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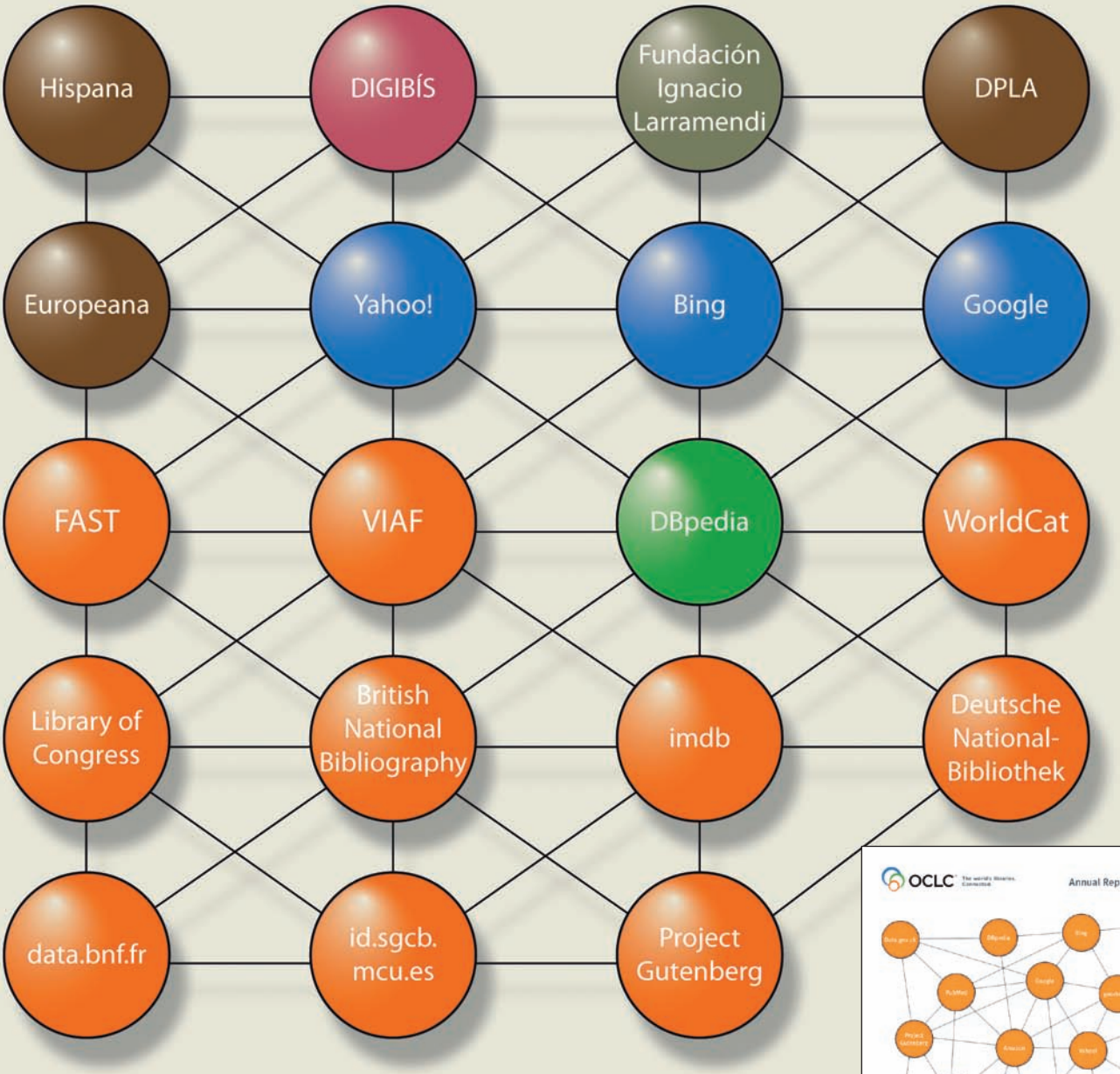
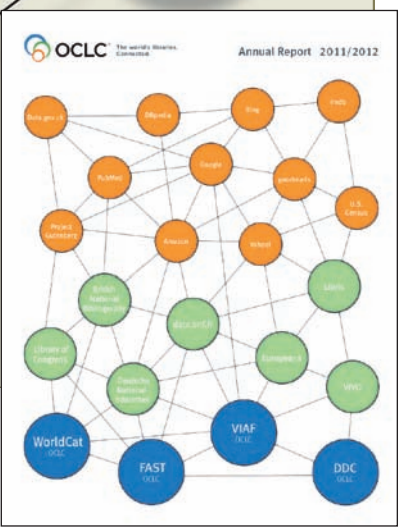
DIGICLIC

Information on Digitisation, Virtual Libraries, Proprietary IT developments and Documenting Services for Archives and Libraries.

Semantic enrichment



Linked Open Data network that allows semantic enrichment by linking content. The OCLC has undertaken an identical strategy.



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DIGICLIC
DIGIBÍS® Newsletter

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Semantic enrichment

One of the most important characteristics involved in the application of the linked and open data (LOD) model is the ability to semantically enrich each and every one of the records of a bibliographic, archival or museological application.

In effect, the metadata models of the bibliographic, archival and museological records allow having appropriate labels to establish links with resources also in LOD.

The clearest case could be the semantic enrichment of MARC records: they have a field, 024, in which it is possible to record the URI address of an LOD resource and to specify, though the "$2" subfield, that the link we have recorded corresponds to a URI structure.

Consider as an example the Virtual and International Authorities File, known by its acronym VIAF: each of the entries in this rich information resource is comprised of a series of fields in which different authorized forms of name of an author derived from processing of the information sent by national libraries is recorded; if that information is recorded in the 024 field, a link between the authority record of our virtual library and the VIAF is established; the same can be done with the authority files or records or resources of the LCSH (Library of Congress Subject Headings), the DBpedia or the List of Subject Headings (LSH) for public libraries that the Ministry of Education, Culture and Sports has recently changed to the SKOS model.

> Basic strategies for automated access of all available information

For example, the List of Subject Headings of the Ministry of Education, Culture and Sports is linked to the respective lists of subject headings of the United States, France or Germany, at least at the time of this editorial. However, a MARC record, to be linked in turn, through the procedure mentioned in the second paragraph, with records of these lists of subject headings, also in SKOS model, will allow you to browse other similar records. It is clear that linking relates the concepts, overcoming the linguistic differences.

The resources mentioned are, in turn, linked with others following the specific techniques of the simple systems of organization of knowledge and, in turn, those resources are linked to bibliographic records the reader, who is ultimately for whom you work, benefits from through access to richer and even unexpected information. ■

Europeana Business Plan for 2013

Although these pages are written, of course, after the year 2012 and several weeks later the exact content of Europeana Business Plan for 2013 is still not known, some general descriptions about what its content will be can be given.

Indeed, throughout 2012 various workshops were held to clarify different aspects of what the Europeana Business Plan for 2013 must be and, above all, outlining of the draft on which the staff of the Europeana Foundation and the Europeana Network will finally work was completed in the Europeana General Assembly (EGA). It was done

data.europeana.eu is accessible with a SPARQL end point as of 7-21-2012

by Harry Verwayen, who left little doubt in his long presentation (99 slides) about the Business Plan at the Annual General Meeting Europeana Network, held in Berlin on November 28, 2012.

The first thing to note is that the strategic objectives for 2011-2015 have been defined and it is expected that 27 million digital objects will be reached during 2013.

The three key points are:

First: consideration of Europeana as a constantly expanding ecosystem of information.

Second: consideration of Europeana as a *Core Service Platform* for the entire European cultural heritage section (expression that could be translated as Europeana acts as a platform that constitutes the core of a service that catalyzes and promotes technical changes in the sector).

Third: consideration of Europeana as a project that demonstrates the importance of the value of information now that the digital objects that constitute it have a CC0 license, since all kinds of API and LOD linking techniques and content reuse are applicable in this huge data set.

In addition to these great strategic lines, a series of important objectives has been set, among them that of enhancing dialogue between central offices of Europeana and major aggregators, whether cross-disciplinary, such as The Europeana Library, or national, having expressly cited the national aggregator, Hispana.

ESE has not been mentioned again due to the strong commitment to EDM that fits perfectly with the W3C LLD directives and that has obtained a very important backing with its partial adoption by the DPLA.

Some refinements and advances in EDM has also been provided. In particular, in regard to Hierarchical Objects (initiative that involved the Project Director of the Fundación Ignacio Larramendi with an EDM proposal designed from the Montiano Archive), and establishing greater links following LOD technology. Use of schema.org is also planned. ■

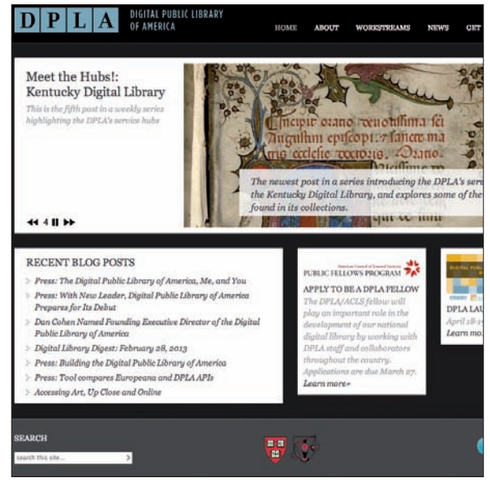
Europeana Business Plan 2013 draft details.

DIGIBÍS® links the DPLA and Europeana

One of the biggest events of the second half of 2012 was the announcement of the next launch of the Digital Public Library of America (DPLA), a project similar to the Europeana communicated to members of the Europeana Task Force at the meeting held in Vienna in autumn 2011.

In fact, it explicitly uses Europeana as a model and has planned the implementation and deployment of its collection using procedures similar to it uses. There can be no doubt that it is a reinforcement and a strengthening of the general methodology of Europeana and is an unprecedented support in the approach of the EU.

Thus, the DPLA application model, which in its third version closely resembles the Europeana Data Model (EDM), has benefited from the contribution of Europeana technicians who have participated in its drafting. Also, through its specialized mailing list, it has been possible to make suggestions and modifications to this information structure.



Digital Public Library of America. Website prototype.

Computer-based development of DIGIBÍS for the API of the DPLA and Europeana

An essential aspect of this, from the point of view of DIGIBÍS®, was the development of a computer tool (API) very useful for both the DPLA and Europeana.

DIGIBÍS®, through its Information Technology department, considered it appropriate to carry out a specific development that would allow joint use of the Europeana API and the DPLA API prototype, which was communicated to both the director of the DPLA, Maura Marx, as well as the director of Europeana, Jill Cousins, and was announced through the Technical Task Forces mailing list. The development has obtained the approval of both institutions.

Even before the DPLA got underway, a tool for DIGIBÍS® was developed in open code to simultaneously consult two large digital libraries. DIGIBÍS® foresaw its importance not only to facilitate the reader's consultation of a very large digital library (VLDL), but because it foresaw the advantage of consulting a second VLDL with the same search request.

The Europeana Foundation has asked DIGIBÍS® to prepare an entry for the Europeana Professional blog about our development and the DPLA has announces its launch on April 18, 2013.

No doubt it will become, as Europeana already is, a first-rate information resource and another example of cooperation in the Linked Open Data environment in Europe and the United States, which is bound to have a considerable influence in the rest of the world. The pages dedicated to the Europeana General Assembly in this DIGICLIC® describe the agreement established with New Zealand and Korea, thus extending a data model that, in its subsequent updates, becomes increasingly more useful and accurate for Linked Open Data editing of bibliographical, archival and museological data. ■

RDA: Year 0

As is known, RDA is the name that the new version, or better said, edition, of AACR2 eventually adopted.

Part of the conceptual developments that the FRBR model represented, as well as the adoption of International Cataloguing Principles, moved the Standing Committee on the Revision of Anglo-American Cataloging Rules to prepare a much more radical reform than expected (of course, the enormous web development was also a considerable influence). The result of this radical revision was RDA.

Nevertheless, it must be noted that to carry out an automated cataloging it is necessary that any cataloging code be adapted to a coding, i.e. metadata, that, in the case of libraries, adheres to MARC FORMAT. Therefore, and as of update number nine of the MARC 21 format, new fields and sub-fields began to be introduced to reflect future cataloging practices and, above all, bibliographical ideas underlying the record creation process.

An important decision also had to be made. This was to determine a date from which the ACCR2 cataloging process would be replaced by the RDA cataloging process. After extensive deliberations, the decision was made to postpone the entry into production of the cataloging until at least January 2013, not only with RDA but also with the updated MARC format. The final date will be March 31, 2013.

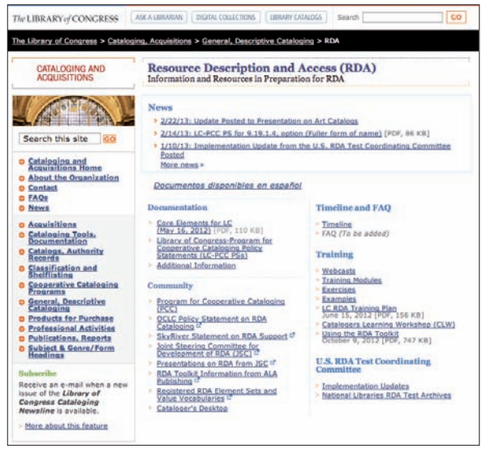
In that regard, the three large national libraries or that play the role of those in the United States of America were essential. The Library of Congress, the National Agricultural Library and the National Library of medicine developed a joint training project that has lasted nearly two years.

> The Library of Congress published the document in English and Spanish

The National Library of Canada and the National Library of Australia were added to this initiative, and soon the National Library of Great Britain joined. Finally, the National Library of Germany joined the process as well.

A work group called EURIG was created in the rest of Europe with the objective of uniting forces and coming to agreements for the development of a process similar to that of the United States, allowing the start of RDA production in Europe. It should be noted that the Project Director of the Fundación Ignacio Larramendi and of DIGIBÍS®, Xavier Agenjo, was prominent in that work group from practically the first moment.

Throughout these years, DIGIBÍS® has made deliberate efforts in the systematic implementation of the variations of the MARC format to accommodate the new structured rules in RDA. In fact, the Biblioteca Virtual Larramendi de Polígrafos [Larramendi Polymath Virtual Library], accessible at the website of the Fundación Ignacio Larramendi, routinely uses it. ■



Page dedicated to the RDA implementation process.

Advances in BIBFRAME

For library automation specialists, there has always been a strong reluctance to use the MARC format. Much less than that of the librarians themselves who, after a brief training period, are perfectly capable of cataloging a bibliographic record with the necessary codes; i,.e., in MARC format; i.e., a set of perfectly predefined metadata that the computer is capable of understanding and that the computer is capable of transmitting, making projects like Universal Bibliographic

Control in a certain measure a reality, since they allow the reuse of objects created under that format. In drafting this paragraph, it almost seems like it is one referring to the latest Linked Open Data trends since it speaks of a set of metadata readable by a computer and, moreover, perfectly reusable by third parties.

An added bonus of the MARC format is that it uses numerical codes for the different cataloging areas, which has extraordinarily facilitated its worldwide extension by not linking the particular codes for each of the fields to a determined language.

> BIBFRAME: short for Bibliographical Framework Transition Initiative

> The Library of Congress leads this team of experts in the Semantic Web domain

Migration from MARC to a new model

However, it is true that the MARC format comes from a very old cataloging reality and that, without a doubt, it does not perfectly fit what the Web today could be, and particularly the linked open data technology. In particular, its distinction between field and sub-field is especially hard to process or, to be more specific, makes a more flexible processing of the bibliographical information difficult.

The Library of Congress began a project, called BIBFRAME, some years ago to migrate the old MARC format structure to another radically different one, based on formats compliant with the semantic network; the process will be long, no doubt, much more so than some naïve individuals expected when the announcement of this migration project was made.

On the other hand, it is very interesting to seize the exact moment when what was AACR2, and was to be the AACR3, become a new radically different cataloging model known by its acronym RDA. If the truly impressive advance, from a qualitative point of view, of the virtual or digital libraries is added to this, the change from one data structure to another could not be more timely.

Nevertheless, there is still a lot to be done.

New advances periodically arise in this technology and in this new definition of data, and there are several mailing lists in which the world's top experts in the field of cataloging and library automation provide a rich discussion from the conceptual point of view and provide all kinds of examples that affirm or contradict in a dialectical manner the process of creating the new standard.

Therefore, it was quite appropriate for the United States Library of Congress to create a website which brings together and updates the various advances in the project.

It is, therefore, an essential reference page. ■

New advances in ENUMERATE

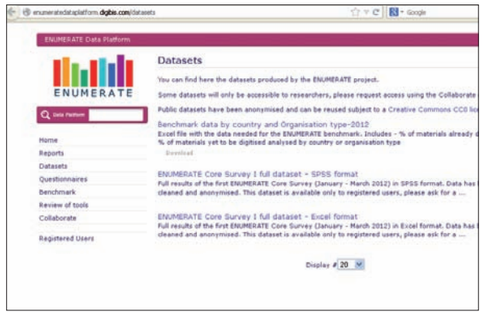
The ENUMERATE project made significant progress in the second quarter of 2012. In effect, the Consortium published a database with the result of the survey performed as well as the electronic and statistical processing of the project and survey.

Decisive action of DIGIBÍS®

Statistical processing of 1,950 responses was performed by the Dutch company Panteia, a specialist in this sector, but no doubt the most significant action was that of DIGIBÍS®, which created a web page with a database that allows consultation of all the information collected so far. This work, whose usefulness has been explicitly valued in public and in the network in a very appreciative manner by the members of the consortium and in particular by Nick Poole, is certainly a work of great usefulness. It should be remembered that Nick Poole is not only the CEO of *Collections Trust* and the ENUMERATE Consortium itself, but also currently presides over the Europeana Network.

> Of the 2200 data providers of Europeana, 1950 answered the ENUMERATE survey.

It was therefore not unusual that, as indicated in the pages of this DIGICLIC® dedicated to the Europeana General Assembly, the data obtained by ENUMERATE was brought up during the Assembly, indicating as a concern and a priority the considerable difference between the estimation of the data obtained by ENUMERATE and that which Europeana had at the moment.



The database is at: enumeratedataplatform.digibis.com/datasets.

In fact, in the European Professional blog an entry was published in which the ENUMERATE Consortium urged Europeana to consider the statistical data obtained, since without a doubt some future planning should be based on knowledge of the real situation. Although the data supplied by ENUMERATE cannot be confirmed to be absolutely accurate, it can be said that it goes much further than an estimate such as Europeana used before the creation, completion and analysis of the survey and the publication in the database.

The fact that the data is accessible for consultation by everyone interested in it allows having a correct idea of the reality of the Europeana project in regard both to the substance to be digitized as well as the metadata available and the computing resources, OAI repository or aggregator, and Linked Open Data technology, consistent with the strategic objectives set by the Europeana project.

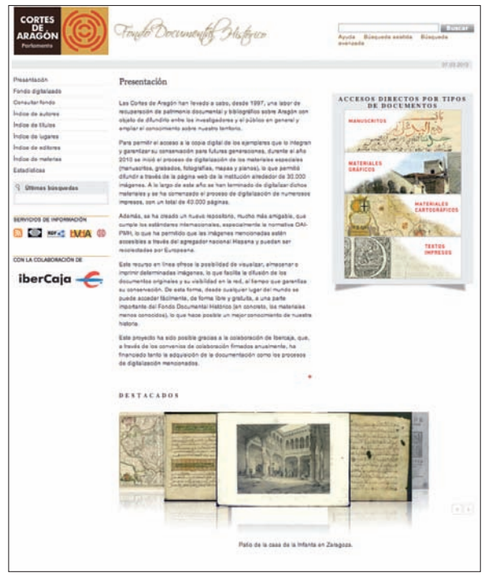
A second survey is planned during the year 2013, which will evaluate the extent to which available data is relevant and corresponds to reality. ■

ENUMERATE

Historical Collection of Documents of the Courts of Aragón

The project of the creation of a digital resource for the Historical Collection of Documents of the Courts of Aragón is a further example, although particularly sophisticated, of the capacity of DIGIBÍS® to transform some digitalization projects that had achieved neither the desired visibility nor accessibility to a completely standard digital resource, adjusted to the internationally prescribed standard, which allows it to be collected by international aggregators. Furthermore, adjusting the metadata schemas of the resource to the latest regulations enable it to adapt to advances occurring in this field.

The project came from two different databases: one, of bibliographic management, and another, of archival management. Therefore, it was necessary to carry out a complex process of transforming information in each of the two databases to current standards, which allowed clearing seeing to what degree it is ineffective to separate the digitalization processes - and the investment made in them - from the creation of digital objects and standardized databases that allow their use in the richest way possible.



Presentation of the Website.

Single process of creating a digital resource

DIGIBÍS® frequently realizes that much more money is invested and that much higher budgets are used when dividing the creation of a digital resource into different processes: on one hand, digitization; on the other, creation of the records that are not really linked with the digitized images and, finally, the integration of those records and those images in a database able to make full use of the effort made.

In this case, and as is frequent and common in digital resource creation processes, DIGIBÍS® created a database to process the different types of manuscript materials, old prints, cartographic materials, etc. which comprise the Historical Collection of Documents of the Courts of Aragón, furthermore implementing an OAI repository that is updated dynamically from the database, and therefore is able to be collected by any of the most important aggregators.

So it was in this case, and the digital resources, the digital heritage objects, to use the terminology of Europeana, were generated dynamically using the DIGIBIS® information management system with its corresponding OAI repository and the generation of some truly rich metadata schema: what it means, right now, through application of the Europeana Data Model.

As a result of all that, the Historical Collection of Documents of the Courts of Aragón is not only accessible on the web page that the reader can see printed on these pages, but also from Hispana, which collected it a few weeks after release, and from Europeana, which subsequently collected it from Hispana. ■

The Virtual Library of the School of Translators of Toledo

Through the considerable academic success and acces that led to the creation in 2011 of the Virtual Library of the School of Salamanca, the Board of the Fundación Ignacio Larramendi decided to launch in 2012 an even more ambitious project:a virtual library of the former School of Translators of Toledo. The project, as in the previous case, has the co-funding of the Fundación MAPFRE and has sought the collaboration of the Universidad de Castilla-La Mancha, the institution to which the new School of Translators of Toledo created in 1994 belongs.

Although the discovery, or rediscovery, of the School of Translators of Toledo occurred in the XIX century with some works that are already classic, from the second half of the XX century the existence of the school of translators began to come into doubt, based on the fact that it had not been formally constituted as such and that it did bot resemble a general study or a university.

While all this is true, there is no doubt that such schools existed; and we say schools because one can speak of at least two periods in which a systematic translation of Arabic texts, and to a lesser extent Hebrew, was carried out under the patronage of two key individuals: the Archbishop of Toledo and King Alfonso X the Wise. An intermediate stage in which another archbishop of Toledo, Jimenez de Rada, promoted this type of study can even be discussed.

Theorica planetarium, attributed to Gerardo de Cremona.

> There is no Formal School but rather *workshops*, as Menéndez Pelayo called them

Toledo, which had some exceptional conditions to serve as a medium for the transmission of classical Greco-Roman culture to the West, also transmitted the culture of the Arabs, immensely powerful at that time and highly creative, which also incorporated considerable achievements of Persian culture and even Indian culture. There were people who knew all these languages in Toledo, especially Arabic, Hebrew, Latin and Castilian. And they came to Toledo from all of Europe and they achieved support and wise aid that they wanted to incorporate that knowledge that, in a way, had been lost in Western Europe.

The microsite

The Fundación Ignacio Larramendi decided to implement on its web site a microsite called Virtual Library of the School of Translators of Toledo which includes all the records authors who were part of the school or schools of Toledo with some enormously enriched and very fruitful authority records at the time of recovering the information. It was also decided to add, in a radically new manner, some Arabic or Hebrew authors and translators –many of the Hebrews wrote directly in Arabic– who had translated the Latin and Greek authors and had incorporated at the same time large amounts of knowledge in their translations through comments and original work.

Alfonso X in the *Libro de juegos [Book of Games].*

The authority records were made using the latests version of the MARC 21 format, i.e. number 15, which contains a multitude of fields to accommodate in them data and information about the person, i.e. the author. Until this new development, based directly in RDA, authority records provided information about the name of the person and not so much about the person himself. So, by providing information about the author, it was possible to assign him to different schools of thought, link him to certain authors, to writing in different languages, to his geographical origin, to the specific era in which he acted. All this is reflected in the 37X fields of the MARC 21 authority format, specifically defined to accommodate the new philosophy of cataloging that comes from RDA, as indicated on page 6

Semantic enrichment

An essential aspect was the semantic enrichment of the records. VIAF (Virtual International Authority File) links were systematically established, which is explicitly recommended among the *datasets* advocated by the W3C. Links are expressed through URI and provide many variants.

This is fundamental in medieval authors whose names were written in different ways over the centuries and, given the Arabic or Hebrew nature of some, written in both languages. Thus, until the XIX century ibn Gabirol and Avicebrón were considered different authors.

> The Europeana API has allowed 1500 new bibliographic records to be added

The link to the DBpedia was also added to each of the authority records of the authors, commentators and translators of School of Toledo. This is very useful given the multilingual nature of this resource and the great number of links to other information sources. Processing, according to Linked Open Data technology, of the authorities of the School of Translators of Toledo and, in general, of the Biblioteca Virtual de Polígrafos Españoles [Spanish Polymath Virtual Library] has allowed creation of a *dataset* in The Data Hub: Polymath Virtual Library (Authority Data). ■

Conference on Cultural Heritage of Defense

Without a doubt, as a result of the success of the creation of the Virtual Library of Defense, the Subdirectorate General of Publications and Culture decided to prepare this Conference to announce his medium-term strategic plan

Though Margarita García Moreno and Pilar Domínguez had to organize this conference in a very brief period of time, leading specialists of the Ministry of Culture attended: María Luisa Martínez-Conde spoke of projects of digitalization of bibliographical heritage; Leticia de Frutos, of projects of digitalization of artistic heritage y Alfonso Sánchez Mairena, of archival heritage. Before these specialists, the organizers of the Conference participated and outlined the projects the Subdirectorate General and logically made reference to the Virtual Library of Defense project presented in the previous half of the year.

Panel morning session.

All projects are characterized by compliance with the international standard

That session was closed by the Project Director of the Fundación Ignacio Larramendi, who stressed the need of having a Single Point of reference for libraries, archives and museums, but without implying a common processing of different types of heritage materials, rather quite the opposite. It would be the minimum common denominator of a metadata schema that would facilitate consultation.

Ultimately, that is the functional analysis of both Europeana and the DPLA, both cases following the recommendations of the W3C LLD. The afternoon session, moderated by Elena Escolano, allowed the managers of numerous Defense archives, libraries and museums to provide information about the status of their various collections. It was interesting to see how a considerable number of digitalization or automation projects have been done in the past or, even, both projects linked, although lacking necessary standardization, which is now intended to be solved.

Both the session moderator as well as the Project Director of the Fundación Ignacio Larramendi insisted that performing the corresponding mapping of information for its subsequent integration in the Virtual Library of Defense, each with its specific metadata schema, really poses no insurmountable difficulty. That is to say, the MARC format for the libraries, the EAD/EAC format for archives and the LIDO format for the museums.

If all that digital information were integrated in the Virtual Library of Defense, it would be easy to achieve maximum visibility and accessibility possible for the rich heritage collections of the Ministry, since as of the first half of 2012 the Virtual Library of Defense has been collected (and will continue to be) by Hispana and by Europeana. ■

The Fundación Ignacio Larramendi and the XI Meeting of Civil Society

As stated in the news section of the Fundación Ignacio Larramendi, the foundation tried to take up the baton of the intervention of Ignacio Hernando de Larramendi himself, its founder, in the II Civil Society Meeting held in Guadalajara, Mexico, in 1994.

On the web, there are photographs of that intervention, where the current president of the Foundation, Lourdes Martinez, widow of Larramendi, also was, all of which highlights a continuing interest in the activities of civil society, including the promotion thereof. In fact, in the *Basic Objectives* of the Foundation, they are explicitly listed as follows:

"2. Analysis of the operation of independent institutions as a means of optimizing resources and revitalization of society."

Thus, it is not unusual that the Fundación Ignacio Larramendi would actively participate in the XI Encuentro Iberoamericano de la Sociedad Civil [XI Iberoamerican Meeting of Civil Society] which was held in Madrid on October 15-16, 2012,

Result of the presentation arose the project of organizing a Conference on health in the context of the AEF.

sponsoring along with other major Spanish foundations activities held at the premises of the Fundación ONCE.

Above: Juan Andrés García, director of the AEF, Rosa María Pulido, executive vice-chair of the Fundación Eugenio de Mendoza and chair of the next Meeting, and Carmen Hernando de Larramendi, patron of the Fundación Ignacio Larramendi. Below, from the right, her brothers and also patrons of the Foundation, Miguel, Margarita y Tachi, the latter Director General of DIGIBÍS, and Xavier Agenjo, Project DIrecor of the Foundation and of DIGIBÍS.

Model of the Digital Agenda for Europe

The Fundación Ignacio Larramendi contributed to the celebration of the conferences with an address titled *La cultura como eje dinamizador de la sociedad* [Culture as a revitalizing axis of society] whose presentation was given by Project Director, Xavier Agenjo.

The address, of a strong technological bias, emphasized the model that Digital Agenda for Europe (2020) assumes and noted that one of the key actions, number 15, is specifically dedicated to the creation of Europeana, the digital library, archive and museum of Europe in which the Fundación Ignacio Larramendi and DIGIBÍS® play such an important role.

The essential aspect of the communication is basedon the application of Linked Open Data technology and reuse of the contents in other areas of social action, such as justice, health, commerce or administration. ■

Europeana General Assembly

On November 27, 2012, the Europeana General Assembly was held, hosted on this occasion by the hospitality of various institutions of the city of Berlin.

It was an particularly productive occasion, as the maturity of the project –established firmly on the significant number of digital objects in the Europeana portal– shows the degree to which it is increasing moving forward, steadily, towards the goals set by the 2011-2015 Strategic Plan.

> The Europeana Awareness project aims to make the European Virtual Library known to the broadest audience possible

The first part of the session was dedicated to the analysis of the draft of the 2013 Business Plan. In that draft objectives are set that, although ambitious, are perfectly feasible. In this case, the presentation was given by Harry Verwayen.

Also particularly useful was the information from Louise Edwards about the Fundación Europeana which constitutes, along with Europeana Network, the two organizational pillars of Europeana without losing sight, of course, of the individual or specific projects that will be developed also with very specific goals. Edwards developed the concept of *commons* applied to Europeana and what it entails.

FRBRoo, persistent links and hierarchical objects

Yesterday there was a very intense work session of the Europeana Task Forces dedicated to different issues such as the use of FRBRoo, persistent links and hierarchical objects. The Project Director of the Fundación Ignacio Larramendi, who is part of this latter group, presented a work model and a metadata schema based on a detailed reflection on the Europeana Data Model for hierarchical objects.

He applied the reflexion to a specific case: the Montiano Family Archive, one of the databases that makes up the website of the Fundación Ignacio Larramendi.

Digital archives produced by DIGIBÍS® among the few collected by Europeana

The Montiano archive –which Ignacio Hernando de Larramendi had as an heir and direct descendant of Agustín Montiano y Luyando, creator and first director of the Real Academia de la Historia [Royal Academy of History]– is structured according to EAD and EAC; a *crosswalk* between those archival standards and the MARC format of authorities and bibliographical records, respectively, has been established.

The information can be displayed using the ISAD (G) and ISAAR (CPF) standards. Although there is much left to do to reach a satisfactory result, it is appropriate to point out that this file, like the "Word file" and "Image file" of the Castille-La Mancha Community Council, has been collected by Europeana. The three files mentioned –all produced by DIGIBÍS®– have joined the small number of archives that Europeana has been able to incorporate to date.

One of the greatest problems lies in the possibility of creating hierarchies adapted to the Europeana Data Model, and that was just what the Fundación Ignacio Larramendi presented at the meeting last November 26. The discussion, which took place within the *Hierarchical Objects* Task Force, will result in an analysis report and recommendations to be published in early 2013.

Various moments at the Assembly.

> The possibility of extending the DIGIBÍS OAsIs software, technical basis of Hispana, was discussed

Turning to other essential aspects of the Europeana General Assembly, Max Kaiser paid special attention to everything related to Europeana version two, known as Europeanav2, which will be brought into operation during 2013. It is one of the objectives of the Business Plan for the year. Some of its technical aspects are already available in Europeana Preview.

Bilateral meetings and work groups

As is customary at this type of meeting, all sort of bilateral meetings were held among Europeana data providers. Work groups dedicated to various technical aspects of the project were also formed, acting according to the methodology already described on various occasions. This involves listing a series of very specific lines of action and subsequently presenting them to the whole Assembly; those points which are most significant or relevant to the members of the Assembly are those that will be reflected in the annual Business Plan.

It is appropriate to also emphasize that there was a series of sessions dedicated to the brief presentation of some projects, highlighting among them the creation of a very complex application by the OntoText company to create a SPARQL service that accesses Europeana data already available as Linked Open Data. Mariana Damova, who presented the project, commended and discussed with the Project Director of the Fundación Ignacio Larramendi the possibility of joint collaboration on a project of these characteristics. Despite the short time, the collaboration was completed a few weeks later in a project called HOLE and, although it is not possible to say that it will be funded by the European Union, it is a good sign that both the Fundación Ignacio Larramendi and DIGIBÍS® are increasingly known to individual members of the Europeana Network.

The possibility of extending the OAsIs® *software* to other countries was also discussed, i.e. the information system developed by DIGIBÍS® that combines OAI recollectors and repositories that are reciprocally fed in a dynamic manner and that is, for example, the technical basis of the highly valuable Spanish aggregator Hispana. ■

NEWS

DIGIBÍS® and cultural industries

DIGIBÍS® is a company that is characterized, among other specifics, by its firm commitment to R+D+i. It has already been noticed in previous published issues of DIGICLIC®.

DIGIBÍS® answered the call for creation of *software* for the international dissemination of Spanish cultural heritage with a proposal to develop a specific product which it called"OAsIs Museos," and was awarded the project, according to record 622/51 07 with a budgeted amount of 65,000 euros.

With this help and, above all, within the framework of the development of cultural industries, DIGIBÍS® suggested development of a completely rewritten application of its DIGIMUS® program that would have functionalities as effective as having dynamically fed OAI repository from the museological database that the Europeana Data Model (EDM) generates.

The LIDO (Lightweight Information Describing Objects) schema, which is the international standard for collection of museums data sponsored by the International Council of Museums (ICOM), was selected as a data model for this project. The project is already quite advanced and an *alpha* with which ambitious projects are being performing is available.

The circumstance has allowed the development of a new commercial product (that for reasons of business strategy will be named the same as the previous one: DIGIMUS 2.0®), which has been very timely because DIGIBÍS® has been the successful bidder of two consultancies for the creation of a *single point of consultation* for the archives, libraries and museums of the Ministry of Defense.

DIGIBÍS® has also been entrusted with the drafting of the first phase of an information system developed specifically to serve as support and gather all existing information about el Greco, since 2014 will mark the fourth centennial of his death.

Activity supported by the
Ministerio de Educación, Cultura y Deporte.

Thus, there will be a new program, very advanced, which will feature the most important functionalities for the exchange of information; among them the most prominent are those that have been outlined above, i.e. OAI and EDM, as well as the various information exchange modules based primarily in METS that, as is known, is an encapsulator of different types of metadata, among which should be highlighted Dublin Core and, and in the museological field, those already mentioned LIDO and EDM, as well as METSrigths, METS/ALTO, PREMIS, etc.

In consideration of the consultancies indicated, it is clear that the data model, functional specifications and standards that Europeana promotes, as well as the W3C LLD (available on the website of the Fundación Ignacio Larramendi in English with a Spanish translation), are increasingly widespread in Spain. DIGIBÍS® is happy to be contributing to this in a prominent way as shown by the applications (and statistics) existing in Spain and reflected in the Spanish contribution to Europeana. ■

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http://www.digibis.com/digiclic.html