

VRA Session | More Than Meets the Eye? Retrieving Art Images by Subject

Organizer & Moderator | Karen Kessel, Art & Art History Department, Sonoma State University

Speakers | Patricia Harpring, Getty Vocabulary Program; Judy Weedman, San Jose State University School of Library & Information Science; Dustin Wees, ARTstor; Hans Brandhorst, Iconclass

Slides: <http://www.slideshare.net/event/vra-arlisna-2nd-joint-conference-2011/slideshows>

Karen Kessel, organizer and moderator, spent the first part of this session introducing not only the speakers, but also the concept and context of subject cataloging for visual materials. Kessel explained that although subject cataloging for books has been commonplace for a long time, cataloging for images is still in nascent stages of development and adoption. She elaborated, stating that subject matter in visual resources can be more specific, but it can also be more elusive. Subject cataloging refers to what an image is “of” or “about.” Qualifying the layers of “of-ness” and “about-ness” in visual works is where the process gets complicated. She explained these complications, using the example of Pieter Brueghel the Elder’s painting, “Landscape with the Fall of Icarus.” Although Brueghel’s work depicts a farmer, plowing his land (*of-ness*), the title of the work indicates a deeper layer of subject matter (*about-ness*). How the story of Icarus relates to this painting is subject matter that may not translate to viewers without explanation.

Kessel next discussed the history of subject classification in the VR profession. She provided background information about the commonly used Fogg and Tansey classification systems, which both provide general categories within an alpha-numeric call number system. This discussion of personal experiences led Kessel back to the problematic nature of subject cataloging for visual resources. She introduced Erwin Panofsky’s concept of three levels of meaning in art: physical description, expressional analysis and identification of subject, and iconographic interpretation. The problem, she suggested, is the delineation between the first two levels. Expertise (or lack of expertise) can obscure the identification of subject matter along these lines. Furthermore, how do you express those layers in a DAMS or CMS?

Expertise is a key factor in the success or failure of subject cataloging ventures. One example Kessel provided is Christopher Donnan’s experiment to identify iconographic themes in Moché art of Ancient Peru. What Donnan discovered is that, regardless of domain knowledge, it is possible to identify common themes and repeated motifs in the visual languages of unfamiliar cultures and styles. Here, Kessel provided examples from Christian iconography, such as the Nativity, Magi, etc. She explained, “even if you don’t know what a story is about, you can tell that there is a story.” This, at least, is a starting point for creating subject access.

At this point, Ms. Kessel introduced the session’s first speaker, Patricia Harpring, Managing Editor of the Getty Vocabularies (AAT, TGN, ULAN, CONA) and co-author of *Cataloging Cultural Objects*. Harpring introduced her presentation on the highly anticipated [Cultural Objects Name Authority](#) (CONA)—the Getty’s forthcoming iconographical authority file—stating that the subject element is critical for the retrieval and disambiguation of images, but is the most likely element to be missing in catalog records. CONA, she explained, is an attempt to satisfy this requirement of a core

CCO/CDWA record. To the question, “What is subject?” Harpring answered, “content and narrative, which can be iconic or non-objective meaning, conveyed by figurative or abstract images.” “Subject” can be representational or non-representational.

The problem with the missing element of subject matter in records is that users *want* to retrieve information and images by subject. Users *want* to search and discover via content. Although institutional repositories are the best source for subject data, most don’t index it—at least not consistently. An OCLC study in 2009 found that most museums were compatible with the burgeoning CCO/CDWA standards, except for the matter of subject indexing. Harpring suggested that subject indexing might have a future in the automatic parsing of elements like work title against controlled subject lists; she refined this thought, arguing that the combination of auto-parsing and human editing would be ideal. Again, it is human expertise that is needed to disambiguate and make necessary distinctions between layers of meaning where subject indexing is concerned.

Harpring then began an in-depth discussion of CONA—how it is structured and what it will offer. CONA follows the basic Getty vocabulary structure and is ISO and CCO/CDWA compliant. Although the manuals are currently online, the data will not be published for a while yet. Furthermore, the Getty probably will not take contributions until 2012. Like other Getty vocabularies, terms in CONA all have unique ID’s, which are linked to titles and names. What may be most exciting is that the CONA vocabulary is linked to other Getty vocabularies; subjects and historical figures, for instance, are linked to their corresponding authority files in ULAN. This non-artist facet includes figures like patrons and sitters, as well. Locations in CONA are linked to the TGN and AAT is used to index work-type, style, and subject. Harpring noted that there may not be enough general terms in AAT for the scope of CONA, but that more can be added as necessary.

Outside of the group of terms linked to existing authority files is the Iconography Authority (IA), which contains names and terms that are not contained in the other vocabularies. Examples of terms in the IA are events, religious and mythological terms, named animals: terms like *Zeus*, the *American Civil War*, or *Adoration of the Magi*. Additionally, CONA allows references to other sources of subject index terms like Iconclass and LCSH. Harpring allows for the problematic issue of subjects that could, conceivably, belong in multiple vocabularies or authorities, such as lost settlements or historical figures, who were also legends or icons (ex. John the Baptist). To this point, she argued that terms could exist in multiple authorities, but should only be entered once and linked across vocabularies. Other issues arise when subjects are separate artworks; this is problematic in work types like architectural drawings. For example, how are associative relationships made when a façade is never constructed from a plan or drawing? Do you still link to the built work?

Harpring wrapped up her discussion with a few final points. First, she explained that CONA can be used to index non-narrative subject matter (architecture, dedications of temples and churches, the function of decorative arts, nonrepresentational art, performance art, and text + image). She also reminded the crowd of the adage, “Broad and correct is better than narrow and incorrect.” Harpring finished her engaging presentation, noting that her slides (and other resources) are available on the GRI vocabularies website (<http://www.getty.edu/research/tools/vocabularies/training.html>).

Next, Kessel introduced Judy Weedman of San Jose State University, whose presentation was entitled, “Subject on a Small Scale: Home-grown Vocabularies.” Weedman has spent a substantial amount of time studying the design process of building local and institutional vocabularies. She wondered, “Are these projects useful and scalable over the long term?” and “Does design language transcend [professional] fields?” Weedman stated that her interest in the topic was piqued when she noticed that

there is a rich literature of design in many professional fields, but very little in the field of library and information science.

Weedman explained that she began her research, emailing list-servs to ask for participants in a study. Of her responses, thirty-four were usable; these responses provided descriptive info about building vocabularies. Ultimately, Weedman held interviews with fifteen of these respondents, who had designed or done extensive maintenance or revision of local vocabularies. She did not focus her attention on respondents who had inherited vocabularies. The fifteen chosen participants were stewards to broad collections, ranging from aquariums to governmental documents to news to museums and various types of libraries. Weedman shared several statistics about her survey with the audience, providing insight to the vocabulary structures that participants used (post-coordinate (7), pre-coordinate (14), classification (10), and natural language (3)), kind of structure by creation date, subject (of and about / literal and interpretive (18) versus literal only (16)), and whether or not participants had considered or consulted existing vocabularies before designing their own. She noted that, of those considered, the most commonly cited sources were the Getty vocabularies, Iconclass, and LCSH. Participants who had consulted previously existing vocabularies incorporated some terms or based their terms on existing terms. When asked why standard vocabularies had not been adopted, Weedman found several reasons: current vocabularies were either too general; too specific; too large; designed for text, rather than images; worked for objects, but didn't fit subject; just didn't fit at all; required too much domain knowledge for non-expert catalogers; didn't fit queries posed by users; or posed tech difficulties to online access. For more information about Weedman's findings, please consult her slides on SlideShare (see above for URL).

Weedman then began discussing design theory, stating that design is the fundamental professional activity—taking a problem situation and creating a solution (Simon). One major problem that needs addressing in this particular design situation is the multiplicity of relationships amongst images; both disambiguation and specificity compound this problem. In other words, how specific should you get in subject indexing?

Weedman offered final thoughts, including the statement that the “user warrants constraint.” She argued that design work is creative with a strong emotional component; although she finds that there is anxiety involved in the design process, there is also deep satisfaction to be found in discovering insights into domain knowledge as you build your system. She stressed the importance of “adaptivity” and reminded the audience that vocabularies must be dynamic if they are to remain useful and relevant. She finished with the Stewart Brand quote, “All buildings are predictions. All predictions are wrong.”

The next presenter in “More Than Meets the Eye” was Hans Brandhorst from Iconclass. After providing some institutional background for Iconclass, Brandhorst introduced the RKD-sponsored Iconclass browser, which is available for free online (<http://www.iconclass.org/rkd/9/>). He explained how Iconclass can be used to index documents by themes, motifs, stories, situations, activities, gestures, events, ideas, messages, miracles, and more. Indexing, he argued, is only half the battle; Iconclass also helps users retrieve documents. Words are linked to alphanumeric codes, which are linked to textual descriptions. Brandhorst provided several examples of how images might be indexed using Iconclass and gives a demo of the online browser. In order for indexing by Iconclass to be effective, however, users need to maintain the designated Iconclass codes in their own database. The system allows users to export a virtual “word cloud” via a simple cut and paste tool within the browser. This information can then be queried, using a free Iconclass plug-in that can be incorporated into your existing web interface via an i-frame in your html page. To obtain this plug-in, users

need only contact Iconclass and ask for it. Brandhorst also gave a brief demo of Arkyves (<http://www.arkyves.org/>), which is a cheap (but not free) image database, indexed with the Iconclass tool.

The final speaker was ARTstor's Dustin Reese, who ended the session on a humorous, yet effective note with a presentation revolving around images of cake (all culled from ARTstor's coffers, of course), including statistics presented in "cake chart" format. Reese used his time to discuss both the potential and complications for ARTstor where the matter of subject indexing is concerned. He explained that metadata is merely one step for an aggregator and that ARTstor currently adds approximately 150-200K images a year with a very small metadata staff. Reese also explained the difficulty of aggregating disparate subject indexing—which is almost always done based on local and institutional needs—in a way that creates useful metadata for users across a broad federated repository like ARTstor.

Building on his cake metaphor, Reese described his "dream cake" as a critical mass of consistently applied terms in ARTstor. The current lack of this consistency prohibits advanced searching by subject matter, which is one factor in the extremely limited amount of advanced searching that is conducted by ARTstor users. Reese revealed that approximately 85% of searching in ARTstor is keyword based, which can also be highly problematic. He illustrated this point with the following example: a user search for the term "impressionism" will, unfortunately, return results for images that might be indexed "not impressionism." This is one reason why the thought of tagging in ARTstor frightens Reese; the real question is, "how could tagging be made useful" in the system? Reese's demonstration of a Google Image search for "jade" made his point crystal clear; ARTstor strips away levels of irrelevance by virtue of its very nature, but disambiguation of terms is still a daunting task with no controlled vocabulary across participant contributions. Looking forward, Reese hopes to start applying broad terms to images, using a controlled vocabulary that might at least account for issues like singular versus plural terminology.

With limited time for a question and answer session, this engaging session concluded with a few practical (mostly product-related) queries. While no solutions to the inherent problem were offered (*is there a solution?*), it is clear that there is a definite need for consistent and usable subject indexing in the VR profession and that several institutions are responding to this need in exciting ways. The tools are being developed; the tasks ahead are how we choose to adopt the technology, incorporate the workflows, and contribute to these efforts.