

## HELPFUL HUNGARIAN DATABASES IN EDUCATION

© Ildikó BALLA  
(University of Debrecen)

[ildiko.balla@gmail.com](mailto:ildiko.balla@gmail.com)

*In our days people use internet every day for the work and leisure activities. There are very much databases which help us to get information from anything. In my study I would like to show some Hungarian databases which are used in teaching and scientific research.*

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With the help of the internet, we can practically access any information that is available on the net. The internet is in fact the collection place of an incredible number of internet portals created by both entities and persons for the purpose of advertising or providing services.

Parallel with the appearance of the internet, new forms of communication were born (e-mail, news-group, FTP, telnet, www, etc.). While in the beginning computer tools and its communication forms were used to ease, support the already existing work processes by libraries, too, realizing the opportunities lying within it, later it became popular also as means of providing their services. This is how the first databases had appeared, to serve the masses and professionals interested in certain fields.

The passing of information based on paper had partially been replaced by the electronic form, which made information available in wide circles and significantly changed the methods and the speed of providing information, this way assisting libraries, whose priority is providing information.

The purpose of providing up-to-date information was previously best fulfilled by periodical publications which are traditional, familiar documents in libraries today just as much as earlier. They are not obliged to be scientific, but almost every type is there to be found on the shelves of especially the larger, university libraries to be able to provide their users with an as broad scale of services as possible.

Giving birth to the periodicals was mostly due to the demands of the scientific world and thanks to scientists, researchers this type of documents is likely to stay alive for a long time. They keep them in movement and develop them but also challenging them with requirements expressed especially regarding publications of scientific quality. To answer these challenges it is more frequent to produce electronic versions, to provide the access to which is one of the electronic services of the libraries (Géczi, 2005).

Parallel with the appearance of these electronic copies, in order to make scientific research easier, firms, bigger libraries or publishers had often ventured and still venture to create databases. These databases can make research simpler and faster with the help of the internet, not to speak about the fact that we have much more chance to access a database than the printed magazine itself. Libraries and firms usually attempt to process every available title while the major publishers rather explore their own publications only, ignoring other titles.

The usage of these databases can be subscription based or free of charge. In most of the cases it is bound to subscription or/and registration but there are freely accessible state-financed initiatives, too. This factor is usually determined by the quality of the information, as reliable, checked information is typically available in databases for subscribers. While the free ones can be accessed anywhere, anytime, the ones with subscription are usually to be used free of charge in larger company, university and other libraries only after having a membership fee paid. These - although limited by the opening hours of the library - provide unlimited possibilities to research with presenting thousands of scientific magazines even if only the tables of contents are accessible. It is altering whether the table of contents/repertory only or the article itself with full text is published. There are several databases which provide the tables of contents free of charge but the downloading of the full article costs money, sometimes even for libraries. All combinations of the different types are to be found, as some provide the searcher with everything for free, no matter if it is the full text of the articles or the table of contents while others bound already the availability of the tables of contents to subscription and then the downloading of the full texts to further costs. Looking only at the periodical publications, there are numerous combinations of databases according to accessibility. (Balla, 2005)

The databases this way ensure unlimited opportunities concerning information providing and searching, no matter if we talk about the simplest or the most widely informing database. This way unlimited is utilized in the different level of education, because from the elementary school to the higher education everybody - to be a teacher or a student - can find database with suitable content to do more interesting curriculum or lesson, or to write individually an essay like homework.

From a Hungarian aspect we can also mention simpler and more detailed databases, which have been established and are being built mainly to support scientific life. Most of these exist due to having won bid funds but some of these initiatives are also supported by the state (Kozma, 2004).

### Types of databases:

There are many sorts of information to be found on the internet. Most interesting and useful are the databases processing magazine articles and other periodical publications (materials of conferences, research reports, etc.) with bibliographical methods, which help quick navigation, especially when containing the full text of the documents or providing access to these with different links.

So there are databases which inform with bibliographical data only, the so-called table of contents providing databases and ones which also provide access to the full text of articles, the so-called content providing databases.

### Table of contents providing databases

The table of contents services usually make the table of contents of scientific magazines, experts' papers available for the user by telling who had published a work under what title in a given issue of a paper.

Modern programming techniques make it possible to search for any expressions included in the table of contents. Sometimes, as an additional service of the table of contents services, we can find the extract or some kind of compression of the articles in the database.

This type of data processing gives an opportunity to process a large quantity of data in a short time. The databases created this way and quickly are new informing instruments for the libraries, which are able to provide library users with fast and detailed information.

These are to be very well used in informing but each processing only a specialized field or part of a field. The bibliographical databases of higher quality usually process the published magazines with selection, sometimes focusing on the lengthier articles only.

Such a database is one of the bibliographical databases of the Parliament Library called PRESSDOK which is created by the selective exploring of articles published in the domestic political, economic and partially legal media, monitoring around 150 daily and weekly paper and magazine. In the Parliament Library it is also possible to search in the continuously growing material under construction of the actual month. The database consists of 700 thousand items and is expanding with the data of 7 to 8 thousand articles per month since 1989. (<http://www.ogyk.hu/konyvt/allomany/pressdok.html>)

Also such database of the Parliament Library is HUNDOK which is a press bibliography, the source of which is the nearly 50 daily and weekly foreign papers (Western- Middle- and Central European, American, Canadian and Australian) suitable for topic-observation to be found in the stocks of the Parliament Library. A short contextual description is made of the selected articles. There are more than 85 thousand items in the database and it is expanded by the data of an average of 800 to 1000 articles per month, since 1991. (<http://www.ogyk.hu/konyvt/allomany/hundok.html>)

The Repertory of Hungarian National Bibliography Periodic Publications (IKR) as "media repertory" is such a database, too. It had contained the selected article material of the social and natural sciences periodicals published in Hungary and sent to the National Széchenyi Library. Since 1996 it is operating under the name IKER and it is accessible on the internet under the name "IKER - Hungarian Periodicals Repertory Database". Its construction was finished in December 2002. (<http://www.oszk.hu/rep.htm>)

The Pedagogy Database (PAD) of the National Pedagogy Library and Museum (OPKM) contains the full material of the national specialized bibliography titled Hungarian Pedagogy Literature since 1989 and also the data of the foreign experts' books and selected magazine articles processed at OPKM. (<http://www.iif.hu/db/opkm/>)

The probably most significant among the databases of this type today is MATARKA (Searchable Database of Tables of Contents of Hungarian Magazines) which is the first table of contents service in Hungary that not only makes it possible to navigate in the table of content of magazines but also to search by author and/or words of the title. (<http://www.matarka.hu>)

Led by Miskolc University Library, Archives and Museum, employees of 27 Hungarian libraries have been doing the uploading of the database since 2002.

The database was started with a bid support, with the original goal of only processing the table of contents of 15 scientific (technical and natural sciences) magazines of Hungarian language and publishing for the past 10 year period. Compared to this, tables of contents of 765 magazines in 9 fields have been processed by the creators until today. This way the content of the database is 547744 titles and even 88931 jump points to reach full texts, part of which is a result of cooperation with EPA.

One of its advantages is the free of charge availability of the software used for the creation of the database and the fact that to search and upload data it is enough to have internet access and a navigation program. Due to this, it is easy for other institutions to get involved in the expanding of the

database. Further advantage is its free of charge availability and the providing of several types of search options thinking of advanced researchers and beginner navigators, too. The structure of the portal is simple and cross-visible thanks to the designers being the uploading librarians themselves, keeping the demands of the users in mind. Besides all these, there is certainly a detailed instruction manual on the portal in which the process of each of the individual search techniques is explained step by step.

In the future the builders of the database intend to extract the content providing with additional titles and besides mechanic data input there is an initiative to convert tables of contents already existing in digital format and also to get in contact with as many publishers as possible in order to obtain the table of context prior to the distribution of the magazine. As a result of the latest development there is an opportunity for the users to search for "articles archived in EPA only" (Karlovitz, 2007).

### Content providing databases:

Recognizing the possibilities in data recording and providing in electronic format, the service providers have started to build databases which provide full text access. Most of these databases attempt to process scientific magazines, too, as the demand on behalf of the people using this type of information is largest regarding this field. They have attempted to provide access to the full text of all articles but sometimes, due to the lack of time and financial sources, they end up processing the significant articles only. Then they provide content information only about the rest of the articles or in better cases, extracts or summaries are published. This is why we can not speak about obviously full text access providing databases, as not all of them are able to ensure this fully, but they still provide more information than a simple table of contents.

Some of the Hungarian libraries too, have recognized this opportunity and started to digitalize its old magazines, which they then store on CD ROMs or hard drives and provide them online. There are plenty of initiatives like this started and aborted involving closed or not continued databases, due to a number of reasons but mostly to the stop of the financial source. From this point of view the libraries and publishers perform their activities isolated resulting in various and sometimes unfinished initiatives and also users finding the service portals only by accident.

In the case of Hungarian magazines there are ones explored by publishers (for example BKL, the tables of contents of the magazines Mining, Metallurgy, Petroleum and Natural Gas at the Hungarian National Mining and Metallurgy Association, <http://www.ombkenet.hu>) but there are databases which collect and explore publications with full text access without regarding any special field.

The most significant of these databases is the Electronic Periodic Archives ([www.epa.hu](http://www.epa.hu)) which was established due to a bid of the Ministry of National Cultural Heritage. The bid was announced under the title "Telematic bid" and its topic was the development of the national electronic content providing. Its goal was to give birth to a project plan on coordinating the central electronic providing service of Hungarian magazines.

As a matter of importance this task was assigned to the duties of OSZK which means a guarantee for the outstanding professional work and also for the long-term financing. The Hungarian Electronic Library appeared on the internet in 1994 and the registering of the electronic periodicals available on the web begun. Although not being maintained any more, this register can be considered as one of the predecessors of the EPA service.

Via OSZK MEK received a significant professional, structural and financial background in autumn 1999 and then the MEK Department of the OSZK started to establish an Electronic Periodic Archives (EPA) in 2001 - this can be considered as the other "predecessor".

The collecting range of the EPA includes the Hungarian or Hungarian related periodical type electronic documents intended to reach the public. Further included are the periodicals published recently which are important in education, research and also the ones representing old, historical-cultural values. The online and carrying independent e-periodicals also belong to the collecting range. The circle is expanded by the magazines digitalized as pictures for stock maintaining or servicing purposes by domestic libraries to be preserved from a content point of view. This way it does not only register the online publications but also provides the users with the offline magazines (for example the ones digitalized by libraries) by collecting their places to find.

The items of the database can be searched on the opening page of the service from several aspects. We may navigate among the magazine titles in alphabetical order or according to topic. Also immediately from the opening page the list of archived publications is accessible together with the full list to navigate.

It is possible to search magazines or articles. Magazines may be searched with simple or advanced search with several options and also advanced search by topics can be used in order to find the appropriate magazine. Articles may be searched by searching specific phrases in the full text with simple or advanced search and it is possible to search by title, author together with the usage of several advanced search options.

Of the new items appearing in the database day by day we may be informed continuously on the opening page. We may also see the state of processing. In case the document is archived, EPA provides permanent access. EPA service is responsible for the availability of the publication not for its content. It is possible to search for full texts in the contents of the archived publications. In case the document is of remote availability, EPA will only register it so the document physically will not be part of the service. The content of the document may be called in form the up-to-date original source in case the source is available. In case the document is offline it can not be accessed directly on the internet. These publications are to be purchased in commercial use or available in public collections. It is also possible that it can be accessed via the local service of the producer of the electronic publication (for example in the library performing the digitalization). The website of the producer of the electronic publication (if such exists) may be accessed from the "Source" point of the EPA covers of offline publications.

At present there are 1286 publications processed in the database, 164 of which are archived, 1113 with remote availability and 9 offline. Nearly 11000 magazine items and several 10 thousands of magazine articles may be found in the locally archived database.

It is still its priority goal to create the full library registry of Hungarian or Hungarian related sources available in electronic format and archiving as many publications of this sort as possible within one homogeneous contents providing system. (Renkecz, 2005)

## Summary

Periodicals had been the means of fast information forwarding in both scientific and everyday life for a long time. Today it is common to see the

printed and the electronic format living together which makes the fast obtaining of information even easier. Thanks to major distribution firms, publishers and libraries with enterprising spirits there are services available which give us much help in finding our way in the world of periodicals.

MATARKA and EPA belong to these services which can be considered as success stories with regard to Hungary. Both have been designed and created by enthusiastic librarians with great amount of expertise answering the demands of the users, with minimal budgets due to the use of free software. Advantage of both is their being user-friendly as they attempt to assist the users in navigating on the portal from every point of view, with explanations, several simple and advanced search functions, link options. There is time consuming work behind the services, resulting in these two valuable databases.

The cooperation of MATARKA and EPA is also to be set as an example, for relying on each others data both services are able to offer even more for their users as the search system of MATARKA makes it possible with one direct jump to conduct article level search with EPA advanced option there.

Probably the most important advantage of these innovations is that the portals follow the logic of internet searching and navigation in their looks and use which is a significant move because regarding the information obtaining habits of the young generation, the internet is number one. Another positive aspect concerning their creation is that domestic libraries had hard times following the great volume increase in the numbers of magazines. Domestic university and specialized libraries had already performed similar bibliographical and analytic explorations based on the sharing of tasks but not regarding all fields of expertise.

With the help of the internet a treasure box of opportunities is opened for us regarding databases, helping us in research activities, already with Hungarian contribution to it. Besides these databases there are numerous other scientific and less scientific types of databases which collect and systemize information from certain points of view and then provide the users with them and now we are already able to get information on a part of Hungarian publications, too.

The content of these databases are utilized good in the education, moreover when we show a database to the students, we can start a procedure, in the course of this the students learn using profitable the opportunity of internet. But we have to conduct users to these databases, because they search rarely alone in the internet think like these. These databases certainly help a lot but the role of the library in accessing the appropriate information can still not be discarded.

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