Who are the oracles – Is Web 2.0 the fulfilment of our dreams?

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Let me start this lecture with a short presentation of myself: I am not at all a technician, I am far from an IT specialist and I am not even so young anymore. I am, however, I must admit, a library leader, one of those who at least seek to be an information policy-maker. But first and foremost I am a simple librarian trying to do what I have always found most important for an information worker: getting the right stuff (information), the truth, at the right time (when it is needed) to the person who needs it.

In revolutionary times it is always very important to keep one's head out of the guillotine. Old times have passed where a Publisher was a Publisher, a Bookseller was a Bookseller, a Library was a Library and a user was just a customer with a single and simple demand. Intermediaries, no matter whether big or small companies, were acting as helpers to both libraries and publishers and all stakeholders found it worthwhile. Every now and then some great inventions made life much easier to everybody in the business. Now there is not one day where we do not have to make business with larger and larger monopolistic media groups, each and everyone offering not only information content but also offering or should one say demanding use of their specific information platform. How do libraries keep their integrity? There has been a tendency to wonder if we still would have any possibility to "pick and choose". The one-stop-shopping with the "big deals" and the uniformity seemed to be the only prospect that we had in the library world. But – hurrah – this has changed and is changing rapidly. Technology appears to help us all the time.

We will have to work hard with information architecture in the future. The so-called "3-layer-model" has been agreed upon in Denmark as being the essential principle to the research libraries: the 3 layers being: Data–Service–Interface or to put it in another way: Engineering–Contents–Graphics/Presentation. "Web-services" is the key-word and XML and its derivations is the language. In this way the libraries are able to exploit the advantages of deep-linking and meta-search facilities and there are possibilities of choosing the services that every library finds to fit into their specific profile. This so-called Service-Oriented Architecture does, however, still cost money and time. And we are still dependent on Publishers and other Data-suppliers.

A "google-isation" is developing – almost all libraries with even the slightest feeling for innovation have built a one fits all search field at the front page of their websites. But it is still on their own website, and in their own catalogue. We are talking about Library mash-up: Powerful web-services will enable integration with Amazon, Library Thing, Google etcetera – you name them, there are lots – and it will make it feasible to construct new applications in very few days rather than the usual months or even years.

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A few years ago – in 2003 – the Library Committee of the Danish Rectors' Conference drew up a strategic perspective for Danish University Libraries. This strategic paper was called "Knowledge in Time" and focused on among other things "The Electronic Library", "E-learning", "Individualised Service Provision for Researchers and Students" and "Exchange of Knowledge".

Let me quote:

- The fundamental objective for modern university libraries is to create interfaces with the global knowledge system, tailor-made to the individual profile and needs of each university, department, researcher, and student.
- University libraries are to be in charge of the importation of knowledge into the universities in the form of printed and electronic information resources which, as an on-going activity, will be made available to the users, and they are to provide individual services to procure information in accordance with the immediate needs.
- University libraries are to support the exportation of knowledge produced by the universities to the surrounding world through registration and making such knowledge available on the conditions and to the extent desired by each university.

And these are 3 landmarks that we keep in mind and upfront at the universities and their libraries. We are focusing on the user as we have never done before. It is necessary – it has always been necessary – but it used to be us who set the agenda. Those days are gone. Our users – or even our potential users (the non-users in-fact) – influence the library buildings, the service delivery, our cooperation, the customer interaction, our marketing, the business processing and even our systems building and purchase. We do not focus on collections anymore. We focus on accessibility and even more on mediation. We are aware that the Internet allows new forms of discourse, scholarship and research. The Internet is pervasive and we must be able to reflect all scales of data organisation from "big science" through to personal resources. The sharing of knowledge is the mission.

Libraries or perhaps I should say University/Research libraries at least, however, must deliver quality information – this is our code of honour, our whole raison d'étre. And we must support, take part in or directly initiate innovation to further extend development of information and communication technology if not only library related technology. Basically this will/should happen in close cooperation between University IT and Library IT (here at Roskilde we have a larger Campus IT Department and a smaller Library IT Department). And in many cases we work very close to find solutions for the students and for the university in its connected whole.

We must be dressed to manage:

- Collaborative knowledge production on the Internet
- Flexible services
- Self-reliant and independent users who want to design services by themselves
- Collaborative filtering
- Collaborative working spaces and user design (here the Web 2.0 technology comes in massively but also the social software must be managed in the right way).

So yes, as university libraries we must support and use collaborative working and learning spaces and we must be able to filter information and make it context relevant and reliant. Therefore these tasks are of very high importance, not only to our students and their education processes but also in connection with science and the scientific processes at the university. We must face problems with:

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- Copyright and open access
- Legislation in general
- Virtual and physical learning spaces
- Scientific character: will social software enable the provision of answers through consensus? And will that be good for us?

Information sharing and collaboration among researchers was one of the early Internet's reason-forbeing. And it has done well in that direction. Now we will have to handle also the grass roots, the democratic development that is both natural and sound. But we will have to face some serious considerations and tasks, especially with what is called "social technology": How do we make use of user behaviour and the collective intelligence herein? Should social software be integrated into our library catalogues? Should we build intuitive search machines supporting both serendipity and social network? We must observe the semantics. And always bear in mind that we are working with involvement and knowledge sharing.

Because of the extreme bandwidth that we have now it is possible with lots of incredible services: Wiki, RSS (syndication), blogging, social bookmarking, tagging, folksonomies, music/photo/video sharing, digital storytelling, mashups with the integration of different sets of data to create brand-new services or products on the fly and sharing information between sources and serving as web-platforms that provide unique value only to be found on the Internet, chat-services, Library Thing with peoples' own and personal catalog and library, the social networking and the user-generated content and all the interactive technologies as seen on for instance eBay and Amazon. All this take us to a kind of so-called "participatory media literacy", where there is a virtual network to educate each other in the use of new and easy accessible medias.

Wikipedia is a great example of collaborative work between non-professionals, non-specialists, nonscientific volunteers with a fine result. But it is still characterized by the fact that everybody wants to leave their own experience, their own influence on the end result. That might be ok to some or even most people – but it is also sign of decay. It is a paradox that in times where we focus more and more on excellence, on science, on being the best in a totally competitive and globalized world (primarily based on economic agendas) we also try to democratize science and "truth". Everybody must be heard and you may choose the truth that fits you. As a university librarian I am not afraid for the researchers, the professors, the "elite", so to say, but I am very much concerned with the fact that students are taking more notice of their fellow students' opinions than of the professional documentalists'. Is a book good for you in your research project if 5 or 10 or 50 fellow students have voted it or tagged it good?

We must be very careful. Life has not become easier for us as information specialists. More and more information is lying out there. That is good. But more and more information is really not worthwhile as research achievements. The focus to most people on the Internet is not on science but on personal experience and points of view. Young students are self-centred and show a growing narcissistic behaviour. This is what American research shows according to Dr. Jean Twenge at San Diego State University in a recent Narcissistic Personality Inventory. It is a tendency all over the world, Danish researchers confirm. Narcissism characterizes society and our culture more and more. Society asks for growing consciousness and demands us all to make choices. The information technology leads to a growing narcissism. MySpace, ThinkFree and YouTube are just a few good examples of the hunt for acknowledgement, confirmation and appreciation. You can share your comments about anything with everyone.

So the job for us to do is to filter out the social networking, the amusement, the entertainment from the real thing. Not by preventing but by including and targeting. It is not an easy task – we seem to be discussing this all the library community and almost every conference nowadays is focused in some

way on web 2.0 or innovation and creativity, as "Second life" is the overall designation of the trend nowadays: Web 2.0, Library 2.0, Democracy 2.0, Life 2.0. The virtual life with its virtual fellowship to some is becoming more important and trendier than real life. Some – even researchers – claim that virtual life is more intelligent and more civilized than real life. I personally doubt it, but we will have to be aware of this fact for the coming future.

How has all this influenced Roskilde University and its library?

- We are working very hard on securing stability, making our procedures less rigid with focus on flexibility, convenience, personalization, simplicity and mobility and portability.
- Chat and virtual reference services are implemented.
- As also Integrated search and link resolver facilities and all the other facilities that you probably also have at your universities.
- A web-service based CWIS (the Portalino) has been running and extended for a few years now, including our LMS, based on Sakai, and being both modular and service-oriented.
- We handle Cooperative Work software baring in mind that Roskilde University has always been the university for project-oriented studies.
- We have plans to implement and manage blogging-facilities as a university/library facility.
- Pod-casting is on its way.

To some Web 2.0 with all its technology solutions specifically the social technology will be the fulfilment of the Roskilde University culture: The pluralistic mentality, the wish to be heard and to be taken serious, the innovation, the possibility to choose and to make your own solutions. To others this might also be very difficult and confusing – and almost insurmountable to find "the truth". That is a very fine exercise and in fact very much what we want to focus at Roskilde University.

A new possible initiative that probably will be on the drawing table at the library is a "Futures Committee" to focus on new technologies, "gadgets" and ways of communicate and diffuse information and knowledge in the future.

We will have to cope with the wide cultural difference between the library and the very much it-skilled patrons and therefore we must be better in partnering with our users in planning, redesigning and improving our services. But you can be sure that as academic libraries, "the guards of human knowledge", we will never yield on quality. We have and must keep the hallmark of quality – please let us use the new technologies to fulfil our goals as the important component in the infrastructure of knowledge in university research and teaching and not fall into decay and amusement parks.

I will end by quoting Andrew Lawrence from Information Age. Andrew says: "Web 2.0 is a powerful, energising method of sharing information and content, but it is so new that the controls and processes that are needy to make it work reliable and fairly have not yet been put in place. Beware blogs, wikis and Web 2.0 - we are entering dangerous, unregulated territory". So we will, as the principle keeper of real source criticism, have to consider who the oracles are that we are working with – and to answer my question "Is Web 2.0 the fulfilment of our dreams?" I must give you a reluctant confirmation: It could be