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# Access to Iconographical Research Collections

KAREN MARKEY

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## INTRODUCTION

ICONOGRAPHICAL RESEARCH COLLECTIONS are tools that support the iconographical approach to the history of art and offer access to secondary subject matter and photographic reproductions of artworks. In this article, the four major approaches to art historical scholarship are defined. One of those four approaches—iconography—is targeted in this discussion because it supports iconographical research collections.

A matrix of subject access to visual resources collections displays the many possibilities for providing subject access to these collections. Generally, iconographical research collections describe secondary subject matter through subject headings or a classification scheme; these collections employ phrase indexing of subject headings or classification codes. Access to three different iconographical research collections through secondary subject matter is described and their respective positions in the matrix are pinpointed. Typical users of iconographical research collections are scholars in art history, theology, and medieval studies who are trained in the iconographical approach to the history of art. Thus access to iconographical research collections through secondary subject matter is in accordance with the training and knowledge of users of these collections.

Access to two different visual resources collections through primary subject matter is described. Users of these collections do not need special training in iconography because primary subject matter can be described by anyone with practical experience with everyday life. Subject access to these collections is contrasted with that offered by icono-

graphical research collections. The reasons for the limitation of the latter collections to secondary subject matter are presented along with future directions in subject access to iconographical research collections.

### APPROACHES TO ART HISTORICAL SCHOLARSHIP

In general, art historical scholarship employs one of four approaches:

1. *Form and style* requires an analysis of formal conventions. It results in "the identification and definition of artistic styles such as Byzantine, Gothic, and Baroque, through artworks' morphological terms, as representing tendencies toward certain modes of composition, of color organization, proportion, treatment of space, etc." (Ackerman & Carpenter 1963, p. 9).
2. *Connoisseurship* is the "study of the artistic personality of an individual artist or of a group or school of artists as revealed in their works" (Ackerman & Carpenter 1963, p. 203).
3. *Iconography* is "the study of subject matter or meaning in art" (Panofsky 1962, p. 3).
4. The *social history of art* "interprets a work of art in terms of the conditions that brought it into being" and "calls upon sources that art has in common with the other activities of society" (Ackerman & Carpenter 1963, p. 220).

Scholars may span one or more approaches in their published work. In *Painting in Florence and Siena after the Black Death*, Millard Meiss brought "his background as a connoisseur and iconographer into partnership with a study of religious and literary history to explain a dramatic shift in style following the plagues of the mid-fourteenth century in central Italy" (Ackerman & Carpenter 1963, p. 224).

Underlying the great variety of approaches among art historians, there is a common need for certain basic identifying information that affects every historical operation. Regardless of the approach of art historians, nearly all ask of the work they study: (1) When was it executed (date)? (2) Where has it been since its execution (provenance)? (3) Who created it (responsibility)? (4) How was it created (materials, tools, techniques)? (5) Why was it created (function)?

Bibliographic tools and collections of visual resources have been established to support one or more of the four approaches to art historical scholarship. An art slide collection is a tool familiar to librarians and curators from academic institutions, museums, and art galleries. The art slide collection may be an administrative unit of the university library, museum, art gallery, art history department, or architecture department. However, the identifying information assigned to each slide in the collection answers the questions all scholars ask of a work of art, namely when the work was done, where, by whom, how, and why.

### *Iconography*

The prominent art historian Erwin Panofsky (1962) defined iconography as "that branch of the history of art which concerns itself with the subject matter or meaning of works of art" (p. 3). In the analysis of an artwork, the iconographer distinguishes three levels of subject matter: (1) primary subject matter, (2) secondary subject matter, and (3) iconological interpretation.

*Primary Subject Matter.* Primary subject matter is "the identification of forms such as configurations of line and color, or peculiarly shaped lumps of bronze or stone as representations of natural objects such as human beings, animals, plants, houses, tools and so forth" (Panofsky 1962, p. 5). Panofsky employs Leonardo Da Vinci's *Last Supper* to explain how to identify primary subject matter. The *Last Supper* shows thirteen men sitting around a table eating dinner and engaged in conversation. This enumeration of objects, events, and expressional qualities is a *pre-iconographical description* of this artwork. The only knowledge needed to formulate a pre-iconographical description is practical experience with everyday life.

*Secondary Subject Matter.* Secondary subject matter is "the identification of themes or concepts manifested in images, stories, and allegories" (Panofsky 1962, p. 6). When viewers realize that the gathering of these thirteen men depicts Christ's last supper with his disciples, they have reached the second level of meaning called secondary subject matter. The identification of secondary subject matter is called an *iconographical analysis*. The iconographer relies upon his knowledge of literary sources, customs, and cultural traditions peculiar to a certain civilization.

*Iconological Interpretation.* Iconological interpretation is "the identification of underlying principles which reveal the basic attitude of a nation, period, religion, class, or philosophical persuasion" (Panofsky 1962, p. 7). For Panofsky, the culmination of iconographical analysis is iconological interpretation. "But when we try to understand it [Leonardo's *Last Supper*] as a document of Leonardo's personality, or of the civilization of the Italian High Renaissance, or of a peculiar religious attitude, we deal with the work of art as a symptom of something else which expresses itself in a countless variety of other symptoms" (Panofsky 1962, p. 8).

The study of iconography (or subject matter in art) requires scholars engaged in iconographical analysis to pass through the first level of interpretation—i.e., pre-iconographical description. Thus, such scholars actually perform two interpretations of an artwork—i.e., pre-iconographical description and iconographical analysis.

### ICONOGRAPHICAL RESEARCH COLLECTIONS

Iconographical research collections are tools that support the iconographical approach to the history of art and feature access to subject matter and photographic reproductions of artworks.

In the late 1960s, discussions by scholars on the automation of visual arts information revealed the availability of data for conversion to machine-readable form per level of subject matter. Art historian Kenneth C. Lindsay (1968) listed these three levels and added another level for empirical information—i.e., identifying information that tells when the work was done, where, by whom, how, and why (see Figure 1) (p. 25). This figure shows that identifying information and secondary subject matter of artworks are presently described in iconographical research collections and thus are available for conversion to machine-readable form. Primary subject matter, however, is not described in iconographical research collections; consequently, primary subject matter is not available for conversion to machine-readable form. Lindsay considered the third level of interpretation—iconological interpretation—beyond the purview of automation.

Since scholars must pass through the first level of interpretation to perform an iconographical analysis of a work of art, why has subject access to iconographical research collections been limited to secondary subject matter? Two explanations for this focus on the physical format and users of these collections:

1. The physical format of iconographical research collections is a card or microform format. These formats preclude the assignment of more than a few subject headings, descriptors, or classification codes per image. Secondary subject matter describes themes, stories, or allegories of an image and thus requires one or two entries per image. In contrast, primary subject matter requires the identification of many entities represented in an image—i.e., objects, events, and expressional qualities. Preparation and filing of multiple entries for primary subject matter for providing access points to a card- or microform-based collection would be prohibitively expensive in terms of the professional and clerical labor required.
2. Iconographical research collections have been established to support scholarly research; thus, secondary subject matter is in accordance with the training and knowledge of users of such collections and supports their scholarly pursuits.

#### *Matrix of Subject Access*

A three-dimensional matrix displays the many possibilities for providing subject access to visual resources collections (see Figure 2). At the top of the matrix are the two types of subject matter—primary and secondary—suitable for conversion to machine-readable form. On the left side of the matrix are the three principal methods of subject access. At the bottom of the matrix, four indexing techniques for visual resources collections are given.

The organization of this two-by-three-by-four-celled matrix seems to indicate that any of the four indexing techniques can be applied to any of the three methods of subject access and so on. In practice, this is

Act of Interpretation	Is data available for computer input?
A. Empirical (e.g., title, date, size, artist)	Yes
I. <i>Pre-iconographical description</i>	No
II. <i>Iconographical analysis</i>	Yes
III. <i>Iconological interpretation</i>	No (but probably not necessary)

Figure 1. Data availability per level of interpretation for conversion into machine-readable form. Source: Lindsay, Kenneth C. "Computer Input Form for Art Works: Problems and Possibilities." In *Computers and their Potential Applications in Museums; A Conference sponsored by the Metropolitan Museum of Art*, p. 25. New York: Arno Press, 1968.

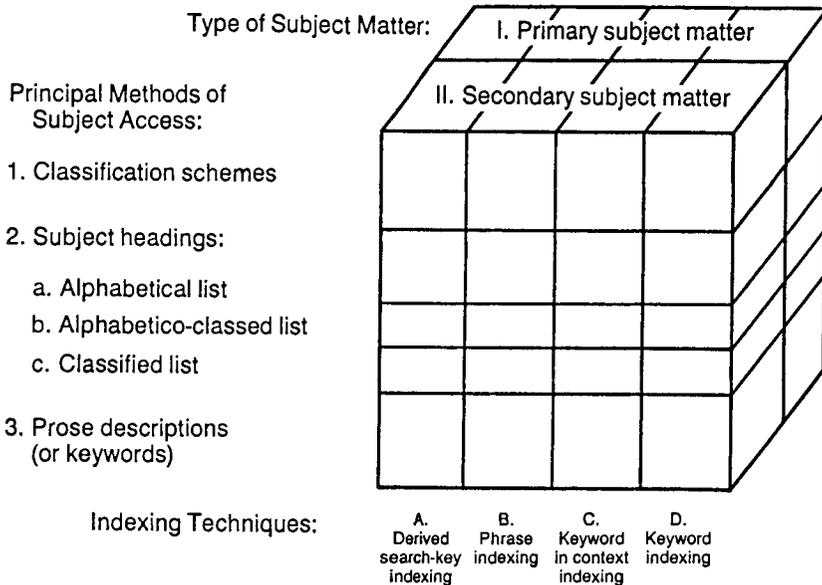


Figure 2. Matrix of subject access to visual resources collections

not true. This section features descriptions of three iconographical research collections and pinpoints each collection's position in the matrix. The three collections covered in this paper are characteristic of iconographical research collections, especially with regard to their respective position in the matrix.

*Index of Christian Art (Princeton Index)*. The *Index of Christian Art (Princeton Index)* was begun in 1917 by Charles Rufus Morey, an art historian at Princeton University in the Department of Art and Archaeology. The *Princeton Index* "grew out of iconographical research that was actively pursued in the Department of Art and Archaeology" (Woodruff 1942, p. vii).

Today, the *Index of Christian Art* is still an administrative unit within that department. Its director, Nigel Morgan, is an art historian known for research in Gothic manuscripts. The mission of the *Index* since 1917 has been

to catalogue by subject and "picture-type" all of the known (published) monuments of Christian art dated before the year 1400, to record briefly the history of the objects, to assemble the important bibliography relating to each monument, and finally, when the literature of art history now available has been searched and exhausted, to maintain the catalogue by adding to it yearly all of the newly published material and all of the pertinent bibliographical references." (Woodruff 1942, p. 2)

In Figure 3, a portion of the matrix of subject access (Figure 2) is shown pinpointing the *Index of Christian Art*. In general, the *Index* is composed of two card files: (1) an alphabetical subject index, and (2) a monument file of an estimated 260,000 black-and-white photographic reproductions of artworks. A user of the *Index of Christian Art* who is interested in images of Lucifer first consults the alphabetical subject index under a subject heading. Figure 4 shows the alphabetical arrangement of subject headings under the main heading "Angel." Under the subdivided heading "Angel: Lucifer," the user first encounters a scope note or information card for this heading which bears other headings that the user can consult for this topic (see Figure 5). Following this information card are main entry cards (see Figure 6) and reference cards (see Figure 7) that describe the secondary subject matter of the artworks and direct the user to the monument file for a photographic reproduction of the artwork described.

In the monument file, photographic reproductions are filed by medium—e.g., metalwork, illuminated and illustrated manuscripts, sculpture, painting, mosaic—then alphabetically by city, then by institutional type, and institution. The user finds a photograph of the illuminated manuscript showing Lucifer by first consulting the monument file for illuminated and illustrated manuscripts, then under the city name Strasbourg, then under libraries in this city, and so on.

Users of the *Index of Christian Art* are principally art historians and scholars in related disciplines. The photographic collection of the Frick Art Reference Library and *Index of Jewish Art* resemble the Princeton Index in their construction and access to secondary subject matter (Knox 1979; Narkiss & Sed-Rajni 1976).

*Iconclass*. Iconclass is not an iconographical research collection; rather, it is a hierarchical classification scheme used as a subject access tool in a

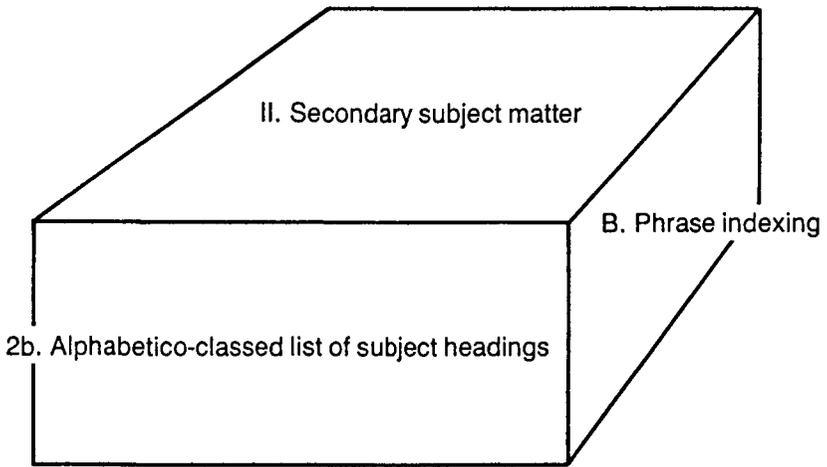


Figure 3. Pinpointing the Princeton index's position in the matrix

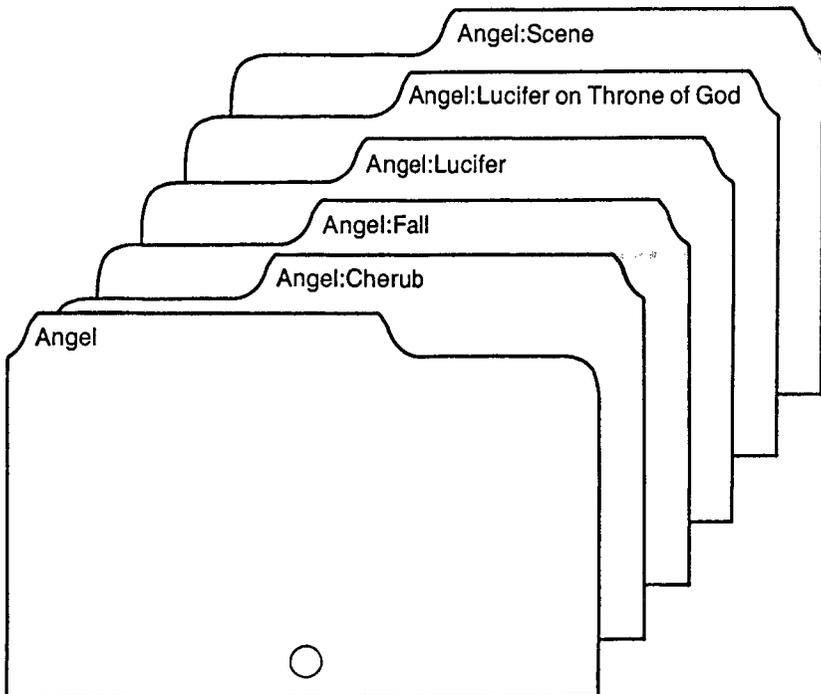


Figure 4. Princeton index guidecards following "Angel"

number of iconographical research collections. The scheme was initiated by the art historian Henri Van de Waal and completed by Leendert Couprie at the Department of Art History at the University of Leiden with financial assistance from the Netherlands Organization for the Advancement of Pure Research and the Royal Netherlands Academy of Arts and Sciences (Van de Waal 1974-85; Couprie 1983). Iconclass distributes iconography into nine broad categories: (1) religion and magic; (2) nature; (3) human being, man in general; (4) society, civilization, culture; (5) abstract ideas and concepts; (6) history; (7) Bible; (8) literature; and (9) classical mythology, ancient history.

Iconclass can be used by the keepers of iconographical research collections to effect a systematic arrangement of artworks by secondary subject matter. In Figure 8, a portion of the alphabetical Iconclass index under the index entry "courting" is shown. A user interested in "one-sided courting" would access the photographic collection under the Iconclass number "33 C 31" to see depictions of one-sided courting or the systematic arrangement of Iconclass under this number to find other relevant Iconclass numbers and topics of interest.

In Figure 9, a portion of the systematic arrangement of Iconclass is shown beginning with the number "33 C 31 one-sided courting." The Iconclass user might find additional numbers by browsing this systematic portion such as "33 C 31 11 woman in flight—leaving something behind (clothing, shoe, etc.)." The user can then access the photographic collection at hand under relevant numbers or the systematic Iconclass bibliography to find published literature on this topic. Iconclass has been applied to organize iconographical research collections such as the *Decimal Index to Art in the Low Countries (DIAL)* and the *Marburger Index*. Iconclass can also be applied to provide a systematic arrangement of print materials. For example, three of the seventeen published volumes of *Iconclass* are a systematically arranged bibliography.

*DIAL (Decimal Index to Art in the Low Countries)*. *DIAL* is published by the Department of Art History at the University of Leiden and the Netherlands Institute for the History of Art at The Hague (Rijkbureau voor Kunsthistorische Documentatie 1958). *DIAL* is a subscription service to over 15,000 postcard-sized photographs of Dutch and Flemish art from the fifteenth to the seventeenth centuries. *DIAL* subscribers are academic and museum libraries and archives around the world.

In Figure 10, a portion of the matrix of subject access (see Figure 2) shows that *DIAL* describes secondary subject matter using a classification scheme. *DIAL* photocards bear one or more Iconclass numbers. Photocards also include identifying information such as artist, medium, size, title of artwork, owning museum, etc., but the detail of this identifying information varies from photocard to photocard.

Subscribers usually file *DIAL* photocards by Iconclass number. *DIAL* users first consult the Iconclass alphabetical index for subjects of



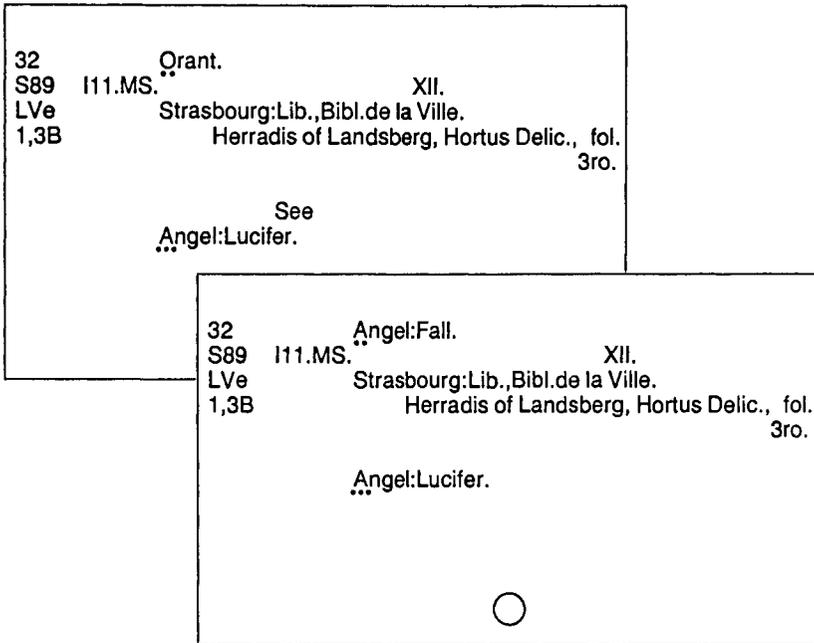


Figure 7. Reference cards directing user to main entry

interest (see Figure 8), find one or more relevant Iconclass numbers, then browse systematically-arranged *DIAL* photocards for artworks depicting secondary subject matter of interest. A *DIAL* user who has already identified Iconclass number “33 C 22 6 interrupted [lovers’] meeting—taken by surprise” would find the photocard whose identifying information is shown in Figure 11 by browsing the photocard file under this iconclass number.

*Marburger Index.* The *Marburger Index* also applies Iconclass numbers to photographic reproductions of artworks. Figure 12 pinpoints the location of this index in the matrix of subject access (see Figure 2). The *Marburger Index* describes secondary subject matter through a classification scheme.

The *Marburger Index* was begun in the 1920s by Richard Hamann in a small university department called the Bildarchiv Foto Marburg (BFM) (1985) in the Art History Institute of Philipps University Marburg. With recent funding from the Volkswagen Foundation, BFM produced on microfiche an initial 500,000 photographs of German art from the Bildarchiv and over twenty other archives of German institutions. By 1987, the *Marburger Index* had approximately 800,000 photographic reproductions on microfiche.

**courtesy**

*see also conduct*

courtesy, manners; etiquette 44 B 15 31

Humanity, Politeness; 'Cortesia', 'Humanita' (Ripa) 57 A 9

**courtier(s)**

royal household; courtiers, retinue, train *see* 44 B 15 2

King Ahasuerus is furious with his wife Vashti and asks his courtiers'

advice: Memucan (Muchaeus) suggest to depose the queen 71 Q 21 3

**courting**

*see also love unrequited*

*see also proposal*

*see also seducing*

*see also suitor(s)*

animals courting and mating KEY (+ 43) to 25 F

relations with friendly, non-aggressive character (expressive connotations)

*see* KEY (+ 91) to 31 A etc.

lovers; courting, flirting *see* 33 C 2

one-sided courting 33 C 31

rest during harvest (eating, dancing, making love, etc.) 47 I14 9

Figure 8. Alphabetical iconclass index

The *Marburger Index* consists of a monument file of photographic reproductions and multiple indexes to the identifying information and Iconclass numbers assigned to artworks. BFM provides online searching of computerized indexes to approximately 30,000 of the total 800,000 images through the STAIRS retrieval system. This online system allows keyword access to Iconclass numbers and captions from the systematic arrangement of Iconclass. Manual searches of the *Marburger Index* can be performed by consulting the computer-produced microfiche indexes accompanying the monument file. BFM is constantly working to increase the number of images accessible through its online and microfiche indexes.

The microfiche indexes provide access to much more information than could be provided through card or book indexes. Figure 13 shows a portion of the primary iconography microfiche index under Iconclass number "33 C 21 courting." *Marburger Index* users must first identify this Iconclass number by consulting the alphabetical index and/or systematic arrangement of *Iconclass*. In this primary iconography index, brief empirical information is provided for photographic reproductions. Once users find relevant empirical information, they can consult the monument file to see images of interest. In the monument file, images are organized on microfiche alphabetically by city, city view, and building type, and each image is accompanied by brief identifying information (see Figure 14). Besides the primary iconography index, the *Marburger Index* provides subject indexes on microfiche for: (1) secondary iconography (by Iconclass number), (2) alphabetical por-

Iconclass Number	Description
33 C 31	one-sided courting seduction 33 C 21 9
31 1	woman in flight lover chased away 33 C 22 9
31 11	leaving something behind (clothing, shoe, etc.)
31 2	lover deserting woman
31 21	deserted woman
31 3	man accused by woman he has cast off
31 4	man in flight
33 C 32	pursuit of a woman, prowling -CC- pursuit of a man
32 1	rivalry of men for the love of women; trying to get the skirt; 'Rivalita' (Ripa)
32 11	rivalry of women for the love of men; fight for the hose; 'andouille'
32 2	shaking lovers out of a tree, with cudgel
32 21	shaking lovers out of a tree, by throwing things
32 3	Love's labours lost (a third person interfering successfully)
32 31	the succeeding third
33 C 33	the (difficult) choice
33 1	shifting out the candidates by men -CC- by women
33 2	blindfolded choice
33 3	choice between wealth and youth
33 C 34	marriage lottery
34 1	computerized dating

Figure 9. Systematic arrangement (schedules) of Iconclass. Source: Van de Waal, Henri. *Iconclass: An Iconographic Classification System*. Amsterdam: North-Holland, 1974-1985.

trait catalog, (3) special catalog for the iconography of art and science, and (4) special catalog for Biblical iconography.

*Common Characteristics of Iconographical Research Collections.* In Figure 15, relevant portions of the matrix of subject access are highlighted for iconographical research collections. These collections share the following characteristics:

1. They were begun by and are currently administered by art history departments and art historians, respectively.
2. They serve art historians and scholars from related academic disciplines.
3. They describe secondary subject matter through subject headings or classification schemes.
4. Automation has been applied to few iconographical research collections.

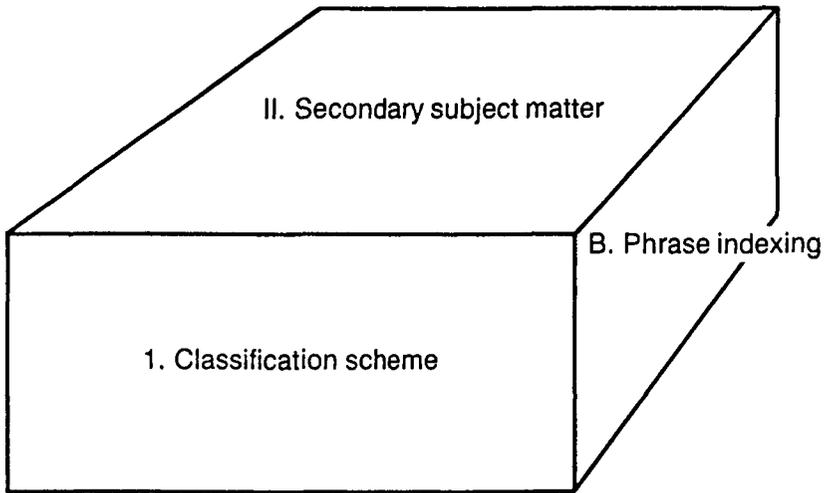


Figure 10. Pinpointing DIAL's position in the matrix

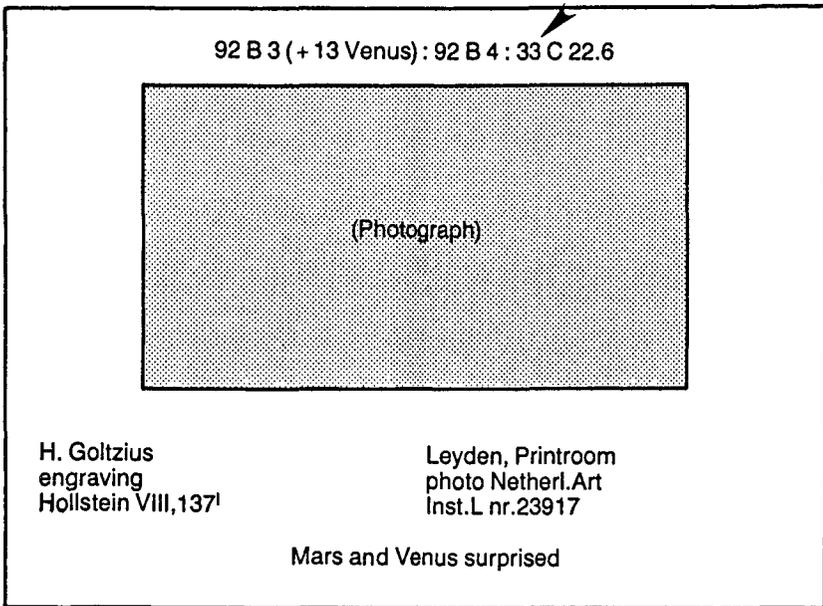


Figure 11. Descriptive information on DIAL photocards

5. Automation of iconographical research collections has introduced keyword indexing of secondary subject matter.
6. Primary subject matter has not yet been described.

*Primary Subject Matter*

Users of two visual resources collections, the Repository of Stolen Art (RoSA) and The Historic New Orleans Collections (THNOC), can access artworks for their primary subject matter. These collections contain images that would be found in iconographical research collections. However, subject access approaches in THNOC and RoSA have been developed with the knowledge that users will not necessarily have special training in Christian iconography, theology, or art history.

*Repository of Stolen Art (RoSA).* The Repository of Stolen Art is currently under development by the Royal Canadian Mounted Police (RCMP), Interpol Branch, Ottawa, Ontario. The objective of RoSA is to promote electronic exchange of information on stolen cultural property in support of RCMP's commitment to suppress theft, receiving, and trafficking in this property. This property includes objects from soils or waters, ethnographic art, military objects, decorative art, fine art, scientific and technical objects, books, records, photographs, and sound recordings (Vance 1984, pp. 377-78).

Figure 16 highlights relevant portions of the matrix of subject access for RoSA. Generally, phrase and keyword indexing is applied to keywords and phrases which represent the primary subject matter of artworks. RCMP collects and enters data into the Canadian Heritage Information Network (CHIN), the government-supported and centralized online cataloging service of the National Museums of Canada. RoSA is searched by detectives, police, and other local, provincial, national, and international law enforcement agencies for identification and recovery of works. RoSA is also searched for graphing networks and patterns of receiving and disposing of works. Online interactive searching is provided by the keyword, Boolean-based PARIS (Pictorial Artifact Retrieval Information System).

Individual RoSA records are built by answers to a yes-no questionnaire about: (1) empirical information—e.g., size and shape of lost object, function, materials, inscriptions, patterns; and (2) primary subject matter. An example of questions from the RoSA questionnaire is given in Figure 17.

*The Historic New Orleans Collection (THNOC).* The Historic New Orleans Collection documents the history of New Orleans through approximately 150,000 photographs, prints, and paintings. The goal of a project to automate access to THNOC is "to provide subject access to a broad spectrum of users with diverse interests including specialists, library scientists, and iconographers as well as students, the general public, and scholars in other fields" (Sarasan 1984a, pp. 317-18). To accomplish this goal, subject access to primary and secondary subject matter will be provided through pre-iconographical descriptions and

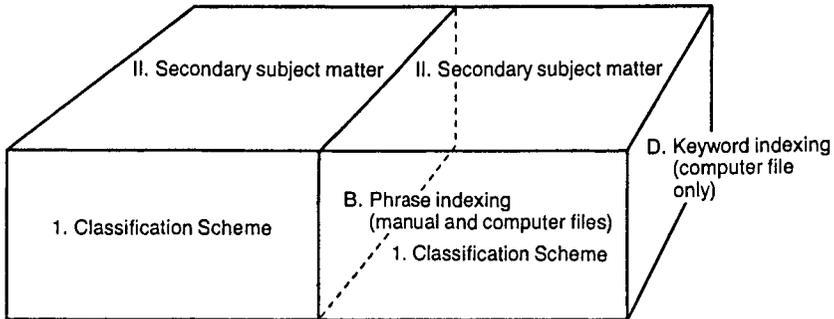


Figure 12. Pinpointing the Marburger index in the matrix

iconographical analyses, respectively. A thesaurus to pre-iconographical descriptions will be developed, and Iconclass will serve as the controlled vocabulary for iconographical analyses. Other subject access approaches to THNOC will mix primary and secondary subject matter in data fields for proper names, places, and events depicted in images, and in controlled vocabulary terms added to the database by THNOC users.

Figure 18 shows relevant portions of the matrix of subject access for THNOC. MINISIS is a relational database management system that will be installed on a Hewlett-Packard minicomputer to offer THNOC users state-of-the-art retrieval capabilities such as free-text Boolean-based searching, range searching, truncation, and access to a multilingual online thesaurus (Sarasan 1984b, pp. 387-406).

### BARRIERS TO ACCESS OF ICONOGRAPHICAL RESEARCH COLLECTIONS

Iconographical research collections pose certain barriers to users who need to access the artworks in these collections. Since secondary subject matter is described in iconographical research collections, users must be sufficiently experienced with iconographical analysis to perform a successful search of the collection at hand. "Providing access to collections by primary subject matter can ease the task of users since it requires only one level of interpretation, practical experience, and knowledge of the history of style" (Markey 1986, p. 7). The recent design and development of RoSA and THNOC may be indicative of a shift from secondary to primary subject matter to serve users who are not experienced with iconographical analysis and to take advantage of the increased number of subject access points that can be easily accommodated by computer technology.

Subject access to iconographical research collections varies from one collection to the next. Differences between systems with regard to

- 33 C 21
- 10183 Bild: Blumenmädchen und soldat  
 Backer?, Jacob Adriaensz (1623–1651 Niederlande) (Maler)  
 Malerei, Tafel-Malerei  
 Leinwand, 117 x 85  
 Standort . . . . . Pommersfelden  
 Verwaltung . . . . . (halb-öffentliche) Sammlung, Schloss Weissenstein,  
 Inventar-Nr.13  
 Iconclass . . . . . 46 BB 22 1 (FLOWER-GIRL) & 33 C 21  
 Abbildungen . . . . . Marburger Index: MAI,02677,A,14  
 Witt Library WIT,10936,E,6
- 1669/1670 (um)
- 20401 Bild: Die Liebe auf dem Lande  
 Watteau, Antoine (1698–1721 Frankreich) (Maler)  
 Malerei, Tafel-Malerei  
 Öl, Leinwand, 56,7 x 80,5  
 Standort . . . . . Berlin (West)  
 Verwaltung . . . . . (öffentliche) Sammlung, Staatliche Schlösser und  
 Gärten, Verwaltung, Schloss Charlottenburg,  
 Inventar-Nr.GK 5337  
 Iconclass . . . . . 33 C 21 & 43 AA 2  
 Abbildungen . . . . . Marburger Index: MAI,00166,F,05-00166,F,08  
 & MAI,03969,A,03
- 1705–1745

Figure 13. Primary iconography index in the Marburger index

subject access mean that users must familiarize themselves with the subject headings, keywords, classification scheme, etc., employed by the collection at hand. Compounding this variation in subject access approaches are:

1. Subject authority files of the principal iconographical research collections have not been published and made readily available in printed or machine-readable form.

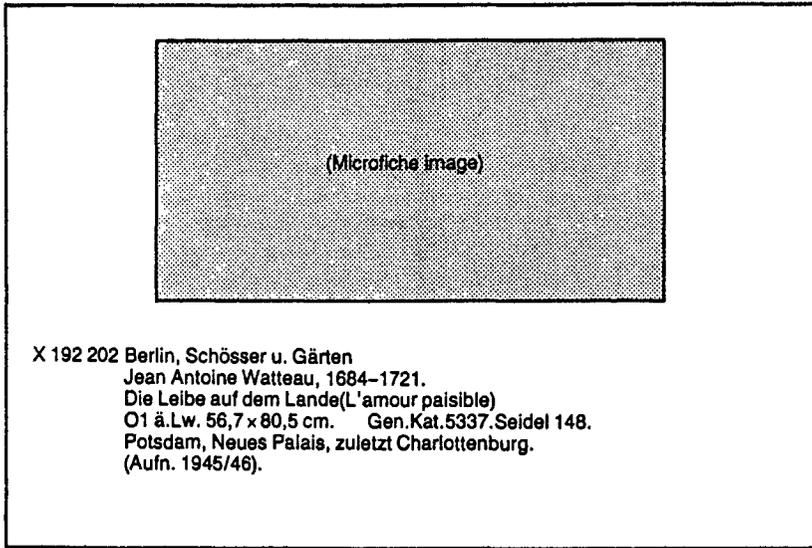


Figure 14. Descriptive information on microfiche images in the Marburger index

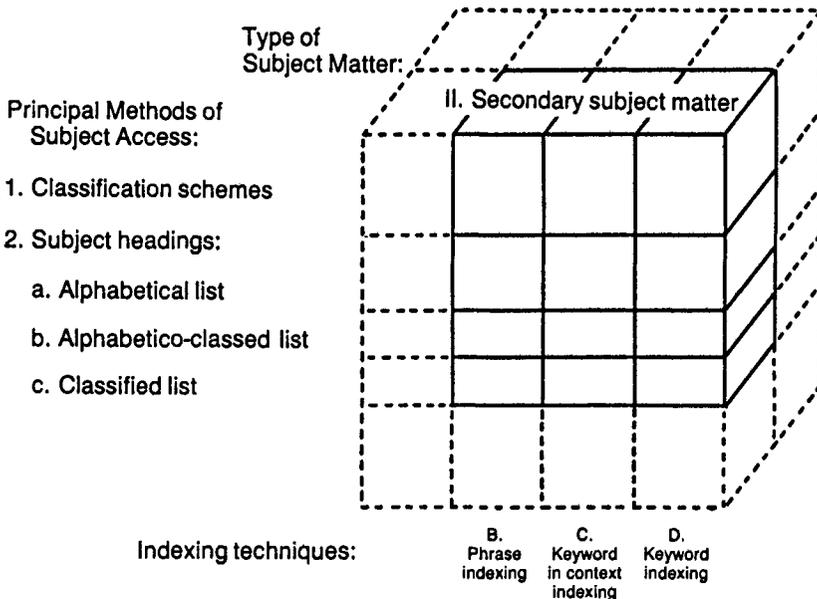


Figure 15. Pinpointing iconographical research collections in the matrix

2. The secondary subject matter of existing iconographical research collections is somewhat limited to the style(s), historical period(s),

- and/or geographical area(s) of the original collection. For example, Iconclass is closely associated with Dutch art and the Index of Christian Art is associated with Western Christian art from 400 to 1400 A.D.
3. Subject heading lists have proliferated since the mid-1970s. Examples of lists published in this time period are the subject headings list used at the Centre National de la Recherche Scientifique, the classified subject headings used at the Yale Center for British Art, the classified subject heading list of the National Museum of American Art, and the subject headings for Canadian iconography used at the Public Archives of Canada (Garnier 1984; Yale Center for British Art 1979; National Museum of American Art 1983; Castonguay 1981, pp. 269-80).

Identifying information about artworks varies from one iconographical research collection to the next. Every collection provides identifying information but there the similarity ends. Differences between systems with regard to such information will require users to search for a known artwork under variant forms of artists' names, institution names, dates, etc. The publication of cataloging rules for describing graphic materials, *Graphic Materials: Rules for Describing Original Items and Historical Collections* (Betz 1982), and the availability of a machine-readable cataloging (MARC) format for representing the identifying information of graphic materials may foster consistency among collections (Online Computer Library Center 1986). The Art & Architecture Thesaurus (AAT) will eventually make a controlled vocabulary available for expressing style, geography, materials, and techniques connected with artworks (Barnett 1986, p. 135).

Efforts to establish a centralized cataloging system for the visual arts have failed or been disbanded—e.g., Museum Computer Network, Museum Prototype Project. Two results of failed efforts are the creation of separate databases within a single centralized system and the proliferation of separate local databases. Also, these databases vary from other databases with regard to the identifying information and subject cataloging assigned to each entry.

## FUTURE DIRECTIONS

Separate collections and specialized databases will proliferate as long as there is no single organization responsible for establishing and maintaining rules, guidelines, and formats for identifying information and subject cataloging. As long as financial support and governance comes from art history departments, programs, and institutions, access to collections will be provided for scholars through *secondary subject matter*.

If a centralized system is successfully established, the system will have to take advantage of data and functions that can be shared among institutions supporting iconographical research collections and other artwork collections. Identifying information for artworks and authority

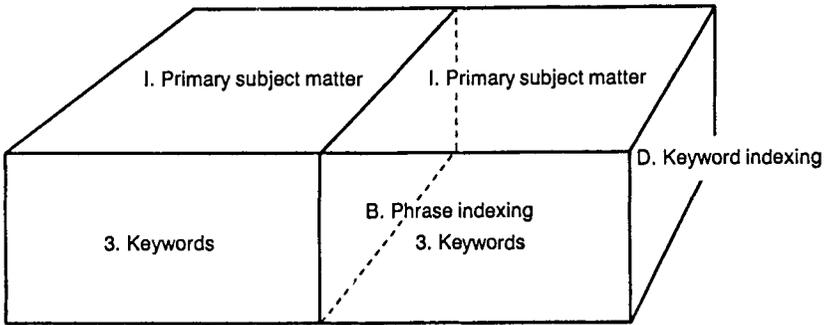


Figure 16. Pinpointing RoSA in the matrix

Check all descriptions that seem true, even if they are not consistent.

- A. Shape
- B. Surface
- C. Human faces and figures
  - C1 Entire human figure
  - C2 Portrait head or bust, partial figure
  - C3 Torso shown without head
  - C4 Other incomplete figure (e.g., sketch of eye, hand)
- 
- D. Individual and types
  - D1 Christ as child
  - D2 Christ as adult
  - D3 Christ with cross, crucifixion
- 
- D19 Military person, warrior, soldier, etc.
- D20 Musician, singer, dancer, actor
- D21 Wearing plume or feathers
- 
- E. Activities
  - E1 Procession, parade, caravan
  - E2 Eating, drinking
  - E3 Smoking
- 
- F. Animals
- G. Setting
- H. Detail

Figure 17. RoSA Questionnaire

data for iconography, artist and school names, styles and periods, geography, building names, and institution names are data that can be shared among iconographical research collections, museums, art slide and picture collections, and academic institutions. The model of sharing data among institutions will be the reverse of the library automation model—i.e., institutions will add entries first to their own local systems and then add these entries to the centralized system.

As long as there is variation among collections with regard to identifying information and subject cataloging, the burden of access is

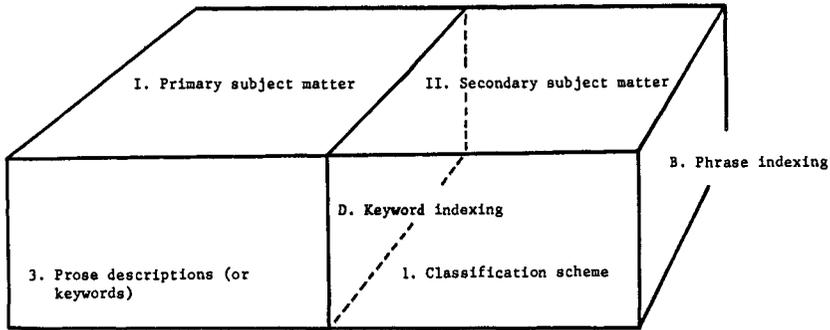


Figure 18. Pinpointing THNOC in the matrix

placed on users of iconographical research collections. At present, users must become proficient in the use of iconographical research collections that employ different subject vocabularies. It can be expected that when iconographical research collections are transformed from manual, card-based files to online databases, users will have to become familiar with many different online retrieval system interfaces and access techniques, especially in view of the proliferation of separate, specialized databases.

## REFERENCES

- Ackerman, James S., and Carpenter, Rhys. 1963. *Art and Archeology*. Englewood Cliffs, NJ: Prentice-Hall.
- Barnett, Pat. 1986. "AAT Update." *Art Documentation* 5 (Fall), pp. 134-35.
- Betz, Elisabeth W. 1982. *Graphic Materials: Rules for Describing Original Items and Historical Collections*. Washington, DC: Library of Congress.
- Bildarchiv Foto Marburg, ed. 1985. *Marburger Index: Inventory of Art in Germany: User's Manual*, 2nd ed. Munich: K.G. Saur.
- Castonguay, Denis. 1981. "Approche Sujet en Iconographie Canadienne à l'aide d'un Lexique de Termes Contrôlés." In *Computerized Inventory Standards for Works of Art: Proceedings: Collection of Papers*, edited by Raymond Vézina, pp. 269-80. Montreal, Canada: Fides.
- Couprie, Leendert D. 1983. "Iconclass: An Iconographic Classification System." *Art Libraries Journal* 8 (Summer), pp. 32-49.
- Garnier, François. 1984. *Thésaurus Iconographique: Système descriptif des représentations*. Paris: Le Léopard d'Or.
- Knox, Katharine McCook. 1979. *The Story of the Frick Art Reference Library: The Early Years*. New York: The Frick Art Reference Library.
- Lindsay, Kenneth C. 1968. "Computer Input Form for Art Works: Problems and Possibilities." In *Computers and Their Potential Applications in Museums* (A Conference Sponsored by the Metropolitan Museum of Art), pp. 19-35. New York: Arno Press.
- Markey, Karen. 1986. *Subject Access to Visual Resources Collections: A Model for Computer Construction of Thematic Catalogs*. New York: Greenwood Press.
- Narkiss, Bezalel, and Sed-Rajni, Gabrielle (1976). *Index of Jewish Art: Iconographical Index of Hebrew Illuminated Manuscripts*. Jerusalem: Israel Academy of Science and Humanities.
- National Museum of American Art (NMAA), Office of Research Support. 1983. *Subject Term Guide*. Washington, DC: NMAA, Office of Research Support.

- Online Computer Library Center. 1986. *Audiovisual Media Format*, 2nd ed. Dublin, OH: OCLC.
- Panofsky, Erwin. 1962. *Studies in the Visual Arts*, reprint. New York: Harper & Row.
- Rijkbureau voor kunsthistorische Documentatie. 1958. *Decimal Index to Art of the Low Countries (DIAL)*. The Hague: Rijksbureau voor kunsthistorische Documentatie.
- Sarasan, Lenore. 1984a. "An Integrated, Automated System to Provide Subject Access to Large Image Archives Across a Broad User Base." In *Census: Computerization in the History of Art*, vol. 1, edited by Laura Corti, pp. 317-18. Florence, Italy: Regione Toscana.
- Sarasan, Lenore. 1984b. "Visual Content Access: An Approach to the Automatic Retrieval of Visual Information." In *Automatic Processing of Art History Data and Documents: Papers*, vol. 1, edited by Laura Corti, pp. 387-406. Florence, Italy: Regione Toscana.
- Vance, David. 1984. "Identification of Objects." In *Census: Computerization in the History of Art*, vol. 2, edited by Laura Corti, pp. 337-51. Florence, Italy: Regione Toscana.
- Van de Waal, Henri. 1974-1985. *Iconclass: An Iconographic Classification System*, 17 vols. Amsterdam: North-Holland.
- Woodruff, Helen. 1942. *The Index of Christian Art at Princeton University: A Handbook*. Princeton, NJ: Princeton University Press.
- Yale Center for British Art, Photographic Archive. 1979. *Subject Authority Used by the Photographic Archives*. New Haven, CT: Yale Center for British Art.