New York

Visual Resources Association
8th Annual Business Meeting

1990 Program
Visual Resources Association
Eighth Annual Business Meeting and Program
February 14 - 17, 1990

General Information
Registration and VRA Information Table:

Wednesday
8:00 am - 9:00 am New York Hilton
Room 510 (5th Floor)

1:00 pm - 4:15 pm CAA Registration Area

Thursday
8:00 am - 9:00 am CAA Registration Area

Friday
8:00 am - 9:00 am CAA Registration Area

VRA Sessions:
ARLIS/VRA Joint Session, Penta Hotel
New York Hilton

VRA Business Meeting: New York Hilton

Registration

A VRA Registration badge is required for admission to all VRA Sessions
and Events not requiring a separate fee. Payment of the VRA registration
fee does not constitute payment of fees for any CAA or ARLIS programs
that may be going on at the same time (except the joint sessions).

A CAA Registration badge or single session event ticket will be required
for admission to CAA sessions, exhibits and special events.
February 14

8:00 am - 9:30 am  
**VRA Registration and Information Table**  
New York Hilton, Room 510 (5th floor)

1:00 pm - 4:45 pm  
**New York Hilton, CAA Registration Area**

9:00 am - 12:00 pm  
**ARLIS/VRA Joint Session**  
Penta Hotel Georgian Ballroom  
401 7th Avenue at 33rd Street

- Conservation and Preservation Issues Beyond the Book: Slides, Microforms, Videodiscs, and Magnetic Media
  
  **Coordinators:**
  
  Henry Wilhelm, Preservation Publishing Company  
  Christine Sundt, University of Oregon

  **Magnetic Media and Optical Disc Storage Technology: The Challenge of Non-Human-Readable Records**
  
  Klaus B. Hendriks, National Archives of Canada

  **Cibachrome Micrographic Color Films**
  
  Peter Krause, Consultant, Purdys, New York

  **Silver Gelatin Microfilm: Update on Toner Treatments for Improved Image Stability**
  
  James M. Reilly, Image Permanence Institute/RIT

  **Color Slide Preservation at the Smithsonian: Color Storage for Originals, Videodiscs for Reference, and Duplicates for Use**
  
  James H. Wallace, Jr., Smithsonian Institution

  **The Stability and Preservation of Color Slides: Duplicates for Use and Cold Storage of Originals Provide the Only Answer**
  
  Henry Wilhelm, Preservation Publishing Company

1:00 pm - 4:30 pm  
**VRA Executive Committee Meeting I**  
Penta Hotel  
Hudson-Sutton Suite, 1st Floor

4:45 pm - 6:15 pm  
**VRA Program Session**  
New York Hilton  
Rendezvous Trianon, 3rd Floor

**Moderator:**

Benjamin Kessler, J. P., Getty Museum

- New Beils and Whistles: Factors Affecting Upgrading and/or Switching to a New Database System
  
  Eileen Fry, University of Indiana

- Data Structure and Retrieval
  
  Astrid Otey, Miami University

- Computer Applications in Visual Resources Collections: Revelations and Visions
  
  Nancy S. Quiller, University of Texas at Austin

- The Apple Macintosh Computer System in The Ohio State University History of Art Slide Library
  
  John J. Taormina, The Ohio State University

- Implications of Technology Usage in Visual Resources Collections in the United States
  
  Sandra C. Walker, University of Tennessee

February 15

8:00 am - 9:00 am  
**VRA Registration and Information Table**  
Hilton, CAA Registration Area

8:00 am - 9:15 am  
**Annual Business Meeting**  
New York Hilton  
Grande Room, 4th Floor

A complimentary continental breakfast will be served

9:45 am - 12:15 pm  
**Art and Architecture Thesaurus Workshop**  
Metropolitan Museum of Art  
Clearinghouse of Art Documentation and Computerization
10:00 am  Tour of the Museum of Holography
11 Mercer Street, Greenwich Village
Meet at the museum at 10:00 am
Pre-registration is required.

10:00 am - 1:00 pm  ICONCLASS Workshop
Sheraton Centre
7th Avenue at 52nd Street
Embassy Suite

12:30 pm - 1:00 pm  Tour of the Clearinghouse of Art Documentation
and Computerization
Metropolitan Museum of Art

The Clearinghouse collects and disseminates information on the development and application of computer technology in the art research and museum environments. The Clearinghouse database consists of two interactive files: a directory of projects, systems, conferences, and organizations; and a bibliographic file that indexes documents housed in a special collection in the Thomas J. Watson Library.

2:00 pm - 4:00 pm  Art and Architecture Thesaurus Workshop
Metropolitan Museum of Art
Clearinghouse of Art Documentation and Computerization

A repeat of the morning session

4:45 pm - 6:15 pm  VRA/CAA Joint Session
New York Hilton
 Sutton Harbor Center

Moderators:
Christine Sundt, University of Oregon
Eleanor Fink, The Art History Information Program

Speakers in this session will address the numerous legal questions which have arisen around the use of new media, such as the optical videodisc and other imaging technologies. It is hoped that the panel will include a copyright lawyer, an art text book publisher, a slide and/or photograph distributor, a museum rights and reproductions officer, and a slide curator from an institution that has investigated new technologies and image transfer. The current state of copyright law and the legal implications this new media poses will be discussed.

7:00 pm - 9:00 pm  Reception
Sheraton Centre
7th Avenue at 52nd Street
Room to be announced
Sponsored by G.K. Hall and Associates
Open Bar

February 16  Friday

8:00 am - 9:00 am  VRA Registration and Information Table
New York Hilton, CAA Registration Area

9:00 am - 1:00 pm  Standing Committee Meetings
Sheraton Centre
7th Avenue at 52nd Street
Embassy Suite

10:00 am  Tour of the Photograph Collection and Catalog Floor of the Frick Collection
The Frick Art Reference Library
10 East 71st Street
Meet at the library at 10:00 am
11:00 am - 11:30 am  
**VRA Information Table**  
New York Hilton, CAA Registration Area

11:30 am - 2:00 pm  
**"Dutch Treat" Lunches**  
Information on group assignments and restaurants available at Information table

4:00 pm & 4:30 pm  
**Tour of the Slide Collection**  
Metropolitan Museum of Art  
5th Avenue at 82nd Street  
Meet at the Slide Collection according to pre-registered time

5:30 pm  
**College Art Association Convocation**  
Metropolitan Museum of Art  
5th Avenue at 82nd Street

February 17  
**Saturday**

9:00 am - 1:00 pm  
**VRA Executive Committee Meeting II**  
Sheraton Centre  
7th Avenue at 82nd Street  
Embassy Suite
Session Abstracts

Conservation and Preservation Issues Beyond the Book

Magnetic Media and Optical Disc Storage Technology:
The Challenge of Non-Human Readable Records
Klaus B. Hendriks, National Archives of Canada, Ottawa

Information storage media beyond the book assumes an ever increasing role in the library world. A steady stream of publications informs us about emerging technologies and new applications for established ones. The principal materials in non-book formats are various photographic media, magnetically recorded tapes, discs, or cards; and optical storage discs. All have well-established properties allowing them to be distinguished from each other, and have common characteristics that separate them from the printed text. These properties will be reviewed with particular emphasis on their stability and preservation. A comparison between various record materials in the traditional book and the non-book format will be presented.

Silver Gelatin Microfilm: Update on Toner Treatments
for Improved Image Stability
James M. Penny, Image Permanence Institute, Rochester, New York

Silver gelatin microfilm continues to be the most cost-effective and long-lasting medium for preservation reformatting of brittle books. However, silver film must be carefully stored, and is especially vulnerable to oxidant gases in the storage environment. The most common manifestations of this attack are red or yellowish stains, silver mirroring, and reddish discoloration of lighter image areas.

Experiments are continuing at the Image Permanence Institute with a promising treatment which greatly increases the resistance of processed film to oxidant attack. Known as polysulfide treatment, the technique converts a portion of the silver image to silver sulfide, although the image remains largely unchanged in appearance. Silver sulfide is extremely stable, creating a kind of “insurance image” which will survive and retain the information content as long as the gelatin itself remains intact. Resistance to hydrogen peroxide attack is complete.

With funding from NEH’s Office of Preservation, current work is directed at evaluating all aspects of this treatment, including possible effects on the gelatin emulsion, image resolution, and the behavior of the treated film when subjected to heat and humidity. Final recommendations will be made at the end of 1990. If successful, polysulfide treatment will provide extra security for preserving master copies and greatly extend the life of copies which often are stored in adverse circumstances.

The Stability and Preservation of Color Slides: Duplicates for Use, and Cold Storage of Originals Provide the Only Answer
Henry Wilhelm, Preservation Publishing Company, Grinnell, Iowa

The stability shortcomings of color slides present special problems in library and museum collections. Color slides fade very rapidly when subjected to the intense illumination of a slide projector. Fujichrome film, which has the best projector-fading stability of all current slide films, suffers a noticeable loss of image density after about two-and-a-half hours of intermittent projection. Ektachrome film is less than one-half as stable as Fujichrome, and will exhibit a noticeable loss of image density after only about an hour of projection. Kodachrome film—in spite of its very good dark storage stability—is the least stable of all current slide films when projected. Kodachrome will show noticeable fading after as little as 15 or 20 minutes of projection. The loss of image detail and a color shift toward green are especially noticeable in highlight portions of the image.

Even when kept in the dark in normal room-temperature conditions, color slides slowly (in some cases, rapidly) fade and, with the exception of Kodachrome, also gradually develop yellowish stain. This can be prevented only by low-temperature, humidity-controlled storage.

Librarians should identify important and/or irreplaceable color slides (as well as color prints, color negatives, and color motion pictures) in their collections and make copies for use purposes; the originals must be placed in cold storage. When stored at zero degrees fahrenheit or lower with controlled relative humidity, color materials can be considered “permanent,” with even the most unstable products probably lasting longer than 1,000 years before a ten percent, or just noticeable, dye loss occurs. Kept at zero degrees fahrenheit, color photograms can be expected to far outlast black-and-white photographs stored under normal room temperature conditions.

Among those institutions currently operating cold storage facilities for the preservation of color photographs are the John F. Kennedy Library (1975); the Peabody Museum of Archaeology and Ethnology at Harvard (1975); the National Aeronautics and Space Administration [NASA]
Cibachrome Micrographic Color Film
Peter Krauss, Consultant, Pudys, New York

Cibachrome Micrographic Films are direct-positive color films based on the silver dye-bleach process. They yield extremely sharp and fine grain images composed of brilliant cyan, magenta, and yellow dyes that have outstanding dark and light stability. Two film types are made: Type M for reproduction of reflection originals, and Type P for reproduction of transparent originals, including slide duplication. Both types are available in 4- and 2-mil (0.10 mm.) and 7- and 18-mil (0.18 mm.) polyester base in a range of roll and sheet sizes. A direct-positive color print material, Cibachrome Copy Paper, is also available for enlargements of the microfilm images.

The films and copy paper are balanced for exposure by 3200K light (e.g., tungsten halogen lamp), but pulsed xenon lamps and other light sources may be used with appropriate color filtration. Manual or machine processing of all three product types can be done by the user with Cibachrome F-5 chemicals that are supplied as liquid concentrates; commercial processing service is available also. The basic processing cycle is 16 minutes at 24 degrees C/75 degrees F, or 8 minutes at 30 degrees C/86 degrees F; it requires three chemical solutions (black-and-white developer, combination silver dye-bleach, fixer) and a final wash.

Among the major applications of Cibachrome microfilms are reproductions of maps, drawings, medical illustrations, and other educational materials; duplication of art and other lecture slides and aerial color transparencies; and micropublishing. Examples of various Cibachrome microreproductions will be shown and data presented on the dark and light stability of their images. Cibachrome microreproduction products are manufactured by Ilford Photo Company, and are distributed in the U.S.A. and Canada by Micromax International Incorporated, 85 Godwin Avenue, Midland Park, N.J. 07432; (201) 445-3450.

James H. Wallace, Jr., Smithsonian Institution
Color Slide Preservation at the Smithsonian: Cold Storage for Originals, Videodiscs for Reference, and Duplicates for Use

The recommended technique for the preservation of processed photographic materials, especially color, calls for storage under low temperature and relative humidity conditions assisted by the removal of oxidizing and reducing agents commonly found in most urban air. For most photographic collections this requires the construction of a special cold storage room or rooms with a variety of electronic and mechanical equipment. These cold storage facilities must be considered an integral part of a well-rounded photographic program for museums. Such a program should also include the shooting of original contemporary photographs of not only artifacts, but also current events which are of interest to the organization and its long-term programs. Such photographs will provide a valuable documentary record for future use. A well-rounded program should also make use of the latest electronic imaging techniques for easy and rapid access to the collections which are being protected in cold storage. Thus, photographic collections can be expanded, preserved and simultaneously made useful on a daily basis.

Automation: Where Are We Today?
New Bells and Whistles: Factors Affecting
Upgrading and/or Switching to a New Database System
Eileen Fry, University of Indiana

Each year brings improved versions of leading commercial database packages and new ones are introduced with increasingly sophisticated features. Many of these innovations have little relevance to most slide applications, but some offer real advantages over previous systems in such crucial areas as data validity and consistency. Thesaurus/Authority file linkage and automatic fill-in, ease and speed of query formation, and export/import capabilities. At what point is it worth the time and expense to switch to a more sophisticated system? How will a switch affect essential in-house processes such as label printing? Should the old system be maintained as well if it is better suited for some specific applications? How can you tell if a new system, no matter how good its reviews, will really do what you want it to do?
This talk will discuss features to look for in commercial database packages, and will specifically evaluate PARADOX and dBASE (III+ and IV) in the areas of:

Data validity checks and templates Thesaurus/Authority file linkages and multiple file formats Field to field/record to record copying of data screen and report generation

Particular attention will be paid to the ease and efficiency of each of these systems in replicating a desired label format, including horizontal and vertical spacing, field by field specification of font, diacritics, and printing of specific records in the database.

Data Structure and Retrieval
Astrid Otey, Miami University

When formulating guidelines for data entry, it is very important to consider what information you would like to retrieve from the database, as well as the way in which you would like to retrieve it. Although the information in this presentation is based on experience with a system called FLEX, a database program written with DBase III and compiled with Clipper, it should be applicable to other database systems as well.

The most basic consideration affecting all facets of computer usage is that the computer matches query information with stored information very precisely from left to right in each field. Consequently, information entered into the database, as well as information entered in a query, needs to be regulated. There are ways to search strings of characters occurring anywhere in a field, but often these are time-consuming searches. The options that will be discussed facilitate a quick, accurate search by the computer, with a logical grouping of records located by each search.

The structure of the database as a whole determines how the user can retrieve information. Since most databases are too large to have all of the information available at once, the file divisions determine the scope of a single search.

Within the files, the structure of the record and definition of the fields determine the type of search that can be done and the information that can be collected. The selection of fields to be included in the record is important, but it is equally important to take advantage of the software's capabilities, such as deciding between character or numeric fields to utilize the math functions for searching dates or sizes. Extremely rapid searches can be achieved using the indexing function, but the necessity of a speedy search needs to be weighed against the space taken on the disk for indexed files.

The way information is entered into the fields is also important in controlling the way that it can be retrieved. It is, of course, imperative that the same terms and phrases be entered in exactly the same way every time. The importance of athesauri, whether adopted from an outside source or formulated in-house, is critical. For fields with a limited number of search possibilities, a menu can be devised in a sub-routing of the program to furnish a prompt for a short, encoded entry. Word order in other fields can be established so that records can be grouped together or retrieved separately, depending on how the query is entered. Information in the same field in different records should be of the same type or level, as the purpose of a search is to gather record information together for images that have a specific aspect in common.

Finally, your choices must be conveyed to the user who is querying the database. The user must ask for what has been entered, in the field in which it has been entered. The clarity of database design and user documentation can help to simplify this task.

Computer Applications in Visual Resources Collections: Revelations and Visions
Nancy S. Schiller, University of Texas at Austin

Today, in the field of visual resources management, we are witnessing the general progression from isolated image collections to the prospect for broad art information systems. Most visual resources curators entered into computer automation to solve the time-consuming and growing repetitious associated with physical control of image collections and approached information access as a bonus. Now, only a few years since the great microcomputer revolution made it possible for the transfer of automation from programmers to the hands of curators, the horizons are broader than we ever considered. Today, the visual resources profession is talking about national standards for almost every aspect of its management.
I propose to describe some of the positive and practical results experienced through automation in our collection and others I have knowledge of through communication with participants in the six Microcomputer Applications in Visual Resources Collections that we have conducted at The University of Texas at Austin since 1985. Some examples are: in-house standardization in data collection formats and image descriptions; additional support for repetitive annual functions (such as reports, purchases, staff appointments and payrolls); multiplication of kinds of information that can be reported (both image information and statistics); increased staff interest and motivation, and modifications of job descriptions; expansion of possibilities for access to information in collections; improvement in control for collections; improvement in service in terms of accuracy, speed, and information availability; broadened opportunities for professional development; shared information on a national basis; but also increased operational costs (in terms of equipment, supplies, and staff salaries); and progress towards the future with interactive text and image databases.

The completely automated art information system does not yet exist, and the route in its direction is certainly not clear or direct; however, what is evident is that computer automation in visual resources collections is taking these collections beyond their traditional boundaries and preparing the ground for the complete art information system.

The Apple Macintosh Computer System in The Ohio State University
History of Art Slide Library
John J. Taormina, The Ohio State University

At the 1986 VRA Conference, we presented our experiences with securing mainframe computing capabilities for the department. At the 1988 conference, we presented our experiences working on the mainframe using first a VMS/Datatrieve system, and then a UNIX/INGRES system. Now, two years later, I would like to discuss our experiences in switching from the mainframe to an independent, Macintosh-based computer system.

In October of 1988, we were told that our shared mainframe lab would be shut down January 1 for cost containment. In three months we had to research, obtain money for, and purchase our own computer system. As it was, our equipment did not begin to arrive until February; for the first two months we had no system up and running until April. In the meantime, an academic quarter's worth of slides were produced and used by our faculty and graduate students without labels, since our computer capabilities ended in January.

With the expert assistance of a computer consultant, expensive though it was, we created a new database using Acius Fourth Dimension software. Our old data from the mainframe was successfully transferred to the new system and we have been inputting data, approximately 20 megabytes to date, since April of 1988.

Our computer system is now comprised of one Macintosh II; three 3Es, one Laserwriter printer, one Imagewriter printer, an 80MB external hard drive, and one 40MB external tape backup. We have four major databases running at once: one for Western slides, one for Asian slides, one for the National Palace Museum photograph archive, and one for the OSU Huntshire Archive of Asian Art. All of these databases are now up and running.

Implications of Technology Usage in Visual Resources Collections in the United States
Sandra C. Walker, University of Tennessee

At conferences and in literature addressing visual resources issues, the proliferation of information concerning the implementation of technology into the sphere of visual resources collections is pervasive. This paper will address the questions of actual technology usage in universities, colleges, and museum visual resources collections in the United States and the perceived obstacles to the implementation of technology in these collections. Data and usage statistics were garnered from a survey of visual resources professionals. The population surveyed is from the membership list of the Visual Resources Association.

The survey examined the prevalence of technologies such as computers, videocassettes, videocards, and digitized images in visual resources collections that may have heretofore concentrated on traditional visual images such as slides, photographs and 16 mm film. The survey also examined the perceived obstacles to implementation of new technological developments. Demographic information, including education, experience and institutional status (public or private) was collected to determine whether these factors influence the implementation of technology in visual re-
sources collections. Cross tabulations of statistics were utilized to draw conclusions as to the prevalence of the actual usage of technology in visual resources collections in the United States at the present time and to suggest future directions for the professional visual resources manager. Collection of this data will be useful in efforts to promote resource sharing and networking capabilities for exchange of information.

Based on this survey of visual resources professionals, slide collections will continue to be the most prevalent type of visual resource for universities, colleges and museums in the United States. At least for the near future, unless great strides are made in the technical development and affordability of digitized images and videodiscs. Understandably, there is resistance to investing in these technologies, given the previous substantial investment in slide collections, without proven justification based on image quality, stability and affordability.

This survey does indicate that computer usage in visual resources collections does enhance collection management and is increasing. However, the proliferation of stand-alone microcomputers indicates that standardization and sharing information may not be as likely as early proponents of computer usage visual resources collections hoped. The use of stand-alone microcomputers reinforces the tendency to customize the collection for local audiences. Therefore, proponents of standardization will have to make their arguments very persuasive. A general standard, such as transferable through ASCII based codes could possibly be used to mesh catalog information from data bases produced with widely variant software on microcomputers and transmitted via modem or mainframe linkages, but this would be a monumental undertaking and less likely to occur as the size of the individual data bases increase. A possible catalyst for standardization and shared information would be the emergence of an online cataloging system similar to OCLC in which a major collection or group of major collections join together to provide shared cataloging for slides comparable to that in use by large numbers of libraries for monograph cataloging.

Visual Resources Association
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1990 Program (New York)

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The Visual Resources Association is grateful to the College Art Association for their generous assistance in making this program possible. We extend our sincere thanks to all members and friends who helped in any way to ensure the success of this program.

Applications for membership in the Visual Resources Association will be available at the Registration Table during the conference. Annual membership dues for 1990 are $25.00, $40.00 outside North America. Contributing membership is $50-$299. Patron membership is $500 and above. To become a member, send your check (U.S. currency only) to Christina Updike, VRA Treasurer, James Madison University, Harrisonburg, VA 22807. Membership includes a subscription to the International Bulletin. Visit our booth in the Exhibits area at the Hilton during the conference for information about other VRA publications.