.

SLIDE 9. HOW TO EXPLAIN PICTURES TO A DEAD HARE JOSEPH BEUYS, 1965

Media: Drawing and objects

Category: Performance

On November 26, 1965 Joseph Beuys spent three hours explaining his art to a dead hare. The gallery was closed to the public, and the performance (though recorded on television) was visible only from the door and street windows.

SLIDE 10. DIRECTIONAL FORCES JOSEPH BEUYS
1975

Medium: Drawing on blackboards

Category: Environmental

In April 1975, at the Rene Block Gallery in New York, the boards could be studied and walked over by the public.

SLIDE 11. PRE SENSE LEOPOLDO MALER, WITH THE ASSISTANCE OF TONY DRIVER AND THE ELECTRONIC PICTURE HOUSE, 1978

Media: Objects and television monitor

Category: Narrative environment (as classified by Edward Lucie-Smith in Art in the Seventies).

Consists of a deflated human headless figure made of flexible silver pvc. This lies on a hospital trolley with all four wheels sawn off in halves. The head of the figure is replaced by a TV monitor. This shows the artist's own head lying in a line with the plastic body on the trolley. There is a chair in front of the work with a device which is activated by whoever happens to sit there. His or her image then replaces that of the artist.

Finally, consider the works considered "Installation" i.e., that which involves multiple-media in a three-dimensional space.

SLIDE 12. INSTALLATION AT 2,701,801 JON BOROFKY, 1981

Media: Drawing on wall and objects

Category: Multi

Borofsky: "The images I create refer to my personal, spiritual, and psychological self. They come from two sources: an inner world of dreams and other subconscious 'scribbles' mystical-spiritual world and often emotional imagery of my personal unconscious, I have been writing numbers in a linear, rational manner since 1968." (from "Jonathan Borofsky," American Artists on Art from 1940-1980 by Ellen H. Johnson (New York: Harper and Row Publishers, Inc. 1982, p. 262).

SLIDE 13. KABUKI (FORMULA ATLANTIC) JUDY PFAFF, 1980-81

Media: Painting and objects.

Category: Multi

SLIDE 14 GATES OF HORNS MARY BETH EDELSON, November 2, 1977, at the Air Gallery, N.Y.

Media: Photography, objects, drawings.

Category: Multi.

Gates of Horns was designed as a memorial to the nine million women who had (so she alleged) been burnt during the Christian Era.

SLIDE 15. SANDY SKOLUND

Media: Ceramics, objects, painting.

Category: Multi

Jean Gallagher

The University of Tennessee at Chattanooga

INVESTIGATION, DOCUMENTATION, MULTIPLE-MEDIA ART: "A VIEW FROM THE ART SLIDE LIBRARY"

The art slide library, an important educational tool for any college art department, is now under an increased demand from its patrons to acquire images of current work being done by contemporary artists. With that demand comes the subsequent cataloguing of such images into the whole of the permanent collection. It is important to keep in mind that such cataloguing is done to provide any patron easy access to any single image and that such cataloguing of images presupposes a similarity in structure and function within any given category.

Since a consideration as to medium, i.e. painting, sculpture, drawing, photography, is important at some point in this process, the cataloguing of much contemporary work can become a confusing, difficult

task. This is due to the fact that today's work seems to override the traditional medium boundaries, becoming more involved with multiple-, inter-, or meta-media work between two or more medium categories, which can render the collection more difficult to use and still not allay the feeling that you have "cut the work in half" by placing it under one medium category. In the case of conceptual art, the materials or medium used is entirely overshadowed by the function of the work, yet if we choose to view "conceptual" as a medium in and of itself (as we might with performance and its art-historical predecessors, and video art) we ignore or splinter other related movements such as body art and post-studio art.

Painting, historically thought of in two-dimensional terms, is moving into three dimensions. Environmental art, once considered in the realm of three dimensions, is now being presented in two. The boundaries of existing media are falling away as the contemporary artist actively remolds our traditional way of viewing the relationship between function and structure. Function becomes a very key word.

Ruth Grover

University of Tennessee at Chattanooga

VIDEOTAPING - COPYRIGHT AND OTHER UNRESOLVED PROBLEMS

There is a small but growing concern about the legalities involved in videotaping slide lectures. A free-lance lecturer and researcher has asked me to bring the problem before a group of slide librarians to find out if any institution has faced this issue. She also hoped that we could work within our organization and contact other concerned groups for the purpose of formulating a uniform policy on this subject.

Specifically, this is the problem. Guest lecturers at a symposium sponsored by an educational institution generally have slides pulled from a variety of sources. When a program is taped, the normal procedure is to obtain written permission of the speaker. The slides are taped beforehand and keyed in later with the audio portion of the program.

Whether a slide is borrowed or has been purchased, the right to reproduce the slide is not granted. Institutional policy calls

for stamping slides with a copyright mark; however, a one-time reproduction right will usually be granted upon written application, either with or without a fee.

When a slide has been made by a lecturer, the possibility of a conflict also exists. An institution without a photographer may at times allow serious researchers to photograph valuable manuscript or rare book material for lecture purposes only; a researcher who allows this unique material to be duplicated without permission of the institution is in jeopardy of shutting off the flow of information to later scholars. Institutions will grow reluctant to permit valuable material to become indiscriminately reproduced.

The same premise is true of site photography. Historical home owners or private individuals who have allowed detailed interior architectural views or garden views to be made by a zealous lecturer may not want these views to go onto permanent tape storage for viewing and distribution to undetermined audiences over an unpredictable period of time. The home owner may feel his generosity has led to exploitation.

When consulted about this problem, a member of the American Library Association replied: "The questions you ask...about the legality of videotaping slide lectures address several legal issues which require consultation with an attorney." Circular R 21 from the Copyright Office states: "The problem of off-the-air taping for nonprofit classroom use of copyrighted audiovisual works incorporated in radio and television broadcasts has proved to be difficult to resolve. The Committee believes that the fair use of doctrine has some limited application in this area, but it appears that the development of detailed guidelines will require a more thorough exploration than has so far been possible of the needs and problems of a number of different interests affected, and of the various legal problems presented." No mention is made, however, of the rights involved in taping a live performance at an educational institution.

Aside from the copyright issues, there are other problems involved with the current videotaping practices. An observation projected today can easily become obsolete with further research. A lecturer's objectives and conclusions, which may have been pertinent at one point in time, gradually decline in validity. As a method of relaying information or as a teaching tool, the tape becomes antiquated.

Also to be considered are informal remarks to the group, spontaneous ideas

which are inspired by the remarks of other speakers, or bits of humor which may add interest to a current program but seem inane and vastly inappropriate in later years.

A lecturer works many hours to put together a good slide presentation, usually for a relatively small honorarium. Upon videotaping the lectures, the institution sponsoring the program obtains unlimited use of the slide lecture without additional fees to the scholar. This may pose no great problem for those who lecture in conjunction with their teaching, but to a free-lance researcher or author it is a partial source of income. The videotape eliminates the need for guest lecturers, and the tape replaces a live performance.

The researcher who asked that this subject be discussed has said that she now follows a procedure which propagates mountains of paper work and she also uses a time-consuming method of slide substitution. She asks each slide source for a release form which grants use of the slide(s) in a videotape. One copy of the form is kept in her files and one copy is forwarded to the institution making the tape. Where she cannot obtain permission to duplicate or where she feels she will infringe on the kindness of individuals who have allowed her to photograph their private collections, she places a blank in the slide tray for the taping session. Before the actual lecture the original slide is returned for viewing by the audience. Obviously this is not a satisfactory solution nor one to which everyone would be willing to conform.

The primary problem we face is how to use modern technology to encourage the free flow of information and ideas without infringing on copyright laws. The second problem is to insure this information is relevant and readily available to scholars.

It has been suggested that videotapes be handled in a fashion similar to published conference reports. The material would be edited and those slides not having appropriate viewing clearance would be deleted from the video presentation. An extra fee could be made to the conference participants and the tape could then be rented to education institutions to cover the cost of production. After a predetermined period of time the tape would become archival material.

The technical aspects of videotaping are generally not the responsibility of our departments. As librarians, however, we do bear the responsibility of determining what constitutes an infringement of the copyright law. It would be in the best interest of

our institutions to formulate a statement of this problem and ask the Copyright Office not only for clarification of "fair use" but for specific guidelines and procedures to be followed by slide libraries.

Kathryn McKenney
Winterthur Museum

DOCUMENTING THE NEW YORK GALLERY SCENE

For over seven years the School of the Arts Library at Virginia Commonwealth University has been able to provide faculty and students with slides of the current New York Gallery and some museum shows. The program began with the suggestion from the late Jonathan Bowie, Professor of Communication Arts and Design, that to have representations of the most current work in New York would be of inestimable benefit as a teaching and research tool.

At first it seemed that the logistics of carrying out this idea would be beyond our capabilities---but I began investigating the possibilities. In the spring of 1976 Marianne Stikas, a recent MFA of the Painting and Printmaking Department, moved to New York to further her career as a painter. She agreed to experiment in doing this work for the Library. I had already written to and obtained permission from many New York galleries to allow our photographer to take slides in their galleries for educational purposes. Marianne also carried a letter from the Dean of the School of the Arts and soon became a familiar figure on the gallery scene.

Our object is immediacy-- we can even have the slides available for use in the classroom while the show is still on view in the gallery. Even some galleries that ordinarily do not allow photography have graciously given us permission for special offerings. Our photographer uses no special equipment, such as lights or tripod, so we don't cause inconvenience to the gallery.

The only problem has been in a few places where there is a mixture of kinds of light, which makes obtaining good results almost impossible.

The slides from the current and immediate past month are displayed on lighted viewers in the School of Arts Library. Faculty and students often head straight for <https://online.vraweb.org/vrab/vol11/iss1/1>

them when they enter the Library. We almost always have two copies made so that more than one faculty member can show them at the same time.

Keeping a program like this going for years is one of the problems we anticipated when we began. Only the dedication of Marianne Stikas for seven years enabled us to get off the ground and become fully established. We also must thank Joan Gaustad, an alumna of the Communication Arts and Design Department, for taking the slides one summer when Marianne Stikas was abroad. This summer Ms. Stikas handed over her responsibilities to Terry Hirst, again a former graduate student in Painting and Printmaking. He, too, is dedicated to his work for the school, and sends us any printed information supplied by the gallery along with carefully typed lists of the works he has photographed.

Our faculty and students seem most pleased with these efforts to bring them these representations. Although New York is certainly not the only art center--it is still the largest and most comprehensive.

Anyone interested in obtaining duplicates of these slides should contact Joan Muller.

Joan L. Muller
Virginia Commonwealth University

MID-AMERICA COLLEGE ART ASSOCIATION - VISUAL RESOURCES

THE ART AND ARCHITECTURE THESAURUS AND VISUAL COLLECTIONS

Libraries, museums, and archival groups have struggled with the task of organizing, indexing, and retrieving data on their print, non-print, and object collections. The problem of subject access is especially difficult and has received a great deal of attention. Art databases and visual collections are in particular need of a comprehensive, controlled vocabulary of subject terms to aid in indexing and retrieval.

A thesaurus is a list of terms showing relationships between words such as synonyms and hierarchical sequences. The Art and Architectural Thesaurus (AAT) provides a standardized vocabulary for the visual arts, including architecture, decorative arts, and fine arts. The AAT vocabulary is arranged both hierarchically, for systematic browsing, and alphabetically, for specific access. It will be available in printed and computerized form. The estimated size of the AAT vocabulary is approximately 30,000 terms.

The terminology for the visual arts has been arranged in thirty provisional hierarchies, organized in a classification scheme which proceeds logically from theoretical concepts to types of works and artifacts, with auxiliary lists for time periods and place names. The working hierarchies are as follows: Design and History Concepts; Styles and Periods; Disciplines and Occupations; Activities and Practices; Artisans', Artists' and Builders' Techniques; Conservation; Physical Analysis; Materials; Tools and Equipment; Architectural Components; Decorative Components and Motifs; Architectural Types; Gardens and Landscapes; Settlements; Armament; Exchange Mediums; Furnishings and Accessories; Musical Instruments; Personal Artifacts; Recreational Artifacts; Transportation Artifacts; Miscellaneous Artifacts; Book Arts and Calligraphy; Commercial Art; Graphic Arts; Multi-Media and Miscellaneous Arts; Painting

and Drawing; Photography and Film; Sculpture; and Documentation.

Guidelines for applying the AAT vocabulary in a consistent set of data fields will be developed for visual as well as object collections. While such common fields as place name and date depend on the auxiliary lists within the AAT, other fields such as name of work, name of artist/architect/maker, and name of collection will depend on authority lists outside the scope of the AAT. The important feature of the AAT is that it will provide for enhanced subject indexing. The AAT terminology should be particularly useful in visual collections which are heavily used for teaching or curatorial purposes -- collections which contain large numbers of details and other analytic views of works and objects.

If your institution or organization has unique subject lists which might be used as sources of AAT terms, please contact Toni Petersen and Pat Molholt, Co-Directors, Art and Architecture Thesaurus Program, Bennington College, Bennington, Vermont 05201.

J. A. Chewning, Senior Editor
Art and Architecture Thesaurus Project

PRECIS AND VISUAL MATERIALS

1. Rationale for Considering PRECIS Subject Analysis for Visual Materials

A. What is PRECIS?

PRECIS stands for PREservEd ContExt IndEx System. It is a technique for subject retrieval based on a set of working procedures rather than an established list of terms. The system, used in the British National Bibliography, was designed for

producing a printed subject index from data held on machine-readable files. The computer creates the entries for an item from manually-constructed initial input. The following entries for one item from various pages of the National Film Board of Canada's U.S. Film Resource Guide, 1983-1984 illustrate the preservation of context:

FILM DESCRIPTION:

Exeter

1972 28:40

D: Gerald Budner

The story of a living church, as solid and dignified as the men who built it. From the pages of medieval manuscripts we picture them, see their tools, and see the people who fill the cathedral. We hear the music of their choir, and outside, the townsfolk who barter their produce in the marketplace.

INDEX ENTRIES:

ARCHITECTURE

Decorated style. 1250-1350. Cathedrals - Study examples: Exeter Cathedral

CATHEDRALS. Decorated Style, 1250-1350. Architecture - Study examples: Exeter Cathedral

DECORATED STYLE. Architecture 1250-1350. Cathedrals - Study examples: Exeter Cathedral

EXETER CATHEDRAL. Study examples Architecture. Decorated style. 1250-1350. Cathedrals

B. What is the status of use of PRECIS for visual materials?

A few examples of uses of PRECIS for visual materials have surfaced. The National Film Board of Canada notes that the use of PRECIS with the FORMAT computerized system for Canadian-produced audio-visual materials "has solicited a highly enthusiastic response from our users, who have praised the system as an easy-to-use and most effective research tool" (Report by Louise de Chevigny, Audio-Visual Librarian, drafted for the Image Banks and Culture session held at the INFODIAL 1983 Conference, p. 8). In France, the Bibliothèque Nationale has experimented with the use of PRECIS (Ferrier, Anne-Marie, "Présentation du système d'indexation 'PRECIS' d'après l'expérience faite par le Département des Arts du spectacle de la Bibliothèque Nationale," Bulletin des Bibliothèques de

France, vol. 23 (1978), No. 3, pp. 161-169). In the United States, Susan Tamulonis, Boston Institute of Fine Arts, is testing PRECIS for a subject index to the Slide Catalog. Perhaps further implementation will be inspired by Sheila Intner's recent statement in her article on organizing non-print materials ("Managing Media for Public Access," Technicalities, vol. 3 (September 1983) No. 9, p. 6): "Perhaps it is time to change from using Sears List of Subject Headings to Library of Congress Subject Headings, or even to an open-ended system like PRECIS."

C. What are the advantages of PRECIS for visual materials?

1) No special adaptation for visual materials is required. The structure and coding of the PRECIS system do not depend on the kind of material indexed.

2) The terminology is contextual, logical and open-ended. As shown in the example above, a full contextual subject statement is provided at each entry point. A device called a "string enrichment option" may be utilized to provide additional access points to visual resources other than the terms logically included as part of the "core" subject content of a string. The logic of the contextual structure of the terminology forces the indexer to think more clearly about the subject being indexed. The open-ended as opposed to thesaurus-based terminology allows the addition of terms encountered in the literature.

3) The PRECIS system can be self-taught within a few weeks, depending on the amount of time per day spent on the task. Following are selected materials fundamental to learning the PRECIS system:

Austin, Derek. PRECIS: A Manual of Concept Analysis and Subject Indexing. London: Council of the British National Bibliography, 1974. 551 pp. A new PRECIS Manual is scheduled for publication during the fall of 1983. It is to be regarded as the only authoritative tool on the PRECIS system and will partly supersede the 1974 Manual.

Ramsden, Michael J. PRECIS: A Workbook for Students of Librarianship. London: Clive Bingley, 1981. 152 pp. This is a very clearly written programmed learning text.

Richmond, Phyllis A. Introduction to PRECIS for North American Usage. Littleton, CO: Libraries Unlimited, 1981. 321 pp. This work updates the PRECIS 1974 Manual.

International PRECIS Workshop. University of Maryland. 1976. The PRECIS Index System: Principles, Applications, and Prospects: Proceedings of the International PRECIS Workshop, October 15-17, 1976, sponsored by the College of Library and Information Services of the University of Maryland; edited by Hans H. Wellisch. New York: Wilson, 1977. 211 pp. Material on the application of PRECIS to nonprint materials is included.

2. Structure of PRECIS

A. What are the basic components of the PRECIS system?

1) A "syntax," or relational structure, is embodied in the system of role operators.

2) A "semantic part," or "meanings" aspect, is found in the procedures for generating references.

3) A set of manipulation codes are used to instruct the computer to produce entries from a string composed from a statement.

B. How are "statement," "string," and "entries" defined?

1) Statement: An indexer constructs a subject description using nouns arranged in a passive-voice construction to express the concepts in the item being indexed and their interrelationships. Example: The stained glass windows in Chartres Cathedral in France (Ramsden, p. 61).

2) String: Terms in the statement are then placed line by line according to assigned role operators to make up a "string." A "role operator" is a prescribed number or letter which denotes role, or context, in the string. Major operators are: (1)Key system: object of action; agent of intransitive action; (2)Action/Effect; (3)Agent of transitive action; Aspects; Factors. Operator (6) is of particular interest to visual collections as it provides for designation of form, such as: "panel with two wings," or "diptych with three scenes" (examples supplied by Susan Tamulonis, Boston Institute of Fine Arts). Terms desired as "lead" terms, or entry points in the index, are ticked. Example of string (Ramsden, p. 131):

- (0) France
- (1) Cathedrals (NU)
- (q) Chartres Cathedral
- (p) windows
- (p) stained glass

3) Entries: Additional codes are assigned for computer reorganization of the elements, or lines in the string, into coextensive entries in a process called "shunting." Example of entries: Exeter film entries shown above (1.A.) Access points, such as ARCHITECTURE, are in what is called the "lead" position. Terms to the right of the "lead" broaden the context and are known as the "qualifier." The "display" is that portion below the line on which the lead and qualifier are found. Terms in the display are narrower in context than those in the "lead" position.

3. The Transition to PRECIS:

The transition to PRECIS proceeds naturally from the decision-making process concerning its adoption for the visual resource collection. Steps in the decision-making process include the following:

A: Consider the specific needs of patrons for subject analysis of the nonprint formats in question.

B: Do background reading on the PRECIS system. Study how-to manuals, especially the Ramsden Workbook mentioned above in 1.C.3.

C: Contact the Subject Systems Office, Bibliographic Services Division, British Library, on how to obtain computer programs for shunting, authority control, and referencing.

D: Conduct a pilot project involving selected items. Survey indexer and user satisfaction.

E: Before reaching a final decision, reconsider the specific needs of patrons for subject analysis of the nonprint formats in question. If an affirmative decision has been reached, the transition to PRECIS will have already begun.

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MICROCOMPUTERS AND THE VISUAL RESOURCES COLLECTION

Microcomputers are being touted as "indispensable" for managers in any field. However, in order to determine if a microcomputer could help the visual resources

manager do a better job, it would be wise to perform a simple systems analysis based on the following steps.

1. Divide the job into small tasks, making sure that each task cannot be divided again.

2. Look at each task to see if it could be performed in a different or maybe even a better way.

3. Look at each task to see if a micro-computer could help make any part of the task easier or better.

4. Review the goals and objectives of the library to determine where it should be in 1 year, 5 years, 10 years, etc.

5. Look at these goals and objectives to see if a microcomputer could help make any of the goals more reachable or if the time required could be reduced by using a microcomputer.

After you do the systems analysis, check the following list for ideas for using a microcomputer. This list is not all-inclusive, but might give you some idea of the kinds of things microcomputers do best.

Word Processing Programs (i.e. Wordstar, Applewriter II, Bank Street Writer, etc.)

Bibliographies and Lists (Acquisitions, Purchase Orders, Subject Headings, etc.)

Chronologies (deadlines for meetings or projects or programs, local events calendars, etc.)

Correspondence

Indexing

Job Descriptions

Legal Documents (Contracts, Employee Forms, Ordinances)

Lists of Members (Support Groups, Faculty, etc.)

Mailing Lists

Name Authority File

Newsletters

Policy Manual and Procedures Documentation

Proposals

Speeches

Staff Directories or Manuals

Telephone and Address Lists

Computer Assisted Instruction Programs (you can use a pilot program or other authoring program to write these)

Library Tours

How to Use the Library

Information for Handicapped Users

Spreadsheet Programs (i.e. Visicalc, Multiplan, Supercalc, etc.)

Balance Sheet

Budgets

Collection Analysis

Program Attendance
Statistics

Communications Programs (i.d. Data Capture, Hayes Terminal Program, Transand, etc.)
Interlibrary Loan
Electronic Mail
Networking

Online Searching (using a modem)

Enhancing (adding to the online search)
Reducing Telecommunications Charges (By storing strategy and results)

Database Management Programs (i.e. dBase II, DB Master, List Handler, PFS: File)
Acquisitions
Catalogue of Computer Programs
Circulation Records
Equipment Inventory and Circulation
Film and/or Slide Booking
Internal Reports File
Reference Question File
Slide Retrieval
Special Collection Inventories

Other Program Applications

Computer Literacy for Staff and Patrons
Control Device for other Equipment
Graphics

At this point, if you have determined that a microcomputer would help you do your job better or faster, you then are faced with the problem of choosing the right system. A key rule of thumb is: SELECT YOUR SOFTWARE FIRST. When reviewing software, keep your goals and objectives in mind so that you will get the software and hardware that will meet your needs now and in the future. Go to a software dealer or a library using the software you are considering, so that you can actually have "hands on" experience with it. Some distributor will send you demo disks if a software dealer or user is not available.

Before you go to a software or hardware dealer, find a good glossary and learn to speak some "computerese". Dealers do not speak "libraryese" or "artese", so you must speak their language in order to make your wants and needs known.

If you have forms like those shown in Fig. 1 and Fig. 2, you can ask the right questions and get the answers you need to make decisions. These forms were developed in a class in "Microcomputer Applications in Libraries" taught at the School of Library and Information Management at Emporia State University. They have been revised several times, in order to include most of the information needed in order to evaluate software and hardware. Feel free to copy them.

If you choose to use a microcomputer to provide access to your slide collection, you can find several software programs that will meet your needs or you can write or contract for a custom program. The main advantages of a microcomputer retrieval system is the easy access to and rapid retrieval from your collection. A disadvantage is the set-up time for input of information about your slides.

Some sources of information on library applications of microcomputers are:

Access: Microcomputers in Libraries
Quarterly, P.O. Box 764, Oakridge,
Oregon 97463, \$11.00.

CMC News. 3 issues per year. 515 Oak St.
North, Cannon Falls, MN 55009, \$6.00.

Small Computers in Libraries. Monthly.
Graduate Library School, College of
Education, University of Arizona, 1515
E. First St. Tucson, Arizona 85721.

Information Technology and Libraries.
Monthly. Library and Information
Technology Association, a division of
the American Library Association, 50 E.
Huron St., Chicago IL 60611,
Nonmembers, \$20.00 per year. Members,
\$10.00 per year.

Nancy Flott
School of Library and Information
Management
Emporia State University

MICROCOMPUTER HARDWARE EVALUATION

Date _____ Application Desired _____
 Make and Model _____ Vendor _____
 Manufacturer _____ Address _____
 Other Products _____ Phone _____
 Language _____ Experience of Vendor _____
 Price _____

SPECIFICATIONS

Power _____ Micropocessor _____ ROM _____
 RAM _____ Can it be expanded? _____ TO? _____ How? _____
 Disk Type _____ Disk Size _____ Disk Drive Capability _____
 Dimensions _____ Keyboard Type _____
 Hard Disk Capability _____ Portability? _____
 Upper and Lower Case? _____
 Video Display? _____ Size of Display? _____
 Number and Size of Lines/Characters? _____
 Audio? _____
 Graphics? _____ Color? _____ Glare? _____ Color of Display? _____
 Printer: Make(s) and Model(s) _____
 Type _____ Speed _____ Type size _____
 Paper Type _____ Interface Capabilities? _____
 Physical Requirements (room temperature, ventilation, etc.) _____

PERIPHERALS	Vendor (Include Address)	Price
_____	_____	_____
_____	_____	_____
_____	_____	_____

SOFTWARE AVAILABLE	Language	Vendor (Include Address)	Price
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

OTHER LANGUAGES AVAILABLE _____

TRAINING In-Store _____ On-Site _____
 Manuals, Training Materials _____ Cost? _____

SERVICE Warranty _____ How long? _____ By? _____
 Maintenance and Repair _____ By? _____ Reputation? _____
 Cost? _____ In-Store _____ On-Site _____
 Software also? _____
 Machine can be updated _____ How? _____ Cost? _____
 A New Model will be Available Soon _____ When? _____
 Trade-In Possible? _____ Value? _____

OTHER COMPARABLE SYSTEMS

_____	Cost? _____
_____	Cost? _____
_____	Cost? _____

OTHER INSTALLATIONS OF THIS MAKE AND MODEL

Location _____	Contact Person _____	Phone _____
Location _____	Contact Person _____	Phone _____
Location _____	Contact Person _____	Phone _____

COMMENTS _____

MICROCOMPUTER SOFTWARE EVALUATION

SUBJECT: _____ TITLE: _____ AVAILABLE FOR PREVIEW: _____
 SOURCE: _____ ADDRESS: _____ PHONE: _____
 COST: _____ REQUESTED/BY BUDGET: _____ DATE: _____
 COMPUTER: _____ LANGUAGE: _____ LENGTH (TIME): _____
 ACCOMPANYING MATERIALS: _____ COST OF MATERIALS: _____
 RECOMMENDATION _____ RECOMMENDED (FIRST PURCHASE) _____
 RECOMMENDED _____ NOT RECOMMENDED _____ REVIEWER _____

PROGRAM AND CONTENT CHARACTERISTICS

N.A. Excel. Good Fair Poor

Appropriateness: for computer application.
 (graphics, audio, content)
 Conceptual Correctness: soundness of content,
 accuracy.
 Organization: logical and balanced.
 Graphics: clear and readable
 Adaptability: to various learning situations
 and/or subject areas.
 Compatibility: with other computer programs
 and learning situations.
 Documentation: completeness and consistency.
 Directions: accompanying printed materials.

(Circle one) Beginning 4 Advanced
 Experience Level: 1 2 3 4 5
 (of user)
 Conceptual Level: 1 2 3 4 5
 (of user)

(Check one)
 Timeliness: ___ Up-to-date ___ Useful though dated ___ Dated
 Appropriateness of Length: ___ Good ___ Short ___ Long
 Can Program be Modified?: ___ Yes ___ No
 Is There a Warranty?: ___ Yes ___ No
 Use Responsiveness: Speed Selection? ___ Yes ___ No
 User Controlled? ___ Yes ___ No
 Rate? ___ Fast ___ Slow ___ Acceptable

Brief Description and Objective of Program: _____

- ___ Administration
- ___ Scheduling
- ___ Recordkeeping
- ___ Statistics, Projections,
Budget, etc.
- ___ Word Processing
- ___ Utility
- ___ Other _____

REQUIRED COMPUTER CAPABILITIES (Check all that apply)

<u>Memory</u>	<u>Peripherals</u>	<u>Other Capabilities</u>
___ Amount of "K" required (minimum)	___ Disk Drive(s)	___ Color
	___ Cassette Player	___ Graphics
	___ Printer	___ Plotter
	___ Hard disk	___ Audio
	___ Video	___ Other
	___ Modem	

REVIEWS (Citation/Recommendation)

COMMENTS AND GENERAL IMPRESSIONS

COMPUTERS AND THE VISUAL RESOURCES ENVIRONMENT

Computers can aid in mathematic calculations, facilitate large corporate fiscal record-keeping or gum up governmental projects and are perhaps fun for playing games. But what exactly is a computer and how does it relate to the specific requirements of the visual resources collection?

On the most basic level, a computer is an electronic device for fast calculation and comparison. Further, computers are used to process and store a wide variety of information. It is as a record-keeping medium that the computer has been of great value to the visual resources environment.

A bit of history might give us some perspective on the computer as a tool. Although many people think of computers as innovative, new devices, the concept of calculating aids is not new. Of course, there are our fingers and everyone immediately thinks of the "abacus" - the Chinese calculating mechanism refined c. 3000 B.C. But the modern computer actually has quite a long history too. Modern "computer history" is generally dated to the seventeenth century. In 1617 John Napier, a Scottish mathematician invented an aid to calculation, subsequently called "Napier's Bones", which were basically rods with numbered, bead-like cylinders (rather like a vertical abacus) that were used to keep track of numbers as you used them. Rather than a computational machine, Napier's Bones was an aid.

The true calculation machine was developed in 1642 by Blaise Pascal (after whom the modern computer language Pascal was named). Pascal developed the "Arithmetic Machine" to help him in his job as tax assistant. The device was a series of notched wheels which were moved to add or subtract. For example, you had the number 236 and wanted to add 12 to it. Three wheels would be set. One to two, one to three and one to six. Then the six wheel would be moved two notches and the three wheel one notch. The machine performed only addition and subtraction.

The German mathematician Gottfried Wilhelm von Leibniz invented the "Stepped Reckoner" in 1694. The Stepped Reckoner used gears rather than wheels and did multiplication and division as well as addition and subtraction. This was another milestone for calculation but the information gathered from the calculating devices had to be stored elsewhere. It was not until 1801 that Joseph Jacquard, a French

weaver, prefigured the solution of this "storage" of information problem. Jacquard invented a loom which used punched cards to aid in the manufacturing of complex textile patterns. The cards masked off the threads so that only the threads located under the holes were selected for the pattern. By running the same sequence of holes, one received the same pattern. Voila! - storage of a "program" for a textile.

So by the early nineteenth century the elements of the modern computer had already been assembled. All that was needed was a coordinating effort. This was attempted from at least 1835 to the end of his life by Charles Babbage, an English scientist. Babbage's "Analytical Engine" was conceptually quite close to modern computer concepts. In his efforts, Babbage was fortunate to have the assistance of Ada Augusta Lovelace, an English mathematician. She convinced Babbage to employ the binary number system. Unfortunately, their efforts and theories were beyond the technical capabilities of their time.

In the United States some fifty years later the synthesis of storage and calculation was achieved by Herman Hollerith. His "Tabulating Machine" was invented to aid in tabulating the 1890 census. The Tabulating Machine used Jacquard's punch cards concept. Contact to a conducting surface was made through the hole in the card and a count was registered and calculated to the total. Hollerith later formed the International Business Machines Corp. (IBM).

Although the progress of calculating devices continued, the history of the computer takes its next step with the invention of the MARK I by Howard Riken of Harvard University in 1944. Basically an electromechanical device, the MARK I utilized Babbage's theory and Lovelace's concepts. It was an enormous room-sized device of relays, tubes, and switches.

The first digital, all electrical movement computer, the ENIAC (Electronic Numerical Integrator and Calculator), was developed by John Mauchley and J. Presper Eckert of the University of Pennsylvania from 1943 to 1946. Even larger than the MARK I, the ENIAC was terribly inefficient in power use and had a run time of about 15 minutes before something failed. From this point on computer history is generally referred to in terms of "generations". The generations are distinguished more in terms of development changes than chronological dating.

FIRST GENERATION Characteristics: Very large, room-size machines and individually

designed machines (MARK I-1944, ENIAC-1946). Electromechanical connections with vacuum tube storage. Internally stored programs (Von Neuman organized program into memory rather than numbers - 1952). First serial then random access to data.

SECOND GENERATION Characteristics:1947 Transistor invented at Bell Labs by William Shockley. Room-sized, lower heat and power usage than first generation. Communications links. Transistors and solid state circuitry. Improved storage - removeable disk packs, magnetic drums, core and film, high-speed tape. On line data processing.

THIRD GENERATION Characteristics:Miniaturization and solid-logic technology. Microchip developed simultaneously by Jack Kilby, Texas Instruments and Robert Noyce, Fairchild Semiconductor. Diversity of data Processing uses. Time-sharing and parallel processing.

FOURTH GENERATION Characteristics:Now. Microprocessors and microcomputers. Diversity of peripherals. Popularization of the home computer. "User-friendly" software. Expert systems development.

FIFTH GENERATION Characteristics:Superspeed computers. Artificial intelligence and expert systems. Gigabyte storage. "Growing" computers biologically.

What is the relationship between the computer and the user? Actually, it is a very simple system with which everyone in visual resources is already familiar. Very much like a slide library obtains slides, identifies them then lends them out again; a computer takes information as INPUT, PROCESSES it, and generates a result or OUTPUT that is utilized or saved in STORAGE.

No matter what size, the computer is made up of sections that reflect this working relationship. For input and output there are various "peripherals" or devices connected to the computer to facilitate human interaction with the machines. For example, the keyboard you type on (input), the television monitor screen you see letters or numbers on (output), printers to receive typed material (output), and joysticks or paddles to play games (input) are all peripherals. Although these are some of the most common, there are many other types of exotic input-output devices designed to make interchange with the processing power of a computer more effective.

The processing power itself is found in the CPU or Central Processing Unit.

This is the logical "brains" of the computer. The CPU can have several parts but central to all current computers are the "controller" and the "alu" or arithmetic logic unit. The controller controls the sequence of operations and how they are processed. The alu does the actual arithmetic calculations. The combination of these working units with input/output control and some memory on a single chip (microprocessor) has led to the incorporation of computers into many aspects of our lives from automobiles to coffee-timers. The microprocessor and the subsequent microcomputer-on-a-chip has led to a revolution in home computing and everyday application.

But in order to be of use as a record-keeping device, the computer must have storage. Storage is generally described two ways - as RAM or ROM. RAM stands for random-access and is an area of "working" memory (that is, used while you are creating or working in temporary memory) that can be both read from and written into by the person using the machine. When you reset or disconnect the computer, the RAM is erased. When computers are advertised, it is generally the RAM which is touted. ROM on the other hand is another type of working storage. ROM, or read only memory, is information which is "burned in" or permanent and does not go away when the computer is powered-down. ROM can only be read from, not written into. (Although other types of ROM such as EPROM - Erasable Programmable Read Only Memory - can be changed.) ROM is generally composed of functions and memory with which the person using the computer would rather not be bothered. For example, the character set used to display letters on the screen for programming or wordprocessing is stored in ROM. I do not think most people would want to create their own characters each time they wanted to display a word!

In addition to working storage, there is permanent storage. These are external storage methods such as data cassette, disk-drive storage and a wide variety of new methods such as wafer and bubble memory. When the information is put on a "permanent" external device, it will be available in the future. Further, the external storage is used to free the computer for additional computation after the task is complete enough to be stored. Unfortunately, true permanent storage is generally outside the fiscal possibility of many users and care must, therefore, be taken to protect the storage media itself. For example, the popular floppy disk is subject to damage from humidity, magnetic fields and physical abuse. Researchers are

working on improving this weak area of the computer chain.

The computer "hardware" or physical mechanisms are only as useful as they can be made to be by instructions. The instructions are the descendants of Jacquard's punch system of programming. These instructions to the computer are lumped together under the term "software". The software can talk to the computer on a variety of levels. The lowest level, that closest to the workings of the computer is the machine code. These binary instructions correspond to the off-on of electrical circuits. At the other end of the spectrum are the high-level languages such as BASIC, FORTRAN and others which require little or no knowledge of the inner workings of the computer. These higher level languages are closer to natural languages such as English. Instructions or programs written in higher-level languages can be machine-independent; that is, they can be run on any machine that understands the higher language. This is a distinct advantage in transporting information across telecommunications links or between professional acquaintances.

It is in the application of the computer as a record-keeping and communication device that the computer is most valuable to the visual resources collection. However, if the computer is to be of help, not hindrance, to the visual resources professional, it is absolutely necessary to communicate exactly what it is you want to do with the device. In most instances, the computer can at least be used as an indexing and record-keeping or statistical device. In some cases, visual images might be stored on videodisk. However, this does not mean that you necessarily have to have state-of-the-art devices. Exploration of available resources often proves more cost effective than extensive market research. The visual resources field processes vast amounts of information routinely. This means a large "data-base". This should be taken into account when choosing a system. Although a small micro may be inexpensive, thought must be given to not only the processor but the storage of information. One method might be to use a micro for immediate processing and to tie into a larger computer, if available, to store the information. In a university environment, there is often a large mainframe computer which can be reached by means of a modem (modulator-demodulator device for communicating over telephone lines). The availability of staffing and technical support, at any level, from microcomputer on up, is a factor which might be overlooked in the rush to computerization. And yet, this is

<https://online.vraweb.org/vrab/vol11/iss1/1>

a factor that can make the difference between a smooth running system and an idle piece of high tech junk.

In choosing software, like hardware, often it is a matter of what is currently available for purchase. The choice is either to use the available software, write your own, or have someone write it. While it is beneficial to find out what is being used elsewhere, compatibility of software with hardware is often a very real problem. Of course, with the proliferation of microcomputers, there is greater possibility that one will be able to buy the right packaged software.

Surprisingly, from the computer's point of view, the biggest concern for the visual resources field should be standardization of information. Because computers allow easy information access, standardization of coding would allow communication on a variety of levels between visual resource collections with computers. The standardization of information would allow for a diversity of cataloguing systems since the computers would be able to identify, say, title and artist, no matter what system was used - if they were able to identify what they are looking for. Known as information structuring, this type or organization is at the very core of good visual resources communication.

The computer has been called the general purpose machine. Perhaps this is because it can be made to fulfill almost any purpose or perhaps it is because it only does what you tell it. Understanding the background of the computer and something about the workings of the computer can help you to communicate with people who sell hardware and software. But in order to develop a meaningful, workable environment, you have to consider who will be using the computer. It is often asked, "What computer should I buy?" or "What software is best?" The reply will often be, "What do you want to do?" This is not because the consultant is trying to be evasive, but rather because it is essential for you to know what you want to do with it before you develop your relationship. The most knowledgeable persons about the needs of the visual resources collection are the people who work in that environment. While the "computer people" can help with needs, they cannot generally define them. Only the visual resources professional can do that.

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**COLLEGE ART ASSOCIATION -
VISUAL RESOURCES ASSOCIATION**

CATALOGUING SLIDES BIT BY BIT

Managing a Slide Collection with dBASE II

Recent progress in modern computer technology and the development of new database management software packages permits efficient storage and retrieval of information. With this new technology, there has been a large movement to computerize slide collections. As a modern collection catalogue, a computer database can eliminate excessive amounts of paper records, reduce the time and manual labor of searching and cross-referencing information, and greatly facilitate the retrieval of information while shortening the retrieval time from hours to minutes. In addition, it can provide an instant hard copy of any information desired.

To attain this optimal data organization and management system, it is necessary to invest in some type of software database management system. A computer database using dBASE II is far more efficient than a standard catalogue and much more versatile than many other software packages. dBASE II is currently the best software available to suit the needs of most slide collections and it is competitively priced.

dBASE II is a software package written by Wayne Ratliff and published by Ashton-Tate. It is a relational database management system which allows one to create databases for the storage of information, and to design programs which facilitate data entry, provide user-friendly information retrieval and print data in various forms. dBASE II is the communication device by which you are able to instruct the operations of the computer. Using dBASE II, you input information through the keyboard, store it on a floppy diskette or a hard disk, and retrieve the information to the screen or printer.

Many people begin learning dBASE II by creating a small simple database file, such as an address file, and add information to fill records. In a short time, one can become familiar with dBASE II's language by working with simple commands such as **LIST**, **DISPLAY**, **EDIT**, and **DELETE**. The next step

is to understand the syntax or grammar of dBASE II by working with additional commands, expressions and functions. Finally, one learns how to combine various commands and expressions to formulate programs. Programs are actually files, called command files, which permit even greater manipulation or alteration of the bits of information in a database. Designing programs requires much time, patience and occasionally perseverance, similar to learning a foreign language. In essence, that is what one does to become literate in dBASE II.

The following commands describe some of the features and capabilities of dBASE II. They are an introduction to the steps necessary to learning dBASE II and to understanding how dBASE II operates.

To create a database, one simply types or "enters" the command **CREATE** and dBASE II will ask or "prompt" the user for all the necessary information to define the file, such as the file name and field names. For example, a database file named **ADDRESS** might have six fields: last name, first name, street, city, state, and zip code. In this case, these six fields constitute a record. A new record is created each time a new name and address is added, similar to adding a new name in an address book.

Once the contents of the database have been defined, records are added to the database with the command **APPEND**. When **APPEND** is entered, the screen will show a new record with blank fields. Data can then be entered as desired.

The **EDIT** command is used to correct any errors or to add additional information to previously created records. An entire record or series of records may be deleted with the command **DELETE**. Any information which has been deleted however, is not actually erased until the command **PACK** is invoked. A record which has been deleted, but not packed, contains an asterisk to indicate its condition. If the record is to remain and not be deleted the command **RECALL** is used to remove the asterisk and return the record to normal.

Once a database has been constructed, various commands are available to view or retrieve records. **LIST** is a command which simply displays the entire database, record by record, on the screen. The command **BROWSE** allows the user to see sections of the database. **DISPLAY** will show only the first record of the database or the individual record indicated. For example, the command **DISPLAY RECORD 13** will show only record 13 on the screen.

dBase II also contains "expressions" which enhance the commands such as **ALL**, **RECORD**, **NEXT**, and **FOR**. As mentioned earlier, **DISPLAY RECORD 13** instructs the computer to show only record 13. **DISPLAY ALL** will list all the records in the database, and **DISPLAY NEXT 5** will list only the next 5 records in the file. The expression **FOR** specifies a condition which must be true. It is an extremely powerful command enhancer when used with dBASE II operations.

There are four types of operations utilized by dBASE II: arithmetic, relational, logical, and string. Arithmetic operations are used with numeric fields so that numbers may be added, subtracted or multiplied with numeric fields. This is a useful feature for accounting and statistical uses; however, the most powerful and common operations are relational. For example, if the **ADDRESS** file is in use, it is possible to **LIST FOR last.name = 'A'**. This would result in a screen display of all records which contain last names beginning with A. The command **LIST FOR zip.code = '02'** would display only records which have 02 in the first two digits of the zip code field. More than one operation may be used such as **LIST FOR last.name = 'A'.AND. state = 'NH'**. The logical operator **.AND.** means both expressions must be true in a record in order for it to be listed. Therefore, only records which consist of a last name beginning with A and an address in the state of New Hampshire would be listed.

One more powerful operation is the substring operator, **\$**. For example, the command **LIST FOR 'A' \$ last.name** would list not only records with last names beginning with A, but also any last name in which the letter A is included. With this type of command, any search is possible. In a slide collection, one may wish to see any slides which deal with sunsets. The command **LIST FOR 'sunsets' \$ fieldname** will examine that field in every record for sunsets. The command can be repeated for all fieldnames in order to search for sunsets in every field of the database.

There are additional commands which allow further modification and retrieval of the information in a database. The commands which rearrange the order of records are **SORT** and **INDEX**. The command **SORT** will arrange the records into a newly defined order, such as alphabetical order. It is one of the slowest dBASE II commands since it must physically move all the records. The **INDEX** command, however, is much faster since records are not moved. Rather, a new index file is created which consists of "pointers" that relate to each record in the database file according to the new order requested. If a file is indexed, it can then be searched using the command **FIND**. **FIND** can locate a particular field variable within 2 seconds. The **LOCATE** command will also search the database; however, it is much slower since it must examine each record in the database for that particular field variable. The **FIND** command will stop on the first record found to contain the field variable.

The dBASE II **REPORT** command allows the user to generate various summaries from the database. This command is similar to **CREATE** in that dBASE II displays options for the user to select. Information from the database is laid out in a series of columns and rows. This command is very useful in obtaining printouts from the database which can be used for reference sheets or for proofreading and editing. However, detailed, well formatted reports are not possible with this command. More sophisticated reports are difficult to accomplish and require more elaborate programming techniques. It is also not possible to edit a report file once it has been defined. It must be erased and the command must be reinvoked with all the specifications redefined.

The command to produce a command file is **MODIFY COMMAND filename**. Once a command file has been created, the user simply enters **DO filename** to run the program. A program, or command file, consists of steps of commands and expressions which perform functions on the database.

Common commands used in programs are **IF..ENDIF** statements and **CASE** statements. Both are conditional statements that perform a function if the condition is true. If the condition is not true, then the function is not carried out. The **IF** statement is for a single condition or option. With a **CASE** statement, the user asks the computer to test for more than one condition.

The command, **DO WHILE..ENDDO**, is a conditional repetitive command. If a par-

ticular series of commands is to be repeated, a loop can be created such that the command steps are continuously reinvoked until some condition is met. For example, the condition **DO WHILE .NOT. EOF** produces a loop which will continue until the end of the file is met.

EOF is one of many functions which dBASE II possesses. Other functions convert character variables to numbers (**VAL**) and numbers to character variables (**STR**). An upper case function (**!{ }**) converts any string characters to only uppercase characters. The record number function (**#**) identifies the current record number for use in various expressions.

By integrating commands, expressions, operations and functions, programs can be designed to perform an almost limitless number of procedures or tasks. By creating certain routine programs, or standard command files, it is possible to modify them to produce new programs. Use of dBASE II at this level requires a sizable commitment of time, especially if one has no prior computer programming experience. Fortunately, one can be compiling a useful database during the learning process.

dBASE II was introduced to VIREO (Visual Resources for Ornithology) in December of 1982. VIREO is a scientific library of bird photographs at The Academy of Natural Sciences of Philadelphia that provides visual resources for research, art and education. Within one year the staff of VIREO was able to construct and manipulate a computerized slide catalog system with no previous computer experience. The microcomputer now performs many functions on a variety of files. dBASE II is used to record information about each slide, to facilitate searches for slides with particular subject content, and to oversee collection management. At the present time, the VIREO slide database contains only essential information about each slide in the collection. As time permits, further information is added to each slide record.

There is no question that dBASE II is a powerful and flexible database system; however, the software package does not include very specific methods for organizing files. These must be devised by the user. It is recommended that one begin with a small database including only the essential information, or information that is consistently requested. In this way, experimenting with the database will be easy. It can later be modified to create the optimum design. Moreover, the most useful slide information will be readily available, and additional information can be

added as dBASE II literacy and user capability improve.

As one may expect with all software, there are some disadvantages and limitations which accompany the dBASE II software package. dBASE II has a limit of 32 fields per record and 254 characters per field. This may become a serious problem as your slide database becomes larger and each record is supplemented with additional information. One possible solution is to create other slide databases which can tie into the main slide database. This is possible by formulating a unique code in each original record that corresponds to related records in supplementary database files.

A significant drawback of the dBASE II package is the time required to perform programs. A database of 5,000 records or less requires little or no time to process commands. However, indexing or packing a database file of 15,000 or more records, can require 30 minutes to several hours to complete. The processing time is poor compared to a mini or mainframe computer, but the data alteration and manipulation capabilities of dBASE II more than compensate for this shortcoming.

There are currently some "bugs" or inconsistencies in the dBASE II software. Ashton-Tate is continually attempting to upgrade dBASE II and correct its faults. The new 2.4 version of dBASE II, which has recently become available, has corrected many but not all problems in the previous versions of dBASE II. The 2.4 version will perform on all files created with older versions of dBASE II.

Although dBASE II requires a great investment of time and money, it offers more flexibility and power than alternative software packages. One system which is comparable to dBASE II is FOCUS. FOCUS is a database management system originally designed for mainframe computers that is now available for PC use. FOCUS, however, requires more memory, greater storage capacity and is considerably more expensive.

Given its tremendous versatility, dBASE II is the ideal software package for cataloguing slide collections on computers. There are many advantages to producing and maintaining a database with dBASE II. The information can be used to answer requests, produce slide labels, and prepare various reports. dBASE II can also be used for mailing lists and for keeping track of slides which are on loan. Ultimately, it allows one to search for an image not only within the organized framework of the col-

lection, but also by some other target word, such as "sunsets", which might be found randomly in the records of a slide database.

This discussion was merely an introduction to the capabilities of dBASE II and the system one can design with it. A wide variety of literature is currently available on dBASE II, and many key articles are listed in the Selected Bibliography. I highly recommend that any user or potential user of dBASE II should obtain a copy of the February 1984 issue of PC magazine. The majority of this issue is devoted to dBASE II and its applications.

Selected Bibliography

- Arnold, D. "Learning dBasics." PC World. 1 (March, 1983) 142-144.
- Colman, R. "Torture Testing dBase II." PC World. 1 (April, 1983) 125-131.
- Graham, J.D. "Extenders: Pushing dBase II To The Limit." PC. 3 (February, 1984) 167-170.
- Green, A. "Advice From The Master On Learning dBaseII." PC. 3 (February, 1984) 189-192.
- Hart, G.A. "The ABC's of dBaseII." PC. 3 (February, 1984) 114-124.
- Hart, G.A. "Advanced dBaseII Programming Tips." PC. 3 (February, 1984) 125-130.
- Howard, W.K. "Judging the Guides: Here Come dBasics." PC. 3 (February, 1984) 171-177.
- Jenkins, D. "dBase II V2.4." PC World. (December, 1983) 139-143.
- Krasnoff, B. "The Many Faces of dBaseII." PC. 3 (February, 1984) 136-141.
- Layman, D. "A New Breed of Applications." PC. 3 (February, 1984) 142-145.
- Levering, R. "Data Management without Programming: A novice reviews dBaseII." PC World. 1 (April, 1983) 113-117.
- Lindgren, D. "It Stands Corrected." PC World. (December, 1983) 141-142.
- Lynch, M. "The Wizardry Of Ashton-Tate." PC. 3 (February, 1984) 178-181.
- Miner, L. "Three Days With dBaseII." PC. 3 (February, 1984) 185-187.

Powell, D.B. "From Basement to Boardroom." PC. 3 (February 1984) 131-135.

Rosenberg, V. "Library Automation Reaches Out To The PC." PC. 2 (November, 1983) 509-512.

Sandberg-Diment, E. "Tutorial Disks for dBaseII Make Learning Easy." New York Times. Tuesday, November 15, 1983, Tuesday, November 22, 1983.

Webster, R. "Three Easy Add-ons for dBase II." PC. 3 (February 1984) 147-158.

Woram, J. "Spending the Weekend With Friday." PC. 3 (February, 1984) 159-165.

Background Information

VIREO uses an IBM PC with 2 floppy disk drives, a 10 Megabyte Davong Hard Disk System, and an Epson MX-80III F/T dot matrix printer.

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THE IBM PC/XT AND ADVANCED DB MASTER

During the past three months the Visual Resources Center of the College of Fine Arts, University of Florida, took its first hesitant steps into the computer age. I think a brief history of the Center will help to explain our priorities and the decisions we made in selecting computer hardware and software.

In 1952 the College of Architecture and Allied Arts started a lantern slide collection in a corner of the Library that was housed in Grove hall, one of many temporary buildings left from the post-World War II college boom. By 1956, when the college was renamed Architecture and Fine Arts, there was a separate art department with two art historians, and the slide collection had grown to almost 20,000. Ten years later a three-building Architecture and Fine Arts complex was constructed and the slide library of almost 50,000 slides was installed in well-lighted, heated and air conditioned space on the first floor of the AFA administration building. In 1975

the College of Architecture and Fine Arts was split into two separate colleges. The College of Architecture included five departments: Architecture, Building Construction, Interior design, Landscape Architecture, and Urban and Regional Planning; the College of Fine Arts had three departments: Art, Music, and Theatre; while the Art Gallery and the Slide Library were made separate units within the College. The combined slide collections remained intact when Architecture and Fine Arts became separate colleges, but the administration and fiscal responsibility for the facility was placed with the College of Fine Arts. I took over management of the Slide Library in 1978 when there were about 75,000 slides in the combined collections. It was essentially a one-person operation, as I had only two part-time student assistants to refile circulated slides and perform other maintenance tasks.

In 1979 the Office of Instructional Resources began closing its satellite labs, the largest being in the Humanities Department, and stopped funding what the Director calls "closet slide collections." When the Humanities faculty found they no longer had access to their slides, they were naturally upset, and after a few hastily-called meetings with the University Administration, Deans of the Colleges involved, and Directors of Libraries and OIR, it was decided that since Fine Arts had the only facility with a full-time professional in charge, it was the logical place to consolidate the other slide collections. With the promise of continuing financial support from other colleges and units, Fine Arts agreed to accept their slide collections and to open the entire facility to all faculty and students. The Visual Resources Center came into existence. Administratively we are still a part of the College of Fine Arts, and we prefer to emphasize this identification. Each fall the University Library System places an insert in the campus newspaper showing the Visual Resources Center as one of its "special collections." The Dean of Fine Arts always makes it perfectly clear that we appreciate their financial and moral support, but the Visual Resources Center is not part of the library.

At this time 75 percent of OPS funds (used to hire student assistants) and 35 percent of expense funds are derived from other colleges and supporting units. I now have one full-time career service assistant and twelve part-time student assistants. On the day the 20,000 Humanities slides and the 4,000 English Department slides arrived, I was not too sure we had made the right decision. But the Visual Resources

Center is almost five years old and has become a campus institution. There are now more than 155,000 slides in the collections, and we circulated 70,000 of them last year. We have 15,000 study prints and photographs. As the collections have grown, they have also broadened and diversified.

There are many areas in which a computer can be useful in a slide facility; cataloging, accessioning, labeling, and circulation control are only a few. But the most important thing I want the computer to do is to save us hours of searching for specific or appropriate slides for patrons. As I told the Dean in my first annual report, "the slide library apparently has operated for almost 30 years on the oral tradition." There were no card catalogues, indexes, subject files, or cross references. Even the basic accession records cannot be relied on.

Since we became the Visual Resources Center for the University, two important changes have taken place that made computerizing the collections imperative. The first has been unprecedented growth, from 75,000 to 155,000 slides in five years. With that growth, and the assignment of more personnel to the Center, my administrative responsibilities have increased. I no longer handle all requests for slides, do the research and photography, prepare accession records, type labels, or bind slides. Sometimes I do not even see new acquisitions at all before they are put in the collections. As a result, I do not have a chance to store those images in my head and to become thoroughly familiar with their classification and location.

The second major change, in the makeup of our patrons, has had an even greater impact. No longer are most of our clients knowledgeable art or architectural historians who know what they want and select the slides for themselves. More and more we have faculty from departments such as anthropology, business, education, philosophy, history, journalism, foreign languages, and so on. These people are frequently looking for images to illustrate a particular issue, topic, or theme.

Students who have assigned class projects come in to select visuals for presentations not only in art and architecture but also for humanities and language classes, talks about nutrition, sports and recreation, or some other aspect of history and culture. I love it when they walk in and ask, "Do you have any pictures of Sarah Bernhardt?" Or, "We're reading The Prince and I need a picture of Machiavelli and

anything else that I can talk about." Last semester we had a graduate assistant for a Marketing Research professor come in and ask for 100 slides that would create a negative attitude and 100 slides that would create a positive attitude--and they had to be subtle. Nothing so blatant as people laughing or crying would do. Wars and weddings were out. You know, 200 subtle images!

We do our best to accommodate such requests which have become more frequent and esoteric as people from other colleges hear about our resources and seek us out. We really do need a computer and a comprehensive data base management system.

How did we get our computer? On June 13, the end of the last fiscal year, I was informed that the University administration had distributed capital funds to colleges earmarked for the purchase of computers, and the funds had to be encumbered before June 30. Allowing for paperwork, that gave me less than two weeks to pick out a computer and a software package. In two previous budget presentations I had pointed out the growing need to computerize the Visual Resources Center's slide collections, and had been talking casually to people about computers, particularly after attending the Visual Resources Association sessions in Philadelphia last year. But I was completely unprepared to go out and buy a computer. It was really a surprise that the funds became available because for the previous two years we had a budget shortfall and had to turn back our OCO money.

At any rate, I spent a frantic week calling people at NERDC and CIRCA, visiting computer showrooms, talking with salesmen, reading recommended articles, and getting advice from knowledgeable friends, and from friends of friends. After quickly sorting it all out, the consensus seemed to be that our application would overwhelm an Apple, swamp a Commodore, trash a TRS-80. What we needed was top-of-the-line hardware like IBM or Hewlett-Packard with at least one hard disk and one floppy disk drive; the hardware should accommodate a powerful data base management software package. A little simple arithmetic in round numbers convinced me: an average 150 characters per slide times 150,000 slides requires 22,550,000 bytes of storage capacity. Each floppy disk with 360K bytes can accommodate only about 2,400 slides, and having to use numerous diskettes for storage really slows down the process of using a data base effectively.

Making the hardware choice turned out to be relatively easy because IBM has a

special arrangement with the University for a 30 percent discount on all hardware. Their PC/XT fit our needs, and the price was right. "XT" simply means that the computer comes equipped with a hard disk that stores over 10 megabytes, or 10 million characters.

The computer components were delivered in three big cartons. The four manuals that came with it looked formidable. The Guide to Operations helped us install the hardware and run the diagnostic test procedure to be sure that everything was functioning normally. The Disk Operating System (DOS) manual explains the programs that control the way the computer uses other programs. This manual is must reading, even if you do not understand all or most of it. It puts everything in context for you and helps you to become familiar with the language.

The IBM personal computer is programmed to use BASIC, one of a number of computer languages. In the manual preface I read, "In order to use this manual, you should have some knowledge of general programming concepts." That lets me out! I haven't tackled this one yet. I am waiting for OIR's Faculty Support Center to offer a short course in BASIC. Besides, I discovered that I don't need to know BASIC to operate the data base management software package I purchased. It is written in PASCAL, but I do not need to know that either, at least not yet. The fourth manual, the easiest to read and the most fun to use, is EasyWriter, the program that tells the computer how to function as a word processor. It lives up to its name. Even if you have never touched a computer keyboard before, this manual will literally take you by the hand and guide you through the process. Unfortunately, it is rather limited.

Our hardware consists of four parts: (1) the system unit which has one floppy disk (or diskette) drive that functions both as Drive A and B, and one hard disk drive that is referred to as Drive C. The advantage of the hard disk is that it has the capacity to store more than 25 times as much information as a single floppy. The second piece of hardware is the keyboard; the third is the display (we purchased the monochrome display, but the system unit will accommodate the compatible color display as well). The fourth piece of hardware is the printer. We ordered the dot matrix graphics printer primarily because it is substantially less expensive than a daisy wheel letter quality printer. The dot matrix printer will serve our immediate purposes adequately.

The data base management software we selected is called Advanced DB Master, distributed by STONWARE of California. Almost everyone I talked to recommended that we get DBASE II because of the massive amounts of data we expect to be processing. But in the next breath they warned that it is extremely difficult to use unless one has a good deal of experience with computers. The instruction manuals are awesome. After some rather hurried soul-searching, I decided on DB Master, which the literature and the vendor describe as much easier to use than DBASE II, although still very powerful. They use words like "user friendly," but I have discovered that those words can have a variety of meanings. Sometimes "user friendly" means that the manual is sprinkled with cute cartoons so there will be at least one thing on the page you can understand. One cartoon from the DB Master manual tells us what not to do with diskettes. The manual explains that the information is recorded magnetically, so it is important not to let the diskettes come in contact with magnetized metals. They should not be placed on top of the display unit or printer, near telephones, or in the vicinity of other equipment that generates a magnetic field. Some or all of your precious data could be wiped out.

Another cartoon, along with the text, explains the importance of making backup diskettes of your files and records. Electrical surges, lightning storms, power failures, and a number of other occurrences can cause the loss of data from both floppy and hard disks, so DB Master recommends making backups of files after each working session in which changes or additions have been made. The program diskettes, original files, and backups should all be stored on end in a safe place. There are neat little expandable file boxes on the market that are a worthwhile investment.

Speaking of investments, after you acquire a computer you will find that there are additional expenses that need to be taken into consideration for budgeting purposes: diskettes, paper, ribbons, a surge protector, and that expensive service contract on your hardware.

Advanced DB Master is relatively new; it has only been on the market for about a year. This is really a disadvantage for two reasons: First, there are not many people around who have had experience with it and are knowledgeable about it, especially in a small community like Gainesville. Second, like all new programs it has numerous "bugs" that are being worked out in successive versions. When I called

STONWARE recently about a problem I was having, they told me matter-of-factly that there were several problems with the program that had been brought to their attention by users. At their suggestion I mailed them one set of program diskettes and they have replaced them with a revised version. So far so good.

It took IBM five months to deliver the hardware, and by then my student assistant who was a senior majoring in computer science was about to graduate. We really put in our first serious time at the keyboard in mid-November.

Another cartoon in the manual shows a dainty boot viciously kicking the display, and the caption, "Boot your system does not mean 'kick the computer' even though you might want to sometimes." It vividly illustrates how I felt about the computer for a while. I had been creating an African Art file and had selected the option to "quit defining fields and create file," when the system locked. I tried every strategy I could think of but nothing worked. Finally, I warm booted the system, losing all my work, which up to that point was stored only in RAM. I had not been able to make a backup or go back to the main menu. Several times I tried to recreate the file, only to have the system lock at the last step. I could not figure out what I was doing wrong. Over a period of several days a consultant from Administrative Technical Support and I tried to create a new file, and the customer service representative from IBM came out to try it, too. Nothing worked. I made another long distance call to California, but Stone-ware's technical support people could not help me either. Finally, the salesman from whom I had purchased the software came to my office. I quickly made up a short test file and said, "Here is where the system hangs up; it will not create a new file on the hard disk." But as I was saying those very words, the computer was busy creating a new file on the hard disk. He laughed and said, "Welcome to the world of computers." We have not had that problem again, and I suppose we will never know what caused it.

One of the features of DB Master is a three-level password system. There is a Master password that permits full access to all operations of the computer, a Read/Write password to be used by the data entry operator, and a Read Only password level that allows the user access to files and records but prevents the user from making any changes in structure, files, or records. When any part of the data base is sufficiently complete for effective use,

the Read Only password will be made available to faculty.

After some rather lengthy consultations with key members of the art and architecture faculty, three initial files were set up: ART-WEST, ART-AFR, AND ARC-USA. I will briefly run through a simulated use. After booting the system and selecting option 6, "Use a hard disk file," ART-WEST.

DB Master Main Menu for ART-WEST.01

Data Entry and Search

- 1 Add Records
- 2 Display, Edit or Delete Records
- 3 Browse through Records
- 4 Audit Trail: Off
- 5 Screen Form: All Fields
- 6 Default Mode: Standard
- 7 System Options
- 8 Data Exchange

Maintenance Functions

- 21 Backup File
- 22 File Statistics
- 23 Secondary Keys
- 24 Long Code Tables
- 25 Dynamic Value Tables
- 26 Passwords
- 27 Restructure File
- 28 Access Utility Package

Report Generator

- 11 Build or Edit Report Format
- 12 Print Formatted Report
- 13 Print Records in Screen Form

Change Files or Leave DB Master

- 31 Load Different File
- 32 Create New File
- 33 Close File and Exit

The DB Master Main Menu for ART-West is displayed on the screen. Since I used the Master password, there are 33 options open to me, each permitting a specific set of functions. When we select "2, Display, Edit or Delete Records," the File Selection Setup will appear on the screen:

File: ART-WEST	SELECTION SETUP
ACCESSION NO:	_____
ARTIST:	_____
CATALOG:	_____
BIRTH/DEATH:	_____
SEX:	_____
NATIONALITY:	_____
GROUP:	_____
TITLE:	_____

DATE:	_____
PERIOD:	_____
CENTURY:	_____
SUBJECT:	_____
DESCRIPTION:	_____
MEDIUM:	_____
SIZE:	_____
STYLE:	_____
LOCATION:	_____
GALLERY:	_____
PROVENANCE:	_____
SOURCE:	_____

These are the fields we defined for the Western art file. In this file, each slide constitutes a single record, and each record can contain up to 3000 characters. The exclamation points following the first two fields indicate primary keys, which combined must be unique for each record. Should you have a duplicate accession number, the computer would not accept the record and you would get a message indicating that there is already a record with that number. The primary keys determine the order in which the program will store the records and provides the fastest search time. Most of the other fields have been designated as secondary keys, and searches on those fields will take a few seconds longer. Even non-key fields can be accessed, but at much slower speeds than primary or secondary keys. DB Master also organizes the records in a file by primary key, regardless of how the records are entered, and there are several benefits that result from such internal organization.

Let us assume that a VRC patron has requested one of Picasso's works, and although our slides are filed chronologically within media, it would take me a while to find it because I do not remember the exact date of the painting. If I type in the artist's name and the title of the painting, press Control/Find, the computer locates and displays the record we want. From the catalogue information I can go to the Spanish painting collection and get slide 348a in a matter of seconds. In addition, I can press a single key to ask for "next record" and the computer will search for another with that same data. It finds a child's version of the Picasso painting, again with full information for easy retrieval. I can continue this process until the computer cannot locate any other records that match my request and gives me a message to the effect.

DB Master facilitates the search for records by providing a number of different options. We can search on a single field or any combination of fields; we do not

have to know in advance full names or accurate titles because the program lets us use the symbols you see across the bottom of the selection setup: * finds a leading match; (locates a key word in a particular field, and question marks can be substituted for any characters for variant spellings. With the flexibility provided by this program, no record should be inaccessible.

A member of our art studio faculty recently requested examples of self-portraits in drawing media, across time periods and cultures. It took a student assistant 2-1/2 hours to go through all the drawing files and pull the slides. While they were out we put the data into the computer, and next semester all we will have to do is type in "self-portrait" in the subject field and "drawing" in the medium field, press CONTROL/F, and the computer will display in turn all the records with those parameters.

One of the more user friendly aspects of DB Master is the unobtrusive display of options along the bottom of the screen; we do not have to memorize commands or look them up in the manual. This will be particularly useful when faculty are given access to the computer.

I am very excited about the use of a personal computer in the Visual Resources Center. Creating a data base for each of the files is a tremendous undertaking at this stage in our growth, but once the system is fully functional, it will save us many hours and help us to provide better service to the community. As I become more knowledgeable and proficient in the use of the computer, I am sure I will find many more ways to use this powerful tool.

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PITFALLS AND POSSIBILITIES WITH A MAINFRAME COMPUTER

In an academic setting where computer time is usually "funny money," it is alluring to initiate a computer project using the university's mainframe computer. Three years ago, when I began to organize the Princeton University's School of Architecture slide holdings, I was swayed by that temptation. Mainframe usage seemed to offer inexpensive, inexhaustible computing.

For the modest cost of a "dumb" terminal plus telephone modem, I felt that I could centralize my storage and searching capabilities while eliminating the need to deal with numbers of floppy disks. In addition, I looked to the mainframe, an IBM 3081, as a means of producing printed indices for cross reference and as a means of gaining access to a laser printer which could generate labels.

The reality turned out to be a good deal more confining than I ever anticipated. In 1981 Princeton did not own a suitable data management package. Until such a package was available, I decided to use the existing text formatting program, Script. I consequently narrowed my immediate goals, putting aside slide searching in favor of a "one time only" computer record for each slide which could quickly produce indices and labels and which could be incorporated later into a data management system. I viewed Script as an immediate survival technique, not as an end in itself.

The results with Script were impressive while the number of slide entries was low. Script can produce up to nine indices, each sorted on up to three different points. The indices I was able to produce were:

- 1) Architect-Building Name-View
(other data such as accession number is added but not sorted)
- 2) Site-Architect-Building Name
- 3) Type-Architect-Building Name
- 4) Classification Code-Architect-Building Name
- 5) Accession Number-Classification Code-Architect

I was also able to produce a sheet of four-line labels. These need to be photocopied onto a full sheet of label paper and then cut accordingly.

Problems began to multiply, however, as Script tried to sort the approximately 12,000 slide entries that had been accumulated by the end of 1983. In order to index, temporary storage had to be secured at four megabytes! Each indexing session, albeit computer money, began to cost over \$100. Even more excruciating was the task of trying to locate an error. If a print-out indicated a typing error, for example, there was no global way of finding and correcting it. Since slide data is kept in Script files with over 200 slides in each of more than 50 such files, it is necessary to go to each of the files and ask the computer to locate a unique number. That process proved no more time efficient than loading and unloading floppy disks.

Fortunately in 1983 Princeton did purchase a data management/retrieval system which has recently become available to selected projects. Princeton chose SPIRES, the Stanford Public Information Retrieval System. SPIRES claims "you may store information in any form, and enter or display it in a different form..." Through its report writing capabilities SPIRES should quickly produce indices on-line and as hard copy. The indices should sort on any of the fields ("elements" to SPIRES) that we have used and continue to use to enter data: accession number, classification code, architect's name, building name, location, building type, date, view. We should no longer be confined to rigid indices such as "Architect-Building Name-Location-View-Accession Number" or "Building Type-Location-Architect-Building Name." SPIRES should also make it possible for us to effortlessly clean up any errors in our files.

Since SPIRES has been in use for more than ten years, the system has been able to shed some of its original problems in that time. One such problem was expense. SPIRES was generally considered an extremely costly system to run. Princeton's Computer Center tells me that there have been many refinements and, especially compared to Script, the cost should not be excessive. The biggest problem in the implementation of SPIRES in the past was that a lengthy, extensive file definition had to be created at the outset in which one decided how data was to be organized and how elements were to be used within the data base. Gail Kana Anderson, former Slide Curator at Iowa State College of Architecture and Design, spent three years working closely with the Iowa State Computation Center in order to write a successful, inclusive file definition. She was able, as many of you know, to give test demonstrations of SPIRES working, although no bulk data was ever entered from her collection. When Gail left Iowa State, the SPIRES pilot project for slides was never continued. When Iowa State recently sent us all Gail's documentation, I was extremely grateful. In January it appeared that

without that documentation it would be impossible to implement SPIRES without extensive programming. As the Princeton programmers learned more about SPIRES, however, it became apparent that we could create our own simple data base and file definer very quickly and inexpensively. In ten years SPIRES has become a system in which it is possible to create an actual data base in one or two hours instead of several years, and in most cases those hours are spent by the person overseeing the resulting project, not by a professional programmer.

I have only started to work with SPIRES in the last two weeks. I have taken twenty SCRIPT entries at random and entered those in a special file which SPIRES will work on. The results are preliminary but quite good. The first index indicated a problem that I did not know could exist. The entry for "Mies van de Rohe, Ludwig" was alphabetized by SPIRES under "R" not "M" because we were unaware that a last name with two capital letters has to be entered in a special way. Once done, the results were obviously much better. And as we work further with it, the results seem to become even more refined.

I have great faith in SPIRES. I will be working with it and Princeton's Computer Center over the next few months. I hope that by the summer we will be truly "on line." I also hope that with Stanford producing a SPIRES version for the IBM XT that there will be some way to coordinate what mainframe and PC users are doing, especially if the content of their collections is similar. In the same way that Princeton is part of a consortium which was formed to purchase SPIRES, I would hope that the Architecture School Slide Collection could be part of a consortium of users involving SPIRES with architecture and design collections.

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