What if they build it and no one comes? Balancing Full-Text Access and User Tasks

Abstract
Kuhlthau (2005) highlighted the chasm separating the investigation of information-seeking behaviors and the design of information retrieval systems and proposed that its continued existence prohibited any effective resolution of information seeking problems. Consequently she argued that only by enhancing collaboration among researchers engaged in these two areas, continuing investigations beyond the first round of findings, and using findings to design systems for evaluation can research in library and information science proceed meaningfully and effectively. This paper will discuss the task analysis findings from the research project Folktales and Facets that seeks to address this chasm. As part of the content analytical approach taken in this project, the researchers conducted task analysis on transcripts from interviews with 12 subjects who rely on folk narratives in their professional lives as storytellers (n=6) scholars or instructors (n=4), or librarians (n=2). These findings will be mapped to the FRBR user tasks and placed in the greater context of user-focused studies that seek to do the same.

Introduction
Since 2005, Library and Information Science researchers have continually found themselves grappling with a dynamic information environment both in terms of the increasing prevalence of full text resources, and in terms of changes in the codes and standards by which bibliographic access is created. User expectations have shifted accordingly. At the heart of many of these changes lies the Functional Requirements for Bibliographic Records (FRBR) final report (IFLA, 1998). According to this report, the entity relationship model of FRBR intended to:

Produce a conceptual model that would serve as the basis for relating specific attributes and relationships (reflected in the record as discrete data elements) to the various tasks that users perform when consulting bibliographic records. … It takes a user-focused approach in analyzing data requirements insofar as it endeavours to define in a systematic way what it is that the user expects to find information about in a bibliographic record and how that information is used. (IFLA, p.3)

Yet, according to Madison's (2005) description of the origins of FRBR, despite the emphasis on users, the members of the Study Group of the Cataloging Section of IFLA decided not to conduct actual user surveys and instead selected another more expedient and practical option:

Tо use our collective knowledge of the various types of users from the working group membership and commentators, as well as to draw upon experts in the fields to provide necessary user perspectives and conclusions… Furthermore, the Study Group believed that, given its own international representational make-up, the range of the members' professional cognizance of user needs based on their theoretical and practical backgrounds and experiences, and the types of experts that they expected to draw into their research, would mitigate the need for user surveys (Madison, 2005, p. 29).

The intent of this brief report from the Folktales and Facets project is to provide a glimpse into a real world user survey of information seeking tasks among a small group of scholars, teachers and storytellers as they seek to discover information resources related to their interests. This briefing will compare and contrast observed user tasks with those formulated by the IFLA study group, which relied on the theoretical and practical backgrounds and experiences of the study group members. Because this user study is a small group, no claim is made to the generalizability of the findings; instead, the findings are offered as a response to Barbara Tillett's (2005) call for more research about user needs...
and user tasks in order to provide answers to questions such as, “What information is ‘enough’ for each of the user tasks?” and “What other user tasks are essential?” (p. 198).

**Literature Review**

Today, it is generally understood that the four generic FRBR user tasks—find, identify, select, and obtain—seek to represent a broad set of users, who are motivated by a range of tasks that include searching and/or using bibliographic records across a variety of tools, comprised of “bibliographies, library catalogs, bibliographic databases, full text, or graphical resources” (Madison, 2005, p. 30). Several recent studies attempt to redress the lack of actual user studies in the FRBR final report (1998), including Zhang and Salaba’s (2009) Delphi study with thirty-three field experts, who identified key issues and challenges for FRBR. Among the most pressing issues they identified were the need to verify and validate the FRBR model using real data as well as the critical need for user studies. In another study that included card sorting, conceptual mapping, and comparison tasks, Pisanski, J. & Žumer (2010a, 2010b) examined whether user mental models of the bibliographic universe fit the FRBR entity-relationship model. One important finding of this work is that users do not have shared mental models, and individual mental models often differ from the FRBR conceptual model, thereby making the need for user studies even more evident.

Foster, Clark, Tancheva, & Kilzer (Eds.) (2011) present work that moves user-based observation of the FRBR conceptual model forward immeasurably, at least in the context of creating the eXtensible Catalog. The chapters in this book describe a process of design and development that relied extensively on participatory design and eliciting user responses as a way to identify needed features—including FRBR-based metadata management. Other researchers, including Elaine Svenonius and Barbara Tillett have suggested possible additional user tasks to add to the original four: Find, Identify, Select and Obtain. Svenonius suggests that the Find task be split into two, Locate and Collocate, and added Navigate (Svenonius, 2000, 62-66). Tillett also adds a possible task to the list, Relate (2005, p.198). It is in the context of these offerings that the Folktales and Facets observations of user tasks are offered.

**The Tasks**

The following sections will first discuss the FRBR user tasks for context, and then will introduce the tasks from the project Folktales and Facets.

**The Tasks: Functional Requirements for Bibliographic Records**

The FRBR report (IFLA, 2009) provides a mapping of tasks to attributes and relationships, and generic user tasks. In so doing it also provides a relative indication of the importance of each task to the attributes and relationships of each FRBR entities [Works in Table 6.1 (pp. 88-89), Expressions (pp. 90-92), Manifestations (pp. 93-95) and Items (p. 96)].

**Find**

Find is the search for a resource that corresponds to stated criteria (i.e., to search either a single entity or a set of entities using an attribute or relationship of the entity as the search criteria).

**Identify**

Identify is to verify the identity or characteristics of a resource (i.e., to confirm that the entity described or located corresponds to the entity sought or to distinguish between two or more entities with similar characteristics).
Select
Select is to choose a resource that is appropriate to the user's needs (i.e., to choose an entity that meets the user's requirements with respect to content, physical format, etc., or to reject an entity as being inappropriate to the user's needs).

Acquire
Acquire is to access a resource either physically or electronically through an online connection to a remote computer and/or acquire a resource through purchase, license, loan, etc.

The following section introduces the tasks from the Folktales and Facets study in order to provide context for the comparison of both sets of tasks to follow.

The Tasks: Folktales and Facets
The user tasks that serve as a comparison to those identified in the FRBR model come from an ongoing study of how individuals seek access to and use folktales and similar materials in their daily lives. With institutional approval, La Barre and Tilley, the principal researchers for this project, Folktales and Facets, have interviewed twelve people. Six of the participants self-identify as scholars (i.e. researchers and instructors); and all but one informant identify as practitioners (i.e. storytellers and librarians). Each of these informants utilizes folktales and similar materials in their work. Full information about this project, nine of the twelve informants, and the method can be found in La Barre and Tilley (2012); however, Table 1 summarizes some of the salient characteristics for each informant.

Through a series of individual hour-long semi-structured interviews, we elicited typical information-seeking and information-use tasks, strategies, and resources related to folktales for these informants. We captured additional information such as the informants’ ideas for strengthening discovery and access tools during these interviews, but much of this additional information is beyond the scope of the current paper.

Table 1: Informants Interview for Folktales and Facets

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Primary Role</th>
<th>Secondary Role</th>
<th>Highest Degree</th>
</tr>
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<tbody>
<tr>
<td>Curt</td>
<td>Storyteller</td>
<td>Instructor</td>
<td>M.A., Folklore</td>
</tr>
<tr>
<td>Liz</td>
<td>Scholar</td>
<td>Storyteller</td>
<td>Ph.D., Library Science</td>
</tr>
<tr>
<td>Jeanie</td>
<td>Scholar</td>
<td>Librarian</td>
<td>Ph.D., Library Science</td>
</tr>
<tr>
<td>Alison</td>
<td>Instructor</td>
<td>Storyteller</td>
<td>Ph.D., Library and Information Science</td>
</tr>
<tr>
<td>Glen</td>
<td>Storyteller</td>
<td>None</td>
<td>MLS, Library Science</td>
</tr>
<tr>
<td>Barbara</td>
<td>Librarian</td>
<td>Storyteller</td>
<td>MLS, Library Science</td>
</tr>
<tr>
<td>Rick</td>
<td>Librarian</td>
<td>None</td>
<td>MLS, Library Science</td>
</tr>
<tr>
<td>Sharon</td>
<td>Storyteller</td>
<td>Scholar</td>
<td>M.A., Folklore (in progress)</td>
</tr>
<tr>
<td>Diana</td>
<td>Storyteller</td>
<td>None</td>
<td>M.S., Museum Studies/Education</td>
</tr>
<tr>
<td>Andrea</td>
<td>Scholar</td>
<td>None</td>
<td>Ph.D., Comparative Literature</td>
</tr>
<tr>
<td>Betty</td>
<td>Storyteller</td>
<td>Librarian</td>
<td>MLS, Library Science</td>
</tr>
<tr>
<td>Peggy</td>
<td>Storyteller</td>
<td>Librarian</td>
<td>MLS, Library Science</td>
</tr>
</tbody>
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Four broad categories of information tasks, or goals, emerged from our analysis of the informants’ interviews: create, collect, study, and instruct. Each informant engaged in each type of information task. Although the storyteller and librarian practitioners participated in study and instruct tasks less frequently than scholars, the scholar informants engaged equally in all four tasks. The following sections briefly define and illuminate each task.

Create
Create is the assembly and synthesis of multiple pieces of information in order to entertain, elicit an emotional response, or encourage empathy. This activity is most
associated with the storyteller practitioners, such as Sharon who described how she might integrate several versions of a single story to maximize coherence and highlight particularly memorable language or humor. Betty and Peggy, who sometimes perform stories as a duo, discussed how collaboration can be a creative activity, as it requires agreement on source materials, timing, and performance aesthetics.

Collect
Collect (or acquire) is defined as gathering and organizing information resources or their surrogates for current and/or future use. The storyteller practitioners provided some of the best examples of the collect task. For instance, Curt has created a personal library of more than 3,000 volumes, which he has cataloged using Library. Thing and makes available for students and storytellers. In addition, this library, together with extensive performance notes, story outlines, and similar resources that Curt gathers electronically on this computer, serve as the starting point for many of his scholarly projects. Other informants collect items such as Internet bookmarks, set lists, and audiotapes; to gather and organize their collections, the informants use a variety of tools including paper folders, map cabinets, file drawers, guitar cases, and notebooks.

Study
Study is the acquisition of information in order to transform intellectual understanding. It differs from create in that the transformation and synthesis of multiple pieces of information is targeted primarily at creating new knowledge as opposed to eliciting an emotional response. For many of our informants, folktales themselves are not the objects of study. Jeanie, for instance, has a long-term scholarly interest in the pioneering storytellers in the early decades of youth services librarianship. Scholar Andrea focuses her work more on the material culture surrounding the production of fairy tales. Similarly, Liz recently completed an edited book in which women in academe reflected on the stories that have motivated their professional work.

Instruct
Instruct is the assembly and presentation of information to train others in some skills, knowledge, or behavior. As an example, Alison regularly instructs students in graduate-level storytelling classes in the use of particular tools and strategies to identify folktales for re-telling. For her job as a museum educator, Diana frequently develops story performances designed to inform young audiences about the social and cultural contexts of various museum exhibits.

Strategies Related to Tasks
The informants relied on two overarching strategies to works toward their goals: search and browse. As many of the informants had formal training and work experiences as librarians, their search strategies often belied this background. For instance, Betty discussed limiting a search in a library OPAC by publication date for a quasi-known item (i.e. an object that the informant knows exists even though traditional known-item search information such as title and author are unknown). Pearl-growing and complex keyword-chaining search strategies were common among participants as well. For all informants, browsing was the primary information-seeking strategy used to fulfill the four tasks. Many of the informants, for example, relied on browsing in a library by call number or on the displays of new items to identify promising stories or collections.

Tasks: Compare and Contrast
The FRBR user task Find most closely resembles the project participants’ Search strategy in support of a variety of tasks, or goals. Here, both Search (Folktales and Facets) and Find
(FRBR) involve a search for relevant materials that fit a user’s stated search criteria. For the participant group, search criteria may be a theme or a particular source, it is quite rare for these users to look for a specific author, or title, though far more common for them to look for items on a given subject or theme.

The *Folktale and Facets* participants also relied on an Explore or Browse strategy to help locate materials - especially in cases when they seek variants or adaptations of a tale. Here the Browse strategy more closely resembles Svenonius’ suggested FRBR task Navigate, than Find (or Search). When resorting to the Browse strategy, a participant may not be able to articulate exact search criteria, but is easily able to recognize an item or know it when they see it. Both Browse and Navigate bear a close resemblance to Tillett’s suggested FRBR task Relate. The participants’ Browse strategy is heavily reliant on associative relationships in order to accomplish tasks. These associations may involve related sources, items in aggregations, classification number associations or other pathfinder-like devices such as folktale indexes that participants often use in order to locate adaptations and variants of tales in ways that are not well supported by the metadata in commonly provided in bibliographic records.

The Instruct and Study tasks of the *Folktale and Facets* participants seem to be most closely related to the FRBR task Select. When participants engage in the Instruct task, they are preparing materials or programs that will teach others. When participants engage in the Study task, they are usually conducting original research or editing resources that are related to folktales, storytelling or folk narrative. Both tasks rely on materials that are identified through the FRBR task Select, but move beyond mere selection to the act of analysis and/or synthesis of the selected information resources. Choosing the appropriate resources (Select) is just the beginning phase of these two tasks, and it is the end goal that distinguishes between the two. The Instruct task often relies on the *Browse* strategy, while the Study task more often relies on Search.

*Folktale and Facet* participants also engage in the Create task, in which they prepare songs, notes, pathfinders, or programs that are primarily intended as entertainment, rather than as instructional devices. Many participants talk about the importance of being able to find numerous variations or adaptations of a story or variations of material that fit a particular theme as they work towards the creation of a version that they will make their own. Here the FRBR task Obtain acquires a central position as the participants must not simply identify the necessary items, but must also be able to acquire them.

This leads into the last *Folktales and Facets* user task, Collect, which also seems to extend beyond the scope of the likely companion FRBR task, Obtain. The Collect task includes more than the act of acquiring or obtaining resources in that it is primarily driven by the desire of participants to actually build physical or virtual collections of materials that they will draw from over time in an open-ended fashion. Nearly all of the participants of this project speak of their personal collections of materials, some of which they have created and others which they have purchased. They also speak of a desire to share their collections with others and are eager to find ways to do so.

This mapping shows a high degree of interplay between and among the tasks and strategies of the *Folktales and Facets* users. It also suggests several refinements and extensions to the four basic FRBR tasks, while providing support for Navigate and Relate as additional tasks. What this mapping also indicates is that the tasks for specific user groups may be far more nuanced than is possible within the four main FRBR tasks, especially without the addition of the Relate or Navigate tasks. The FRBR report (1998) does not indicate that the number of user tasks should remain at four, and it remains open to the need for a variety of tasks in the model, among them preserve, and management of rights. The
preliminary findings from this project indicate support for additional, and more finely nuanced descriptions of user tasks, as well as the need for further attention to Tillett’s admonition ‘What information is enough.’

One possible explanation for the nuances discussed in this briefing are addressed by Nicholas (2005) as a set of considerations for oral narratives, a format currently not well treated by bibliographic access forms. This weakness stems from the understanding within the oral tradition that an audience experiences a new version of a tale on each telling and that a tale relies not only upon the source material used by the teller, but also upon audience members’ common memory and common knowledge of previous versions of the same work. The teller depends on this common shared memory as he introduces variations, which may concern the elements including plot, characters, and title. (p. 180).

Bibliographic access forms typically deem such variations too superficial to capture, even though they lie at the heart of the oral narrative experience. Another feature of oral tradition that must be considered when contemplating the question of ‘What information is enough’ is the phenomenon of ‘sunken works.’ These often consist of written recollections of an oral tale in a colonialist work. These composite works result in ‘bibliographically dependent or hosted works’, which sink out of sight in bibliographic records, especially when the tale belongs to a group of people who are now extinct (pp. 189-190). Nicolas looks to the FRBR model as a way to redeem these ‘sunken works.’ In combination with the user-focused tasks that are indicated by the Folktales and Facets project, further support for the importance of user studies is evidenced.

Conclusion
Today, those who seek to provide access to information resources are more and more frequently resorting to heavy investment in full text portals. Individuals, like those in the Folktales and Facets project are being directed to the purported wonders of portals like the Open Folklore Initiative (http://openfolklore.org/). This site provides access to tools that allow a user to search across HathiTrust-scanned materials, which include the full collection of Indiana University’s unparalleled folklore materials. Unfortunately not everyone can actually view the full text of these materials due to access limitations; at a minimum, they can identify if and where terms appear in an item and see a small snippet of context for those terms. Studies like Folktales and Facets present a preliminary set of user tasks that could come to bear on the development of user-focused features for full text access portals that can also benefit from enhanced understandings of the FRBR entities, attributes and relationships between and among folk narrative materials.

References


