

**Charles W. Cushman Photograph Collection:
Report on the Group and Individual Walkthrough**

Table of Contents

Introduction	2
Walkthrough Objectives	2-3
Participants: Criteria	3
Methodology: Group/Individual Walkthrough	
Walkthrough Technique	4
Protocol Summary	4-5
Testing Environment	5
Walkthrough Evaluation	
Evaluation Highlights	5-13
Satisfaction Responses	13-14
Recommendations Checklist	15-17
Appendix A: Background Questionnaire Graphs	18-20
Appendix B: Satisfaction Questionnaire Graphs	21-23
Appendix C: Task Completion Chart (Group)	24-28
Appendix D: Field Interview Transcription	29-30

Report Created and Distributed: 02/10/2003

Introduction

The Digital Library Program has received an Institute of Museum and Library Services (IMLS) grant to digitize a thirty-one year span (1938-1969) of color slides taken by amateur photographer, Charles W. Cushman. The Charles W. Cushman Photograph Collection website will encompass approximately 15,000 color images; detailed descriptions of each photo documented by Cushman himself; and additional metadata to enhance subject, genre and geographical access.

Because of the extent of the content available via the Cushman website, it is of utmost important to implement both a browse and search (keyword/simple and advanced) that encourage successful retrieval. Along with browsing and searching dynamic content, the website will also contain static contextual resources in the form of essays, photo-essays, timelines, interviews as well as relevant project information (grant proposal, technical information, etc.) so the organization of the site (navigation) is also critical in order to facilitate access to this information. Needless to say that a website with this depth and breadth will also need reliable help documentation and visible screen tips and instructions. These areas of interest as well as other aspects of the Cushman prototype website will be reviewed with representative users to ensure that an intuitive and useful interface to the Cushman photograph collection has been accurately captured at this stage of the development process.

This report outlines the overall evaluation goals of this study focusing on the above-areas summarized as well as evaluation procedures for both the group and individual walkthrough method. The 'Walkthrough Highlights' section of this report will include a summary, based on the current organization of the Cushman prototype, of the participants' impressions and suggestions. It will conclude with a prioritized list of recommendations that will inform the necessary revisions and enhancements necessary to aid in the decision of the technologies to be used to continually develop the Cushman website. Graphs, charts and transcriptions are included in the appendices and will be referenced appropriately in the report.¹

Walkthrough: Objectives

A thorough evaluation of the Charles W. Cushman Photograph Collection prototype website was conducted with the help of representative users to better understand how: a) the website should function in terms of providing access to the data; b) what type of content is expected and deemed useful; and c) how the overall organization should facilitate access. Areas specifically evaluated include: 1) overall organization of content; 2) the ability to promote efficient browsing (facet and hierarchical browsing alternatives explored); 3) the ability to promote successful searching (Boolean, transparent thesauri and refined searching explored); 4) the provision of useful results display and options; and 5) the cultivation of a clear, concise, context-sensitive help to aid in browsing and searching.

The prototype created adopts known design principles to facilitate navigation, browsing, searching and access to help. However, the design presented to the participants was illustrative, not prescriptive, thus allowing for exploration of alternative presentations and interactions. Discussion was often redirected from the hypothetical ("I would . . .") to real examples of how existing image collections *are* used ("I do . . ."). Other collections referenced during the walkthrough include: Hohenberger, American Memory and the Getty's digital resources.

Areas of specific concentration include those that will require a high level of interaction: Browse and Search. It is safe to assume that the Browse and Search areas will be the most used features of the Cushman website so the discussions focused heavily in those areas. Following are the specific goals that guided the evaluation:

1. Determine if overall organization including navigation, terminology and suggested content of the website is clear and adequate

¹ Instruments used for this study are not attached but can be provided upon request. Also, the group evaluation study received approval from the Human Subjects Committee (HSC). Related HSC documentation can also be provided upon request.

2. Determine how participants can efficiently browse a site with approximately 15,000 records, including:
 - a. identification of browse categories/options
 - b. discussion of browse interface layout (hyperlinks, dynamic display, etc.)
 - c. exploration of hierarchical (year/month) and faceted (year/subject) browsing
3. Determine how participants can successfully search, including:
 - a. understanding the ability and inclination to conduct complex, Boolean search queries in keyword/simple search
 - b. understanding how an Advanced Search is used including search filters to limit search results
 - c. understanding which features are meaningful in the results display, including the:
 1. ability to refine searches
 2. ability and desire to use the controlled vocabulary for query expansion
 3. ability to sort and by which fields
 - d. exploration of the detail results page, including the:
 1. organization and display
 2. ability to broaden searches by providing certain hyperlinked fields
 3. ability to move sideways in the search process by linking related terms
 4. ability to link to notebook, roll presentation, etc.
 - e. exploration of a "Save" feature
4. Determine the advantages or disadvantages of both context-sensitive and overall help.
5. Determine if screen instruction and labeling are sufficient or if more is required rather than having to launch the help.

Participants

Because the Cushman Collection is so varied in terms of subject matter, the impact of his images can affect teachers, scholars and curious souls of various disciplines. Participants were contacted both from within Indiana University (faculty, librarians, students, alumnus) and outside of IU, primarily within the Monroe County Public Library. Various departments and libraries were contacted: History, Anthropology, Journalism, Fine Arts and School of Library and Information Science as well as the Lilly Library and the Fine Arts Library.

Test participants were voluntarily recruited via contacts from each of the departments and libraries mentioned above. Due to scheduling difficulties, several professors and librarians responded with hopes they could participate some later time. It was difficult to recruit undergraduates mainly because the instructors that would have spread the word to their students were unable to participate in the January walkthrough study.

Participant criteria for recruitment included faculty, students, subject specialists/librarians, photographers, and those with general interest in the subject matter from any of the following fields: art history, fine arts—photography, history—American, urban, popular, journalism, library science, anthropology, and sociology. Participants with a range of computer skills were welcomed.

One librarian, two graduate students and a photographer by trade were present at the group walkthrough. The individual walkthrough, which followed a format similar to the group session, was conducted with a faculty member. All participants were Indiana University affiliates (librarian, graduate student, alumnus and faculty, respectively). Their collective areas of expertise range from popular and urban history to photography. The librarian's area of expertise is in popular and social American and British history. She is also the gatekeeper to several image collections at the Lilly Library. The graduate students are both pursuing coursework in the School of Library and Information Science with an emphasis on special collections. One student received his BFA in Photography and the other a BA in History. The photographer present also has an educational background in journalism and history. Lastly, the faculty member who participated individually is an Urban and Architectural American Historian. Further background information for each participant can be found in Appendix A.

Methodology

The Walkthrough Technique

Before outlining the objectives sought by holding a group and individual walkthrough, it is important to understand briefly the history of the walkthrough technique. The proponent of the Group Walkthrough, Randolph Bias, then an IBM affiliate, formalized the walkthrough as an inspection method in his chapter entitled “The pluralistic usability walkthrough: coordinated with empathies” found in *Usability Inspection Methods* (edited by Jakob Nielsen and Robert Mack).

According to Bias, the group walkthrough is conducted in the early design stages or when an existing design needs to be entirely reconceived. The participants include representative users, designers and human factor (HF) specialists with an HF specialist leading the discussion. All members including others in the development team (programmers, librarians, etc.) contribute to the discussion from a user’s—not expert’s—point of view; however, because they are experts they can probe the participants with questions of special interest or concern.

In his writings, Bias tends to conduct low-fidelity (paper-based) evaluations of proposed web pages; however, the Cushman application of the method uses high fidelity, static web pages for discussion. The Bias application identifies representative tasks that each participant is to solve on the paper screens provided. The Cushman walkthrough followed this technique for the Browse and Search screens only (to be later discussed), and used the remaining pages of the site as a point of reference for discussion without focusing on task completion per se.

The group walkthrough method is a hybrid in some respects of a usability lab test and focus group. It takes the positive contributions of each to reveal significant problems in the early development stages of the proposed design. It also fosters “synergistic redesign” since comments are generally supported with real-life anecdotes; participants not only can tell you what is wrong or right but how it can be made better. This instant feedback is important to collect along the way so that the final website is rid of many of design flaws early on. The combination of task scenarios and guided focus group discussions tends to yield substantial findings for continual development.²

Protocol Summary

Both the Group and Individual Walkthroughs were conducted according to a written ‘script’ to ensure all users were provided with the same information. Bias introduced into the testing through variations in the test facilitator’s performance is minimized when following a script.

GROUP WALKTHROUGH:

Participants completed consent forms, background questionnaires and contact forms upon arrival. Each area of the Cushman prototype site prompted the discussion; therefore, a mostly “linear” discussion ensued beginning with the Home page and ending with the Site Map page. Other online collections were referenced during the discussion.

Before discussion ensued about the Browse and Search screens, participants were given screen shots of the date, location and genre browse with corresponding task scenarios to solve step by step individually. The same was done for the keyword and advanced search screens (see Appendix C). This activity provides a way in which to collect data not influenced by other group members or in-depth explorations of these areas of the site.

After the discussion, participants completed a satisfaction questionnaire and acknowledgement of gift form for reimbursement purposes.

INDIVIDUAL WALKTHROUGH:

Participant followed exact format as above except for browse and search task completion. This exception was due primarily to maximize time. Also, this participant was part of a field-interview study (still in

² For a more in-depth understanding of the group/pluralistic walkthrough, copies of the literature referenced can be provided upon request.

progress) that was conducted that same day. The purpose of the field-interview study is to see how instructors, in their own work/classroom context, utilize images and/or image collections in their teaching and research. Appendix D contains a full transcription of that interview. A complete report of that study is forthcoming.

Testing Environment

The group evaluation was conducted in the LETRS conference room with both video and audio recording of the session. Video was a screen-only capture of the monitor being used along with audio to place comments in context. The audio recording was used as back up in case the videotape would exceed capacity—and it did. A DLP staff member was present for note taking. The entire evaluation, including the completion of consent forms, questionnaires, tasks and discussion, did not exceed three hours time (longer than anticipated).

The individual walkthrough was conducted in the professor's office with an audio recording of the testing session. A DLP staff member was present for note taking. The interview and individual walkthrough session did not exceed two hours time.

Instruments Used

- Evaluation script
- Participant background questionnaire
- Participant contact form (for follow-up)
- Consent form
- Tasks scenarios (group)
- Post-test questionnaire
- Interview questions (individual walkthrough)
- Notation sheets for discussion
- Reimbursement form

Walkthrough Evaluations

Evaluation Highlights

The highlights below correspond to each area of the Cushman prototype website: home, overview, browse, search, [results], [help], highlight, cushman in context, about and site map. Satisfaction questionnaire responses will also be included when appropriate. The testing highlights will be addressed in aggregate per category and are based on the discussion held by the participants.

Home: What was said?

The Home page did not elicit any strong feelings either way. Most people liked the home (splash) page overall, but one participant felt that the grid presentation was not representative of Cushman's time: "seems too contemporary." Another responded that it looks "kinda sixty-ish, doesn't it? Like Mies van der Rohe," and therefore representative to some degree. Two participants commented on the small size of the individual images. One participant who likes the grid recommended that the "graphic take up a greater proportion of the page because the photos are what's so strong. . ."

Other questions, concerns and suggestions include:

- Could the images be clicked? Could they behave as thumbnails?
- What's the purpose of the black square?
- Are the images representative of the collection as whole?
- How quickly would the page load remotely?

One strong recommendation to be considered, but was only proposed by one participant (individual walkthrough), is that the home page should contain just a few lines announcing the collection: "Welcome to the Charles W. Cushman Photograph Collection where you'll find approximately 15,000 color images taken by amateur photographer Charles W. Cushman between 1938-1969."

Home: Assessment

It is to be further explored if the grid is not reflective of Cushman's time period. The other issue at hand is that his photographs span three decades making it difficult to represent any one aesthetic of the time. The home page was designed first and foremost with simplicity in mind as is the rest of the website so that displaying of the Cushman images do not clash or compete for attention with any graphical design inherent in the website design itself.

While it is true that the images are too small to appreciate detail, the home page is not meant to be an area where in-depth contemplation of Cushman images occurs. Instead it should entice the visitor to see more. Also, the website is designed to adhere to a resolution of 800 * 600. Larger images would violate this standard.

Overview: What was said?

Before discussing in detail the Overview section, the participants were asked about the overall organization/layout of the site. The group responded with a generic "It's fine." The individual walkthrough participant was a bit more expressive: "This is a nice site. It makes sense." Initially, the participants were not able to articulate in great depth what they expected to find in each section of the site. However, as each section was individually explored, several sections of the site were heavily discussed including the Overview section.

In general there was some confusion as to what content should appear in the Overview section. Most of the group participants felt that the About section contents should be rolled into Overview while the individual participant felt that the Cushman in Context contents should be part of Overview. All participants are in agreement that the Overview should contain information about Cushman and the collection (how did IU inherit it; copyright, etc.).

General questions, concerns and suggestions from the participants include:

- Is copyright information going to be provided? It should go with the information about the physical collection. The protection statement should be upfront. Are the images copyright protected or will they be available?
- Overview category names are too abstract
- What is a website overview? It should go under Site Map.
- Overview content needs to be broken down better like in the About page.
- The Overview could just be a paragraph about the collection: how big it is, what time periods covered, what genres covered, etc.
- Are the black and white photographs going to be mentioned?

Overview: Assessment

The Cushman in Context contents should be collapsed and contents moved to Overview as the participants suggested. However, a couple of participants recognized that the About section is unique enough and could stand on its own. With perhaps better labeling (About the Project), the About section will remain a significant area of the site with information relating specifically to the project: grant proposal, papers/presentations, digitization and other technical information, and contributors.

Browse versus Search: What's the difference?

During different points of the discussion general questions were asked to understand preferences, expectations, etc. Before examining the Browse area, the question regarding the perceived difference of browse and searching was asked. The participants were also asked how they felt about receiving a large number of results when browsing versus searching.

The group participants were able to articulate the difference between browsing versus searching while the individual participant had some difficulty. In general, the group felt searching is done when something

specific needs to be known. Browsing, they felt, was like sampling, exploring things topically or thematically, like browsing a library shelf. It should be noted that most of the group participants had some level of library experience, which could contribute to their ease in determining a distinction. The individual participant feels that searching is when you enter a keyword or date. He feels that searching is “less fun,” but more comprehensive. For him this statement illustrates browsing: “I really want to look at his Indiana pictures.”

There was no general consensus as to whether large numbers of results were acceptable for browsing or searching. In the end, it seems that they would prefer to somehow limit or control the number of results regardless of whether they browse or search.

Browse: What was said?

The Browse section generated a tremendous amount of discussion from the group as well as many questions from the individual participant.

Before exploring each browse option, the participants were asked to comment in general about the browse “menu” page with a list and descriptions of the browse options. The browse options were all rather clear to the participants except for genre. They even understood the notebook browse: “So the notebooks document the rolls, I take it?” They were unclear what genre meant precisely and whether it included subjects.

All the participants insisted on a topic/subject browse; it was a unanimous and essential option. They translated the need by relaying anecdotes as to how they look for items and how patrons in general look for items: “I need pictures of a covered bridge” or “I’d like to see all of his Indiana pictures.”

DATE:

Before demonstrating the year/month interface possibility, the participants commented on the initial screen with all the years listed. All participants felt that a date browse would be useful. Discussion about the large number of results one particular year could yield revealed some alternatives. One participant mentioned how Vivisimo or Teoma search engines cluster results (both provide refined search topics based on your query). Others contemplated searching within a set of browse results if the set was too large. These initial suggestions will resurface once the year/month screen and search results are further explored.

Once the year/month hierarchical browse was shown to the group they did not respond favorably. They felt that a year/month breakdown was not meaningful or necessarily conducive to browsing: “I think year/topic will be more useful. I can’t imagine doing a year/month browse unless I know an event occurred in a particular year/month.” Others in the group felt that it was too restrictive. The individual participant thought that the ability to break down by year/month was “extraordinary”, but felt that such a browse would be irrelevant in the early browse stages. He felt that one would have to be “pretty specialized and I hope to get specialized enough because I am interested in writing about Cushman- but you have to be pretty far along to care about what he does in March versus April.” He too agrees that perhaps a year/genre or year/subject breakdown would be far more useful.

General comments about the year/month browse from the participants include:

- “Year/topic much more useful—about a million times.”
- “Genre would be fine” [as a facet possibility]
- “Genre okay but subject or topic are much more useful.”
- “Genre is better than this.”
- “Can you do that for genre? Genre/year, Genre/location?” [Question posed before even examining the Genre option]

When asked whether the “unknown date” link was a desirable access point, the group agreed. One participant took the opportunity to reinforce the idea of introducing a faceted browse by stating: “Yeah, also a good argument for having subject [facet] so you can get to the picture you want.”

LOCATION:

The individual participant felt that location and subject/topic would be the two most used browse options. He also mentioned presenting the information much like the date/month so that when a country is selected, the web page then produces a list of provinces/states. In turn, clicking the provinces/states will generate a web page, which then produces a list of cities.

All the participants felt that the Location browse should reach the city level of specificity. Many felt that facets for locations would be nice but not necessary since people looking for location tend to be just that, location-oriented: “If I am going to location it’s because I am more interested in location than what the pictures are about.” The group discussed how a facet might be helpful for those places containing a large number of results. One participant mentioned that a date facet would help in illustrating how a particular city as changed in 20 to 30 years. Another participant mentioned from a history of photography point of view that it would be nice to be able to compare Cushman’s photos in Alabama taken around the time Margaret Burke White photographed Alabama. He did conclude his support for the date facet with: “I wouldn’t insist on it.”

The group felt that, where relevant, the location browse should break down as follows: country, province/state, city where as the individual participant felt that provinces would not be very useful. Some argued that breaking it down to the city-level even for states that had few cities would still aid browsing: “If I click on Illinois and it says ‘Chicago’, ‘Peoria’ and ‘Springfield’ and I am looking for yet another city in Illinois, then I don’t have to click and scroll through all the images under Illinois.”

General questions, concerns and suggestions from the participants include:

- How about city limits or greater metropolitan areas? Does Evanston show up under Chicago?
- How about non-cities like Mountain Valley, which is over multiple states? Would there be cross-referencing?
- Might prefer U.S. on top and maybe click to get to foreign.
- Could we search within browse results?
- Could the city with large number of results, say 4,000, be somehow subdivided by theme or topic?
- The number in each category would be a factor so if you’d narrow any, narrow those that have a ton of images.

GENRE:

The group debated incessantly about the usefulness of the genre browse. At first there was great opposition to its perceived utility. The individual participant felt that less people would use genre as opposed to a subject browse. However, after some lengthy discussion, the genre browse was redeemed based on historical and photographic significance. Also, participants began to slowly see outside their areas of expertise and considered how others may approach this category.

The initial group reaction to genre is that it didn’t make sense as an option. They felt the categories were too broad and ambiguous: “‘ethnographic’ is too broad” and “What are ‘identification photographs’?”. The latter question also puzzled the individual participant who felt without any explanation of TGMII that the labels seem deliberate or prescribed. Others felt that some genre categories, like ‘landscape photographs’ are helpful for browsing, but some are too general or require more explanation. Most of the group continued listing reasons why they didn’t like the genre browse:

- “Where would dilapidated houses go?”
- “Working in reference trying to help people find things—this would not be a speedy resolution.”

Most participants were not so inclined to receive large number of genre browse results. They may have felt this way due to their inability to understand the genre categories themselves: “Obviously there’s a fine line between architectural and cityscape. I don’t know what identification photos are. Landscape I am comfortable with. How about urban landscapes? Night photographs- why this category?

Reproductions—not intuitive to me. Views- gosh this must be so hard.” Even though the participant was baffled by some of the categories he acknowledged that he could have different search needs than others.

After more discussion, the group felt that others might benefit from the genre browse. They recognized that much discovery could occur by simply visiting a genre category that had some level of interest. The

genre browse could also serve as a way to broadly define the collection of Cushman images. One participant felt that it could be a useful tool for comparison: “What if someone was doing a comparative study—comparing what was happening in the vernacular tradition at the time of Aaron Siskind to see what his Abstract photographs look like or Bernice Abbott to see her cityscapes. All of it is a matter of effort. I can see this being used—not as much as a subject index—but I don’t know that it is in the way.” This proclamation seemed to sway group opinion to: “I am not saying get rid of it” or “I can see people being interested in Aerial.” Others returned the comparative photography example with: “The ethnographic category could be used by folklorist or anthropologist to compare it to Joseph Curtis or Edward Dixon.” One participant ended the genre discussion with genre being a good way “to get inside Cushman’s head—to understand the themes he was drawn too despite the imposed categorization.”

Suggestions for making genre a more meaningful browse include the provision of a facet such as subject, location and/or date in order to more easily sift through the large number of results. This alternative/expectation was raised by participant 2 in his task scenario (see Appendix C), which was an activity conducted by the group *before* in-depth exploration and conversation of the browse area of the site. The ability to provide facets for enhanced browsing was also reiterated by two participants in their satisfaction questionnaires.

General questions, concerns and suggestions from the participants include:

- Could it be a search option?
- Are images mutually exclusive? If they can appear in multiple [genre] categories, could that be explained?
- But we don’t want to just call the nature photographs? [comment on how artificial the genre categories sound]
- After clicking on Cityscape, I’d like to see place.

ROLL:

The group took the opportunity to say a few helpful things about the roll browse such as: “Useful in combination with notebooks” and “Rolls should be linked to notebook and notebooks to rolls,” but their thoughts were still with genre.

However, once the genre fascination wore off with comments in jest like “God bless the genre browse,” some participants affirmed that the roll browse would be more interesting when shown in combination with the notebooks. One participant also felt that it was valuable to see the order in which the photos were taken. She mentioned that the Hogenberger image collection has many undated photos and viewing them in a roll presentation would make guessing a date easier to do.

The individual participant felt that a roll browse would not be so useful to him but that it would be fascinating: “It is intriguing to know that he had to change film at some point.” He suggested that the browse could be simplified by providing roll as a facet for date since they are more or less in chronological order: “so in date I could browse by month, roll or subject.”

NOTEBOOK:

Overall, the participants were impressed by the notebook browse, and by simply knowing the notebooks exist and that they have been digitized. They all agree that the notebook would only be valuable when linked to a roll and vice versa.

The participants felt that the notebook images were a good size and the group, as a whole, liked the pagination feature.³ When exploring other ways of viewing images such as PDF or other viewers, all the participants expressed unwillingness to download a plug-in to view the notebook images.

General questions, concerns, impressions and suggestions from the participants include:

- “Great- my favorite part.” [commenting on the relationship between notebook and roll]
- “The roll images should be numbered according to the notebook entries.”

³ Currently, the prototype website is in a frameset; thus, the page numbers remain in a constant position on the screen. This will not be an option as framesets will not be supported.

- ❑ “I don’t like Acrobat.” [3 participants mentioned this explicitly]
- ❑ “He wrote ‘bride’ instead of ‘bridge’—how will misspellings be handled?”

Browse: Assessment

While it is clear that a subject browse is a necessary access point, the genre option, despite the controversy and confusion, should remain as an access point as well. However, the genre category names and descriptions need to be reconceived to sound like contrived and more like natural language. As one participant stated: “Why not nature photographs?” for landscapes.

It is important to note that participants are expecting a way in which to enhance browsing. This notion was present far before demonstrating the year/month hierarchical browse or even a general discussion concerning facets. Questions regarding general feeling of large result sets when browsing versus searching were answered by referencing other search engines that cluster or sub-divide results within the “greater” query or category. Also, comments concerning the availability of sub-divisions were repeatedly stated, especially by participant 2, as a way to facilitate a more directed browse. Of course, after demonstrating the year/month break down in the date browse, the group as a whole engaged in greater discussion and agrees that providing facets is essential to a successful browse.

Some may argue that such a directed browse is too much like searching. That very same concern underlined many of the questions posed to the group in order to identify that fine line between browsing and searching. In the end, that fine line was not necessarily revealed, but it is clear that creating an orderly, semantically significant browse is not the same as searching. The constant reference to “shelf browsing” is illustrative in that books are not haphazardly placed, but ordered based on a classification system. In some respects, an online browse will provide more flexibility since the selection of different facets can dynamically change as one’s approach to browsing changes. Shelf browsing here at the IU stacks is bound by subject. Cushman browsing could extend beyond subject to include genre, location and dates to generate new views of the content.

Browse: Other online collections and thoughts on hyperlinked browsing.

The participants were asked to show-and-tell particular online collections they like to browse. American Memory was named and explored primarily because of their subject headings browse.

After some discussion, most participants preferred to browse using hyperlinks than form fields. One did not think it would be a problem either way. However, some mentioned that they associated form fields with searching. One compared it to the Amtrak website and said emphatically that he prefers links. Some of the group participants and the individual participant felt that drop down menus [combo boxes] were a hassle and cumbersome to use.

Search: What was said?

Little time was spent on the keyword search screen. Participants, in general, felt that the keyword search page needed better and more tips. All the participants felt that the Advanced Search could be linked from within the keyword search page as opposed to being linked from the navigation bar: “It’s only one click away.” The rationale for not having Advanced Search immediately accessible is that studies show time and again that most users do not conduct advanced searches.

It is interesting to note that one of the four participants never uses advanced search screens and two out of four will perform complex queries in a single search box. But one of those two also likes the guided abilities of advanced search screens.

It was at this stage of the discussion that the top-level search box was mentioned: “What happens in that top search box?” After clarifying that it was meant to provide quick search access wherever one is within the site, he assumed that it would search both dynamic and static content of the site. No further

comments ensued and it was clarified that the feature was tested in another prototype and will be removed.

The individual participant wants to know how to deal with multiple words in the simple search. He suggested a help or tips section like IUCAT. He mentioned using advanced searches about half or a third of the time.

More time was spent on the advanced search screen because of the number of options to explore. A couple field filters were discussed: location versus city/state/country and name versus personal and corporate name. The group agreed unanimously that the location label is too generic. They felt that location field filter should be broken down to country/state/city and neighborhood especially since it's already catalogued. The individual participant felt that a location field would suffice and that he'd enter a location-related place such as Monroe country or Mission neighborhood just the same. All participants understood name to mean only a person's name. They all agree that the name field requires clarification: name (personal) and name (company).

One participant asked if Cushman ID is a necessary field for searching and the group responded with an emphatic "yes". Their main reason stated was that it served as a quick lookup reference.

The group agreed that entering dates as opposed to using drop-down fields would be a quicker alternative to data entry so long as an example of the required format is provided.

The 'Results Display Options' section was then discussed. The group felt that the display format option made sense except one person did not understand why there is a 'captions-only' option. The others in the group thought all the display options would be useful given the circumstances (remote loading, visual scanning, etc.). All participants agreed that date, location and genre or subject would be reasonable sort by options.

Search: Assessment

Not only did participants mention during discussion that more illustrative search tips are needed on the search pages, they also made this comment when completing their task scenario as well as in the satisfaction questionnaire. Since the simple search will be able to handle complex queries, it is important to indicate that one can input such queries and be shown how to do so.

Help: What was said?

In general the help seemingly went unnoticed. Some felt that screen tips alone could solve many of the help needs. Others felt the site was well designed and didn't need help [comment may have been flattery-induced]. In general, context-sensitive help is preferred. Some felt that an overall help would be nice but could take you off course. One participant requested knowledge-base type help with commonly identified/anticipated questions—like an FAQ.

Help: Assessment

It needs to be further explored whether the context-sensitive help links are visible or if they were just overlooked since this evaluation was discussion not task oriented.

Results: What was said?

Participants were overall pleased with the content and organization of the results pages—both the summary and detail view.

All participants felt that the default display results format for the brief view should be thumbnails and captions sorted in descending chronological order. Some participants felt that the roll number should be part of the brief view and that the description be abstracted or shortened. They all thought the re-displaying of the query was helpful so that one remembers what they searched for and how to, perhaps,

construct a better query if the results are not as anticipated. All the participants applauded the ability to refine a search (which harks back to the ability to refine a browse as well).

After discussing the top of the results page, the bottom was presented to all the participants. The group reacted favorably to the ability to expand or limit a search. Some understood what was being presented: "Thesaurus idea is good." Others simply felt that it was "nice that you can expand or limit your search." Someone mentioned that was the Ebay model for searching and someone else felt that it was better than endlessly scrolling a thesauri or a list of authorized terms. The individual participant was a bit confused as to how his natural language "street life" yielded broader or narrower terms.

A basic discussion of controlled vocabularies (CV) ensued. A few group participants were familiar with the concept and have used CVs when searching. One participant perceives CVs as only for use by librarians.

Since the prototyped thesaurus tool does not work, a hypothetical explanation of how it could work followed. One participant asked: "But my search terms were my own words. So I don't understand how I would go from 'street life', which is totally vernacular, to an official term. How would the site manager know?" Others in the group did not question the thesaurus implementation too much and felt that it was a great idea. The group felt that the presentation to expand or limit a search made sense: "And I also think it makes sense in terms of efficiency and it challenges you to think about your searches and the subject matter." It should be noted that the above-quote was stated by the only non-librarian (or librarian-to-be) in the group.

The one participant that could not understand how his natural language would be mapped to a controlled vocabulary, while "wowed" by this feature, felt that it is unclear how he would relate the suggestions generated to his own search. He then suggested simply clarifying the language used to: "Your term 'street life' falls within the following broader categories:" or "Your term 'street life' can be further subdivided into the following narrower categories:"

The presentation of the thesaurus as a search tool received far greater acceptance than anticipated. The questions it did generate were thoughtful and provoked ways in which to re-label the interface to promote usage. However, further testing with less library-like people would be needed to resolve how this part of the interface should be presented.

Lastly, the concept of saving search findings was discussed. A few participants use that feature when searching other online resources. Others when conducting web searches, just bookmark the page or download an image of interest. Others don't utilize the save feature at all.

Some felt that a save could be temporary or session-specific but others who are working on a paper or using images for teaching would find it more valuable to save it for a period of time.

Results: Assessment

Questions remain as to how more people who are unfamiliar with controlled vocabularies react to the thesaurus search tool. However, it seemed to be a well-received tool conceptually. The rationales behind using a thesaurus for searching by the two non-librarian participants reveal a thoughtful, non-resistant approach to its possible utility. Both felt that it was a way to better understand what one is searching for as well as the content itself, and both recognized its ability to enhance access.

Two participants (one is a library assistant and other has no library work experience) expressed concern regarding the authorized use of language when completing their task scenarios (see information for participants 2 and 4 in Appendix C). At the very least, it is important to make clear that the collection can be searched using both natural language and a controlled vocabulary. If the CV is not offered as a search tool, it will have to be offered in some usable format from within the help.

Highlights: What was said?

In general, participants expected to find the “coolest pictures” from the collections in Highlights section. One did not know what to expect. One felt that she would go to a highlights section even before browsing to see what the collection is all about, and then others agreed with that statement. Most of the participants thought the timeline was another interesting way to get a sense of the collection. Some felt it should include events from Cushman’s life, photo technology, and history while one participant interpreted it as personal timeline of Cushman’s life and travels.

Highlights: Assessment

The participants did not question this section to any great extent. While it is clear that the thought the slideshow and timeline presentations interesting, it is not clear if they were persuaded more by novelty or utility. Regardless, the Highlights section seems to be a trusty source for initial exploration of the collection. If a new visitor does not feel like sifting through essays to understand who Cushman is, s/he can gather that from a visual timeline. Also, as was mentioned above, if a visitor does not want to just browse a collection initially s/he could check out the slide show. Both options are worth pursuing.

Cushman in Context: What was said?

The group as a whole felt that the Cushman in Context section would contain information about what is happening photographically, a biography, etc, but felt the labeling was puzzling. The group agreed and the same suggestion was made by the individual participant that this type of information should be moved to the Overview section.

About: What was said?

Most felt that the About contents could also be moved to Overview, but a couple felt that the areas were unique enough in that the About section would contain project related information such as grant proposals, presentations/publications, technical information, and contributors.

Site Map: What was said?

No significant comments were made about this section. However, the group was intrigued with the idea of a ‘Website Overview’ and suggested it go under site map.

Site Map: Assessment

The ‘Website Overview’ is intended to replace the need of an overall website Help. Before participants suggested moving to the ‘Website Overview’ to the Site Map area, the notion of renaming Site Map to Site Guide (based on Harvard’s website) was under consideration. Under this new label, all website-information and resources- including an FAQ if deemed necessary- can reside here.

Satisfaction Responses

The satisfaction questionnaire contains questions addressing six major aspects of the Cushman prototype: navigation, organization of content, instructions/labels.help, browsing, searching, and results pages. The questions were mainly posed in semantic differential scale. However, all scale questions had room for qualitative comments. Participants added additional feedback in areas that seemingly impacted or impressed them.

Participants responded, overall, favorably to the Cushman prototype. See appendix B for a graphical summary. Of particular interests are the qualitative comments by participants, which were categorized according to the six aspects and a generic ‘other’ category of the website:

Navigation

- Pretty standard; okay
- Like as is
- I think it's fairly successful
- Looks good—work out the bugs
- Complex but workable

Organization of Content

- Good except combine rethink About and Overview
- I really enjoy the links between the images and notebook
- Looks good
- I think subject should be the most obvious category to begin with

Instructions/Labels/Help

- More help and instructions on search pages
- More prominent help
- Pretty good- not a lot but that's ok

Browsing

- Genre browse not especially helpful
- Matrix-browsing ability (e.g. location + year) would be a big plus
- Look forward to greater depth- drilling down
- Need subject

Searching

- Good once more info is available on how to do simple searching
- Labels of search fields should be specific as possible (Adv. Search)

Results Pages

- Looks good
- Like as is- like big thumbnails
- I like both the display of text and image one or both. The amount of data is very satisfying.
- Looks good
- I like the thumbnails with brief description- I like the detail page.

Many of the additional comments reinforce the findings from task performance.:

Aspects Found Most Useful

- Search—especially Advanced Search
- Multiple access points
- Thesaurus and links to notebooks

Aspects Found Problematic

- Limit and Subject browsability

Recommendations Checklist

The recommendations are based on the reactions, comments, suggestions and impressions of the participants based on the prototype site reviewed: <http://algernon.dlib.indiana.edu/~mdalmau/cushman/prototype/>. Much of the existing prototype will remain unchanged. It is advised to review the prototype for it reflects various features (such as ability to refine search, linking fields in the results page to broaden search, etc.) that will not be discussed below because of their overall approval.

It is also advised that the Preliminary Browse and Search Recommendations be consulted: <http://www.lettrs.indiana.edu/~mdalmau/cushman/prototype/designDocs/CushGuidelines.pdf>. This document has not been updated since late August, but it contains a significant amount of search and browse behaviors and suggestions that need to be equally considered when deciding on the technologies that will be used to create the Cushman website. The Interface Suggestions document was more recently revised in December and can be found: <http://www.lettrs.indiana.edu/~mdalmau/cushman/prototype/designDocs/InterfaceGuidelines.pdf>. Interface Suggestions may be subject to change based on the findings from this evaluation.

* May affect technology decision

** Added recommendations based on recent literature reviews / experience

Home	
Recommendation	Priority
Make individual images clickable	High
Add brief statement about the collection	Medium

Overview	
Recommendation	Priority
Include content from Cushman in Context	High
More descriptive labeling of contents	High

Browse	
Recommendation	Priority
Add a subject browse	High
Remove month sub-facet from year	Low
*Add faceted browsing for date, location, genre and subject	High
Clarify genre labels and description	High
Dynamic display of options (not all links presented at once: e.g. click country -> state/province; click state/province -> city)	Medium
Link notebook images from roll browse	High
Merge date and roll browse (discussion needed) so roll would be a facet under date	Low
Label images from linked roll presentation to match notebook entries	High

Search/Advanced Search	
Recommendation	Priority
Include more and better search tips	High
Using precise fields for searching in the advanced search (city, state, neighborhood, person's name, company name, etc.)	High
Dates should be typed not selected	High
Sort by options should include date, location, genre, and subject at least and should match the sort options in the results page.	Medium

Results: Summary and Detail Pages	
Recommendation	Priority
**Remove 'Change Display Option'	Low
Add roll number to summary view (discussion needed)	Low
Show only abstracted or abridged descriptions in summary view (discussion needed)	Low
Sort by options should include date, location, genre, and subject at least and should match the sort options in the advanced search page.	Medium
*More intuitive presentation of the thesaurus search tool including labeling/phrasing	High
*Add "refine search box" on the bottom of the page, near thesaurus tool so that query modification or expansion is easily seen without having to scroll up to the top of the page	High

Save Search	
Recommendation	Priority
*Ability to save images and metadata on-site, temporary	Medium
*Ability to save images and metadata to file	Medium
*Ability to save images and metadata for extended period of time (requires log-in)	Low

Help	
Recommendation	Priority
More and visible on-screen search tips	High

Highlights	
Recommendation	Priority
Slideshow of cool and representative pictures of the collection	High
Timeline should convey Cushman events (travels, celebrations, personal milestones), historical, social, and photographic happenings as well.	Medium

Cushman in Context	
Recommendation	Priority
Move all contents to Overview	High

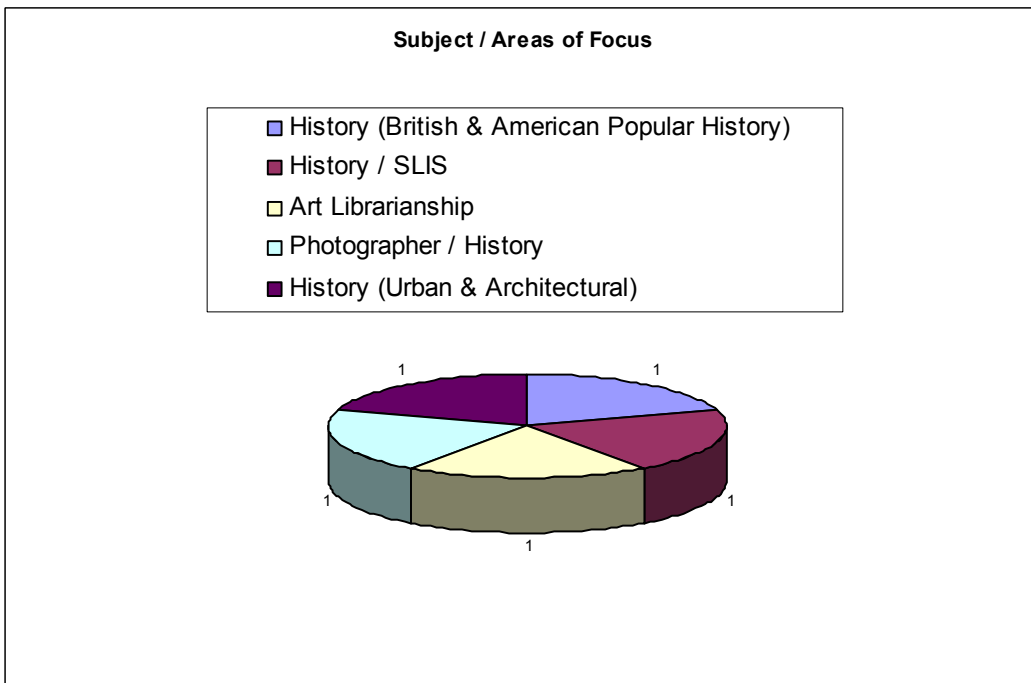
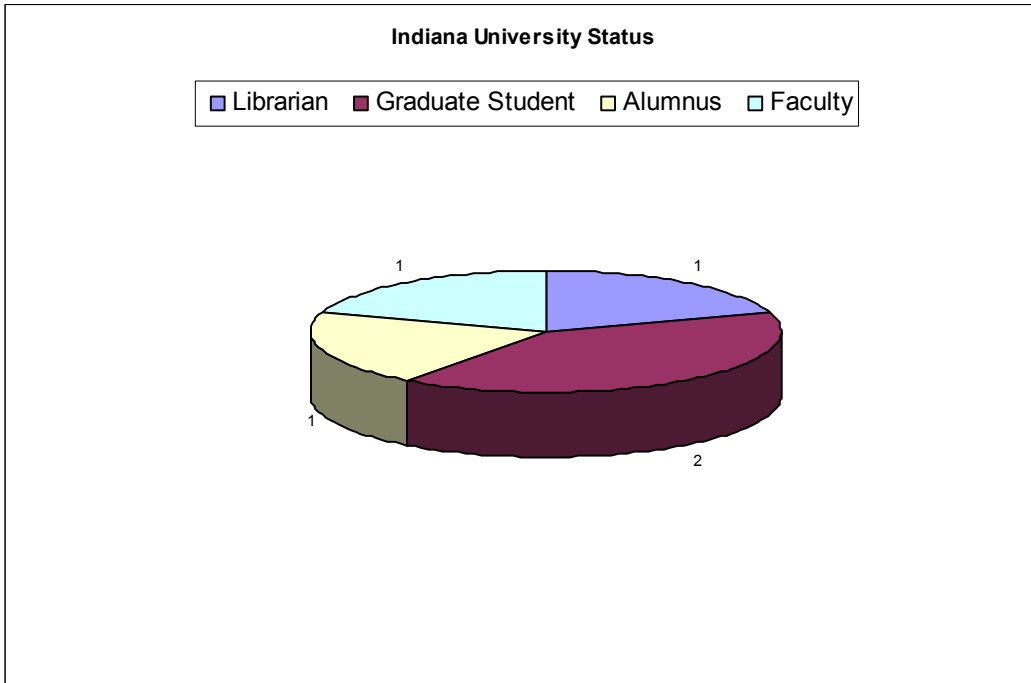
About	
Recommendation	Priority
Should be renamed to "About the Project" or suggestions?	High
Should contain only project info like: grant, papers/presentations, digitizing information, contributors, etc.	High

Site Map	
Recommendation	Priority
Renamed to "Site Guide" and include 'Website Overview'	Medium
Display Site Map in a hierarchical, linked format	Medium

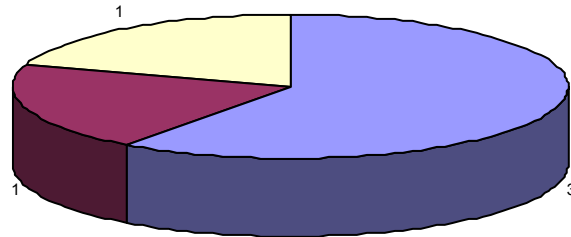
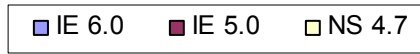
Miscellaneous	
Recommendation	Priority
Remove top search box	High
**Remove from frameset (a PHP prototype was in progress)	High
Indicate which slides have been color corrected; Display corrected slide with link to original	Medium

Appendix A: Participant Demographic/Background Questionnaire: A Graphical Summary

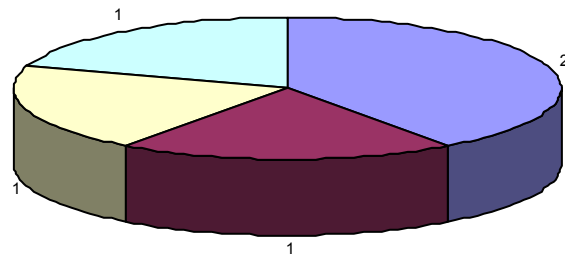
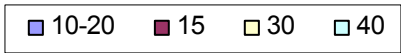
The participant information represented below is an aggregate of two separate but similar studies conducted: the Group Walkthrough and a faculty interview/independent walkthrough.



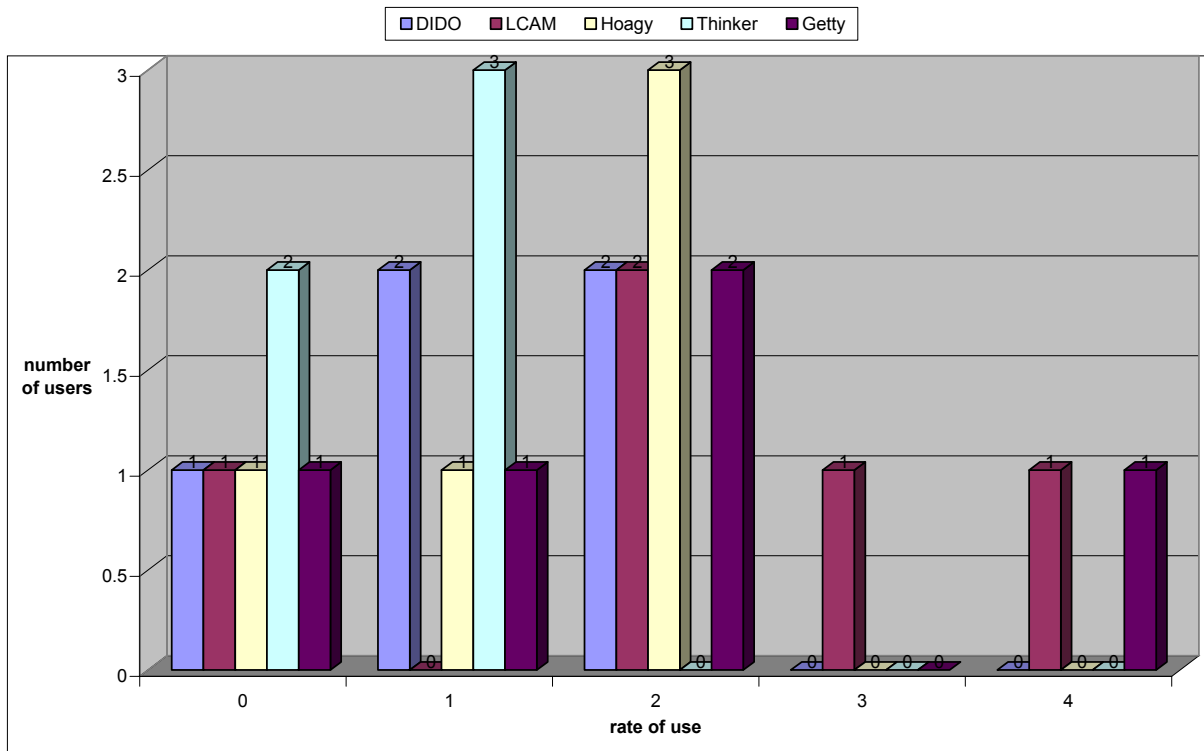
Preferred Browser



Hours Online

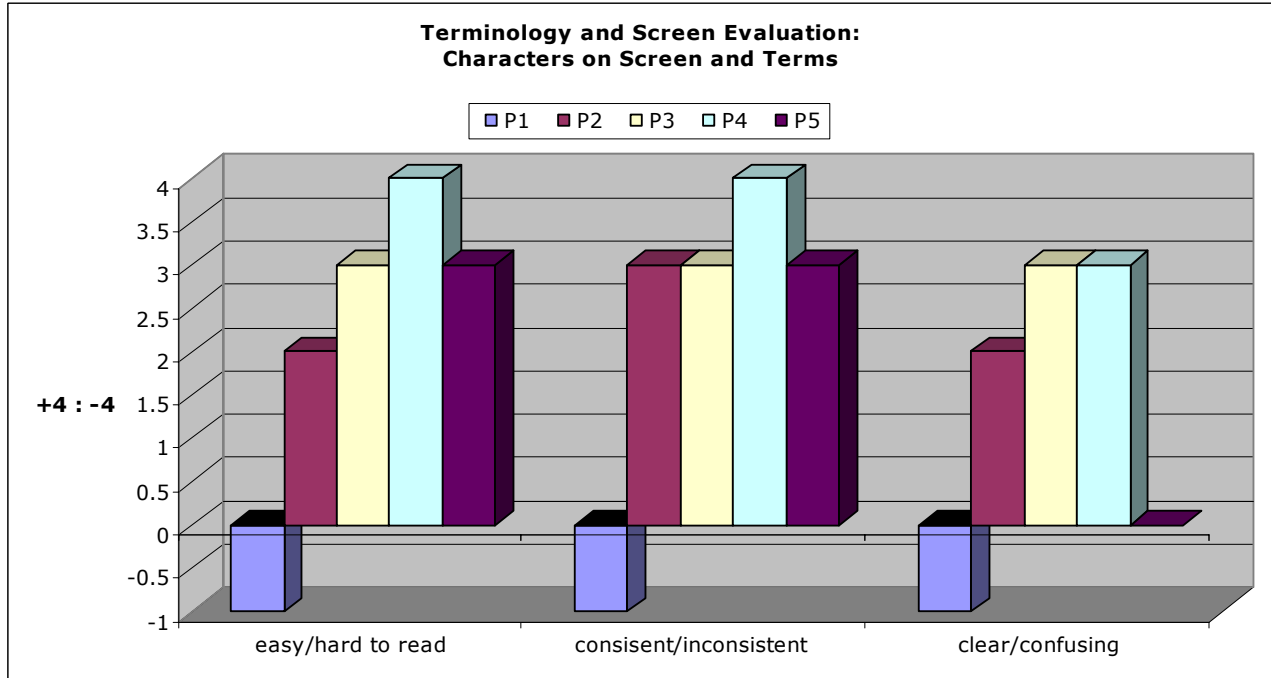
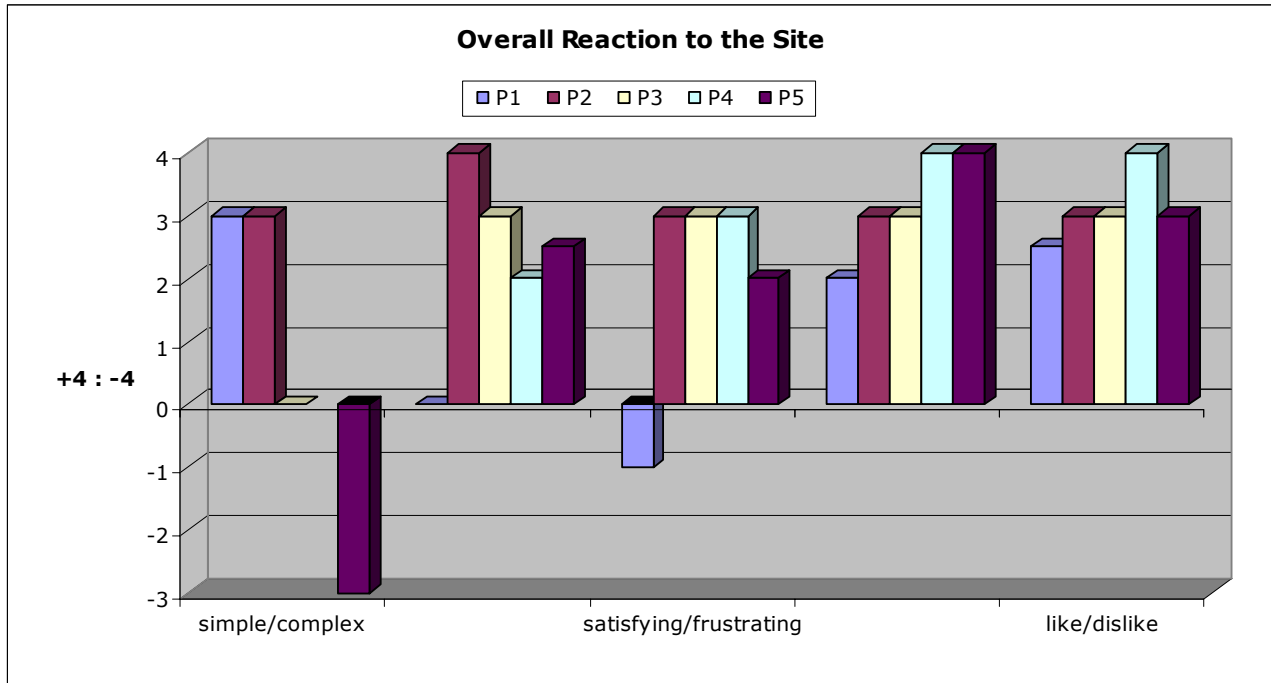


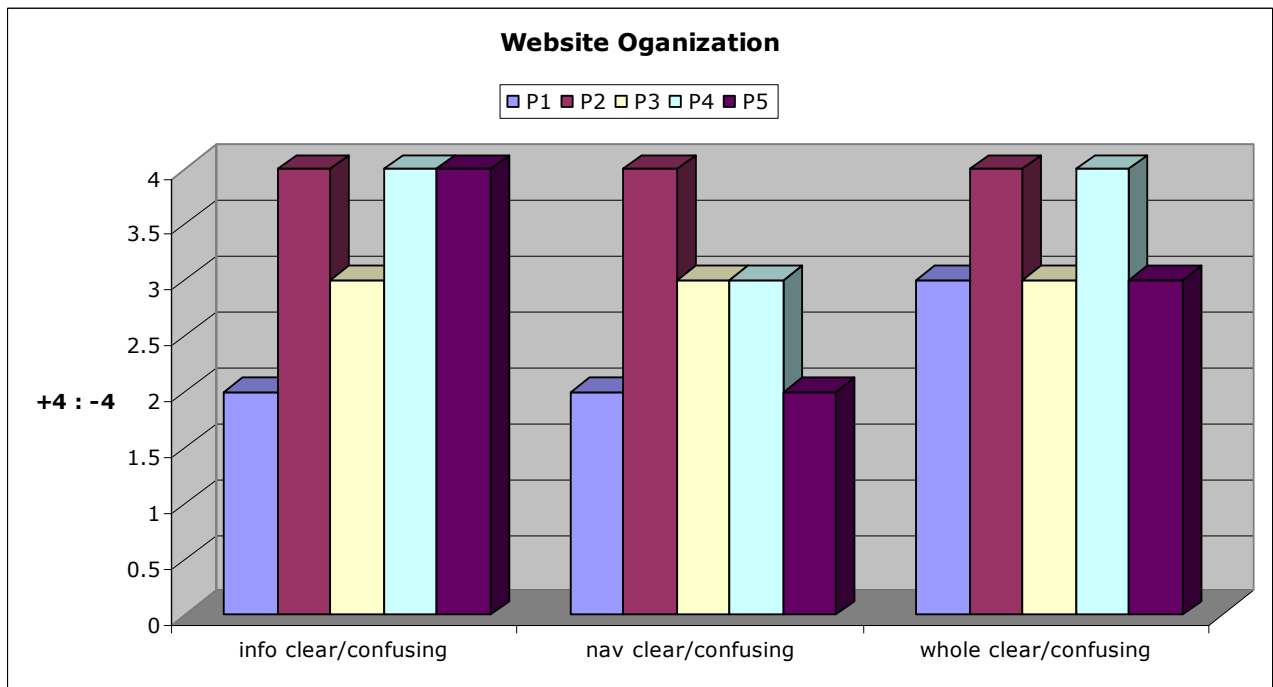
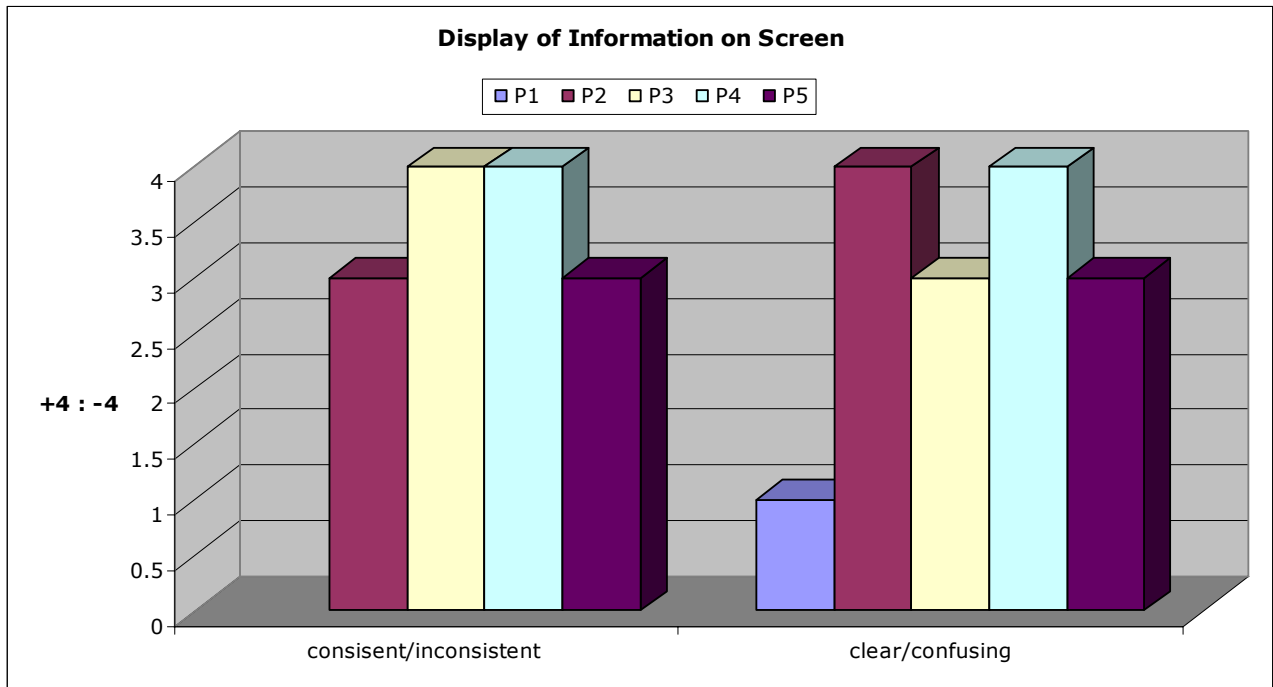
Use of Other Online Collections

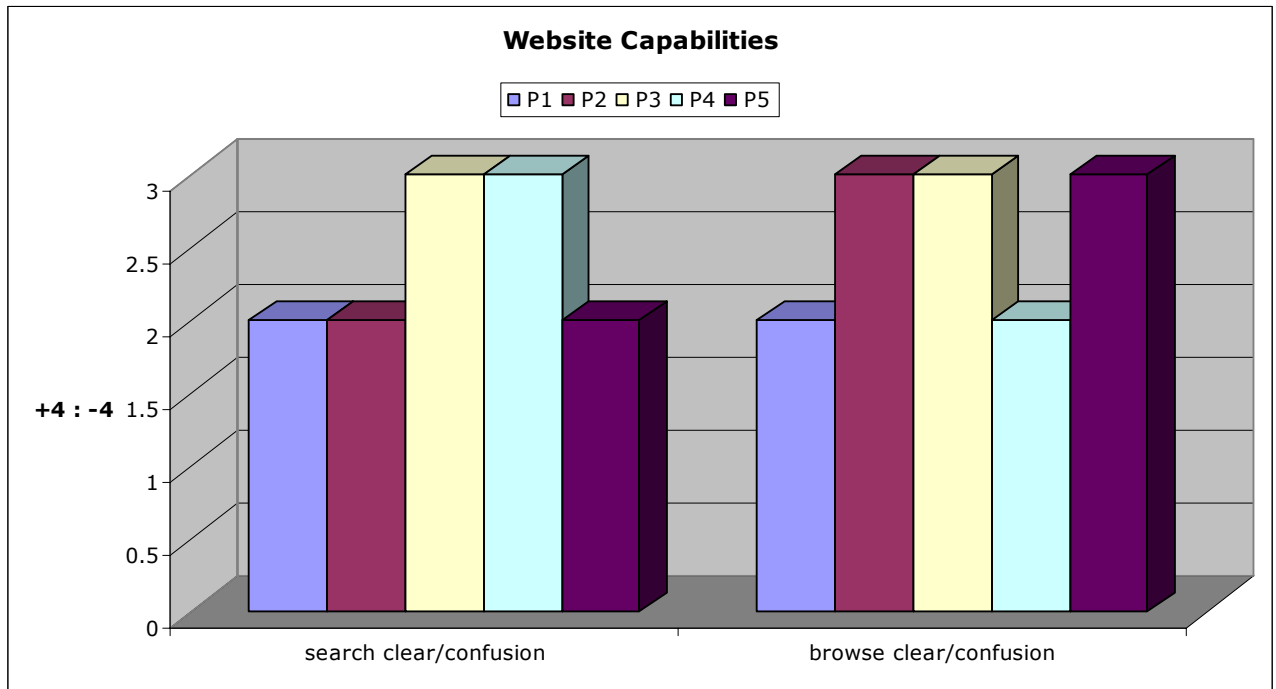


Appendix B: Participant Satisfaction Questionnaire: A Graphical Summary

The participant information represented below is an aggregate of two separate but similar studies conducted: the Group Walkthrough and a faculty interview/independent walkthrough.







Appendix C: Task Scenarios: How the Group Walkthrough Participants solved the Tasks at Hand

In order to collect individual data not influenced by group discussion or further exploration of the browse and search screens, participants were given screen shots of the date, location and genre browse as well as the keyword/simple and advanced search screen with corresponding tasks. They were asked to use the corresponding screens to describe, step-by-step, how they would solve the task.

Keep in mind that the task breakdown and accompanying comments were written before any discussion ensued about the browse and search options, display capabilities, and special features such as saving a Cushman record or matrix browsing.

Overall, findings indicate that a more flexible browse should be implemented that supports subdivisions to meaningfully categorized results into manageable numbers. One participant mentioned a couple of times the ability to save or mark records while browsing. Presumably this can be a useful tool as one spends more time discovering the collection. Having records saved could serve as a helpful point of reference to launch a more detailed search.

The search findings were also rather interesting in that task breakdowns and comments alluded to a few issues the tasks were designed to clarify: inclination to create complex queries in a simple search; proficiency/understanding of the advanced search fields; and questions of authorized terms. The latter was least anticipated since reference to the thesaurus was not all referenced as a way in which to aid searching for these tasks. Three of the four participants constructed complex queries for the simple search tasks while one felt that he needed to construct queries using the advanced search screen. On average, most of the participants understood how to use fielded searching to create a more precise search query in the advanced search screen. Lastly, two participants had concerns with using language such as "street life" or "u.s." that was not standardized. One participant in particular seemed sensitive to the possible presence of a controlled vocabulary and was uncertain if his natural language query formation would yield results.

The charts below describe the browse and search tasks explored by each participant. The chart states the task description, task breakdown (steps written by participants) and any additional comments. Following each participant chart is a brief analysis of significant findings.

Participant 1					
B r o w s e S e a r c h	Task Description: Date Browse You are interested in seeing post WWII depictions of the rise of suburban communities.				
	<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Start with "1946" and continue selecting each subsequent year. If time is factor, may only search from 1950-1960.</td> <td>No date range feature Some way of marking images to save.</td> </tr> </tbody> </table>	Task Breakdown	Comments	Start with "1946" and continue selecting each subsequent year. If time is factor, may only search from 1950-1960.	No date range feature Some way of marking images to save.
	Task Breakdown	Comments			
	Start with "1946" and continue selecting each subsequent year. If time is factor, may only search from 1950-1960.	No date range feature Some way of marking images to save.			
	Task Description: Location Browse You are interested in indigenous cultures and would like to peruse photographs taken in Central and South America.				
	<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Click on "Mexico" Go through all 127 images</td> <td>Like some way of marking images to save or refer to.</td> </tr> </tbody> </table>	Task Breakdown	Comments	Click on "Mexico" Go through all 127 images	Like some way of marking images to save or refer to.
	Task Breakdown	Comments			
	Click on "Mexico" Go through all 127 images	Like some way of marking images to save or refer to.			
	Task Description: Genre Browse You enjoy looking at photos of nature- woods, trees, leaves, streams and so on- taken during the fall (autumn) and you are curious if such photos exist in the Cushman Collec				
	<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Browse "Landscape Photos"</td> <td>Actually I wouldn't browse at all. I'd do a search (possibly a Book search).</td> </tr> </tbody> </table>	Task Breakdown	Comments	Browse "Landscape Photos"	Actually I wouldn't browse at all. I'd do a search (possibly a Book search).
Task Breakdown	Comments				
Browse "Landscape Photos"	Actually I wouldn't browse at all. I'd do a search (possibly a Book search).				
Task Description: Simple Search You need to find photographs conveying street life scenes in all the New York City boroughs except for Manhattan.					
<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Conduct 4 separate searches for the boroughs unless I can do Ors in which case: Brooklyn OR Bronx OR Queens OR Staten Island. Depending on the Boolean, I could AND the stat with "street".</td> <td>*Note stating more info is needed in the Search Tips area.</td> </tr> </tbody> </table>	Task Breakdown	Comments	Conduct 4 separate searches for the boroughs unless I can do Ors in which case: Brooklyn OR Bronx OR Queens OR Staten Island. Depending on the Boolean, I could AND the stat with "street".	*Note stating more info is needed in the Search Tips area.	
Task Breakdown	Comments				
Conduct 4 separate searches for the boroughs unless I can do Ors in which case: Brooklyn OR Bronx OR Queens OR Staten Island. Depending on the Boolean, I could AND the stat with "street".	*Note stating more info is needed in the Search Tips area.				
Task Description: Simple Search You are looking for photographs taken of San Francisco bridges. You would like to see pictures of the Golden Gate Bridge as well as the other known bridge but you are not c name: Oakland Bridge or Bay Bridge or Oakland Bay Bridge. Compose a search query that finds either or both of these bridges in the Cushman Collection.					
<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Go to Advanced Search (San Francisco) AND Bridge or if phrase searching is available "San Francisco" bridge</td> <td></td> </tr> </tbody> </table>	Task Breakdown	Comments	Go to Advanced Search (San Francisco) AND Bridge or if phrase searching is available "San Francisco" bridge		
Task Breakdown	Comments				
Go to Advanced Search (San Francisco) AND Bridge or if phrase searching is available "San Francisco" bridge					
Task Description: Advanced Search You are looking for pictures taken of Sears, Roebuck and Company storefronts across the Eastern United States during the early 1940's.					
<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Keyword = Roebuck and then Date: Jan 1, 1940 - Dec 31, 1945</td> <td>Or keyword = Sears but may not use Sears since Roebuck is les common. Since location is by state I don't want to re-search for however m states, I'd rather go through the results on the screen.</td> </tr> </tbody> </table>	Task Breakdown	Comments	Keyword = Roebuck and then Date: Jan 1, 1940 - Dec 31, 1945	Or keyword = Sears but may not use Sears since Roebuck is les common. Since location is by state I don't want to re-search for however m states, I'd rather go through the results on the screen.	
Task Breakdown	Comments				
Keyword = Roebuck and then Date: Jan 1, 1940 - Dec 31, 1945	Or keyword = Sears but may not use Sears since Roebuck is les common. Since location is by state I don't want to re-search for however m states, I'd rather go through the results on the screen.				
Task Description: Advanced Search Find photographs of landscapes taken in state and national parks located in Arizona, California and Nevada. Change the default results display per page and sort these in a r meaningful to you.					
<table border="1"> <thead> <tr> <th>Task Breakdown</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>keyword = park; and location = Arizona; and location=California; and location=Nevada; genre = land Sort by Location (if it's an option).</td> <td></td> </tr> </tbody> </table>	Task Breakdown	Comments	keyword = park; and location = Arizona; and location=California; and location=Nevada; genre = land Sort by Location (if it's an option).		
Task Breakdown	Comments				
keyword = park; and location = Arizona; and location=California; and location=Nevada; genre = land Sort by Location (if it's an option).					

Browse Analysis

Most of the insights stem from the comments added by the participant rather than the task breakdown. The first browse task involved looking for images during a certain time period, thus, implying a date range. This participant noted that a date range feature is not available. This observation harks back to an earlier study held, a focus group for the Sheet Music Harvester project, in which participants asked for the ability to customize their date browse. They felt that even if date ranges were provided, they might not be ranges that support their browsing needs.

The participant also mentioned the ability to save or mark images as she browses.

Search Analysis

The participant took completely different approaches when attempting to solve the Simple Search tasks. For the first task, she assumed that one could type complex queries using Boolean operators and phrase matching. However, the steps taken were phrased in the hypothetical with a note stating that more information is needed in the Tips area. She decided that she would complete the second Simple Search task by clicking on the Advanced Search link and composing the query there.

While the browse tasks were conceived in a more open-ended fashion, addressing the very general 'How would they browse?', the search tasks were designed to see how many participants would enter complex queries in a simple search or would just go to advanced search to solve the task. In this case, the participant was inclined to do both. Perhaps after solving the first task, she felt uncertain whether complex queries were supported in the Simple Search thus using the Advanced Search to complete the second simple task.

Participant 2

**B
r
o
w
s
e

S
c
r
e
e
n
s**

Task Description: Date Browse	
You are interested in seeing post WWII depictions of the rise of suburban communities.	
Task Breakdown	Comments
Click on relevant years in turn (39-45)	From this screen I am not confident that the following screen would provide easy access to images of suburbia. Would the next screen have more date divisions or would genre categories appear?
Task Description: Location Browse	
You are interested in indigenous cultures and would like to peruse photographs taken in Central and South America.	
Task Breakdown	Comments
Click on "Mexico" Next I expect an itemized list (of all 127 images) w/thumbnails and info about the images.	The only apparent relevant category Would stray from any of the Mexico sub-categories for fear of missing u
Task Description: Genre Browse	
You enjoy looking at photos of nature- woods, trees, leaves, streams and so on- taken during the fall (autumn) and you are curious if such photos exist in the Cushman Collection.	
Task Breakdown	Comments
"Landscape Photos" (looks the most useful) May also look under "Marine" and "Aerial"	Intimidating to see that there are 3,720 images. Seems unbalanced. Could it be subdivided? Though the Aerial section seems to be primarily architectural based on the description. Took me a while to see that Identification Photos contained botanical items.
Task Description: Simple Search	
You need to find photographs conveying street life scenes in all the New York City boroughs except for Manhattan.	
Task Breakdown	Comments
Would hope Boolean is available and would try: 'New York NOT Manhattan'. If timid would try 'Brooklyn OR Bronx OR Queens OR Staten Island'.	Would be hesitant to search any terms to get street life not knowing the right vocabulary.
Task Description: Simple Search	
You are looking for photographs taken of San Francisco bridges. You would like to see pictures of the Golden Gate Bridge as well as the other known bridge but you are not quite sure of the name: Oakland Bridge or Bay Bridge or Oakland Bay Bridge. Compose a search query that finds either or both of these bridges in the Cushman Collection.	
Task Breakdown	Comments
Would try 'California bridge' hoping that California would pick or Oakland and S.F. Bridges.	Also likely that I would search for each bridge individually for fear that no single search would gather all the needed bridges.
Task Description: Advanced Search	
You are looking for pictures taken of Sears, Roebuck and Company storefronts across the Eastern United States during the early 1940's.	
Task Breakdown	Comments
Enter 'Sears' in Keyword field, leaving all other search fields blank. May try the 'architecture' genre. Would certainly use date delimiters.	Uncertain about right vocab to use in location/place field. Would be hesitant to even put U.S. there. Should it be 'United States'?
Task Description: Advanced Search	
Find photographs of landscapes taken in state and national parks located in Arizona, California and Nevada. Change the default results display per page and sort these in a manner meaningful to you.	
Task Breakdown	Comments
Enter something like 'park AND (state or national)' in keyword field. Enter 'Arizona OR California OR Nevada' in place field (or leave it blank). Select 'landscape' in genre box. Use sort by place. Display 50 per page (maybe).	

Browse Analysis

The recurring theme in the browse-related comments refers to the ability to further subdivide the date and genre browse. Comments regarding the date browse task express uncertainty as to how to access images of suburbia. He wonders if the next screen (after year selection) will sub-divide into genre categories in order to make the appropriate selection. The genre browse task elicited similar concerns but mostly due to the large amount of results 'Landscape Photographs' would generate.

Participant 2 listed as the second step for the location browse that he expected to see an "itemized list (of all 127 images) w/thumbnails and info about the images." This is indeed the proposed default view for displaying results. Interestingly, no other participant referred to the results page in their task breakdown, but they all agreed, once discussion ensued, that the thumbnail/caption list is the expected display and should be the default.

Search Analysis

This participant approached the first simple task using complex query syntax, as did the first participant. He expressed some hesitation in using the term "street life" since he was not certain of the right vocabulary. The assumption then is that Cushman collection is possibly described using a controlled vocabulary only. The same assumption was made for the advanced search task. He was hesitant to complete the location field search for he was unsure whether to enter U.S. or United States. It is clear that this participant is sensitive to or perceives the use of controlled vocabularies and/or normalized input of terms.

Participant 3

**B
r
o
w
s
e**

Task Description: Date Browse	
You are interested in seeing post WWII depictions of the rise of suburban communities.	
Task Breakdown	Comments
Start by selecting 1945, then 1956 so on.	While browsing the images I would wonder how or why I can't do a keyword or subject search under "suburban" to make it less tedious.
Task Description: Location Browse	
You are interested in indigenous cultures and would like to peruse photographs taken in Central and South America.	
Task Breakdown	Comments
n/a	I would go to the search field on the top-right hand corner and enter "indigenous" and "indigenous cultures". Short of that I would begin visiting the clickable links using educated guesses and pray for luck.
Task Description: Genre Browse	
You enjoy looking at photos of nature- woods, trees, leaves, streams and so on- taken during the fall (autumn) and you are curious if such photos exist in the Cushman Collection.	
Task Breakdown	Comments
	I would use the search function above using the term "autumn". Short of that I might browse genres such as "landscape photographs."

**H
o
w
o
u
d
I
b
r
o
w
s
e**

Task Description: Simple Search	
You need to find photographs conveying street life scenes in all the New York City boroughs except for Manhattan.	
Task Breakdown	Comments
First, try a Boolean search like "Brooklyn AND Bronx AND Manhattan AND Staten Island."	Looking at the tips note, I might do the first search but leave off Staten Island and do it as a separate search in quotes. If those fail I would search by single boroughs.
Task Description: Simple Search	
You are looking for photographs taken of San Francisco bridges. You would like to see pictures of the Golden Gate Bridge as well as the other known bridge but you are not quite sure of the name: Oakland Bridge or Bay Bridge or Oakland Bay Bridge. Compose a search query that finds either or both of these bridges in the Cushman Collection.	
Task Breakdown	Comments
Would try "Golden Gate Bridge" OR "Oakland Bridge" OR "Bay Bridge" or "Oakland Bay Bridge"	Depending on the results and if I were dissatisfied I might explore the Advanced Search link.
Task Description: Advanced Search	
You are looking for pictures taken of Sears, Roebuck and Company storefronts across the Eastern United States during the early 1940's.	
Task Breakdown	Comments
Enters "Sears" in the first field [Keyword]; "United States" in the second field [location]; in the third field I would use the drop down menu to select Subject and enter "store fronts" in the Year field I would enter 1939 to 1945.	
Task Description: Advanced Search	
Find photographs of landscapes taken in state and national parks located in Arizona, California and Nevada. Change the default results display per page and sort these in a manner meaningful to you.	
Task Breakdown	Comments
[keyword] = landscapes; [location/place] = "Arizona AND California AND Nevada"; fourth field [select field] = "state AND national parks". Would ask for 50 per page.	

Browse Analysis

This participant clearly did not find these task scenarios conducive for browsing. For all the browse tasks he would go to the search box (the always visible, top-level search box). Even though the top-level search will be removed, this participant's inclination support Jakob Nielsen's research that a search box should be accessible at all times.

Search Analysis

The comments indicate that this participant was unsure whether the simple search could support phrase searching in conjunction with a query that contains several Boolean Ands. He seemed to overcome any hesitancy in phrase searching when completing the second simple task, but he did mention he'd explore the Advanced Search if dissatisfied with the results. It is clear based on his Advanced Search task breakdown that he's comfortable using the various fields to generate a more precise query.

Participant 4

**B
r
o
w
s
e

S
i
m
p
l
e

S
e
a
r
c
h
e
s**

Task Description: Date Browse	
You are interested in seeing post WWII depictions of the rise of suburban communities.	
Task Breakdown	Comments
Click on 1945 and browse images displayed. Then click 1946 and so on. Then I'd click on the years preceding and during the war.	I would be looking for patterns in the images or information or mood in the shots that are illustrative.
Task Description: Location Browse	
You are interested in indigenous cultures and would like to peruse photographs taken in Central and South America.	
Task Breakdown	Comments
Click on Mexico and browse images. Might click on Texas and Arizona for completion.	
Task Description: Genre Browse	
You enjoy looking at photos of nature- woods, trees, leaves, streams and so on- taken during the fall (autumn) and you are curious if such photos exist in the Cushman Collection.	
Task Breakdown	Comments
Click on <Landscape photographs> <marine photographs/seascapes> etc and browse.	Might search on specific terms as well.
Task Description: Simple Search	
You need to find photographs conveying street life scenes in all the New York City boroughs except for Manhattan.	
Task Breakdown	Comments
Go to Advanced Search form. Fill in borough names separated by OR. I would do a second search on New York City separately.	*Even if I could use a mechanism to search on 'New York' and eliminate Manhattan I would not feel as confident unless I had too many images to sift through. The way it is, I would search on each of the boroughs separately.
Task Description: Simple Search	
You are looking for photographs taken of San Francisco bridges. You would like to see pictures of the Golden Gate Bridge as well as the other known bridge but you are not quite sure of the name: Oakland Bridge or Bay Bridge or Oakland Bay Bridge. Compose a search query that finds either or both of these bridges in the Cushman Collection.	
Task Breakdown	Comments
Go to Advanced Search -> San Francisco and bridge.	In a real world situation I would determine the name of the bridge elsewhere or just do a few searches on 'Oakland', 'Bridge' etc until I get it.
Task Description: Advanced Search	
You are looking for pictures taken of Sears, Roebuck and Company storefronts across the Eastern United States during the early 1940's.	
Task Breakdown	Comments
Keyword = Sears; Location/Place = Eastern U.S.*; Fill in appropriate dates.	*If U.S. is possible?
Task Description: Advanced Search	
Find photographs of landscapes taken in state and national parks located in Arizona, California and Nevada. Change the default results display per page and sort these in a manner meaningful to you.	
Task Breakdown	Comments
Location = Arizona; change Cushman ID to Location/Place = California; next one = Nevada. Change ANDs to Ors. Select genre = landscape. Search.	

Search Analysis

This participant instantly opted to go to the Advanced Search page to complete the Simple Search tasks. Interestingly, this was the only participant that stated to never use Advanced Searches on the web or when consulting other online resources. He too, like participant 2, had a question as to how U.S. should be entered in the location field.

Appendix D: Interview Questions for Charles W. Cushman Photography Collection Transcription of Field Interview

1. Do you utilize image collections in your teaching and/or research? If so, how? If not, how would you like to use image collections in your work?

Feel free to demonstrate how you do so (Power Point, web pages, Oncourse, etc.) while you explain. Do you use online images differently in your research versus in your instruction?

JR's Notes: [Professor's] first year at IU. Used images in course on history of American cities. Doesn't know how to use Power Point. Uses 35 mm slides – taken himself or borrowed from Fine Arts Library. Received grant to digitize slides from his collection—just beginning work. Wants slides for course web pages & projection in class.
[No demo of online collection in class.]

MD Trans: First year at IU in general things are new. I can speak more broadly. Taught course this fall, twice a week, survey course—slides for virtually every lecture (28/30 class sessions). I use slides because I don't know how to use Power Point and I have slides. I also borrow if I need to fill gaps—either have them made with one of those other offices with initials [TLTLTC] down in this [Ballantine] building or I would go to the Fine Arts library and borrow slides. Between those and my collection I would scrounge up the slides I need to use. [During lectures] Speak to the slides.

Applied for and got a small grant to digitize a part of my slide collection for future use and that was from TLTL now TLTC and I haven't started working on that. I have the money to pay an assistant to scan things. So my goal is to digitize that stuff so I can figure out how to use it and TLTC's goal is to work with me specifically to create a curriculum and integrate [the slides] into my teaching.

So I do want to work with images. I do want to get savvy about knowing how to use them digitally both for course-related website purposes and for projection during class.

[MD asks whether a web page has ever been mocked up to link images]

The simplest thing I can think of and I'd rather NOT [emph is mine] be too elaborate about bringing stuff up and contrasting and comparing—I find that really disturbing about PPT presentations—constantly seeing the person monkey-ing around – but try to keep them more like a real slide presentation—to project instead of constantly looking stuff up in class.

I could imagine doing the work ahead of time so I had that stuff ready to go. Once I was in class I would want it to be straight images that wouldn't require lots of manipulation.

2. Have you ever downloaded images from the web? If so, how do you use these images—in your own course website or lecture slide presentation? Do you mind showing me?

JR: No download. All his slides he took himself. Used Google image to look things up, but doesn't use these images.

MD: No. I have never turned on a computer in a classroom. Never downloaded from the web. Only slides I have are the ones I took. Never from digital to any other form. And I never downloaded any digital image—I don't think. Have looked up for reference purposes using Google Image.

3. Are there any **comprehensive image collections** that you use in their totality (for the other contextual resources included like essays, supporting documents, etc.)? How do or would you use them in your work?

[Probe with: Library of Congress' American Memory or Getty digital resources]

JR: Not really. Used Google Image some. Would like to use image bases but hasn't gotten around to it yet. Has browsed American Memory.

MD: No, I'd say not. I have only learned this year about Google Image. Never used image bases as a research reference material. I'd like to. [Has heard about LC American Memory] Yeah, I have touched on the site. Browsed couple of things that were in categories familiar to me.

4. Have you ever included online image resources for class projects, homework or simply as general references? If so, which ones [can you show me]? Why did you choose those [content, searching, browsing]?

JR: No Fall 2003 or Spring 2004 will start including these in syllabi.

MD: No I haven't. I'd like to start preparing and I will come Fall or Spring of next year syllabi that include references to online resources in general and expect among those will be some image sites.

5. Are there any features such as search abilities, browsing, and image manipulation (like zooming) that you especially like within the online collections you just mentioned? [Name these collections specifically] [can you show me?]

JR: Likes telescoping images—zooming, panning. No plug-ins. Hates them. Works from slow home connection as well as fast IU connection.

MD: I like being able to telescope up and down—whatever you call that—When you can click on a magnifier and compress, zoom. [Finds viewing a detail of an image useful]. I don't like stuff that is too tricky. I have been on a lot of sites where I'll immediately get the message: 'you'll need whatever my flash player or something other' [plug-ins] to get this thing to work. That's a turn off for me.

I guess now that I am at IU a lot of those things are already built onto my computer, but in general and at home in particular, I prefer not to have to deal with that. Downloads too slow.

No more surfing at home than here [at IU]. At home I have an older Macintosh computer and I find that it is slow in getting stuff so I can't deal with anything to elaborate.

6. Is there anything else you'd like to mention that will help us in designing the Cushman image collection website? Any other issues you'd like to address about image collections in general (such as remote loading times, etc.)?