

Jennifer L. Rinalducci. Evaluation Criteria for Scholarly Research Offered by Art Museum Library Websites. A Master's Paper for the M.S. in L.S degree. July, 2004. 89 pages. Advisor: David Carr

The purpose of this research is to consider how useful web-based resources are to art history scholars. The study examines the usefulness of online resources of museum libraries and research centers, institutions created to provide relevant information, in meeting scholars' needs online. These web resources need to be evaluated for the scholar, and the discipline of art history has unique considerations within the humanities.

The survey developed evaluates websites associated with art museum libraries. Museum libraries included in this study are the Getty Research Institute, Tate Research Center, Frick Art Reference Library, National Art Library, and Smithsonian American Art Museum Information Resources. The survey is similar to those used in the humanities field, including the categories of relevance, navigability, and coverage. The questions also include an image category to address the unique needs of art historians.

Headings:

College and university libraries—Reference services

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Evaluation

EVALUATION CRITERIA FOR SCHOLARLY RESEARCH OFFERED BY ART  
MUSEUM LIBRARY WEBSITES

by  
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## Table of Contents

Abstract .....	1
Chapter I: Introduction.....	2
Chapter II: Literature Review .....	8
Chapter III: Methodology .....	16
Chapter IV: Website Profiles .....	25
Chapter V: Analysis of Survey .....	46
Chapter VI: Conclusion .....	53
Bibliography .....	58
Appendices.....	65
Notes .....	72

## **Introduction**

The enduring and ever expanding popularity of the Web, seen in the growing number of online resources available for entertainment, commerce, and information, suggests a new avenue for conducting scholarly research. According to Nicolae-George Dragulanescu, however, “The quantity of information distributed through the World Wide Web is rising much more quickly than the quantity of information available through other mass media.”<sup>1</sup> In other words, much of the information available on the Web has not been culled for reliability and quality; therefore, a potential danger exists when conducting scholarly research. From the scholar’s perspective, websites have to be critically assessed to determine the extent to which they meet user needs in ways that advance inquiry. To meet this demand, several information professionals have analyzed the current state of web-based resources and created tutorials to help users choose reliable information. One such initiative is the “Librarians’ Index to the Internet: Information You Can Trust,” created by an organization based in California.<sup>2</sup> The mission of the organization is “to provide a well-organized point of access for reliable, trustworthy, librarian-selected Internet resources.”<sup>3</sup> Yet, with the incredible demand for web-based information and the constant creation of websites, only a small portion of web-based resources have been thoroughly analyzed for user expectations and needs, including those created by authoritative institutions such as museums.

In the article “Designing and Managing Information in the Fast Lane,” librarian Thomas Jevic argues that people have come to expect that they need to use the Internet for quick access to current information. However, he notes that “many users come to the Internet with naive expectations about the quality and extent of information...” available through this medium.<sup>4</sup>

Art-related websites are especially prone to unreliability. As discussed in a technical paper entitled “How Useful Are Web-Based Resources to Art History Scholars?” the discipline of art history is especially vulnerable because many websites are created by non-art historians.<sup>5</sup> Several art-focused websites have been created by enthusiasts who have not been educated in the discipline. As discovered in the aforementioned technical paper, many websites, like *Haber Arts* and *Pre-Raphaelite Passion*, have been created by web designers interested in art. These websites are easily retrieved by popular search engines like Google and Yahoo and are mistakenly seen by uncritical users as presenting valid information.

As the scholarly information environment changes, so do the needs, expectations, and behaviors of users. For this reason, librarians functioning as website designers and information managers “want their sites to be as aesthetically pleasing, useable, accurate and as dynamic as current technologies allow.”<sup>6</sup> Museum libraries must continue to assess and respond to these changes in order to support the scholarly mission, and the role of the librarian should be examined in conjunction with the state of art resources online

and web presentations of museums. For this reason, I have focused how the websites of art museum libraries and research centers present information.

Web-based resources created by museums and universities automatically carry greater authority than personal websites. Often within these sites are provisions for access to institutional research libraries created to aid in scholarly research; as with almost all websites their online resources should be current, relevant, and navigable, and the coverage of topics should be clear and thorough. Unique to art resources, however, is the presentation of images. Images of artworks on the computer screen must be sizable enough for study, accurate, and in colors with high resolution in order to enable scholarly inquiry. According to various studies of cultural organizations, universities have been more involved in observing these considerations than museums. Thus, there is a need to address the authority and quality of electronic research resources presented by art museums on the World Wide Web.

Tom Flynn's article entitled "The Dearth of Art History," although published in 2001, is still relevant to discussions of web-based resources for art history.<sup>7</sup> He begins with the question "How is the history of art represented online?"<sup>8</sup> and then describes the discipline as having, over the past few decades, "transformed from a stuffy, male-dominated, classbound connoisseurial club into a flexible, free-thinking modern discipline devoted to visual culture in its broadest manifestations."<sup>9</sup> One of the websites that Flynn examines is the site for the Association of Art Historians.

No doubt the website of the Association of Art Historians reflects this progressive outlook, embracing a diversity of perspectives, brimming with provocative

imagery, beckoning the interested visitor towards a highly visual digital profile of its professional activities. Er, no.<sup>10</sup>

As Flynn's description suggests, in the continued battle between text and image in art history writings and projects, text dominates. In other web-based resources, however, the images are the primary focus, and there is little descriptive text. According to Lauren Weingarden, a professor of art history and museum studies, the text and image must work together within the art history discipline.<sup>11</sup> The website for the Association of Art Historians has few to no images although this is an organization based on the image.

Criteria for authority are cited most often in tutorials and articles on evaluating web-based resources, and leaders in the evaluation of web-based resources commonly cite authority as an important criterion. Museum libraries automatically have authority in the eyes of users because information is presented by knowledgeable authors. However, the impact of authoritative resources has been questioned. For their article "Do the Web Sites of Higher-Rated Scholars Have Significantly More Online Impact?" Mike Thelwall and Gareth Harries examined whether higher-rated scholars produce higher impact websites using British sites as case studies. Thelwall and Harris measured the quality of several scholars in terms of university-wide average research ratings.<sup>12</sup> The findings suggest that universities with higher-rated scholars produce more web content but only have an average online impact. They are cited more often through links by peers but only because they are more prolific.

Refuting earlier suggestions, Thelwell and Harries argue that general web publications

seem to be very different from scholarly journal articles and conference papers. They note the important implications for the construction of new web indicators, notably that online impact should not be used to measure the quality of small groups of scholars, even within a single discipline. Although this study looks at academia, the findings are important to consider when discussing museum websites because they indicate that the authority of the website author does not automatically lead to online impact. Based on this research, we might assume that museum libraries are not necessarily making an online impact among scholars. Their web presence should be examined for usefulness.

“Scholarly Communication and the Continuum of Electronic Publishing,” by Rob Kling and Geoffrey McKim, provides insight into this popular topic from the perspective of library science.<sup>13</sup> In this article, published in the *Journal of the American Society for Information Science*, they question the use and acceptance of web-based resources by scholars in the arts and sciences. The authors examine the variations in Internet publishing among disciplines and define what constitutes a published article. Although Kling and McKim investigated publishing in the sciences, the study is significant in developing criteria for valuable scholarly communication. The three criteria they used are trustworthiness, accessibility, and publicity, and two of their criteria correspond with the evaluation criteria for museum libraries’ websites (trustworthiness is related to authority and accessibility to currency).

Studying the online presence of museums in the article “The Role of Museums in Online Teaching, Learning, and Research,” Kenneth Hamma looks at the integration of



information among libraries, museums, institutional archives, research organizations, and digital production groups.<sup>14</sup> Hama is the Assistant Director for Collections Information at the J. Paul Getty Museum in Los Angeles and Senior Advisor for Information Policy for the J. Paul Getty Trust, and he uses the Getty as a point of study. As he explains, the traditional functions of museums have been “about conserving, curating and exhibiting works in permanent collections and about presenting special exhibitions.”<sup>15</sup> These activities form the basis of responsible collections management, but there are also important opportunities for education and interpretation.<sup>16</sup> Hama adds, “It should be no surprise that the number of museums with Web sites is big, but the number that have integrated digital knowledge management functions into their organizations is still relatively small.”<sup>17</sup>

In order to assist art history scholars in their research, evaluation criteria needs to be developed and implemented. While some criteria, like coverage and relevance, are applicable to all humanities fields, there are concerns unique to art history, such as the color and resolution of the image. This process needs to involve both librarians and art historians, and survey participants for this study involve both groups.

## Literature Review

The absence of literature on evaluating and utilizing web sites within the discipline of art history suggests that web-based resources are not yet wholly accepted for scholarly research. Any focus on this subject is primarily addressed in interdisciplinary conferences and workshops, producing information that is temporary and generally inaccessible to the average researcher. Because of the absence of research, it was determined that there is a degree of commonality between art history and other disciplines within the humanities. This suggests that the humanities literature on evaluating and utilizing web resources is an acceptable starting point.

One of the few articles that approaches the question of using online information for art history research is “The Internet and Art History: A Tool or a Toy?” by Trish Cashen, a professor of art history and web manager for the online journal *Computers and the History of Art*. This 1995 article remarks on the increased popularity of the Internet and the resulting plethora of web-based resources. In the article, she asks the following question: “Can the Internet be considered as a serious research tool for art history, or is it merely a toy?”<sup>18</sup> To answer this question, she looks at a selection of web-based resources for art history and asks how further developments could assist in teaching and research. Cashen notes that many art websites “make ideal toys as they are attractive playthings, yet simultaneously educational.”<sup>19</sup> Although text-based resources do not have the immediate impact of web counterparts, unlike websites, they can support research in

way that is accepted in the art history discipline. As of 1995, Cashen felt that the Internet was not a viable resource tool because of a lack of confidence, not content. She urged art historians to determine the web-based services they want in time to influence the Internet's evolution. In a 2002 discussion, Cashen again suggested that the Internet can be an education tool but that its usefulness for scholars is limited to "generic research."

Cashen elaborates on this statement:

I'd say the usefulness of the Internet for art history research depends to a large extent on the subject you're researching. However, it can support serious research through generic means such as the ability to peruse other libraries' catalogues, contact specialist librarians and durations, locate and collaborate with other researchers, arrange research trips in advance (e.g. pre-arrange seeing books, paintings, etc.). Also, one shouldn't underestimate the usefulness of the humanities citation indexes, bibliographies, thesauri, online reference works, etc.<sup>20</sup>

An example of this approach is available from the Open University's Library website:

<http://library.open.ac.uk/bysubject/arts/artspdf/arhistory0901.pdf>"). The Open University

Library's approach, as detailed by Cashen, is similar to the approach found in the tutorial offered by the University of North Carolina at Chapel Hill's Sloane Art Library with numerous subject guides.<sup>21</sup> Cashen only sees web-based resources as a means to print resources, but universities and museums have taken steps to offer more information for educational and research purposes.

Articles like Cashen's coupled with the lack of research on art history web-based resources and scholarly research reveal the reluctance of art historians to use these resources beyond entertainment, in-class teaching tools, and basic information gathering. In the study "Multimedia Research Support for Visiting Scholars in Museums, Libraries

and Universities,” the authors examine how cultural institutions must anticipate the future needs of scholars for new media-intensive activities, like advanced online research.<sup>22</sup>

This study is intended to be part of that process.

In the study “Scholarly Work in the Humanities and the Evolving Information Environment” by Williams S. Brockman, Laura Neumann, Carole L. Palmer and Tonyia J. Tidline, the authors discuss how humanities scholars have been reluctant to take advantage of digital resources even though these resources are now more visible. This study brought together scholars concerned with aspects of information science and librarians concerned with delivering operational information services. As this project suggests, humanities scholars in other disciplines have been more open to a dialogue about the value and uses of web-based resources and have been more receptive to web-based resources for conducting scholarly research than scholars within the art history discipline. As a result, there is more literature on the interactions between the Internet and the humanities disciplines of history, archeology, classics, and literature. The work of Brockman, et al. belies the traditional image of humanists as technophobic.<sup>23</sup>

The comfortable stereotype of humanists as technophobic is no longer accurate. The availability of text and images in electronic form, coupled with the processing power of modern computers, allow the humanist to explore hypotheses and visualize relations that were previously lost in the mass of information sources.<sup>24</sup>

The authors of this report examined how humanities scholars conduct and collate their research. Although the study was based on a small sample of scholars, the results are powerfully suggestive of ways in which academic libraries can adapt to and develop in a rapidly changing environment.<sup>25</sup> For instance, the findings emphasize how important it is

for libraries to map their evolutionary courses in consultation with scholarly users. This collaboration between librarians and scholars would help the library meet the needs of these users online, as well as in person.

Within other humanities disciplines, there has been a move by scholars and librarians to evaluate web-based resources. For instance, Sonja Cameron, a history professor at the University of Glasgow and the coordinator for its Subject Center for History, Classics, and Archeology, has written several articles about using web-based resources for history research. In the briefing paper “Using the WWW to History, Classics, and Archeology, or When is a Bad Website a Good Website?” Cameron provides an instructive tutorial for distinguishing between authoritative, accurate websites and their ill-informed counterparts. She presents numerous tutorials on the website of the University of Glasgow’s Subject Center for History, Classics, and Archeology, noting the importance of evaluation criteria like authority, accuracy, objectivity, and currency for academic use. The Center provides valuable resources for evaluating websites for history, Classics, and archeology, and these criteria have informed the survey (See Appendix F).

There have been several initiatives to train university students in evaluating websites. A large-scale initiative was carried out through the College of Arts and Sciences at George Mason University. This project, conducted from 1999 to 2000, was funded by Technology across the Curriculum (TAC), a program designed to incorporate technology into the liberal arts curriculum. TAC works with teams of faculty, graduate students and instructional designers to promote the use of technology and thereby enhance student

learning in all subjects. Part of this project incorporated three courses from the Department of History and Art History: “Women in Islamic Society,” a history class under the project title “Critical Evaluation of Websites for Women in Islam”; “Survey of Latin-American History,” a history class under the project title “Web Evaluation in Latin American History”; and “National Traditions” and “Arts of India,” two art history classes under the project title “Critical Evaluation of Websites on India.”<sup>26</sup> All of these non-Western topics have been marginalized in a Western historical context, and as a result, are susceptible to misinformation. The project asked students to find websites relevant to the course material and examine the accuracy of the information presented, the intentions of the authors, and the possible impact on the website visitors. The classes shared the same IT goals, which were described in “Electronic Research and Evaluation,” of training students to use electronic tools for research and evaluation. Goals relevant to the class assignments include the following:

- Critically evaluate websites vis-à-vis issues of currency, authorship, authority, and design.
- Evaluate and use topic- and discipline-specific Web sites and other information sources according to scope, coverage, timeliness, reliability, authority, and appropriateness.<sup>27</sup>

With these history and art history classes, we see traditional humanities criteria used, notably currency, authority, coverage, and design. Despite the focus on art history, the presentation of images was not highlighted. Also, it is not clear if the evaluation of design includes usability and aesthetics. Since they had not been addressed in the TAC project, I incorporated the issues of image presentation, usability, and aesthetics into this survey. Overall, the initiative by George Mason University shows the need to evaluate websites and to train undergraduates to find viable information sources for research.

The websites of museum libraries are only briefly mentioned in the literature on museums. However, there have been studies on the general use of museum websites, and they provide insight into online museum use. One example is Suzanne Sarraf's 1999 article, "A Survey of Museums on the Web: Who Uses Museum Websites?" published in *Curator*.<sup>28</sup> This article profiles the average Internet user and the average museum website visitor. Although the study examines how museums can reach untypical museum visitors through online technology, the survey provides some interesting results about the use of museum websites.<sup>29</sup> An important conclusion from this survey is the change in attitudes toward museum websites. As she explains, the sites "have been accused of being nothing more than electronic brochures, marketing tools, or 'pretty pictures.'"<sup>30</sup> However, 83% of respondents said that they learned something new, an important result when seen alongside the negative accusations. While the participants in Sarraf's study were general users (unlike the librarians and scholars of this art museum library study), there is some overlap, and the first study informs the second one. For instance, the average museum website user for this study had an advanced degree and a job in a museum-related field.<sup>31</sup> Overall, Sarraf's study suggests that museums are communicating useful information through their websites.

Sam Hasting and Victoria Kravchyna conducted a more in-depth study of museum websites, and their analysis can be seen in "Informational Value of Museum WebSites."<sup>32</sup> The study was conducted through the University of North Texas and the African American Museum for the purposes of developing a new database for a photographic

collection. In debating the quality and quantity of information the museum website should provide, they felt more information about online visitors was needed. Prior to this study, there were no studies about online museum visitors and their needs, especially regarding their use of images. The participants in their study included scholars, teachers, students, and visitors who were asked if they performed the following functions when visiting the museum's website: searching the collection, finding out about special events, finding information about recent exhibits, doing research, finding an appropriate image, buying tickets online, finding directions, and finding contact information. In analyzing the responses, the authors found that 49% of users of museum websites indicated that they visited for the purpose of seeing an image and 67% of respondents indicated visiting the page for an educational purpose. However, Kravchyna and Hastings noted that only 44% of scholars stated that they utilized museum-sponsored web sites for research.<sup>33</sup>

Another interesting paper on museums is the student paper written by Michael Angeles for his graduate student internship with the Thomas J. Watson Library at the Metropolitan Museum of Art.<sup>34</sup> Although Angeles is a business information specialist, he holds a bachelor's degree in art history and has experience working with art-based organizations. He notes that electronic resources have been increasingly offered by special libraries through the Internet. Angeles describes his paper as "a case study in using the world wide web to create a sense making tool within the context of an art museum library."<sup>35</sup> The case study is based on the Thomas J. Watson Library of the Metropolitan Museum of Art through the Electronic Information Resources Center, and the work was conducted under his supervision of the chief librarian. A primary focus was to improve navigation



through the website. Related to the evaluation survey, Angeles' case study shows that navigation is an important consideration. Improvements in web services were primarily aimed at scholars and researchers. The paper is intended to help museums in the creation of an art research library website. Although the case study does not present a list of evaluation criteria for a "good" museum library website, it shows the initiatives that are being taken in the community.

As library websites become more complex, usability testing is an option for improving online service.<sup>36</sup> Testing shows navigation links on a site can be confusing for library users. Notable researchers, like Jared Spool and Jakob Nielsen, often come from the commercial market, but their ideas can be applied to library and museum websites.<sup>37</sup> Librarians have also conducted usability studies and trained others in the field to evaluate their institutions' interfaces for usability. One example is the work of Susan McMullen of Roger Williams University, who has written a tutorial on usability for the University site. While this study does not specifically employ usability measures, principles like navigability are part of the evaluation process. The usability of the interface is considered in conjunction with aesthetic appeal. Further information on the value and elements of usability can be seen in the methodology section.

The literature related to evaluation criteria and art-related websites is limited and has yet to apply criteria to these sites. However, available literature informs this study and creates a foundation.

## **Methodology**

The purpose of this research is to consider how useful web-based resources are to art history scholars. Are museum libraries and research centers, institutions created to provide relevant information, meeting scholars' needs online? How should web resources be evaluated for the general user and scholar? How is art history unique within the humanities? My first conclusion was that the art history discipline is distinguished from the humanities by the importance of images.<sup>38</sup> Art history scholars use images in different ways.<sup>39</sup> The accuracy of the image is critical, particularly the clarity of the image and the color or resolution of the image.<sup>40</sup>

In the study "Scholarly Work in the Humanities and the Evolving Information Environment" by Williams S. Brockman, et al., the authors concede that it is difficult to get rich and descriptive details on the processes of scholarly work, especially those involving technology.<sup>41</sup> Work done with information resources can be difficult to describe, and "people do not talk readily about tools that they take for granted or activities that are intellectual in nature."<sup>42</sup> I have dealt with these difficulties by creating a survey with numerical-value questions and including sections for additional comments and justifications, as well as open-ended questions. I also asked follow-up questions of the participants. This elaboration on the responses provided interesting and useful qualitative data. In creating the evaluation criteria, I looked at a cross section of literature

to create a comprehensive survey.

For this study, I developed a survey to evaluate websites associated with art museum libraries.<sup>43</sup> The text of the survey can be found in Appendix A. I created the survey by combining the categories of relevance, navigability, and coverage with the presentation of images.<sup>44</sup> The survey is similar to those routinely used in the humanities field in that it focuses on each of the above categories using questions and criteria that are repeatedly referenced in the humanities literature. The questions/criteria within the *Image* category address issues with respect to accuracy and usability of the image.

This survey consists of two parts. The first part consists of four discrete areas worth a maximum of thirty points, and each area contains three questions.<sup>45</sup> Thus, a perfect web site would achieve a maximum score of 120. This construction was implemented to suggest that no one area was more meaningful than another. The use of a numerical scale was intended to place a value upon each of the criteria that would permit a user to make a thoughtful decision as to the utilization of information from a particular website.

Part two consisted of five open-ended questions intended to help the researcher evaluate the answers to questions included in part one and to obtain information the respondents viewed as important but otherwise omitted from part one. This question format elicits rich and valuable details about the evaluation process for art history web-based resources. The test group was a convenience sample consisting of participants specifically selected based on their knowledge of library science and/or art history. Following the model

created in Brockman's report, "Scholarly Work in the Humanities and the Evolving Information Environment," participants include scholars concerned with aspects of information science and librarians concerned with delivering operational information services. All of the participants have a background in the arts. The participants were chosen for their education and professional experience.

#### Librarians:

Participant One: A graduate student in library science who completed the master's degree prior to the completion of this study. The participant holds master's degrees in library science and art history and has work and academic experience with special collections, archives, academic libraries, women's studies, photography, and medieval art.

Participant Two: A graduate student in library science who completed the master's degree prior to the completion of this study. Participant Two also holds a degree in English literature and has worked in theater set design. Work experience includes special collections, exhibits, academic libraries, and undergraduate reference.

Participant Three: A rising second-year master's student in library science. The participant has worked in an academic art library in preparation for a career in this area. Participant Three also worked in the education department of a major U.S. art museum.

Participant Four: A graduate student in library science who completed the master's degree prior to the completion of this study. During graduate studies, this participant

worked in the registrar's office of the university art museum and at an academic design museum.

Participant Five: A photograph archivist and museum registrar. The participant holds a master's degree in library science. During graduate studies, the participant held a year-long internship at the university museum.

Art Historians:

Participant Six: A doctoral student in art history. The subject area is 20<sup>th</sup>-century art. The participant was in the final stages of completing the PhD during this study. Work experience includes interning at the education department of one of the museums included in this study and assisting a dealer of antique maps.

Participant Seven: A doctoral student in art history. The participant specializes in eighteenth and nineteenth-century European art with a focus on feminist theory and a minor in Northern Renaissance art. Work experience includes assisting in a university exhibit.

Participant Eight: A professor of art history. The participant teaches a variety of art history courses, including Gothic art and architecture and modern art. Subject area is Italian Renaissance architecture. Participant has taught several study abroad programs, including trips to Italy.

Participant Nine: Participant has completed a master's degree in art history in eighteenth- and nineteenth-century European art. Work experience includes jobs as a research assistant and museum fundraiser.

For the first part of the survey, four criteria were presented: relevance, navigability, coverage, and quality of images. Relevance was addressed in various ways in available literature. For example, an online tutorial at Ohio University, "A Student's Guide to Research with the WWW," addresses the importance of relevance in evaluating web pages.<sup>46</sup> In the tutorial, relevance encompasses the issues of purpose and audience.

The following survey questions are designed to measure the issue of purpose: "Is the site supposed to be educational or entertaining?" and "Is this site meant to be informational or promotional?" I have included these questions by asking participants if they see the site as a reference site and not just an enticement site (See Appendix F). The concern for relevance is also discussed by Esther Grassian in "Thinking Critically about Discipline-Based World Wide Web Resources" under the heading "Content and Evaluation."<sup>47</sup> Grassian points out that the web offers many resources but that not all of the information is reliable and valuable. Under "Content and Evaluation" she highlights the following questions:

- Does the site refer to print and other non-Internet resources or just Internet resources?
- If a selected list is offered, are criteria provided describing how the list of resources was chosen?
- Is an explanation provided for use of particular criteria?

I have addressed the first question with the survey statement, “Site provides cross-references to print sources and/or other sites.”

The measurement of coverage includes the components of an introduction/mission statement and expansion on collections and reference options. Coverage is one of five criteria cited by Jim Kapoun in "Teaching undergrads WEB evaluation: A guide for library instruction."<sup>48</sup> Coverage is often referred to as “scope.” It considers the principles involved in evaluating the topic covered, including how the coverage differs from that of traditional print materials and how comprehensive the coverage is. Web coverage can differ from that of traditional print materials in terms of depth and seriousness. Since coverage can be difficult to determine, this survey focuses on the more concrete measurement of whether the website includes an introduction or mission statement and whether this mission statement or introduction appears to match the information given in the website.

According to a leader in usability studies, Jakob Nielsen, good navigability is critical to viable websites.<sup>49</sup> Although his focus is on commercial websites, his principles also apply to museum web-based resources. In his “Report From a 1994 Web Usability Study,” Nielsen used Time Warner’s website as an example. Nielsen’s study shows that user interface design is critical to usability and that it should not just be the first-level interpretation of proposed design elements.<sup>50</sup> This consideration will prevent inappropriate metaphors. Thus the principle lesson is that the interface design is critical to usability, which in turn affects the evaluation.

The organization INTRAC created a system for evaluating websites within the non-commercial sector. INTRAC was founded in 1991 as a UK registered charity and was created as a new kind of Support NGO (Non-governmental Organization). Their 1991 policy briefing paper entitled “Evaluating Websites” promotes an evaluation process by which websites can be improved as media for sharing research with an international audience.<sup>51</sup> It argues that previous evaluations have not adequately considered the usage of the medium and then presents its own evaluation process. The first important criterion in the survey is navigability. Although INTRAC’s study focuses on the relationship between Internet technologies and poverty alleviation, the measurements of navigability are still important.

The survey includes the following questions:

1. Does the website feature a table of contents, site map, or equivalent?
2. Can visitors in one section move to another without returning to the home page?
3. Does the website's directory structure and syntax facilitate navigation?
4. Is there a search feature?
5. How easy do you find this website to browse?

These issues are addressed in my study; I asked informants to respond to the following statements: “Linking between sections is easy. For example, site contains a menu (to avoid returning to the homepage)” and “Site has a usable search feature.” The architecture of the web-based resource refers to its structure and the logic by which the pages interconnect, and these components are examined in order to assess each site’s navigability.



When conducting a survey with art historians as participants for “How Useful Are Web-Based Resources to Art History Scholars?” several participants felt that the aesthetics of the web pages should be included in the survey questions. For this reason, I included this consideration under the measurement of navigability in the following statement: “Information is presented clearly (pages are not too complex and are aesthetically pleasing).”

The criterion not directly addressed in the literature on website evaluation is the presentation of images. As noted in the literature review, most discussions concentrate on the digitization process of images and not on how images appear on the website. One tutorial on evaluation touches on the presentation of images but in the context of the overall layout. “Evaluating Information on the Web” from Iowa State University includes a section on design, which is defined as “visual layout, choice of images and media files [which] often have an impact on a website's professional credibility.”<sup>52</sup> Some of the questions included in this section relate to required software and download time, but these technical issues can vary from one computer to another.

Esther Grassian takes another approach to images in the UCLA guide “Thinking Critically about World Wide Web Resources.”<sup>53</sup> She asks the following questions: “Does the document follow good graphic design principles?” “Do the graphics and art serve a function, or are they decorative?” She approaches the images as supplementary to the text and not as a primary concern. Therefore, I did not include these questions in the survey. These tutorials also ask if the information (textual, visual, and aural) enhances or

detracts from the web page's usability or legibility. While related to the issues of aesthetics and navigability, this approach does not address the use of the images for research. Therefore, this survey asks about the ability to locate images, the size and color of images for examination and necessary descriptions or metadata about the images.

Other important criteria not included in the survey are authority and currency. For all of the museum libraries, there is an immediate level of authority. In the technical paper "How Useful Are Web-Based Resources to Art History Scholars?" we discovered that survey participants automatically gave the selected museum a high rating of authority.<sup>54</sup> In addition, currency can be assessed more easily by looking for "last updated" messages and inactive/broken links. Instead of having participants look for these criteria, I have considered both authority and currency in the context of each online museum library.

## **Website Profiles**

### Getty Research Institute:

While all of the selected museums for this study were chosen because of established reputations and strong holdings, I chose the Getty in particular as a model for examining the other museums' website content and initiatives. Since the early 1980s, the J. Paul Getty Trust has worked to apply computing to art history information in a way that benefits research. Originally established as the Art History Information Program (AHIP) in 1983, the Getty Information Institute (GII) was developed to examine ways of applying computer technology to art-historical information in order to improve scholarly access and use. According to the reflections of Eleanor Fink, the last director of the Institute, this mission involved several components:

1) build a critical mass of electronic information essential to art-historical research: catalogs of works of art, visual reproductions, bibliographies, biographies, and provenance of art objects, (2) identify model approaches and act as a catalyst among other institutions with similar interests to foster standards and procedures for sharing information on an international scale, (3) analyze the needs of the art-historical community and tailor emerging technology to the requirements of humanistic research, and (4) influence the development of a technical structure through which others could contribute and retrieve data.

Through the Getty Information Institute (GII), the Trust and the Getty Museum developed several initiatives, such as the Getty Vocabularies, which includes the Union

List of Artists Names. Working with Columbia University, the Institute created the Avery Index to Architectural Periodicals, and collaborating with Clark Institute of Art, it created the now essential database known as the Bibliography of the History of Art. While the Information Institute has since been closed and restructured, the Getty Research Institute and its research library still provide important information through the web, including the catalog and GII projects like the “Thesaurus of Geographic Names” (a database of geographic place names presented in hierarchical clusters).

At the center of the Research Institute is the Research Library, which offers research resources and services. The Library focuses on the history of art, architecture, and archeology, as well as relevant materials from the humanities and social sciences. Under “Research Library Resources,” web users can search the library catalog, photo study collection, special collections highlights, provenance database, and digital libraries based on the museum’s holdings. Then, under “Research Library Services,” the museum provides information about access, circulation, interlibrary loans, and grants.

In addition to these information resources, this study also looks at the resources listed under “Standards and Vocabularies” and “Other Getty Research Resources.” Special links under the latter section include databases and indexes listed through the library, as well as links to the museum’s collections and exhibitions. This section highlights important parts of the museum and its website for clearer access. The section under “Standards and Vocabularies” displays the significant projects created by the Getty Information Institute.

By navigating through the Getty's Research Institute from the homepage, users come to the section entitled "Conducting Research." Other sections include "Scholarly Activities" about scholars in residence and "About the Research Institute," which lists information about staff, exhibitions, events, and the library. Here, the information provided about the library is an overview with links to the catalog and policies. Therefore, I have only focused on the library's role in the structure through the section "Conducting Research."

In the 2004 workshop "Putting the Digital Puzzle Together: Creating a Digital Project" during the American Library Association conference, Murtha Baca spoke about her role as the head of the Getty Vocabulary Program and Digital Resources Management.<sup>55</sup> During her presentation, she discussed how strong vocabularies are central to access for users searching the website. This includes adding common misspellings and anonymous artists who are later named. The central argument of the presentation was that five key elements are needed for an effective digital collection. She referred to them as "The Five Cs": content ("critical mass"), curation, cataloguing, controlled vocabularies, and copyright.<sup>56</sup>

Baca presented a detailed guide for creating a useful and informative web-based project. Part of an informative website, she explained, is the description of the objects. When describing objects for the Getty Research Institute's website, the staff uses more "harried" metadata than the Museum because the collection is more diverse.<sup>57</sup> Baca criticized the web-based resource database RLG Cultural Materials (RLG is the

international member organization of universities, libraries, archives, and historical societies) for not having any curation or vocabulary control, which in turn hinders access

The layout of the website is also crucial to the website's effectiveness. Baca emphasized the need for information professionals to be involved in the website design. She cited "Cataloguing Cultural Objects: A Guide to Describing Cultural Works and Their Images" by the Visual Resources Association as an example of this involvement. The editorial team was involved in the database design of this web-based resource. In contrast, the Metropolitan Museum of Art does not use a controlled vocabulary because there is no communication between the web designers and the curators and librarians. As with the RLG database, access is hindered and website visitors are not aware of the available information.

When discussing web interfaces, Baca talked about the importance of a clear interface for navigability over an aesthetic design. She explained that with the redesign of their website, the Getty Research Institute is trying to deliver information and "not trying to win a pretty award."<sup>58</sup> However, she criticized the interface of Iconclass, an iconographic classification system, for its unattractive interface. Therefore, the aesthetics of the interface is still significant.

Scholars create a key audience for the Institute. But, because the Getty Research Institute can be accessed on the web, the audience has increased to include non-scholars. For this reason, the Institute's staff has created thematic groupings of objects for browsing. The

Institute includes information on their website about hours and locations for visitors, but according to Baca, scholars and researchers are prominent users of the website because of its good access points.

The Getty is referred to as a strong resource in various university-based subject guides and course listings. For instance, the Pitt Digital Library, run by University of Pittsburgh, has a subject guide for art history and architectural history that lists the Getty Research Institute for the History of Art and Humanities—Research Library. Unlike other subject guides, the Pittsburgh guide lists the Research Institute and not simply the museum. Even more significant is that they list the Getty Institute under “Research Libraries” showing that the Getty is seen as a source for scholarly information which should be conveyed through the website. The guide then tells potential users what resources are provided by the Getty. An interesting link to the Getty Research Institute is from Reed College in Portland, Oregon. The website has photographs of the building for university students to study its architecture.

#### Tate Museum Research Center:

The Tate Museum (now Tate Britain) was created in 1897 as the national museum of British art; the website was created in 1998. The library and archive collections are housed in the Hyman Kreitman Research Centre, a new facility for researchers. Since images are central to any museum, the Tate has created a committee to make their artwork available online through Insight. The Tate’s approach is different from the Getty’s, which attributes the web content to named individuals in the Web group as well

as to consultants and additional Getty staff. With the Tate, individual authors are not named, except within their online journals, the Tate Magazine and Art on the Net; rather, they are collectively identified as the Tate. The information put on the website is created by the Information Department in collaboration with web designers.

When looking at the Tate's museum collection, the user can search it either by artist or artwork through an index or by gallery. George Landow was asked to critique the Tate due to his knowledge of art history and hypertext, and he criticized many of the Tate's images as small and not viable for study. Other images require multiple linking to see a larger version. These problems make the Tate's images too inconsistent to be viable for study. In his discussion of art history on the web, Tom Flynn commented on the Tate's failure to fully utilize images and graphics to create a dynamic site.

The Research menu heading of the Tate's website gives users three options: to find out about Tate's research program, to make use of the Tate's Research Services, or to explore the depth of the Tate's Collection online. The Research Center is composed of the library and archive collections, and the webpages for the library collection are limited to an overview about the holdings and general access information. In contrast, the archive collection has some tutorials for using the variety of materials, as well as showcases on the Tate's history, the Bloomsbury Group, and American art critic Barbara Reise. These showcase attractive displays divided into a moving display and a searchable database, and they provide the user's first online access to the Archive. The Archive Journeys are moving displays with images and text. For wider use, the journey can be seen in Flash or



HTML versions. All of them include a timeline, a quiz based on information in the journey, and a list of other resources (other sections of the museum website, other web-based resources, and print resources). In order to aid in the study of the subjects, the website also offers users a printable version. The journey for the Bloomsbury Group also includes brief biographies of primary members, and more significant members have extended and elaborate biographies that are separate from the main list. This journey also shows the visual and literature art created by the member being discussed. The thumbnail images link to larger versions with extended descriptions, and some images can be studied more closely with a zoom feature. The images can be selected and saved for further study.

The Archive Showcase is a database with over 4,000 items that can be searched according to the three initial themes of the Tate's History, the Bloomsbury Group, and the art critic Barbara Reise. It is part of a pilot project to assess user response to this kind of material being made available online. Users choose one of the three themes, and then they can choose a media and/or category. After choosing the Tate's History, users can search the entire online archive or narrow the media to books and printed material, objects, photographs and artworks, or unpublished documents. The categories include art and literature, events, interests and ideas, people, and places. Both media and categories have subcategories, and the information is presented on what appears to be a card catalogue file. Users can click on the link underneath this image to see the results. It is not immediately evident, however, that users need to look below the card to link to the search results. This feature hinders access and usability. Looking at the list of results,

users see a thumbnail and description of the object. After clicking on the title or thumbnail, users are taken to an extended presentation of the work with a larger image and the media and categories related to the image. As with the Archive Journeys, the images can be saved. Although the images are usually accessible, some searches resulted in broken images.

Many of the citations for the Tate are presented through print art journals and newspapers. Of the surveyed websites, the Tate is the only site with significant print citations. The user must be wary of such citations as many of the references are for the museum and its collection, not the website. The museum is also included in established print directories and on-line directories such as Yahoo. The museum is also cited by commercial websites that use images from the collection, such as Popular Posters.

During the 2003 International Cultural Heritage Informatics Meeting, Jemima Rellie, the Head of Digital Programs at the Tate since 2001, discussed the online developments of the museum.<sup>59</sup> Her job entails having responsibility for the strategy and co-ordination of public-facing digital content. In her presentation, she discussed the online developments of the museum. According to Rellie, first-generation museum websites commonly listed information about exhibitions and events at offline sites. The Tate's current website is in its second generation, but there is a redesign planned for 2004-2005. The paper presented some of the changes planned to improve the services offered and the management of those services. These activities include education and research. One of the objectives of the project is to "facilitate new partnerships to improve the range of content and services

offered,” and part of this objective is to improve collections and research.<sup>60</sup> Rellie asked if Tate Online should be the first place to visit online to find out about British art, 20th-century art, or all art, showing that museums are examining their roles in the research process. After digitizing the core collection, they are now focusing on more contextual information, which includes material from the Tate archives.

The Museum’s online presence was also discussed at the 2004 Museums and the Web conference with the presentation “One Site Fits All: Balancing Priorities at Tate Online” by Jemima Rellie, Head of Digital Programs.<sup>61</sup> In her presentation, Rellie discussed how the museum staff is working to meet the needs of online users, and not just visitors. They refer to Tate Online as the Museum’s fifth gallery, designed with the goal of increasing public awareness and appreciation of art. Including the Research Center, Tate Online is visited by over 2 million users every year. Because of the diverse information needs of these users, almost every Tate department now contributes to the web content.

As an enticement site, the Museum’s Research Center offers visitor information and details about the research services available to scholars. Professor Trish Cashen suggested that the Internet can be an education tool but that its usefulness for scholarly research is limited to such “generic research.”<sup>62</sup> Lauren Weingarden, a professor of art history and museum studies, explained that she primarily uses museum websites in class as visual tools and to locate images relevant to her area, but, illustrating the importance of print within the discipline, she then orders the print catalogue rather than relying on the web source.<sup>63</sup> Their comments show that scholars have been reluctant to rely more heavily on web-based resources despite the potential.

In addition, the Tate offers information about special events and exhibits. Past events, including conferences and lectures, can also be assessed through web videos, a unique feature. These videos replicate attendance at the events and provide an innovative means for scholarly research; however, this information is hidden within the site. This is a general problem that emerged in discussions with Pat Thompson, librarian at The University of Chapel Hill's Sloane Art Library, who lamented that accurate and useful information does not help the user if it is hidden.<sup>64</sup>

#### Frick Art Reference Library:

The Frick Art Museum is housed in the former mansion of Henry Clay Frick, a Pittsburgh industrialist in coke and steel. The museum's holdings are based on his private art collection, and the mansion was designed by the firm of Carrère and Hastings, the architects who designed the New York Public Library. The house museum retains the feeling of a private home rather than a public space and includes a collection of English eighteenth-century portraits, Italian Renaissance paintings and bronzes, and French eighteenth-century furniture.

Adjoining this building is the Frick Art Reference Library. Although the collection is small in comparison to others in this study, like the Getty, it is a premier art reference source. The library was founded in 1920 by Frick's son to "to encourage and develop the study of the fine arts, and to advance the general knowledge of kindred subjects."<sup>65</sup> But, the work of his daughter, Helen Clay Frick, formed the bulk of the library's material.

She researched the artworks owned by her father and continued to support the library financially until her death in 1984.

The homepage for the museum is a simple menu superimposed onto an image of the enclosed courtyard in a frame. The art library website can be accessed from the top of the menu. The links to the library and the art collections are at the top of this menu and have a larger font size than the rest of the links (education, membership, virtual tour, etc.). The library's main page provides a brief introduction to the library's history and holdings. From here, users can access the library's history, resources, services, catalog (Fresco), announcements and a form for reference questions.

The use of images in the library's site is limited to pictures of the building and Frick family. Instead, the library focuses on information about print and electronic sources that can only be used onsite. Hidden within the website are some images from the collection. Under the listing for Announcements is a link to a press release for the exhibition "The Private Side of the Artist's Hand," shown in the Frick Art Reference Library. Instead of being provided images to study, users are given a view of the installation. The main source for images is through links from the library website. For instance, there is a link to the images available for journalists, and while they are not intended for study, the images are presented in PDF format and are clearly identified with metadata.

The digital project for Spanish books and photographs under "Special Projects, Collaborative Initiatives" is disappointing because there are no images and there is no

reference to forthcoming images. This project is for the electronic processing of Spanish and Spanish Colonial art photographs. While the project description presents it as an ongoing initiative, the website does not meet the criteria of currency in all sections because there are no recent online project. Therefore, full records may be in the catalog without plans to show images.<sup>66</sup> In searching the catalog, I found indicators for records but no images.

Although the library provides secondary information about the collection, there is a strong emphasis on user reference and instruction. There is a clear link for asking reference questions. Users are then given a form to complete and send to the library. The site also provides workshops on how to use the catalogs and indices. They also have an outreach program for graduate-level students in instruction.

Features for reference questions and the online catalog, unlike other information, are shown prominently on the website. The catalog Fresco can be accessed through a separate link or through the menu links for resources or services, and it is one of the few electronic resources available to distant users. Other information is hidden within the website. For instance, the link to the finding aids is available under “Resources” through “Catalogs, Indexes, Finding Aids.” However, the finding aids can only be reached through a second menu in which the listings are not clearly identified as links.

The finding aids are aimed at prospective library users and current users, and they only offer a title and call number for reference books. For instance, the finding aid for “World War II Provenance Research” gives complete citations, but the resources have not been

digitized for long-distance users. However, this finding aid links useful Internet, resources including other organizations' databases and finding aids. Through this feature, the Library serves online users.

Under "Special Projects, Collaborative Initiatives," the library points to collaborative projects to improve database searchability. One example is the REACH Project: Record Export for Art and Cultural Heritage, a Research Libraries Group (RLG) initiative to create a database of museum object records. The goal is to export existing digital data from museum collection management systems and analyze the research value of the resulting database. This initiative is no longer relevant to online users since the website has been frozen, and another website for collaborative projects is no longer available. However, the Frick's website has not been updated to reflect these changes, which points to a problem with currency.

Like the Getty Research Institute, the Frick Art Reference Library is included in the University of Pittsburgh's subject guide for art history and architectural history.<sup>67</sup> As with the Getty, the subject guide includes a description of the research services and resources available through the museum. The Frick Art Museum and the Frick Art Reference Library are referred to together in the Metropolitan Museum of Art's list of museum educational resources, but just a minimal description is provided.<sup>68</sup> The lists of resources were created through the Lita Annenberg Hazen and Joseph H. Hazen Center for Electronic Resources, which is located in the Museum's Watson Library. The Center is intended to serve the research needs of the Museum staff and other Watson Library

users. These lists of education resources are part of the Center's initiative to catalogue hundreds of art-related and general Internet resources for online research. Looking specifically at library catalogues, the Metropolitan points to the Frick's online research catalogue (FRESCO), along with the Getty Research Institute, which is listed as "Getty Research Library, IRIS Main Menu," and the Smithsonian American Art Museum Catalogues.<sup>69</sup>

#### National Art Library of the Victorian and Albert Museum:

The National Art Library is a major reference library and the Victoria and Albert Museum's curatorial department for the art, craft and design of the book. Its holdings fall into one of two categories: general collections and special collections. The publication of the *Universal Catalogue of Books on Art* in 1870 "signalled the Victorians' desire to achieve comprehensive coverage of the subject area" and helped establish the library.<sup>70</sup> Subject areas include prints, drawings and paintings; furniture and woodwork; textiles and dress; ceramics and glass; the art and design of the Far East, India and South East Asia; and the history of the art, craft and design of the book. The focus of the library collections echoes the exhibits of the Victoria and Albert Museum.

The Museum was established in 1852, following the success of the Great Exhibition the previous year. The goals of the Museum were to make works of art available to all, to educate working people, and to inspire British designers and manufacturers. The Museum moved to its present site in 1857 and was renamed the South Kensington Museum. Then in 1899, Queen Victoria authorized a new building to give the Museum a



grand façade and main entrance. The Museum was renamed the Victoria and Albert Museum, in honor of Prince Albert's support for the Great Exhibition and the subsequent building.

When looking at the website of the National Art library, the user can click on the link for "Collections" for an overview of the library's subjects and holding strengths. One of these strengths is book arts, and this listing links to a description of the holdings. This includes text with two small images. By clicking one of the images, users are taken to another page with detailed descriptions of six artist books selected from library holdings. In addition to providing information on the artist, date and title, this section includes comments from the artists and physical descriptions of the books and pages. Although only one book has an image large enough for study, this particular section of the web-based resource is an excellent tool for research.

The National Art Library's website focuses on access to the print collections by providing information to prepare users for visiting the library. The access link provides information about library hours and induction sessions, and there is a link to the catalogue at the top of each webpage. The library website also has numerous subject guides to help visitors access the print collections. For instance, the menu heading for Archives links to the Archive of Art and Design, which includes a link to the guide for Architecture and Interior Design. This guide lists papers and records in various collections. In addition, the collection overview includes a link to Special Collections. Here, users can see a list of the materials the library holds.

Some of the subject guides point to images from the holdings. For instance, the subject guide for the Children's Literature Collection has four images on the webpage. Each image has a caption telling where the illustrations can be found in library. Users can click on an image for a larger picture to examine. However, study of the images is limited because there are no zooming capabilities. As more features are offered on the internet, users expect more "high-tech" features. Not all museum libraries can afford the time and money involved in enhancing images, however. Yet, the website for the Victoria and Albert Museum has more viewing features, and as mentioned, the appearances of the two websites are completely different. The subject guide for Book Art also includes images. The medium-sized image at the top of the guide links to a large image of the object and a longer list of images with detailed notes about each book.

Extensive information is provided with their online exhibitions. For the recent exhibit "Beatrix Potter: West County Colours," users can easily scroll through the images, and each image is identified by title, date, medium, and collection number. Highlighted illustrations have enhanced description. As with the print exhibit catalogue, the curators are credited, and copyright information is provided. Another example is the 2001 exhibit "Art Droids." With all of the online exhibits, each presentation is unique. With this exhibit, users can move through the images through an index or through contiguous pages. The accompanying text gives important information about the images. Users have the ability to view a larger version of the image, but the accompanying text has been transcribed and is no longer a digital representation of the print version within the context of the page. These exhibits provide more information than one of the earliest examples,

“The Book & Beyond: Electronic Publishing and the Art of the Book.” The presentation is simple, and the site includes minimal information.

One of the main purposes of the website is to tell researchers what materials the museum has. The other function is to attract visitors to the museum. In this respect, the library’s web-based resource is an enticement. The website for the museum is much more elaborate than the library’s in terms of images. The presentation is completely different despite the library’s affiliation with the museum. At the library’s site under “What’s New,” there’s a note from 2000 stating that many of the pages have been updated. However, the library is not taking advantage of illustrations and binding designs in order to enable its website to be especially pertinent to long-distance users.

Many citations for the Library only link to the catalogue. These listings include subject guides for students and links from other museums, in addition to commercial websites. An interesting reference to the National Art Library can be accessed through the website for Mapping Asia, a project funded by the Research Support Libraries Program.<sup>71</sup> The project supports research on Asia, the Middle East and North Africa by giving information about available resources in British libraries (university, public, or specialized libraries). This is one of the more detailed links to the Library’s website. It includes information on the institution, descriptions of the collections found in the library and the museum, subjects and material types, management information, and catalogue information. The Royal Institution of Chartered Surveyors also provides a link to the Library on their website.<sup>72</sup> The site describes the information that can be obtained:

access to the catalogue, details of collections, subject guides and details of services. Neither link to the National Art Library's website mentions the online exhibitions.

#### Smithsonian American Art Museum—Information Resources:

The Smithsonian American Art Museum (SAAM), located in Washington, D.C., is the nation's museum dedicated to the art of the United States from colonial times to the present. The museum's wide-ranging collection includes colonial portraits, nineteenth-century landscapes, twentieth-century abstraction, photography, decorative arts, African American art, and folk art. It began in 1829 with gifts from private collections and art organizations prior to the founding of the Smithsonian in 1846, and it is the first federal art collection. The museum was chosen for this project because it is a major research center with several scholarly resources, such as computerized databases, image archives, graduate and post graduate fellowships, and the journal *American Art*.<sup>73</sup>

To access the library/research center for the Smithsonian Museum of American Art (SAAM), users enter through the museum's homepage and click on "Art Information Resources" under "Have a Question? Find an Answer." Like the Getty, the Smithsonian's research information is not organized under the traditional label of library. Instead, information specialists/librarians offer information and guidance through a variety of links (Ask Joan of Art, Search Collection, Get Art Information Online, Visit Us for Art Information-Library and Photo Collection, *American Art Journal*). All of these online services for research are listed under "Art Information Resources." Another link to the library on the homepage is under "Visit Us for Art Information," but the section provides

only a brief overview of the library's services and holdings. There is also a separate link for the reference service "Ask Joan of Art" on the museum homepage. The Library has highlighted these services by including them on the homepage, as well as under "Art Information Resources."

A unique feature of the Smithsonian website is the survey given by the museum. When accessing the museum's main page, users are asked to take part in a survey to improve the site. The first question asks the user's reason for visiting the website (planning to visit, conducting research, creating class assignments, doing homework, browsing). The next series of questions is intended to help museum staff enhance the web-based resource. One question, for example, explains, "We are planning to add more content to the Web site," and asks, "How important to you are the following features?" Users are asked to rate the importance of adding information for entertainment, like events, games, and visitor information. For study and research purposes, users are also asked to rate the need for online exhibits, research findings, access to collections, and communication with curators. Survey participants are also given the option to add further opinions. This survey feature shows a strong interest in understanding their audience and making the web-based resource more usable.

In the 2002 report of the museum's "Strategic Goals: Public Impact and Management Excellence," the Smithsonian American Art Museum presented its operating resources and discussed how they have been applied to performance objectives.<sup>74</sup> The museum's strategic goals include public impact (e.g., offering compelling, first-class exhibitions and

other public programs) and management excellence (e.g., modernizing the Institution's information technology systems and functions). To meet the goals of public impact, the museum intended to use half of its federal resources for exhibitions, a national education program, care of permanent collections, publications, public services, research resources and a popular website. The last two are especially important to the discussion of how the library is presented online. Part of this strategy to reach the visitors involves the expansion of the online reference service "Ask Joan of Art." In the outline of public impact goals, the focus on "Ask Joan of Art" is described as follows:

- Implement a promotional campaign to targeted educators, museum and library professionals, and the general public in order to extend the reach of "Ask Joan of Art."<sup>75</sup>

The research and educational goals also include digitizing every object in the collection, as well as using technology and distance-learning tools to reach classrooms.<sup>76</sup> The long-term goal of digitizing every collection object is a high-reaching one but would be an incredible asset for research. However, the images would need to be large enough for study, and detailed information would have to be provided about each object.

The heading for Art Information Resources leads to "Get Art Information Online," and four indices/databases are listed under this section, including Inventories of American Painting and Sculpture, Peter A. Juley & Son Collection, Pre-1877 Art Exhibition Catalogue Index, and Smithsonian Institution Libraries Catalog. While each database is introduced by a selected painting from the museum, the search results do not have images. Instead, users are given detailed descriptions of works of art (prints, photographs

of paintings, etc.) available for study at the library. The catalogue information includes artist, title, date, medium, subject headings, exhibitions, and other remarks.

Images can be found when searching the collection (Link to “Search the Collection” under Art Information Resources). After entering the artist’s name or the work’s title, keyword, and/or accession number, users are given a list of results with a thumbnail image of the left and to the right, the title, date, and the museum’s name. The thumbnails link to a slightly larger image for study. Some objects do not have online images, primarily because of copyright reasons. The brief description to the right of the image links to further details, including size, medium, and related keywords. These details are vital for scholars researching an artwork.

The museum and its collections are referenced in various university subject guides, as well as popular search engines like Google and Yahoo. Most of the subject guides refer to the Smithsonian Institution, and not specifically to the American Art Museum.

However, the Sloane Art Library of the University of North Carolina at Chapel Hill includes the Museum in its subject guide on American art for a department course.

Under the heading “Websites,” references to the Smithsonian include the following:<sup>77</sup>

- The Inventory of American Painting (Smithsonian) has paintings executed before 1914. Be sure to look at the long view, which may include a bibliography.
- Also look at the Smithsonian American Art Museum. Images of more than 4000 objects in the collections and exhibitions, with artist information.

Cornell University Fine Art Library also includes a link (without a description) to the Smithsonian American Art Museum under a list of general web-based resources for art history that includes museums and databases.<sup>78</sup>

### **Analysis of Survey**

As expected, the Getty Research Institute consistently received high scores. Among the five librarian participants, the Getty's total score was 480 out of 600 points (each participant could award the site up to 120 points), and among the four art historians the score was 418 out of 480 points. While the website did not receive a perfect score, it achieved the highest score from librarians and art historians. Counting all participants, the Getty achieved a total of 898 out of 1,080 points (See Appendices A and B).

Each participant could award a maximum of 30 points per category, and, with five librarian participants the total possible points were 150. The Getty received 125 out of 150 points for Relevance, 121 points for navigability and coverage, and 113 points for images (See Appendix B). The score for images was skewed because Participant One's score was below 20 points. The mean score was 22.6 points, and the median was 22, both of which are strong scores. Participant Two, who awarded the Getty 24 points in the image category, felt that the images were of "decent size and resolution" with good descriptions. However, the participant was frustrated by the inadequate search features. This participant was not the only librarian who complained about locating and searching the images. Participant One, who has master's degrees in both library science and art history, was unable to find any images; this resulted in the low score of 14 points.



Comparing these results to the art historian participants, the Getty Research Institute's website also received high scores. Calculating the librarians' ratings for each website, the Getty Research Institute had the highest score with 480 points out of 600 for 80% (with 100% as a perfect score). The Getty received high scores for every category with the exception of one participant who found the links to images but was unable to access them.

As with the librarians, the Getty Research Institute's website also received high scores among the art historians with 418 points out of 480. For the art historian participants, the Frick Art Reference Library came in second with 81.9%, while the Smithsonian earned 25 points less for 76.7%. Participant Seven gave the museum library website its highest score of 112 points. This could be attributed to the fact that the participant frequently uses the library and is familiar with its resources. The disparity between the scores for the Getty and the Frick are due, in part, to the Frick's low scores for navigability by two participants. Participant Eight was impressed by the ability to ask reference questions online (although when asked what criteria were not necessary in the survey, the participant felt there was no need to ask about two-way communication or self-reference). Smithsonian ranked third despite that their online databases have numerous images and text because of the lack of a mission statement. Some participants also complained that the images were too small to study.

The Smithsonian American Art Museum was a close second for librarians, with 463 points for 77.2% (See Appendix A). Most participants felt that the website's resources

supported research, at least on a general level, and that it was not an enticement site (with the exception of Participant One). The scores for the images category varied widely depending on participants' abilities to locate and search them within the site. Two participants were unable to find many of the images. Those who were able to fully examine the images gave them high scores (between 7 and 9). Participant Three felt it was easy to search the images in the museum's collection, and Participant Four was pleased with the size and color. However, the slightly lower ranking could be attributed to the fact that the text accompanying the images is very basic. Scores for Navigability and Coverage remained high between 20 and 29 points.

Art historians chose the Frick Art Reference Library as the second best website with 393 points for 81.9% (See Appendix A). The website is aesthetically attractive with a blend of text and images on the main page, which helped it score. The menu is clear which aids navigability.

In contrast, the Tate's Research Services received the fewest points from the librarians (384 out of 600 for 64%). This low score is explained, in part, by the consensus that the category of coverage is not sufficiently met in the website.

The National Art Library received the lowest score among art historians and the lowest score for all participants (See Appendix A). Out of a possible 480 points from the art historians, the library website received 265 points. Then, its total score, counting all participants, was 675 out of 1,080 points. The website emphasizes self-reference with

numerous subject guides which are helpful for users. However, the subject guides can be difficult to find and require go into several levels of the site. Also, the interface is antiquated in comparison to the museum's look, and the impressive museum website raises expectations for the library's site.

The inability to find images points to the problem of hidden information. This problem was mentioned earlier as part of a discussion with Pat Thompson, the art librarian at the University of North Carolina at Chapel Hill. As mentioned earlier, participants had trouble finding images on the Getty's website; likewise, three participants were unable to find links to website images for the Frick Art Reference Library (one participant, however, said the image category was unnecessary for the open-ended survey question). This resulted in the two lowest scores for the Library, with 55 points at 45.8% and 67 points at 55.8% (See Appendix D). Although the Frick has some high-quality images, two scores of zero hint at problems with hidden information. When searching the Smithsonian website, Participants One and Five gave low scores to the museum's images because they had difficulty finding them (when they were able to find them). Even Participant Three, who awarded the museum 25 points for images, still commented, "It takes some searching to know where to find images. I was surprised that there are no images in the Photo Study collection." Sometimes hidden information can cause as many problems as the lack of information.

One of the participants mentioned above also gave a score of zero to the National Art Library for the image category. The participant was looking for an image database in

order to answer the survey's corresponding question and did not count the images from exhibitions and study guides as viable examples. Although this is understandable when considering the images for scholarly research, images presented in subject guides and exhibitions (especially the latter) are viable for study.

For some participants, the technology used by the museum created problems in accessing information. For instance, Participant Nine was unable to view the images on the website of the Tate Gallery Research Services during one visit. To combat this problem, it is critical that websites are designed for a variety of computer capabilities.

The second part of the survey asked participants to critique the survey, and participants were able to elaborate on the process of the survey. One question asked what the most helpful criteria was, and another asked about the least helpful. Of the four categories, Relevance was mentioned the most often as the most important criteria. One librarian participant and one art historian participant felt this was an important consideration for using a website, but two other librarian participants felt it was not necessary. While these numbers do not represent statistical significance, they do provide insight into what librarians want to be present in a website and what art historians look for in one.

Participant Three noted that some of the Relevance criteria overlapped, but my intention was to emphasize its importance by highlighting different aspects. For instance, the survey asked, "Information adds to and supports research?" and "Site is a reference site, not just an enticement site?" These points repeat the question of scholarly value for

emphasis. However, the question asking about cross-references to print sources and/or other sites could have been incorporated into the first question mentioned above.

One surprising result was that two of the librarian participants felt that the images category was not necessary for these websites (See Appendix D). One participant, who has master's degrees in art history and library science, made the valid point that the images category was not as important because some websites did not emphasize them. The participant noted that not all museums have the financial resources for staff and technology like the Getty. However, in many instances, images were available but hidden within the website. This may also point to a need by libraries to create a stronger web presence with images. The other participant who felt the image category was not necessary has worked in general reference, special collections, and theater design. Although she has a foundation in the visual, she has not necessarily studied the image as part of research. In contrast, three of the four art historians mentioned the image category as the most helpful.

In the technical paper "How Useful Are Web-Based Resources to Art History Scholars?" participants were asked to answer survey questions related to authority, currency, bias, relevance, and images about four websites (one university site, one museum site, and two personal sites).<sup>79</sup> When asking how the survey could be improved, one participant (Participant Eight) suggested including a question about navigability and the ease of moving through a website. From this response, the Navigability section was developed. The questions incorporated usability and aesthetics, but in retrospect, these issues should

be separated. As Murtha Baca of the Getty Research Institute mentioned, a good site does not need to be aesthetically pleasing.<sup>80</sup> This issue of aesthetics is appropriate with an audience of art historians but can be separated from usability concerns (See Appendix E). Only one participant mentioned navigability as the least helpful criteria, but this response was tempered by the remark that it was important but that it was the least important of the four categories.

No museum library website received a perfect rating. None of the websites even received a perfect score in one category. In a few instances, an individual participant gave the maximum 120 points to a website (See Appendix F). However, some websites frequently received high scores in the same category. For instance, the National Art Library consistently received high scores in relevance because of the subject guides. Also, the Frick Art Reference Library and the Smithsonian American Art Museum achieved high scores in Coverage because of the reference features.

## Conclusion

There is an absence of literature about evaluating web sites within the discipline of art history. As mentioned earlier, this subject is primarily addressed in intradisciplinary conference workshops, so the information is typically temporary and inaccessible to the average researcher. For instance, the review of the Metropolitan Museum's Thomas J. Watson Library by Michael Angeles, based on his student internship, would have been inaccessible if he had not made it available on a personal webpage. In addition, only those who attended the American Library Association 2004 workshop "Putting the Digital Puzzle Together: Creating a Digital Project" had access to the essential information provided by library professionals, such as the Getty Research Institute's Murtha Baca, about web-based tools for scholars and the process involved in creating them.

Only a few scholars have addressed this issue in books or journal articles, including Lois Swan Jones, who wrote *Art Information and the Internet*, an introduction to finding web resources, and Trish Cashen, who published "The Internet and Art History: A Tool or a Toy?" in 1995.<sup>81</sup> However, Jones' work is aimed at all levels of study, from secondary school to postgraduate research, and includes websites that simply point to print sources, and Cashen's article has not been updated to account for the incredible changes that have taken place on the web.<sup>82</sup>

This study attempts to contribute to the examination of web-based resources available for scholars by evaluating several museum websites using the following evaluation categories: relevance, coverage, navigability, and images. The general consensus among participants was that these evaluation categories were appropriate for the study. As noted earlier, relevance was the criteria cited most often by participants as an important part of evaluation. This is revealing in that it is the first question a scholar asks of an information resource—Is this resource relevant to my research? Despite some criticisms about repetition and question order, participants felt that this study plays an important role in discussions of web-based resources. Most notably, Participant Eight, who has been teaching at the university level for over fifteen years, expressed approval of and support for these types of studies.

The participant who expressed the need for navigability in the paper “How Useful Are Web-Based Resources to Art History Scholars?” provided another suggestion for expanding the evaluation criteria. Some museum websites displayed content that was limited to a shorter period of time, like the Frick’s, or a geographic area, like the Tate’s. For this reason, they are limited in their appeal when compared to the Getty’s more inclusive website. When further developing the criteria, accommodations could be made in the questions to address this issue.

Although two participants, both librarians, felt that the image category was not necessary for the selected websites, the majority said this focus was important (See Appendix D). In part, the criticism of the image category can be attributed to the website since they did



no focus heavily on images and others had their images hidden within their pages. In contrast, no participant practicing art history at the time of the survey felt the category was unnecessary. Therefore, this discrepancy could indicate a communication gap between librarians and the scholars they assist. Ultimately, images are critical to the evaluation of any art-focused website. This concern was repeated in correspondence with Chizuko Owada, a member of the Tate's Information Department.<sup>83</sup> Owada, who holds master's degrees in art history and Renaissance studies, felt that the Tate Research Services would score high on relevance, coverage, and navigability. However, she was unsure about the image category. Their internal search system provides greater searchability and more information. When information is provided about images, copyright is the main concern (an issue mentioned earlier as popular in current literature).

Of course, the evaluation criteria must be continually adapted to accommodate changes in web-base resources. As the environment of scholarly information changes, users change in terms of their needs, expectations, and behaviors. Museum libraries need to assess these changes and respond to them; this role cannot be left to academic libraries. Museums like the Getty are at the forefront of meeting these needs, and as a result, the Getty Research Institute was ranked the highest out of the five museum libraries by the participants as a whole and by librarians and art historians as two separate groups. However, even the Getty did not achieve a perfect score. The score was lower than expected because of hidden information and small images. Major museum libraries, like these surveyed, have the opportunity to look for ways to meet these scholarly needs.

This study was based on a small convenience sample, but the results provide valuable information about how museum libraries can adapt to meet the scholarly needs of art historians. Participants from library science were chosen for their interest in the arts through education and work experience. This combination was ideally intended to bring forward participants who could connect their training as information professionals with the anticipated needs of art historians. In turn, art historians were selected based on their advanced levels of research. They were the library users targeted for the study. The similarities and differences in survey results show how information professionals are meeting the needs of scholars and how they still need to adapt to these needs. The results also reveal that greater communication is needed between librarians and their scholarly audience. By understanding the perspective of arts scholars, including their focus on visual images, librarians and other information professionals can better instruct scholars in exploring web-based resources and evaluating them for research value. The potential “cross-fertilization between the scholar concerned with aspects of information science and the librarian concerned with delivering operational information services” benefits both communities.<sup>84</sup>

The disparity between print and virtual tools leads scholars to question whether we can ever anticipate parity between them. Many scholars and information professionals have addressed this question. The Victorian listserv housed at the University of Indiana, for instance, sparked a debate about the value of web-based resources when a mistake was found in a text on the Project Gutenberg website. Project Gutenberg is a generally respected website of digitized books representing key texts from various humanities

disciplines, and their mistake in accuracy led to discussions about the ongoing skepticism scholars have toward web-based resources. The goal of web-based resources should be, perhaps, to achieve critical credibility or to provide web tools that print sources cannot offer. Some of these websites are already achieving these goals; examples include those that have searchable databases and indices, color images at a high resolution that can be enlarged in size, and detailed subject guides. The question, then, should focus on how web-based resources differ from print resources and in what ways are they uniquely useful—and not simply as good as print resources.

Ultimately, this study shows the need for evaluating web-based art resources in an ever-expanding world of electronic resources. Currently, there is no established set of criteria for evaluating websites used in art history. Most discussions about web-based resources focus on digitizing images as replacements for the traditional slide, without giving any consideration to context. Other discussions within the discipline relate to copyright issues because of increased access through the web. The first concern of this study is that evaluation needs to be openly discussed in the discipline. The second concern is that criteria specifically designed for art history need to be used. Because of art history's focus on the image, general evaluation criteria are not sufficient for judging art websites. Librarians need to be at the forefront in establishing evaluation criteria and informing scholars of this evaluation process, and communication between information professionals and scholars is central to this process. Art museum libraries hold valuable information for scholars, and their online presence can and should be utilized to expand and guide research.

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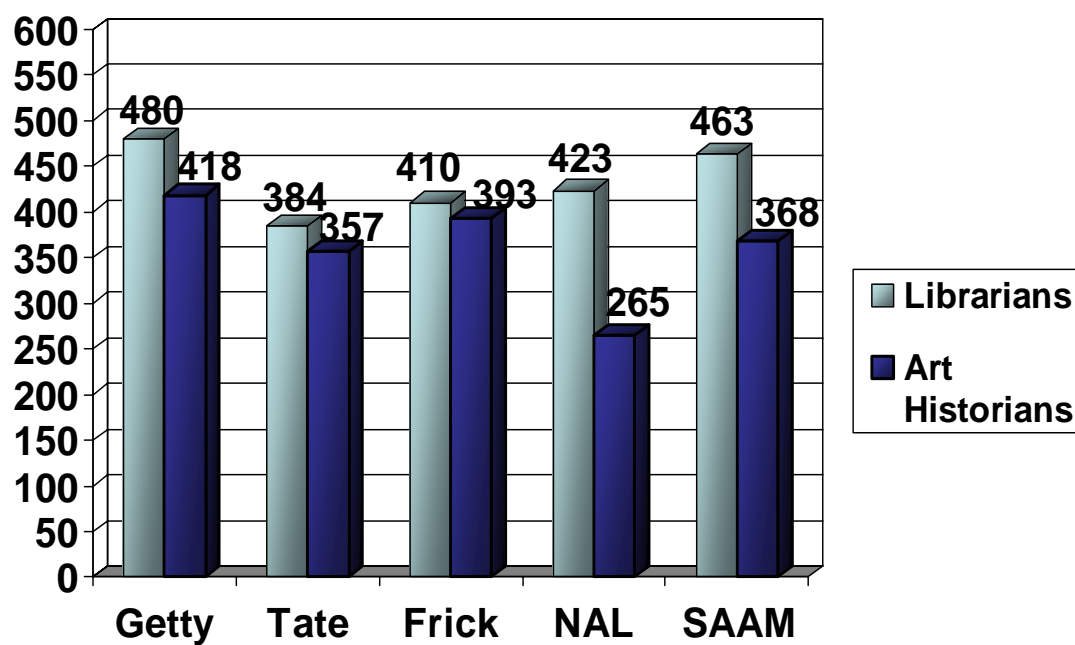
Wulf, William A. "Warning: Information Technology Will Transform the University." *Issues in Science and Technology* 11: 46-52.

## Appendix A

## Total Scores for Each Museum

Librarian total possible points=600

Art historian total possible points=480



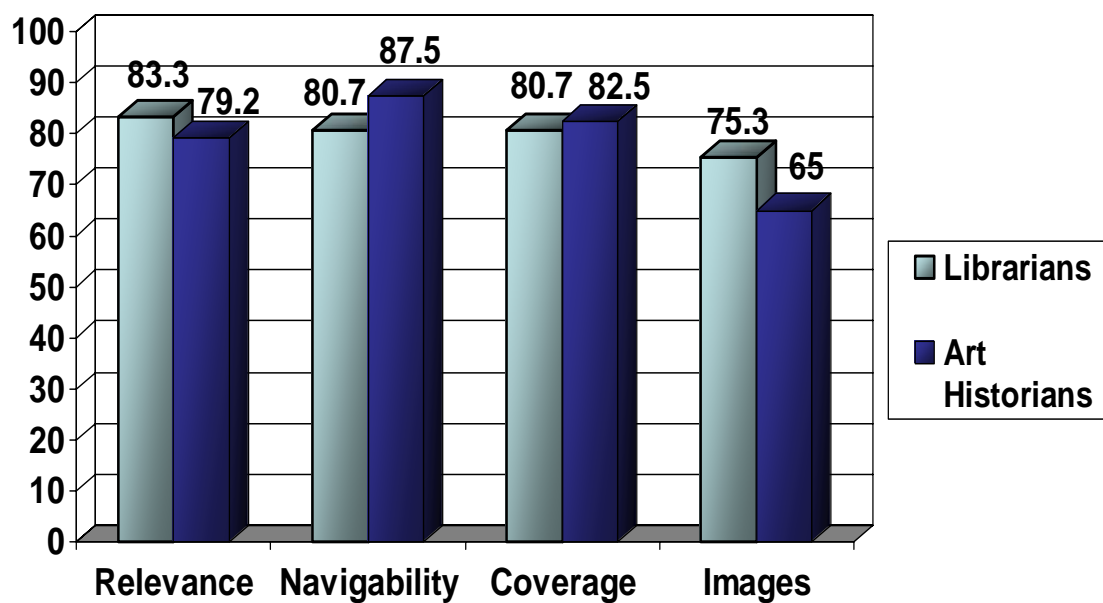
NAL=National Art Library

SAAM=Smithsonian American Art Museum

## Appendix B

# Getty Research Institute

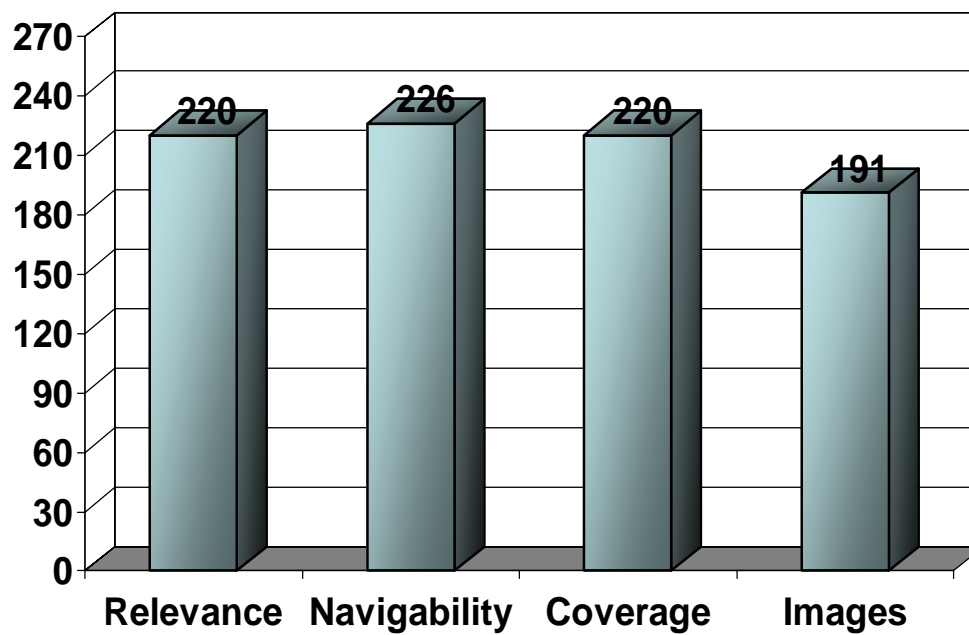
Librarians in comparison with Art Historians  
(percentages)



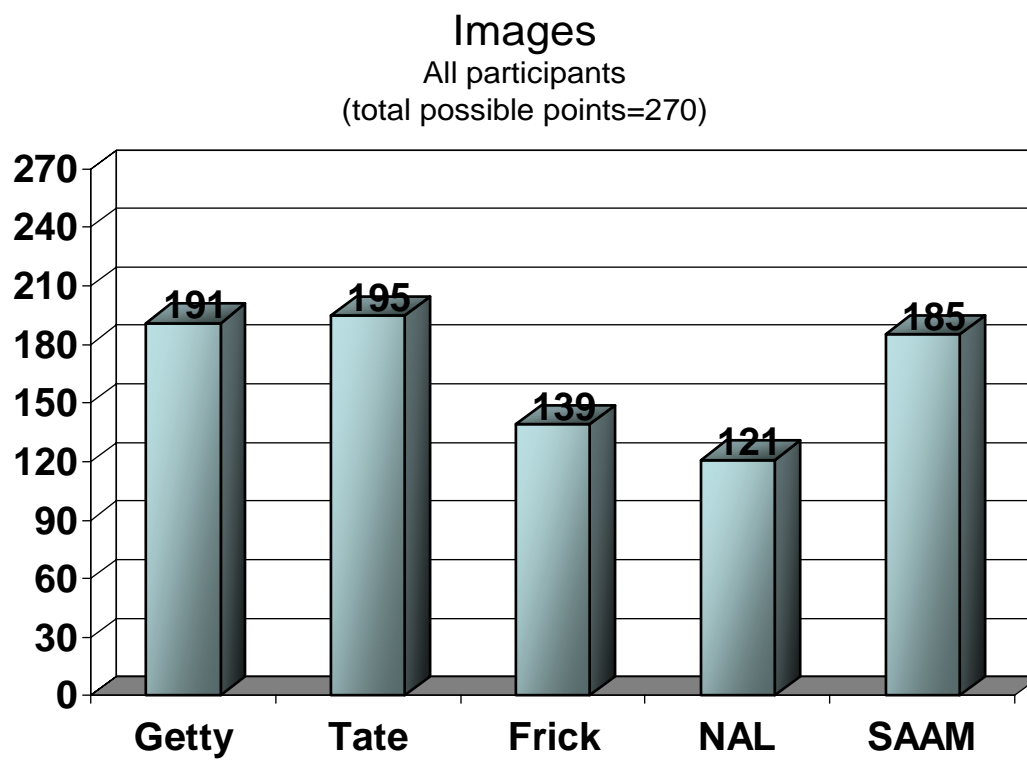
## Appendix C

## Getty Research Institute

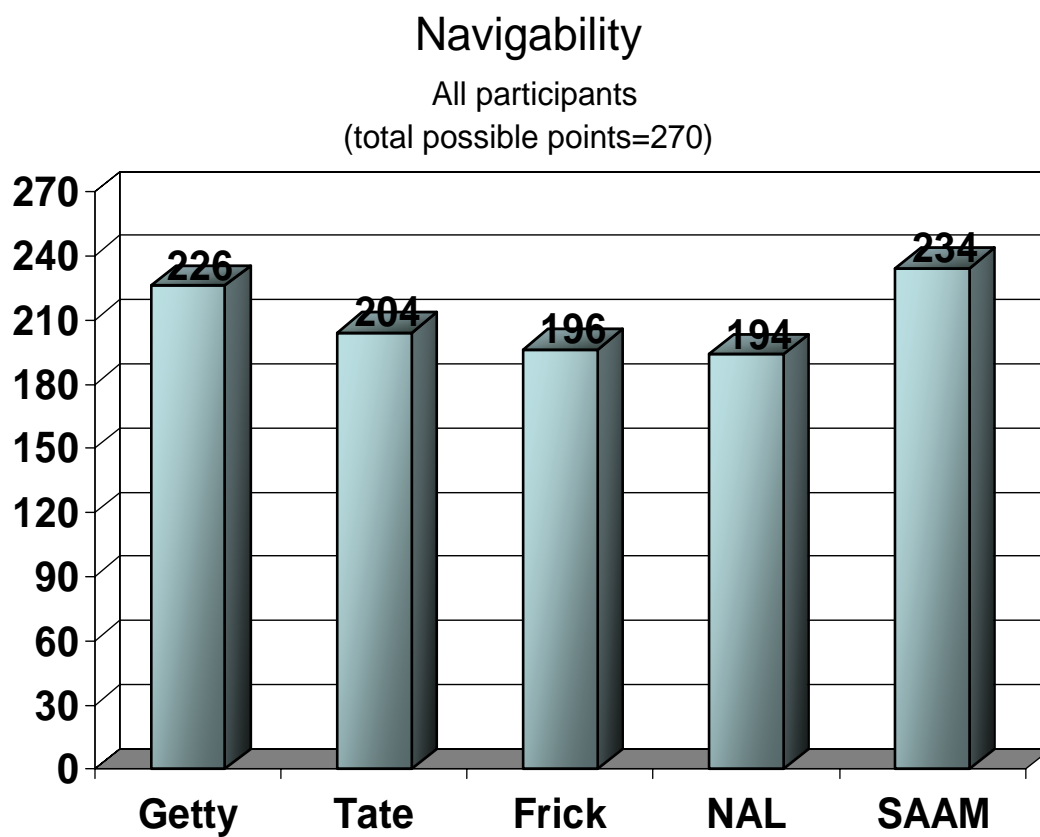
All Participants  
(total possible points=270)



## Appendix D



## Appendix E



## Appendix F

## Example from Survey

<b>The Getty, Los Angeles, The Research Institute,</b> <a href="http://getty.edu/research/">http://getty.edu/research/</a>		
Measurement (Criteria)—	Score	Comments/Justifications
<b>A. Relevance:</b>		
1. Information adds to and supports research.		
2. Site provides cross-references to print sources and/or other sites.		
3. Site is a reference site, not just an enticement site.		
<b>B. Navigability:</b>		
1. Information is presented clearly (pages are not too complex and are aesthetically pleasing).		
2. Linking between sections is easy. For example, site contains a menu (to avoid returning to the homepage).		
3. Site has a usable search feature.		



<b>C. Coverage:</b>		
1. There is an introduction/mission statement and it matches the coverage of the site.		
2. Information expands on museum and library materials. Site provides information about the collections and how to access the holdings.		
3. Site provides reference (self-reference and/or two-way communication)		
<b>D. Images:</b>		
1. Images are usable (appropriate size and color).		
2. Images are easily locatable and/or searchable.		
3. Text identifies and describes images.		

## Notes

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<sup>1</sup> Nicolae-George Dragulanesu, "Website quality evaluations: criteria and tools." *International Information and Library Review*. 34:3 (September 2002): 247-54.

<sup>2</sup> Librarians' Index to the Internet (Information You Can Trust). Homepage. Retrieved 30 May 2004 <<http://lii.org>>.

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The organization's staff includes librarians, editors, and programmers.

<sup>4</sup> Thomas E. Jevet, "Designing and Managing Information in the Fast Lane." *First Monday*. 2:8 (August 4, 1997). Retrieved 1 June 2004 <[http://www.firstmonday.org/issues/issue2\\_8/jevec/index.html](http://www.firstmonday.org/issues/issue2_8/jevec/index.html)>.

<sup>5</sup> Caroline Osborne and Jennifer Rinalducci, "Evaluation of Web-Based Resources within the Art History Discipline." Technical Reports--School of Information and Library Science, University of North Carolina-Chapel Hill (December 2002) Retrieved 1 June 2004 <<http://ils.unc.edu/ils/research/reports/TR-2002-04.pdf>>.

<sup>6</sup> Ibid.

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<sup>7</sup> Tom Flynn, “The Dearth of Art History.” *Art Review*. 53 (July/August 2001): 75.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Lauren S. Weingarden, “Website Use for Research.” Email to J. Rinalducci. October 2002 and May 2004.

Dr. Lauren Weingarden is a professor of art history and museum studies, and she is a member of the International Association of Word and Image Studies.

<sup>12</sup> Mike Thelwall and Gareth Harries, “Do the Web sites of Higher-Rated

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<sup>13</sup> Rob Kling and Geoffrey McKim, “Scholarly Communication and the Continuum of Electronic Publishing.” *Journal of the American Society for Information Science*. 50:10 (1999): 890 – 906.

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<sup>14</sup> Kenneth Hama, "The Role of Museums in Online Teaching, Learning, and Research." *First Monday*, 9:5 (May 2004), Retrieved 15 June 2004  
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Kenneth Hama is Assistant Director for Collections Information at the J. Paul Getty Museum in Los Angeles and Senior Advisor for Information Policy for the J. Paul Getty Trust. As Senior Advisor he oversees the management of the Getty Trust Web site, <http://www.getty.edu>, as well as strategic planning and funding for information management across all Getty programs in art collecting, conservation and research as well as philanthropy. As Assistant Director in the Museum he oversees the creation, maintenance and use of digital resources in the Museum's public and scholarly activities. This includes oversight of the departments of Information and Media Systems, Photo Services, Digital Media, Interactive Programs and Information Planning. From 1987 until 1996 he was Associate Curator of Antiquities for the Getty Museum.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

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<sup>18</sup> Trish Cashen, "The Internet and Art History: A Tool or a Toy?" *Computers and the History of Art*. 5:2 (1995).

<sup>19</sup> Ibid.

<sup>20</sup> Trish Cashen, "Website Use in Art History." E-mail to J. Rinalducci. (2 December 2002 and June 2003).

<sup>21</sup> Ibid.

<sup>22</sup> Marcia J. Bates, Catharine Hulsey and Geoffrey Jost. "Multimedia Research Support for Visiting Scholars in Museums, Libraries, and Universities." *Information Technology and Libraries*. (June 2002): 73-83.

<sup>23</sup> William S. Brockman, et al. "Scholarly Work in the Humanities and the Evolving Information Environment." Washington, D.C.: Digital Library Federation of the Council on Library and Information Resources. (December 2001): 1.

<sup>24</sup> William A. Wulf, "Warning: Information Technology Will Transform the University" *Issues in Science and Technology*. 11 (Summer 1995): 46-52.

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<sup>25</sup> Council on Library and Information Resources, CLIR Publications and Resources: CLIR Reports from Council on Library and Information Resources. Retrieved 15 June 2004 <<http://www.clir.org/pubs/reports/reports.html#pub104>>.

<sup>26</sup> “Technology across the Curriculum (History and Art History Courses).” George Mason University. Projects funded in 1999-2000. Retrieved 1 July 2004 <<http://cas.gmu.edu/tac/projectlist.php?Year=1999-2000>>.

<sup>27</sup> Ibid.

<sup>28</sup> Susanne Sarraf, “A Survey of Museums on the Web: Who Uses Museum Websites?” *Curator*. 42:3 (July 1999): 231-43.

At the time the article was written, the author was the assistant to the conservation administrator at The National Gallery of Art in Washington, DC. The survey is part of Sarraf’s thesis for a master’s in Museum and Heritage Studies at the University College London.

<sup>29</sup> Sarraf compares the demographics of the average internet user and the average user of museum websites.

<sup>30</sup> Ibid.

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<sup>31</sup> The “average” museum website visitor for Sarraf’s study was female, held a degree in higher education, was approximately 36 years old, was from North America, occupied a job in a museum-related field, was Caucasian, had an average annual income of \$53,520 and spent an average of 7.5 hours/week searching the web.

<sup>32</sup> V. Kravchyna and S. K. Hastings, “Informational Value of Museum Web Sites.” *First Monday*. 7: 2 (February 2002). Retrieved 5 June 2004  
<[http://firstmonday.org/issues/issue7\\_2/kravchyna/index.html](http://firstmonday.org/issues/issue7_2/kravchyna/index.html)>.

At the time the article was written, Victoria Kravchyna was a doctoral candidate at the School of Library and Information Sciences at the University of North Texas, and Dr. Sam Hastings was a faculty member.

<sup>33</sup> V. Kravchyna and S. K. Hastings. “Informational Value of Museum Web Sites.” *First Monday*. 7: 2 (February 2002): 11. Retrieved 5 June 2004  
<[http://firstmonday.org/issues/issue7\\_2/kravchyna/index.html](http://firstmonday.org/issues/issue7_2/kravchyna/index.html)>.

<sup>34</sup> Michael Angeles, “Case Study: A Museum Library Website.” Retrieved 5 July 2004 <[http://studioid.com/pg/case\\_study\\_a\\_museum\\_library\\_website.php](http://studioid.com/pg/case_study_a_museum_library_website.php)>.

<sup>35</sup> Ibid.

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<sup>36</sup> Battenfield, Robert L., reviewer, “How usable is your site?” Review of *Usability testing for library websites: a hands-on guide* by Elaina Norlin and C. M. Winters. *Library Journal* (Feb. 15, 2002): 185. Book- (Chicago: American Library Association), 2001.

<sup>37</sup> See further references to usability in Methodology.

<sup>38</sup> The online tutorial “Creating Accessible Digital Imagery” by Birdsey discusses the digitization of certain images from The Royal Photographic Society, including, image quality, indexing and database.

<sup>39</sup> V. Karvchyna and S. K. Hastings, “Informational Value of Museum Web Sites.” *First Monday*. 7: 2 (February 2002): 11. Retrieved 5 June 2004  
<[http://firstmonday.org/issues/issue7\\_2/kravchyna/index.html](http://firstmonday.org/issues/issue7_2/kravchyna/index.html)>.

49% of users of museum web sites indicated they visited for the purpose of seeking an image and 67% of respondents indicated visiting the page for an educational purpose.

<sup>40</sup> “Digital Imagery for Works of Art, Conference Report” through Harvard University Art Museums (<http://www.dli2.nsf.gov/mellon/report.html>) and Christopher Whitcombe’s “Art and Technology: A Brief History” (<http://witcombe.sbc.edu/arth->



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[technology/arth-technology1.html](http://technology/arth-technology1.html)) represent current trends in literature on art-related web resources.

<sup>41</sup> William S. Brockman, "Scholarly Work in the Humanities and the Evolving Information Environment." Washington, D.C.: Digital Library Federation of the Council on Library and Information Resources. December 2001.

<sup>42</sup> William S. Brockman, "Scholarly Work in the Humanities and the Evolving Information Environment." Washington, D.C.: Digital Library Federation of the Council on Library and Information Resources. December 2001: 36.

<sup>43</sup> A copy of the survey is attached to this paper as appendix A.

<sup>44</sup> Trish Cashen, "Website Use in Art History." E-mail to J. Rinalducci. (2 December 2002).

George Landow, "Website Evaluation in Art History." E-mail to J. Rinalducci. (15 October 2002).

The decision to draw from the humanities resources was supported by correspondence with Trish Cashen, an art history professor at Open University with expertise in computer technology for the Journal of Computers and History of Art. Cashen suggested that, in her opinion, it was not possible to conduct art historical research solely via the internet; but that the internet was a permissible resource for

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locating humanities type information as well as determining the location and accessibility of particular art collections. She also suggested that an image and its corresponding text are inseparable. George Landow and Trish Cashen are considered experts in the area of using computer technology for the humanities and both scholars have published extensively in the art history discipline and specifically on the subject of computer applications for the discipline. Landow maintains the website Victorian Web: An Overview and Cashen is the web manager for the journal Computers and the History of Art. Therefore, both Landow and Cashen were contacted for this study.

<sup>45</sup> Points on a scale of 0 to 10 were to be assigned. Zero was the minimal amount of points a participant could award and ten was the maximum.

<sup>46</sup> Craig Branham, "A Student's Guide to Research with the WWW." Department of English at Saint Louis University. Available at <http://www.slu.edu/departments/english/research/index.html>.

<sup>47</sup> "Esther Grassian, "Thinking Critically about World Wide Web Resources." UCLA College Library, 2000. Retrieved 1 May 2004  
<<http://www.library.ucla.edu/libraries/college/help/critical/index.htm>>.

<sup>48</sup> Jim Kapoun, "Teaching undergrads WEB evaluation: A guide for library instruction." C&RL News (July/August 1998): 522-523. Reprinted by Cornell

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University. Retrieved 1 May 2004

<<http://www.library.cornell.edu/olinuris/ref/webcrit.html>>.

<sup>49</sup> Jakob Nielsen, "Report From a 1994 Web Usability Study." Useit.com. 1997, 1994. Retrieved 1 May 2004

<[http://www.useit.com/papers/1994\\_web\\_usability\\_report.html](http://www.useit.com/papers/1994_web_usability_report.html)>.

<sup>50</sup> One participant in Nielsen's study was surprised when the "Virtual Garden" button pointed to information for home gardeners instead of a list of websites to visit.

<sup>51</sup> INTRAC-NGO Research Program, "Evaluating Websites: NGO Policy Briefing Paper No. 5". (November 2001). Retrieved 15 May 2004

<[http://www.intrac.org/Intrac/docs/NGOPBP\\_5.pdf.PDF](http://www.intrac.org/Intrac/docs/NGOPBP_5.pdf.PDF)>.

<sup>52</sup> Instruction Commons Staff of Iowa State University, "Evaluating Information on the Web." Retrieved 1 May 2004

<<http://www.lib.iastate.edu/commons/resources/evaluation>>.

<sup>53</sup> "Esther Grassian, "Thinking Critically about World Wide Web Resources." UCLA College Library, 2000. Retrieved 15 April 2004

<<http://www.library.ucla.edu/libraries/college/help/critical/index.htm>>.

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<sup>54</sup> Caroline Osborne and Jennifer Rinalducci, "Evaluation of Web-Based Resources within the Art History Discipline." Technical Reports--School of Information and Library Science, University of North Carolina-Chapel Hill (December 2002) Retrieved 1 June 2004 <<http://ils.unc.edu/ils/research/reports/TR-2002-04.pdf>>.

<sup>55</sup> Murtha Baca, "Using Controlled Vocabularies and Thesauri to Enhance End-User Access; Metadata, Vocabularies and the Web." *Putting the Digital Puzzle Together: Creating a Digital Project*. ALCTS Networked Resources and Metadata Committee of American Library Association. Marriot Hotel, Orlando, Fl. 25 June 2004.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

<sup>58</sup> Ibid.

<sup>59</sup> Jemima Rellie, "Tate Online: Towards a Third Generation Museum." *International Cultural Heritage Informatics Meetings: Cultural Institutions and Digital Technology*, (8-12 September 2003), l'École du Louvre, (Paris: Archives and Museum Informatics Europe, 2003). Retrieved 10 June 2004 <<http://www.ichim.org/ichim03/PDF/080C.pdf>>.

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<sup>60</sup> Ibid.

<sup>61</sup> Jemima Rellie. "One Site Fits All: Balancing Priorities At Tate Online." *Museums and the Web*. David Bearman and Jennifer Trant, eds. 2004, (Toronto, Canada. Toronto: Archives & Museum Informatics, 2004). Retrieved 5 July 2004 <<http://www.archimuse.com/mw2004/papers/rellie/rellie.html>>.

<sup>62</sup> Trish Cashen, "Website Use in Art History." E-mail to J. Rinalducci. (2 December 2002).

<sup>63</sup> Lauren S. Weingarden, "Website Use for Research." Email to J. Rinalducci. (May 2004).

<sup>64</sup> Pat Thompson, Personal interview. June 2003.

<sup>65</sup> Frick Art Reference Library, "An Introduction to the Frick Art Reference Library." Retrieved 30 May 2004 <<http://www.frick.org/html/libf.htm>>.

<sup>66</sup> The link to the Frick's catalog Fresco from the project description for Spanish books and photographs is broken because an incorrect address was entered into the code.

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- <sup>67</sup> Pitt Digital Library, "Subject Guide for Art History and Architectural History." (2 June 2004). University of Pittsburgh. Retrieved 1 July 2004  
<[http://www.library.pitt.edu/subject\\_guides/arthistory/#researchlib](http://www.library.pitt.edu/subject_guides/arthistory/#researchlib)>.
- <sup>68</sup> Metropolitan Museum of Art, "Educational Resources: Museums." Retrieved 5 July 2004 <[http://www.metmuseum.org/education/er\\_online\\_links/er\\_mu.htm](http://www.metmuseum.org/education/er_online_links/er_mu.htm)>.
- <sup>69</sup> Metropolitan Museum of Art, "Educational Resources: Library Catalogues." Retrieved 5 July 2004  
<[http://www.metmuseum.org/education/er\\_online\\_links/er\\_lc.htm](http://www.metmuseum.org/education/er_online_links/er_lc.htm)>.
- <sup>70</sup> National Art Library, "Collections Introduction." Retrieved 15 May 2004  
<<http://www.nal.vam.ac.uk>>.
- <sup>71</sup> Mapping Asia Consortium, *Victoria and Albert Museum and National Art Library*, (29 July 2002). Retrieved 30 May 2004  
<<http://www.asiamap.ac.uk/collections/institution.php?ID=24&Query=%22Victoria+and+Albert+Museum+National+Art+Library%22>>.
- <sup>72</sup> Royal Institution of Chartered Surveyors, Retrieved 30 May 2004  
<<http://www.rics.org/ricscms/bin/show?class=Link&template=/includes/showlink.html&id=888>>.

<sup>73</sup> Continues the journal *Smithsonian Studies in American Art*.

<sup>74</sup> Smithsonian American Art Museum, "Strategic Goals: Public Impact and Management Excellence." Washington D.C., (2002). Retrieved 15 June 2004  
<<http://www.si.edu/about/budget/2004/26-SmithsonianAmericanArtMuseum.pdf>>.

<sup>75</sup> Smithsonian American Art Museum. "Strategic Goals: Public Impact and Management Excellence." (2002): 75. Retrieved 15 June 2004  
<<http://www.si.edu/about/budget/2004/26-SmithsonianAmericanArtMuseum.pdf>>.

<sup>76</sup> Bulleted points:

- Photo-digitize an additional 20% of objects in the collection.
- Define object, information, and imagery content for the Luce Center at POB by developing a schedule for photographing approximately 5,000 objects
- Publish 3 issues of the journal American Art
- As part of the newly developed National Education Program, implement a pilot program to make professional education opportunities and learning materials accessible to teachers and educators

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<sup>77</sup> University of North Carolina at Chapel Hill, Sloane Art Library, "American Art Subject Guide," Retrieved 15 June 2004

<<http://www.lib.unc.edu/art/artamerica.html#web>> Path: Course and Research Guides.

<sup>78</sup> Cornell University, Fine Arts Library, "Internet Sites for Art History." Retrieved 1 July 2004 <<http://www.library.cornell.edu/finearts/InternetArtHistory.html>>.

<sup>79</sup> Caroline Osborne and Jennifer Rinalducci, "Evaluation of Web-Based Resources within the Art History Discipline." Technical Reports--School of Information and Library Science, University of North Carolina-Chapel Hill (December 2002)

Retrieved 1 June 2004 <<http://ils.unc.edu/ils/research/reports/TR-2002-04.pdf>>.

<sup>80</sup> Murtha Baca, "Using Controlled Vocabularies and Thesauri to Enhance End-User Access; Metadata, Vocabularies and the Web." *Putting the Digital Puzzle Together: Creating a Digital Project*. ALCTS Networked Resources and Metadata Committee of American Library Association. Marriot Hotel, Orlando, Fl. 25 June 2004.

<sup>81</sup> Lynne Swan Jones, *Art Information and the Internet How to Find It, How to Use It*. (Phoenix: Oryx Press), 1998).

Trish Cashen, "The Internet and Art History: A Tool or a Toy?" *Computers and the History of Art*. 5:2 (1995).



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<sup>82</sup> Lynne Swan Jones, *Art Information and the Internet How to Find It, How to Use It*. (Phoenix: Oryx Press), 1998).

Jones touches on issues of authority and relevance but does not stress the step-by-step evaluation of quality web resources found in other humanities literature. She evaluates the sites and then presents them to the readers. Jones also instructs readers on the basics of finding information.

<sup>83</sup> Chizuko Owada, "Tate Website." E-mail to J. Rinalducci (5 July 2004).

<sup>84</sup> William S. Brockman, et al. "Scholarly Work in the Humanities and the Evolving Information Environment." Washington, D.C.: Digital Library Federation of the Council on Library and Information Resources. December 2001: vii.