



The European Library: Improving Cross-Cultural Web Portals

Sergey Zherebchevsky
Long Island University
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The European Library

The European Library is a remarkable resource for gaining access to the cultural heritage of many European societies.

It was created with a mission to “open up the universe of knowledge, information and cultures of all Europe’s national libraries” (Janssen 2006).

“The role of the European Library Office is to create a stable portal that allows the user to search within and across the deep web and closed database collections of the National Libraries” (Cousins 2006).



Present

Currently, the European Library features forty-eight participating members and provides a point of access to digital and non-digital resources.

Although the library portal is up and running, the work is far from over. One of the most urgent priorities is the digitization of the European national libraries collections (Eur-Lex 2009); usability of the library's websites is among other prominently featured concerns. This aspect deserves further consideration.



Organizing Information

In essence, a library website is a knowledge organization system and its primary purpose is to facilitate resource discovery.

At the same time “Formal systems for KO operate in specific cultural milieu that require the user to conform perception to the reality modeled in the system...” (Smiraglia 2008).



Studying Culture

Thus, it can be argued that design of a cultural artifact such as website is reflective of the cognitive and cultural schemas prevalent within a given society.

Therefore, studying the national libraries' websites as cultural artifacts may lead to a better understanding of specific cultural characteristics that are instrumental in producing the design outcome.



Purpose

The purpose of this ethnographic study is to improve cross-cultural web portals of The British Library, The Vernadsky National Library of Ukraine, The Russian State Library, and the Italian National Library Service accessible through the European Library portal.

The objective is to evaluate user's access to catalogs, capture the most recognizable features of communication and visual display patterns that characterize the design of each national website, and describe and compare the observations.

Methodological Perspectives

Analysis of digital library cross-cultural web portal can be performed using a combination of techniques suggested by differing methodological perspectives. These include:

- **Usability testing** concerning itself with usability-engineering, human-computer interaction and website design (Spencer 2000; Battleson et al. 2001; Keith et al. 2002; Blandford et al. 2004)
- **Evaluating the construct** of the digital library in terms of evolving conceptual approaches, operational functions, attributes, and services offered to the users (Choudhury et al. 2002; Sandusky 2002; Saracevic 2001; 2004).
- **Analyzing websites as cultural artifacts** that can be best understood through the prism of ethnography (Crabtree et al. 1998; Seadle 2000; Khoo 2001; Würtz 2005).



Context & Meaning

According to Hall (1989, p. 101), a message originated within specific cultural milieu “can be characterized as high-, low-, or middle context.” Such gradation permits the positioning of the communication patterns on a scale or as a point on a continuum.

Hall (1989) defines a high-context (HC) message as one “in which most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit, transmitted part of the message” and a low-context (LC) as “just the opposite; i.e., the mass of the information is vested in the explicit code” (1989, p. 91).



Method

Employing recommendations suggested in usability studies (Spencer 2000; Battleson et al. 2001; Karoulis et al. 2004), the test scenarios were created prior to evaluation sessions.

Following ethnographic practices (Burke and Kirk 2001; Button 2003), the researcher acted as a fieldworker accessing the websites, performing specified tasks, and documenting the observations.

Procedure

1. The following national libraries' websites were accessed from the European Library Portal:
 - The British Library
 - The Vernadsky National Library of Ukraine
 - The Russian State Library
 - The union catalogue for over 2.000 Italian libraries
2. Five two-hour sessions were carried out to explore each website.
3. The generic task was to find in the national library resources relating to a field of Knowledge Organization (KO).

The Vernadsky National Library of Ukraine

Selected option: The abstract database of Ukrainian scientific studies and Full text database of Ukrainian scientific studies

Task 1. – Find materials covering the terms “Організація знання and Організація знань.”
1.1 Navigate from the European Library portal to the national website.
1.2 Select the Ukrainian language .
1.3 Find search box.
1.4 Enter query.
1.5 Document the results.
Task 2. – Find materials covering the term “Knowledge organization.”
2.1 Navigate from the European Library portal to the national website.
2.2 Select the English language .
2.3 Find search box.
2.4 Enter query
2.5 Document the results.
Task 3. Assessment of the communication and visual features
3.1 Navigation and Access.
3.2 Organization and Content.
3.3 Color scheme and Fonts.
3.4 Links.
3.5 Text coverage.
3.6 Miscellaneous details (if observed).
Task 4. – Describe impressions

Table 4. Tasks and activities undertaken to identify the most recognizable features of the Vernadsky National Library website design.



Limitations

This study has a number of limitations. These limitations were discovered during the process of data collection and analysis. Due to limited scope of this study, the intention was to evaluate only the initial web pages of each national portal. It was anticipated that communication and visual design patterns of each national web site are going to be different.

However, it was not anticipated that the methods for designing these four national portals are going to be so substantially different. This discovery has complicated the process of describing and comparing the study findings.

Findings

Library	Database	Term		Results
British Library	The Integrated Catalogue	Knowledge organization		513
National Library of Ukraine	Database The abstract database of Ukrainian scientific studies	Term Організація знання Організація знань Організація знань	Form Singular Plural Generic	Results 12 68 82
	Full text database of Ukrainian scientific studies	Організація знання Організація знань Організація знань	Singular Plural Generic	8 37 45
	Database The abstract database of Ukrainian scientific studies	Term		Results 1
	Full text database of Ukrainian scientific studies	Knowledge organization		16

Russian State Library	Database Books printed before 1830	Term Организация знаний		Results 0
	Electronic collection of musical notation editions			0
	Universal collection			0
	Library of electronic dissertations			72
	Lenin's electronic			3
	Electronic catalogue			385
	Database Books printed before 1830	Term Knowledge organization		Results 0
	Electronic collection of musical notation editions			0
	Universal collection			0
	Library of electronic dissertations			0
	Lenin's electronic			0
	Electronic catalogue			26
Union catalogue for Italian libraries	Database The union catalogue for over 2.000 Italian libraries	Term Organizzazione della conoscenza		Results 38
	Database The union catalogue for over 2.000 Italian libraries			Term Knowledge organization

Library	Search box	Color	Fonts	Links	Text coverage
British Library	Accessible via the Euro portal; separated from the main page	White Black Navy Gray Blue Red 6	Arial Unicode MS Arial Verdana	20	91
National Library of Ukraine	Accessible via the Euro portal; separated from the main page	White Black Navy Gray Beige Fuchsia 6	Times New Roman Arial	4	50
Russian State Library	Embedded into the main page, which is accessible via the Euro portal	White Black Navy Gray Blue Aqua 6	Tahoma Arial	49	578
Union catalogue for Italian libraries	Accessible via the main page, which is accessible via the Euro portal	White Black Navy Red Silver Yellow-orange Blue-violet 7	Verdana	38	149

Table 8. Search page location and design features.

Search function

- The British and the Ukrainian Libraries' search pages are accessible directly from the European Library portal.
- The search function for the Russian Library is embedded into the main page.
- The user who navigates to the Italian catalogue, reaches the Italian National Library Service (SBN) webpage first, from there, he or she can get to the search page.

Wildcard characters

- The British Library - ? # ! %
- The Ukrainian Library - \$
- The Russian state Library - *
- The Italian Library Service - *

“Help” documents

- The British Library - 53 pages long.
- The Ukrainian Library - half the size of the page.
- The Russian Library - 6 printed pages.
- The Italian National Library Service – cascading design – to read all 39 pages, the user has to click 39 times.

Communication patterns

- The Ukrainian website - 50 words & 4 clickable links - a high-context (HC) transaction.
- The British Library - 91 words and 20 links.
- The Italian webpage - 149 words and 38 clickable links – a low context (LC) transaction.

Discussion

- The websites of the national libraries are as different as the cultures they represent.
- Further improvements involving collaboration among all participating libraries are needed to ensure that users are empowered to explore as many different collections as realistically possible. This means:
 - minimizing the differences between design patterns
 - increasing the diversity of language options offered by each national library, and
 - performing thorough functional testing.



Conclusion

It is therefore imperative to recognize competing priorities and create a balanced approach to resolving all identified issues.



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