DIGICLIC

DIGIBÍS

DIGI HUB 6.0

New version

More accessibility

More visibility

Responsive web design

With updated international standards

SUMMARY

The origins of Hispana

The centenary of Ignacio Hernando de Larramendi's birth (1921) will be celebrated next year, and it would be right to remember how the ROAI initiative (Directory and Harvester of Digital Resources), Hispana's predecessor, was created.

At the beginning of this century, the Ministry of Culture was going to start the digitization projects of bibliographic materials, the great project that has had its vicissitudes even until today; and the General Subdirectorate of Library Coordination was worried about possible duplications in the digitization of the same materials in different libraries. Therefore, OAI technology was chosen so that there was a metadata harvester for digitization projects. The Ministry of Culture launched this initiative. A few years later, Europeana made the same decision to aggregate content from the European Union's digital projects.

> The centenary of Ignacio Hernando de Larramendi's birth will be celebrated in 2021

ROAI became Hispana and DIGIBÍS, which had been awarded the corresponding tender, was able to extend the implementation of its DIGIHUB application, on which Hispana runs, in different Spanish institutions. Among them, Americanae, which already has more than 2 million records, and Galiciana stand out due to their volume; and Patrimonio Dixital de Galicia due to its variety, because it harvests bibliographic records, archival records, institutional repositories of Galician universities and even bibliographic records generated by OAI repositories, which journals manage with OJS incorporated software. The last of the projects is Defensa Digital, which, like Americanae, harvests metadata from Ibero-American repositories.

New DIGIHUB 6.0 functionalities

As a result of constant *software* updates, based on the strategic vision derived from DIGIBÍS' technological security and its relationship with its customers, new functionalities have been implemented, amongst which the thumbnail viewer is of particular mention.

Surely in 2021, the year that commemorates his centenary (#100ignaciolarramendi), Ignacio Larramendi would have been more than satisfied with this particular software because it makes consulting cultural information from many institutions at the same time so much easier, and is completely free of charge. ■

Europeana and Open GLAM FAIR

Among the strategic points being addressed by Europeana, the event Using FAIR data from Galleries, Libraries, Archives and Museums (GLAM) sector, took place on 26 September 2020, and can be consulted on the Europeana channel on YouTube.

As is known, FAIR is an initiative whose guiding principles, first drawn up in January 2014, attempt to provide a solution to the absence of scientific and cultural data, which can be widely shared, articulated and applied, as indicated by its own acronym Findable, Accessible, Interoperable and Reusable.
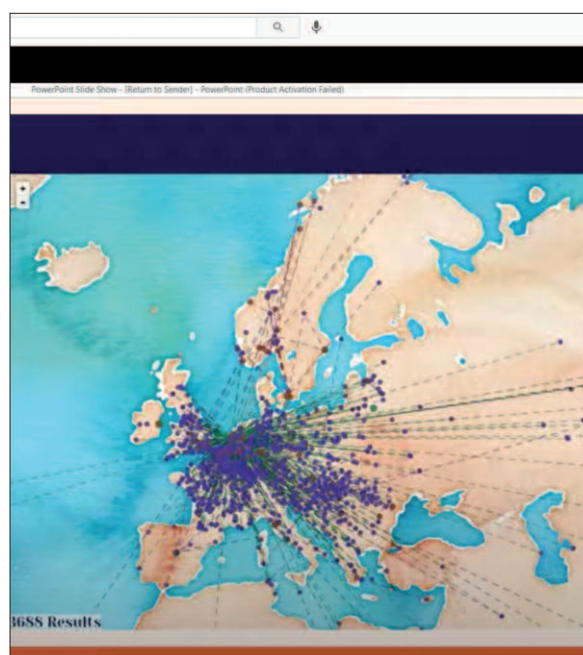
It is clear that these four concepts fit like a glove with Linked Open Data technology and, of course, the first and second are precisely the very meaning of the Europeana project. The FAIR initiative and the principles that shape it were officially published in *Scientific Data* in March 2016.

Therefore, it makes perfect sense that Europeana should be considering adoption of the FAIR principles, because there is a great deal of agreement with Europeana's values and principles as expressed in its strategy.

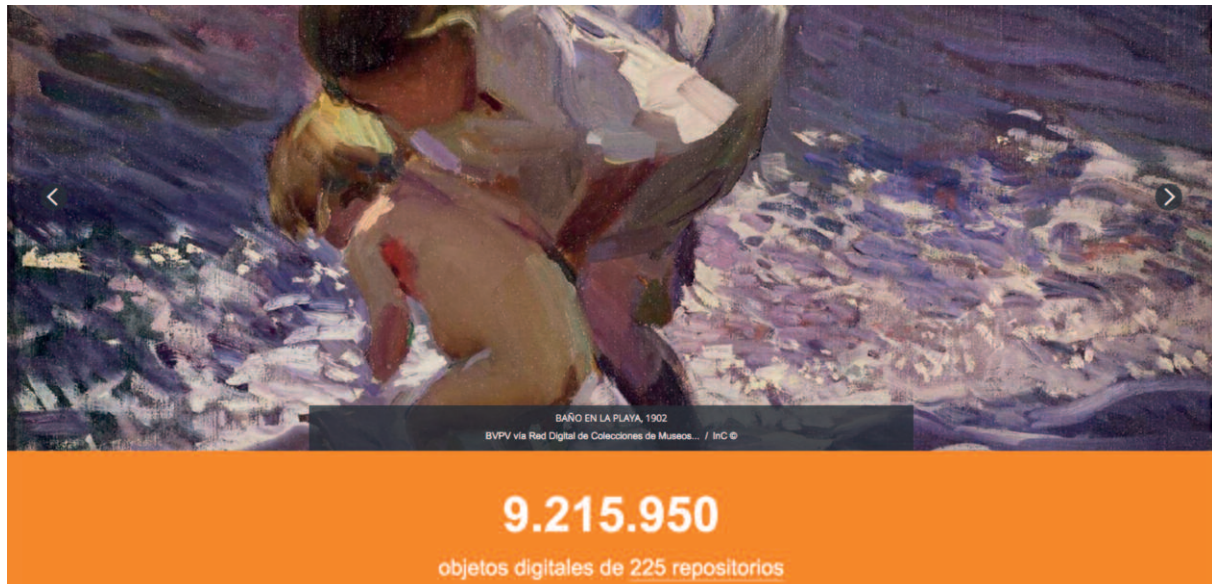In April 2019 Antoine Isaac and Nuno Freire of EuropeanaTech published an article in Europeana Pro, "Europeana and the FAIR principles for research data," announcing Europeana's upcoming efforts to implement those principles.

DIGIBÍS is very aware of this strategy and is gradually carrying out developments and tests so that in the medium term its DIGIBIB, DIGIARCH and DIGIHUB programmes will be able to put these principles in production. ∎

On this page, pictures from the video of the event.

Hispana reaches the milestone of 9 million records

BAÑO EN LA PLAYA, 1902
BVPV vía Red Digital de Colecciones de Museos... / InC ©

9.215.950

objetos digitales de 225 repositorios

At the time this is written, in 2021, Hispana will have surpassed 9 million records; in December 2020 there were only a few to go to reach this figure. In this issue of DIGICLIC we could not fail to mention this event because Hispana was created as an implementation of the DIGIHUB programme, although with its original name of Directory and Harvester of Digital Resources.

It is important to remember that when it was presented at the Digital Heritage Preservation Conference organised by the Ministry of Culture on 14-16 March 2006 under the acronym ROAI, the Directory and Harvester of Digital Resources included 55 digitization projects, of which 25 had OAI-PMH repositories, and 116,014 records of digitized works. Hispana now has 225 OAI-PMH repositories and, as mentioned, has surpassed 9 million records.

From the beginning Hispana offered, as the visible face of the project, a single point of consultation for all the metadata harvested with access to the digitized document itself, an OAI-PMH repository harvester, an OAI-PMH repository to allow the harvesting of the aggregated metadata and a a Search Retrieval via URL (SRU) server. This configuration has meant that Hispana is also the bridge for two thirds of the Spanish participation in Europeana.

Indeed, Hispana harvests many different families of metadata schemas, but always with the common Dublin Core base, and DIGIBÍS has made it possible for Hispana to harvest metadata records transparently according to the Europeana Data Model ontology, which is constantly updated.

The importance of coordination and international standardization

It is important to highlight, as Xavier Agenjo and Francisca Hernández do in the article "OAI-PMH and Linked Open Data in the context of Hispana and Europeana: Some historical reflections" that despite the fact that these 15 years have been characterized by constant budget cuts, Hispana has seen the number of its records increase by more than 7000% and the number of repositories by almost 1000%, which proves the importance of coordination, which is part of the name of the General Subdirectorate of Library Coordination of the Ministry of Culture, responsible for the maintenance of the Hispana repository and aggregator and its international standardization. ■

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DIGIHUB 6.0 Updates

Throughout the second half of 2020, despite the difficulties caused by COVID-19, major updates were made to the various DIGIHUB implementations.

Americanae. Dissemination and Harvesting System of Americanist Collections

The first has been the Americanae project, the System for the Dissemination and Harvesting of Americanist Collections of the Spanish Agency for International Development Cooperation (AECID), in which perhaps the most important thing to be highlighted is the sharp increase in the number of its records during 2020.

In fact, more than two million digital objects have been added from 60 repositories. It should be remembered that Americanae harvests digital libraries, including the Digital Library of the Spanish Agency for International Development Cooperation (implemented in a DIGIBIB) and the Hispanic Digital Library, whose core is the old Hispanic America collection, which for historical reasons also includes the Philippines. It consists of books and pamphlets from after 1800, as well as an important collection of manuscripts, plans and maps on America, a total of 14,991. The same can be said of the Americanist collections of the Bibliothèque Nationale de France, as well as European and American collections.

But the most important of all aggregation sources is La Referencia: Red de Repositorios de Acceso Abierto a la Ciencia (The Reference: Open Access to Science Repository Network), which is located in Santiago de Chile and has a volume of more than 1,800,000 records.

It would have been difficult to dream a few years ago that such a powerful tool as Americanae would be available.

Galiciana: Patrimonio Dixital de Galicia (Digital Heritage of Galicia)

Galiciana: Patrimonio Dixital de Galicia has also increased the number of its digital objects. It already has 440,000, corresponding to 14 different collections ranging from the Virtual Library of the Royal Galician Academy through Galiciana: Arquivo Dixital de Galicia (implemented in DIGIARCH), Galiciana: Biblioteca Dixital de Galicia (implemented in DIGIBIB), the institutional repositories of all Galician universities.

Galiciana presents an important enhancement: when a search is made, a thumbnail appears to the right of each record recovered, which greatly guides the user because it facilitates their visual exploration. It is an important step for the visibility and accessibility of information. ■

On the left, the home page of Americanae, which has surpassed two million digital records from 60 repositories.
On the right, results page in Galiciana: Patrimonio Dixital de Galicia, in which you can see, sorted in the right-hand column, the miniatures that help to guide the user's search more quickly.

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Update of the Arxiu de Revistes Catalanes Antigues (ARCA)

The Arxiu de Revistes Catalanes Antigues (ARCA), managed by the Biblioteca de Catalunya, is implemented in DIGIBÍS which was upgraded to version 10.14.4. in the second half of 2020.

This project continues to grow since it went into production on 1 March 2019, with new titles added to it continually.

This virtual library has an extremely useful timeline, with the headers of the publications and the place of printing reflected at the same time, in the same space of the web page.

New microsite of humorous magazines

If when it was published on the website, the Arxiu de Revistes Catalanes Antigues already had a dedicated microsite called "Avant-garde maga-zines", the librarians of the Library of Catalonia have now published a new microsite of humorous magazines, of great quality.

This microsite is signed by María del Tura Molas, director of the Periodicals Library of the Library of Catalonia, and Pepa Bagaría, also a librarian at the same institution. ■

The timeline shows the headers of the publications and the place of printing on the same page

Updating of the MAPFRE Documentation Centre's DIGIBIB

The MAPFRE Documentation Centre has been updated to DIGIBIB version 10.14.4. This Documentation Centre has a series of interesting features such as the recommended bibliographies that are published periodically, a newsletter for those users who are registered in the private area, the Foundation's Notebooks and an insurance dictionary that can be accessed from the Documentation Centre itself.

Moreover, the catalogue is organised into specialised collections, not only of monographs, journals or legislation, but also regulations, *rankings* and special collections from the world of insurance such as AGERS, which is the Spanish Association of Risk and Insurance Management, and ICEA, which is the Insurance Sector Statistics Service.

It can be said that this MAPFRE Documentation Centre is the Ibero-American referent for the insurance sector, which is helped by the fact that the pages are in Spanish, Portuguese and English.

In addition, this project has had a specific development of SEO optimization (Search Engine Optimization). ■

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DIGIBÍS awarded the digitization of the Ministry of Culture and Sp

Once again, DIGIBÍS has been the company awarded the tender convened by the General Subdirectorate for Library Coordination of the Ministry of Culture and Sport for the digitization of bibliographic materials.

The tender was published on 12 June 2020 and awarded on 23 December 2020. This year's project consists of the digitization of newspaper materials from the Municipal Newspaper Library of Madrid and the Municipal Newspaper Library of Santander, of bibliographic materials from the Public Library of Teruel, from the Library of the University of Valencia, and, finally, of the digitization of all types of museum materials from the Benito Pérez Galdós' House-Museum, surely derived from the importance of this author's death centennial.

The digital objects resulting from this project will swell the catalogues of the Historical Press Virtual Library and the Bibliographic Heritage Virtual Library, also managed by the General Subdirectorate for Library Coordination, which amount yo very high numbers, specifically more than 1,600,000 digitized copies of the Historical

DIGIBÍS will generate the specific metadata for the text obtained from OCR according to the ALTO 4.2 scheme

programme
ort 2020

Press Virtual Library and more than 117,000 works in the Bibliographic Heritage Virtual Library.

As in other projects, DIGIBÍS is in charge of carrying out original cataloguing of historical press copies or reusing bibliographic records from different library applications.

At the same time, DIGIBÍS will generate the specific metadata for the text obtained from optical character recognition (OCR) according to the Analyzed Layout Text Object schema, version 4.2. In addition, these ALTO files, as well as the rest of the files of the digital representations and descriptive metadata, will be encapsulated in METS (Metadata Standard and Transmission Standard) files that will constitute information intake packages for their standardized integration in the Historical Press and Bibliographic Heritage virtual libraries. ■

La Biblioteca Virtual del Patrimonio Bibliográfico, gestionada por la Subdirección General de Coordinación Bibliotecaria del Ministerio de Cultura y Deporte, es una biblioteca digital en la que se ofrece a los ciudadanos una valiosa y creciente colección de reproducciones facsímiles digitales de manuscritos, libros impresos, fotografías históricas, materiales cartográficos, partituras y demás materiales que se conservan en instituciones de la memoria (archivos, biblioteca y museos) y forman parte del Patrimonio Bibliográfico Español.

Esta iniciativa permite a los ciudadanos consultar sin restricciones fondos, en su mayoría públicos que, por sus características, se conservan en depósitos especiales y son difícilmente accesibles.

El proyecto es el fruto de la cooperación del Ministerio de Cultura y Deporte con las comunidades autónomas y otras administraciones e instituciones públicas o privadas. Los fondos digitalizados provienen de bibliotecas, archivos y museos, de comunidades autónomas, ministerios, ayuntamientos, ateneos, fundaciones, universidades, instituciones privadas, reales academias, particulares, etc. Gracias al trabajo y colaboración de todas estas personas e instituciones, que realizan tareas de selección de fondos y los ceden para su digitalización ha sido posible sacar adelante este proyecto.

La Biblioteca Virtual del Patrimonio Bibliográfico ofrece actualmente (marzo de 2021), en acceso abierto y gratuito, unos 24.000 libros impresos, 2.500 manuscritos, 5.135 materiales cartográficos (atlas y mapas), 84.500 materiales gráficos y fotográficos, 212 partituras, etc.

DIGIBÍS awarded the contract for Castilla y León digitization

DIGIBÍS has once again been awarded the contract for Junta de Castilla y León digitization for 2020, a total of 232,423 digital objects. This tender has had somewhat different characteristics to other years, given that the materials to be dealt with come from both libraries and archives.

In addition, the generation of records linked to controlled vocabularies has been requested, as was undertaken in previous tenders. While in previous years the semantic enrichment of either person authorities or place authorities was tendered, in this case it is a question of institution authorities.

Digitization is being carried out in the following: Provincial Archive of Ávila, Provincial Archive of León, Provincial Archive of Palencia, Provincial Archive of Segovia, Provincial Archive of Soria and the Film Library of Castilla y León. The project includes digitization of negatives and slides as well as metadata work.

A migration of metadata from proprietary databases, such as Filemaker, descriptions of scrolls in Word files, or from the Catalogue of the Network of Libraries of Castilla y León has also been carried out.

The Digital Library of Castilla y León is being harvested by Hispana thanks to its OAI-PMH repository and from there goes to Europeana; it is one of the Spanish virtual or digital libraries with greatest representation in the European digital library. ∎

Home page of the Digital Library of Castilla y León (BDCYL).

DIGIBÍS awarded the contract for Galicia digitization

DIGIBÍS has been awarded, once again, a project to incorporate new digital objects to the Biblioteca Dixital de Galicia. More than 34,450 pages of press and 29,411 pages of monographs will be digitized in this tender.

The Technical Specifications governing this award called for the generation of digital objects of these scanned pages, with the corresponding metadata, i.e. MARC 21 format, OCR according to the ALTO scheme, encapsulated in METS format. The Dublin Core records, essential for the OAI-PMH repository, and the Europeana Data Model

DIGIBÍS has also converted the journal *Nós* into EPUB electronic format, readable on all types of devices

descriptions for Europeana are generated automatically from the DIGIBIB application of the Biblioteca Dixital de Galicia.

In a separate tender, DIGIBÍS has encoded the issues of the journal *Nós*, the leading historic journal for Galician autonomy, in EPUB format. Thus users will be able to download these files to their mobile phones, tablets or desktop computers with content perfectly adapted to each device.

Nós has its own microsite

In this case it is a new issue of this journal that the Xunta de Galicia has been gradually digitizing and that has its own microsite within the Biblioteca Dixital de Galicia.

As of today it can be consulted, either on the Biblioteca Dixital website, or by downloading EPUB files. In addition, the cataloguing is enriched with analytical records, of the contents of any journal. ∎

Home page of the microsite of the journal Nós in Galiciana: Biblioteca Dixital de Galicia.

Francisco de Vitoria University and Digital Humanities and Artificial In

On 16 July 2020 a broad collaboration agreement was signed between the Francisco de Vitoria University and Fundación Ignacio Larramendi in the context of the Digital Humanities degree, which includes a degree in Digital Humanities and Artificial Intelligence.

The agreement was signed by Daniel Sada Castaño, rector of the UFV, and Luis Hernando de Larramendi, chairman of the FIL, accompanied by Clemente López, vice-rector, Victoria Hernández Ruiz, coordinator of the Humanities Degree, and Rosa Salord, director of the Library, on behalf of the Francisco de Vitoria University, and by Carmen Hernando de Larramendi, vice-chairman of Fundación Ignacio Larramendi, and Xavier Agenjo and Patricia Juez, director and project technician respectively of the Foundation.

Training of students

The agreement focus on the application of Digital Humanities technology and Artificial Intelligence, fields in which the Fundación Ignacio Larramendi, as well as its technological company DIGIBÍS, are leaders. In fact, the Virtual Polymath Library of Fundación Ignacio Larramendi, implemented in the DIGIBÍS software, is a case study of W3C and Europeana.

Therefore, one of the actions to be carried out in the 2020-21 academic year will be to train Francisco de Vitoria University students in the handling of DIGIBíS software, that is, DIGIBIB, for the digital management of libraries; DIGIARCH, for archives; and DIGIHUB, repository and data aggregator, as well as to familiarize them with the semantic links that can be established, the OAI-PMH protocols for repositories, Linked Open Data technology, etc. The theoretical classes, to be taught in the classrooms of Francisco de Vito-

ria University by Xavier Agenjo and Patricia Juez, will be complemented with practical classes be held at the headquarters of the Fundación Ignacio Larramendi and DIGIBÍS.

TEI, the key to digital humanities

It was also envisaged to develop a research project for the application of artificial intelligence in XML environments, with emphasis on the Text Encoding Initiative (TEI) encoding standard, the masterpiece of the digital humanities. In fact, in

FIL sign an agreement to promote telligence

The agreement refers to the application of technology to Digital Humanities and AI, as FIL and its technology company DIGIBÍS are leaders in these areas

the last weeks of 2020 a proof of concept project was prepared to implement a virtual library on the legacy of Luciano Pereña.

Because the University bears the name of Francisco de Vitoria, –an author who is part of the Virtual Library of the School of Salamanca 3.0, one of those created by the FIL in its Virtual Polymath Library– both institutions have agreed to carry out collaborative projects, as well as to use the DIGIBIB and DIGIARCH software to manage digital objects related to the School of Salamanca. ■

From left to right: Patricia Juez, Xavier Agenjo, Carmen Hernando de Larramendi, Luis Hernando de Larramendi, Daniel Sada Castaño, Victoria Hernández Ruiz, Clemente López and Rosa Salord.

New AENOR certificate: R+D+I project

New AENOR certification for DIGIBÍS. This time for its 2020 R&D&I project, PIDI-0166/2020, entitled «SCHEMA.ORG, IIIF and BIBFRAME for digital libraries». This R + D + i project certification, endorsed by AENOR, involves a Motivated Report from the Ministry of Science and Innovation that was issued on January 18, 2021

Since 2008, DIGIBÍS has continued on the path of innovation, focusing, above all, on Linked Open Data (LOD), with very important projects that will mark the future of access to information both in terms of the Semantic Web –Schema.org, BIBFRAME and IIIF– and digitized images.

The project's objectives are structured in three main sections, according to the three standards mentioned above. In all three cases, the Virtual Polymath Library of Fundación Ignacio Larramendi, owner of DIGIBÍS, is used as a testbed, for which a technological surveillance policy is maintained within the Innovation department of this company.

- Search engines need to index an immense mass of documentation. For this purpose, guidelines have been drawn up through the W3C Consortium and agreed upon by the major search engines such as Google, Bing, Yandex, etc. They propose the use of an ontology which information producers can encode their pages and data: Schema.org, whose extension called BIB.Schema.org is based on an adaptation of the MARC 21 format.
- Similarly, the Library of Congress is leading a transition process from MARC format to an ontology called BIBFRAME in order to take advantage of all the functionalities that Linked Open Data technology is already providing to bibliographic information.
- Since virtual or digital libraries present digital objects containing images on the web, the international community is promoting their standardization and openness through the technology called International Image Interoperability Framework (IIIF), for the management of images, their comparison with each other and with third parties, as well as the management of metadata associated with these images in a Linked Open Data environment.

Paradigm shift in universal librarianship

The emergence of Semantic Web technology and Linked Open Data has brought about a paradigm shift comparable to the use of the MARC format in automated bibliographic catalogues 50 years ago.

DIGIBÍS, always aware of developments in the sector, and especially those of such importance, is committed to the implementation of these ontologies and the functionalities derived from them in its library management and bibliographic description applications order to make the most of them, both between authority and bibliographic records of digital objects and with information resources outside the libraries themselves, such as Wikipedia, Wikidata or geographic databases, to mention just a few.

Centenary of Ignacio Larramendi in 2021

With all of the above, DIGIBÍS seeks to provide value to its customers, as well as the Spanish and Latin American library sector as a whole, following in the footsteps of our founder, Ignacio Hernando de Larramendi, whose centenary will be commemorated in 2021. ■