

Virtual Libraries – Conceptual Considerations

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Many webpages seem to have been set up with the thought of how to present. The results are sometimes impressive layouts or deliberately kept simple tables. While there is a necessity for clear presentation, we advocate for the emphasis on contents rather than presentation.

Consequently, when we started to develop the "Virtual Library of Veterinary Medicine and General Parasitology" within the framework of several virtual libraries, sponsored by the German Research Society, principal questions arose.

1. Which contents?
Internet resources – topical selection
2. How to select?
Criteria for assessment
3. Data Filing

The answers we give to these may be helpful to colleagues who are pursuing similar goals:

1. Contents to consider for inclusion in a virtual library

Theoretically all URLs of any importance could be included. However, in order to make a virtual library for a given subject „the only portal a scientist or student will ever need“ (users will remember sites where they find everything they look for), a broad concept with the exclusion of the trivial has to be followed. Hence careful decisions are to be made as to what is apt for inclusion and what should be excluded. Directories such as BUBL

<http://bubl.ac.uk/link/>

or the Open Directory Project

<http://dmoz.org/>

among others are to be found on the internet as well as linklists. Here and by systematic surfing resources can be screened. What to take into consideration is partly a question of the quality of sites. We will touch this subject after a more general outline of categories to be considered.

- Databases

Ideally all available databases should be included, but licenses and license-fees prevent this. Therefore a database-section of a virtual library is in most cases limited to such databases that are free of charge and can be accessed anywhere else. Still it is worth having as many of these as possible. It will add to the site's popularity and will encourage users to look into other sections.

- Fulltext documents

Here full text files of internet origin and such digitized in ones own library. It is original and digitized by the project that should be considered. A separate project for the

digitization of printed material, for example dissertations or other material not subject to copyright outside the library would complement the virtual library.

Within this category also interactive learning programmes should be regarded. There are many of them freely available on the web, but also some can only be bought or licensed. In the latter case it would be necessary to indicate restricted access on the respective pages.

It might add to include a smaller database-like fulltext documents, if finances permit, and then license them for wider use. This would be sponsored in those cases, where the library has a national or regional task.

- Graphics, photographs, animations

These would come with many URLs already and should then remain within the context, there may be special sites with graphics exclusively. The same goes for animations. If relevant, they should be strongly considered

- Congress calendars

These are essential to researchers and librarians alike and the ones regularly updated and freely available on the internet should not be missed.

- Catalogues (individual and union catalogues)

Even, if catalogues are available on the respective sites of libraries and networks, it is highly valuable to have them on a page of a virtual library, thus fulfilling the idea of the one portal for every need. This would be greatly enhanced by an access to online ordering, at least from the library where the virtual library is installed.

- URLs of tools essential for some special computerised resources
Since the sites a virtual library links to, have sometimes sophisticated features that require tools and plugins such as viewers for three-dimensional molecule-presentations, players, etc., it is a desirable service for the users to have links to the sites from where they can download all these tools and plugins.

2. Selection of resources

Given the wealth of available resources the developer may face the same situation, as if an internet search engine were used. Therefore it is necessary to

- concentrate on quality instead of quantity employing standards for the selection adapted or derived from sources like:

<http://biome.ac.uk/guidelines/eval/howto.html>

<http://hitiweb.mitrettek.org/docs/criteria.html>

Looking at these long lists, we may become scared of the enormous task and time required to evaluate a single URL. Therefore it seems reasonable to devise one's own criteria. In our case these were limited to six only:

Relevance to subject
Authority
Regular updating
Clearness of
Loading of page
Stability of host server

With clear definitions set and some experience in the selection of URLs, it will be evident that sites of the type:

”Welcome to the homepage of

Our address is....

Business hours: “

will not be eligible.

- systematise resources

The systematised display of resources is absolutely necessary once the virtual library has grown substantially. Therefore it is best to systematise right at the start and make the virtual library differ from mere linklists. Because of the unbalanced situation in the hypertexts as opposed to the relative completeness in printed materials it is not necessary to employ established subject classifications, although it is done already.

3. Data Filing

- Use of metadata

The subject of metadata would require a separate lecture. For a deeper insight a look into:

<http://dublincore.org/>

is suggested. However, the necessity of the cataloguing of metadata (in our case the fifteen Dublin Core categories that describe an internet resource unmistakably through so-called identifiers) has to be elaborated somewhat. The main reason is the reliability in the retrieval of URLs with the detailed keywords in the metadata. This will not only make the URLs retrievable in the database of the virtual library, but also from the outside via search engines. That way results from a site can be in the top hits of searches.

- Subject specific internet search engine

This task is one of the harder aspects of the virtual library and it requires programming on a professional level. It may have to be done by a third party or come with a development of a library system module, as is expected in the case of I-Port of Pica.

A virtual library is a dynamically developing collection. Short lived URLs would let it become outdated in a short time, if it were not continuously worked upon. Some technical precautions may limit the workload

- Link Checkers

There are some true share-ware link checkers available that will „look“ whether a link is in place automatically at given intervals or by starting them manually. The results then make it necessary to relocate some of the links.

- Persistent URLs

This is still more a perspective than a fact. Owners of sites will have to create a PURL, and of course, virtual libraries cannot determine this step for them. It is hoped, however, that many URLs will turn into PURLs in the future. A short introduction to PURLs can be found at:

<http://purl.oclc.org/>

Another solution to persistence is the membership in the **Open Archive Initiative** which is gradually gaining greater importance.

Future scope is for broadening of contacts with libraries in related fields around the world and establishing a network of a universal virtual library with national gateways.

Setting up a virtual library is much more than collecting a few links and presenting them nicely. Hence it needs time and manpower. At our library five people are involved in the task. One full-time and the others part-time. We hold a short meeting every week and write a short summary of it. In these meetings the overall schedule is reviewed and sometimes modified. The work and new possibilities are continuously and critically discussed.