Digital library applications and interactive Web:

from space to virtual place[1]

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Introducing this session during the Conference Cultural Heritage Online I was looking for finding a reply to the following questions: How librarians and technologists can exploit the potential of emerging technologies? How can the cultural institutions transform the way digital libraries provide services and resources?

In trying to reply to these questions, after the conclusion of the session, I reflected on what the speakers have presented. They have described how emerging technologies can support the integration of different digital collections, can facilitate community building and extend connectivity to the ubiquitous user. However the speakers of the session have evidenced that there are challenges on existing delivery models of traditional cultural institutions, which have to change.

Two new roles were emerging from the presentations: a new role of digital libraries, a new role of users This two roles are two faces of the same coin: digital libraries are participating to a diffused culture of learning; users are actively engaged in creation, modification, and distribution of information objects in digital libraries as learners in a new virtual space.

Analyzing the different presentations, I can say that the digital libraries applications, with a focus on their users, move from the paradigm of cultural institutions as place to the paradigm of digital libraries as virtual spaces for learning.

New digital library role

Most of the speakers said that digital libraries should transcend the "search and access" approach, and serve as collaborative knowledge environments. The metaphor of the virtual space is very simple in technical term. The focus of the new role however is not on the tools and technologies, but on the changing roles of libraries supporting learning services. For example, the VKS (Virtual Knowledge Studio for the Humanities and Social Sciences) in Netherlands, focuses on the new scholarly practices, on the research methods, and on the ways of knowledge creation in the humanities and social sciences, stemming from the introduction of information and communication technologies into those scholarly fields.

Web 2.0 technology is a hot topic at the moment, and public librarians in particular are beginning to feel the pressure to apply these tools. Indeed, Web 2.0 has the potential to transform library services, but all the speakers have demonstrated that only if the policy and strategy for digital library services are ready to be transformed, the digital libraries can afford the new role. In a world where computing power, ubiquity and connectivity are increasing, the digital libraries could follow powerful new visions of their services for facilitating learning. This new digital library role brings cultural institutions into the cultural and social aspect of the technology.

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Manzuch (Vilnius University) explained that the new role can be expressed as "communication of memory and involvement of the communities". This means bridging cultural heritage to the users, communicating heritages using the technology and digital media, sharing memory as part of the community values and cultural conditions. The present services of cultural institutions how are interpreting the cultural heritage? And how the services of cultural institutions are communicating memory?

With the contribution from leading practitioners in all areas – including lecturers, librarians and e-learning technologists – the session has explored the strategic approaches which digital libraries in the world are following. New services are the new access channels and value added services which EuropeanaConnect is going to provide for users of Europeana; or the service of digitisation on demand of the project EOD; or the activities supporting publishing of the EUI Library. "Interaction with the users" is the most advanced functionalities of the new services: transactions are made online, the whole ordering process and service management process (from the point of view of the digital library) is online and also modern payment services such as credit card payment – where needed are integrated in the services.

The speakers of the session have reviewed the technological tools of the digital library setting, but they have especially recommended the institutional policies, the theoretical reflections and the business models that are needed to create a new strategy for digital libraries. Challenges encountered when designing a large-scale application of digital library for a diverse public audience have been explored, including digital rights management, user content moderation, and balancing customizability with simplicity of interface. Also, staff development needs have been stressed, which includes programmes of training courses for the staff of the cultural heritage sector as well as higher and further education, conferences and workshop on best practices for exploiting the potential of the Web.

New users role

How users can be involved in digital libraries? The first attempts made from digital libraries to include the active role of users in services have been described in the session: building networks of resources also produced by users, involvement of users in the selection of eBooks, participating to control the vocabulary, or putting data in the Web, collaborating in building repository of harvested resources. Users have been asked of leaving comments, annotating, making collaborative discussions, producing video content streams, cooperating with graphically enrich metadata visualisation.

For example, the British Library (BL) is involving users in digitisation and content creation. BL asks to users text correction, improving the quality of the text version, putting their annotations, delivering user-created guides, participating to the discussion board and to the collaborative creation of text extraction.

More expert communities of users are involved in discovering, assessing, organizing critically all the primary resources, or in doing critical editions, not only terminological distinctions, putting annotations and doing linguistic analysis with syntactical tools, realising domain ontology to mark the texts of the documents.

The speakers have evidenced that we do not need pharaoinic projects but small scale projects, adapt to the moment and which fit in the different needs of the communities.

Some issues about the learner and teaching and learning interventions of digital libraries were also evidenced. Considering the enduring socio-psychological features of online interaction and the different user engagement, the diversity of user's community needs an interface design which is easy to access. User expectations want the accessibility of interface which should be focused on users intended purposes and the cultural institutions should not miss this opportunity of improving interaction and communication in the contemporary net-based social networks.

The most fundamental need in user's involvement is "trust": who is this person? The presentations gave a lot of information about user's generated content. Trust of communication and the expectations of an active role of users need a collaborative knowledge environment, as virtual space improving and facilitating learning.

Conclusion

Cultural institutions are going back to their roots, to start from their foundations to create new delivery mode of their services. The convergence in the Web of cultural institutions is not enough, if they offer services with no difference with the previous "search and access" paradigm.

Interistitutional cooperation needs to improve communication of memory and to create a virtual learning space. The focus on learning communities, scholars and other users move the cultural institutions services to the Web, moving from being a physical place to realising a virtual space, with the aim of promoting knowledge in extended services paradigms.

In conclusion the need of user's involvement is not new, the available tools are new and the functionalities can be highly extended, behind the traditional services. The projects in this session were able to use these new tools with creativity and the result was innovation.