insights

1/2019

Archives and people in the digital age

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editorial

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Dear colleagues,

every ending holds a new beginning. I am therefore particularly pleased to announce quite a few new and exciting projects and initiatives in this issue. The last issue mainly focused on the results of the "co:op" project which came to an end in November 2018 after many years of international cooperation.

By now we have already embarked on new, exciting and revolutionary projects. We are thrilled that many of our highly esteemed colleagues from the previous years of collaboration are also part of the new projects. Our international network of teams is growing with each new project on which we are working together. We therefore highly appreciate that ICARUS will be a part of "Digital Treasures", a project funded by Creative Europe and headed by the Spanish National Archives. This project aims at further opening up access on archives. Our cover story gives insights into the work of Severiano Hernández Vicente, head of the Spanish National Archives, and his objectives for his leadership of "Digital Treasures".

Revolutionary developments in the way we deal with historical data are emerging in connection with the ground-breaking project "Time Machine": This project will design and implement forward-oriented technologies in the areas of digitisation and artificial intelligence to exploit the multi-layered cultural heritage of Europe. That much we can already promise: The Time Machine project will also hold many new findings and possibilities for research on genealogy and regional heritage. We already look forward to travelling there together!

And now I hope that you will enjoy discovering the many-sided articles and topics which our first edition of the year 2019 is holding ready for you!

Cheerio,

Kerstin Muff
Editor-in-Chief "insights" | Head of Communications ICARUS

Portrait: Severiano Hernández Vicente | Director General of the National Archives of Spain. Ministry of Culture, Sport and Education

The European treasurer

Severiano Hernández Vicente is head of the Spanish National Archives. As one of the main partners of the ambitious EU project "Digital Treasures" he will make documents on the history of Europe visible in collaboration with colleagues from across the continent. The treasure hunt has begun.

by Saskia Blatakes
Photos: Subdirección General de Archivos Estatales

a peace treaty concluded in 1648 between Spain and the Netherlands. A gloomy picture in black and white showing emaciated people who are cheering their liberators at the gates of the Mauthausen concentration camp. Documents recording the invention of the World Wide Web or the first advances of European scientists into space.

These highly diverse objects are stored at archives spread across the entire continent. They have one thing in common: They bear witness to a history which, not least thanks to integration, has become a common history – the history of Europe.

A new EU project funded within the framework of Creative Europe and sustained by archivists from all over Europe wants to make it visible: "European Digital Treasures: Management of centennial archives in the 21st century" (in short: Digital Treasures). And here is one of the project's main partners: Severiano Hernández Vicente, head of the widely spread and complex framework of the Spanish National Archives.

The tasks which he and his fellow European partners – among them ICARUS – have taken on are not easy. He points out that he is proud of all those colleagues who have launched the "risky and highly promising" endeavour Digital Treasures.

Apps, video games and a new hobby

Plans for the project include exploring new business models, assembling and organising exhibitions in six countries and reaching out to new target groups with the help of workshops for the young and the old, for experts and amateurs. But how can people who have never before ventured into an archive be reached?

Vicente firmly counts on digitisation: "The transformation of all types of cultural content into bits and bytes is opening up entirely new ways of reaching traditional as well as new target groups. This would have been completely unthinkable some decades ago."

The project has now set an explicit focus on two groups of new and traditional users: Adolescents and retirees of 60+.

Digital offerings such as video games or apps are primarily developed for the youngsters. As far as retirees

The Historical Archive of the Nobility is part of the extensive system of National Archives of Spain. Here: Its impressive courtyard.

The General Archives of the Crown of Aragon in Barcelona are also part of the National Archives of Spain and are located in the former Palau del Lloctinent (Lieutenant's Palace).

are concerned, the project counts on existing users. They shall help in the development of tailor-made services for elder people who might discover working at an archive as their new hobby.

The ideal of transnational cooperation spans the various initiatives like an umbrella. But there are times when a project that sounds good in theory is suddenly facing problems in reality. This concerns much more than just the latest project of Vicente

The international team of the EU-funded project Digital Treasures met for the official kick-off meeting in the General Archives of the Crown of Aragon in Barcelona.

portrait

First name and last name:
Severiano Hernández Vicente

My favourite memories from my professional life:
The conviction which the National Archives and PARES are putting into making the portal accessible to the public and compatible with other archival information systems internationally.

When I am alone in the archive ...
I check the information contained in our archival information system PARES and optimise the norms databases.

Coffee or tea?
Black coffee, please.

I am impressed by ...
the enthusiasm my team is showing in its work despite the drastically reduced headcount.

I am good at ...
getting deeply lost in my work and looking out for more.

Three things I love about archives:
The care we take in conserving documents, the professional attitude of our team and our national as well as international pioneer PARES.

My connection to ICARUS:
Our long-standing common work on projects as well as our current cooperation within the framework of "Digital Treasures".

Hernández: "The biggest challenge lies in developing common guidelines which are independent of national circumstances and highly diverse administrative traditions."

Common problems, common solutions
The complex work effort has already delivered good results: "International cooperation – in our case with Europe as well as with South America – is incredibly rewarding. Together we find solutions to problems which are faced by archives from all over the world." Two previous projects are particularly important to him: The Iberarchivos program which enables exchange

"International cooperation is incredibly rewarding. Together we find solutions to problems which are faced by archives from all over the world."

with 23 South American countries as well as the Archives Portal Europe.

The latter one is a pan-European project pooling the archival treasures of the continent. Severiano is enthusiastic: "Initiatives like this one have radically changed access to primary sources. The linking of sources will undoubtedly clarify and complete our knowledge of the past."

After all, his native country is home to one of the largest archival fonds worldwide. Together with his colleagues he wants to promote these treasures outside of Spain. "His" archives hold much more than just records on the history of Spain. They allow researchers to reconstruct the history of the entire

European continent, of America and parts of Asia. The in-house PARES archive aims at making access to these objects easier and better known.

An archivist of passion
Despite its many treasures, the Spanish archival system does not only have benefits, as Severiano Hernández Vicente says. Coordination proves to be a challenge because of the decentralised framework. The Spanish archival system requires cooperation with the autonomous communities through the Archivist Cooperation Council. It furthermore cooperates with many smaller public and private archives.

But this is Severiano Hernández Vicente at his best: Born in Salamanca in 1960, he is an archivist of passion. After graduating in geography and history he completed his degree in archival sciences and documentation at the centre for bibliographic and documentary studies in Madrid. Following a first stint at the National Archives and work for the Ministry of Culture, he returned to his native city a few years later and was head of the University archives of Salamanca for many years. He then trained colleagues in digitisation. Among other countries this job also took him to Venezuela.

The archivists now have to take ac-

tion to release the digitised treasures from the invisibility which is keeping them in the databases. Within the framework of the Digital Treasures project, Severiano and his European colleagues want to show some very special archival documents in order to give the public a better understanding of the history of Europe.

The preselection will contain 320 pieces, out of which 120 will be chosen to be shown in three thematically structured touring exhibitions. The topics are "The construction of Europe from Charlemagne to the EU treaties", "Exile, migration flows and solidarity" as well as "European discoveries – from the New World to new technologies".

Submarines and other treasures
The latter one deals with pioneering discoveries made by European inventors and scientists. The archivists of Digital Treasures have come up with a very special way of presenting the exhibition documents, whether they are digitised, facsimiles or the originals: They have secured the support of Factoría Cultural, the most important creative hub of Madrid.

The creatives will merge the archival material which is highly diverse in terms of topics and geography into three interactive trans-media exhibitions to make it even more tangible to the visitors.

The teams are currently involved in the first phase of preselection. But Severiano Hernández Vicente already has an inkling of the documents which could become the puzzle

pieces of European innovation history in the exhibition "European discoveries": His archive holds plans and drafts of the first submarine torpedo boat which was invented at the end of the nineteenth century by Isaac Peral, an engineer and lieutenant commander of the Spanish Navy.

The project will unite these diverse objects in pan-European exhibitions: The peace treaties and the plans for the war ships. European history, made visible by the treasurers of Europe, by archivists such as Severiano Hernández Vicente.

fact sheet

Name of the institution:
Subdirección General de Archivos Estatales – Ministerio de Cultura y Deporte

Web address:
www.culturaydeporte.gob.es/cultura-mecd/areas-cultura/archivos/portada

Oldest collection:
The collection of medieval parchments at the National Historical Archive.

Oddest object / best-known archival item:
Historical topographic map from China "Ku – Chin hsing – shêng Chih t'u". Dated 1555
Identification code MP-Filipinas 5

Overall volume of digital copies:
More than 32 million.

Most loyal visitors of the reading room:
Mainly archivists, history enthusiasts, scientific researchers and students.

From the team´s point of view

Cristina Díaz Martínez (Head of Institutional Relationships Area of the Spanish National Archives): "What impresses me the most about Severiano is his ability to retain in his memory the data of practically all the documentary holdings and producers of the Spanish State Archives. His ability to establish contextual relationships between the agents present in the documentation is astonishing."

Miguel Ángel Bermejo Alonso (Archivist assigned to the International Cooperation Service of the Spanish National Archives): "Something to emphasize about Severiano is his closeness and humility, the barrier that sometimes may exists with some superiors is eliminated with him. I feel very fortunate to be part of that team; which although small is capable of doing great things."

Iván Stoychev Vasilev (Personnel Manager of the Spanish National Archives): "Severiano is a person totally committed to his work and is fully involved in all the projects that are carried out. In short, he is able to compromise his sleep hours and his health for the organization."

info

Links:

pares.culturaydeporte.gob.es

digitaltreasures.eu

iberarchivos.org

archivesportaleurope.net

Saskia Blatakes studied Political Science at the University of Vienna and the Institute for Advanced Studies. She works as a freelance journalist, presenter and editor.

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The topotheque, a "harvesting machine"

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Almost ten years after its launch, the topotheque has become something more than "just" a reservoir for historical image documents of all kinds. It has a story to tell about its own history. A look back on the first decade of the topotheque and a glimpse into the future.

Everything started with Alexander Schatek's own Prater photo collection from his childhood in the third district of Vienna. In order to bring order to its treasures, Schatek had an online archive programme programmed, which allowed an exact indexing.

When you are searching the Internet for old pictures on the history of your family or of the places they were living at, you will most probably come across the topotheque. The online platform for privately owned historical documents was founded in 2010 and has meanwhile developed into an online archive which is being taken seriously and promoted by experts from all over Europe. Thanks to their integration into the co:op project, topotheques are currently in place in more than eleven European countries. They are mainly operating on a local level and are managed by more than 800 people, our so-called "topothecarians". In response to the geographical spreading of the platform's use, the user interface of the topotheque has become multilingual: At the moment, about 400,000 records are available in 17 languages.

The future is geared towards a meta topotheque

Further technological development will focus on searches across languages and topotheques. A "meta topotheque" will connect all topotheques and allow global searches. It will therefore no longer be necessary to enter your search terms in one topotheque after another. Instead, a single search will automatically go through all topotheques that exist – from Finland to Spain! Thesauri are yet another feature that will be included in future versions. If you presently want to search for pictures of dogs you have to enter all kinds of breeds to get good results – ranging from Chihuahuas to Golden Retrievers. With the use of thesauri, you will automatically receive results for all dog breeds. Thesauri will also make automatic translations possible. With the search term "dog", the topotheque will automatically include the German word "Hund" or the Italian word "cane" in the search.

A versatile tool for training and education

The steadily growing number of topotheques has created a solid basis on which new use cases can be considered. In many courses on local history, for example the one held by the Lower Austrian Provincial Archives, topotheques have become an essential part of the training. In addition, museums are increasingly turning to topotheques when they put together an exhibition. The Lower Austrian provincial museum "Museum Niederösterreich" is taking an important step in this direction by hosting the annual topothecarians' meeting of Lower Austria in the autumn of 2019. Topotheques will be able to play a major role in many areas of training and education, for example at schools. The renewed participation in the Citizen Science Award 2019 for schools underlines the fact that the topotheque of the future has everything it takes to become a standard tool.

Time travelling with the topotheque

The topotheque will also play an essential role in the development of local time machines. The EU project "Time Machine", in which ICARUS is a part of the steering committee, includes plans to this purpose. In this sense the topotheque will turn into a "harvesting machine" that collects the material which is then processed by artificial intelligence. In the end, it will be possible to reconstruct entire places and localities at a certain point in history.

Alexander Schatek has a degree in Industrial Design from the University of Applied Arts in Vienna. Since 1989 he runs his own company in Wiener Neustadt; in 2010 he became the "father" of the topotheque.

© Franz Baldauf

Europe builds a Time Machine – Big Data of the Past is becoming a reality

The European Commission has decided: The "Time Machine" project is one of six excellent proposals which have been chosen for the next developing phase and have been granted generous fast-start funding. And ICARUS is in the front seat!

The Time Machine project unites globally outstanding academic institutions, private companies and cultural heritage institutions in a revolutionary alliance.

© Notch Communications

it all started in Venice. In 2012, the millenary history of the city on water and its archives with more than 80 kilometres of shelves full of historical documents motivated Frédéric Kaplan, Professor of Digital Humanities at EPFL Lausanne, to start a large-scale digitisation and research project. Right from the beginning, Kaplan wanted to do more than just scan the existing archival treasures as comprehensively as possible. He also wanted to analyse them with the help of newly developed forms of artificial intelligence. This should lead to the creation of a social network of the past.

From a network of cities and institutions to a major EU project

Kaplan's research initiative hit the scene like a bomb. Other European cities soon followed and built their own regional "Time Machines", for example Amsterdam, Paris, Budapest and many more. In Austria, research initiatives for regional Time Machines were launched in Lower Austria and for St. Stephen's Cathedral in Vienna. In 2017, successful networking then led to the idea of building a pan-European "Time Machine" out of these individual projects. Thanks to generous fast-start funding by the EU with an amount of approximately one million euros this idea may now become a reality. "The Time Machine will likely become one of the most advanced Artificial Intelligence systems. It will go beyond what today's systems can achieve in terms of the data streams of the present – the Time Machine will cover data from wider geographical and temporal horizons," says the project's leader Frédéric Kaplan. This new source of knowledge will become a driving factor in economy where it will lead to the creation of new jobs, services and products in areas such as education, creative industries, policy making, smart tourism, smart cities and environmental design.

Austria at the centre of the Time Machine

"Austria is taking a prominent role in the Time Machine project," says Thomas Aigner, President of ICARUS. On the one hand, approximately 35 out of 233 participating institutions are headquartered in Austria, among them the Vienna University of Technology or the Austrian National Library. On the other hand, Aigner, an expert from Austria, is on the management board. The president of ICARUS is convinced that the major EU project will lead to fundamental changes in the way we deal with historical data, and that these changes require a sustainable organisational structure which is about to be established: "In the course of this project, the Time Machine Organisation will be founded as an international association for collaboration in the areas of technology, science and cultural heritage. It will be the largest organisation of that kind worldwide – and it will be headquartered in Vienna."

Thomas Aigner has been President of ICARUS since 2008. He is a pioneer in the digitisation of archival material. With his expert know-how he is part of the management board of the Time Machine project.

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From archive images to knowledge

Teaching computers to read and extract the content of documents can help to bring our past to life and adds value to billions of documents currently stored at thousands of archives and libraries all over Europe.

Understanding document images is an important field of research in pattern recognition and computer vision. The main objective is to analyse, recognise and understand the content from images of documents. Lately, the revolution in artificial intelligence – and in particular in machine learning and data analytics – has made a huge impact on the progress of this technology. Document analysis employed at digital archives provides computational techniques to extract information from documentary collections and thereby plays an important role in preserving, accessing and indexing our cultural heritage.

One project, two partners

Population sources allow the study of the demographic behaviour as well as the understanding of the social and economic evolution of the past. They reflect the evolving memory of generations. The project NETWORKS (Xarxes) is focused on developing technologies to create historical social networks, thanks to the mining of information of citizens registered in local censuses. It is a joint initiative between the Computer Vision Center (CVC) and the Centre for Demographic Studies (CED), funded by the Recercaixa program of CaixaBank.

The Computer Vision Center is a non-profit institution devoted to Research and Development in Compu-

ter Vision, established in 1995 by the Catalan Government and the Universitat Autònoma de Barcelona (UAB), with the mission to undertake basic and applied research at the highest international level, while promoting knowledge transfer to the industry and society at large. The Computer Vision Center has more than 15 years of experience in historical document image analysis, including not only textual documents but also graphic documents such as maps, floorplans and music scores.

Constructing social networks of the past

By using computer vision as enabling technology, in particular handwriting analysis, the content of digitised population sources is (semi-)automatically extracted. Then, record linkage techniques are used to link the individuals appearing in the different sources in order to construct the historical social network. Finally, the participation of citizens and ar-

chivists is incorporated, both in the extraction and validation of the demographic information through gamification, and also in the design of new user experiences (e.g. geo-projections in interactive maps). As a result, the historical demographic heritage is converted into digital assets, facilitating new experiences for the consumption and dissemination of the historical knowledge from an individual perspective and in a pedagogic way.

© CVC

With the NETWORKS (Xarxes) project, the CVC develops technologies that help map social networks of the past.

Links

cvc.uab.es
(in English)

dag.cvc.uab.es/xarxes
(in Spanish)

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Josep Lladós is Associate Professor at the UAB and the director of the CVC. He has been the head of many R&D projects and technology transfer on document analysis.

Alicia Fornés is a Senior Research Fellow in computer vision at the UAB and CVC. She has broad expertise in historical document image analysis. She is currently co-leading the project NETWORKS.

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At the ÖFR, shared interest in family and regional history research is a top priority.
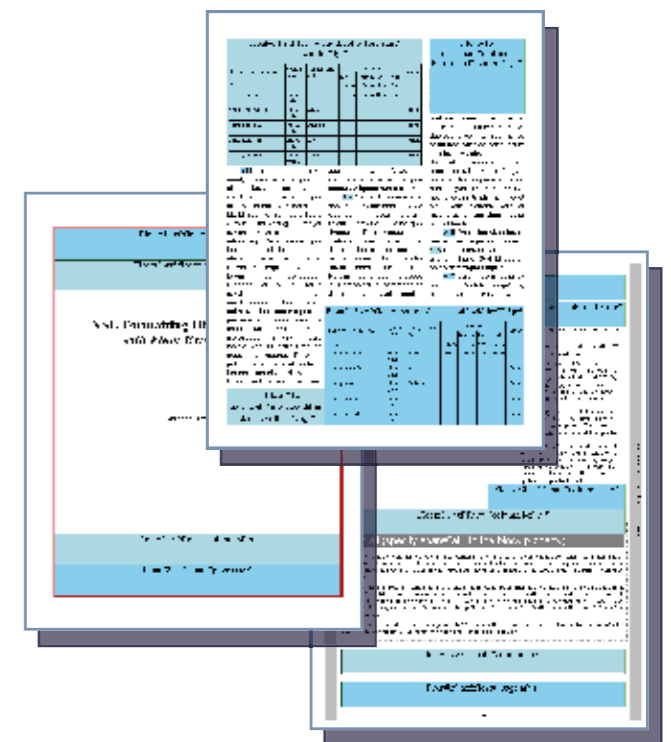
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Genealogy 2.0

Most genealogists know the feeling of enjoying one's treasures in solitude and searching in vain for a "missing link" or the one and only picture. A family topotheque has everything it takes to work on the basis of networking. Insights into the archive of the Bischoff family.

the history of the Bischoff family has been fascinating me for a very long time. The line of ancestors has many exciting biographies. Three generations of my direct ancestors were military officers, starting with my great-great grandfather Alois Bischoff (* 1791) and his two sons, Orestes (* 1831) and Elmo (* 1834) Bischoff. Records show that the geographical route of the family led from Offenbach to Prague and finally to Olmouc. One of my favourite objects dealing with my family research is a family chronicle which my grandfather wrote between 1911 and 1938 and which has in part been published. While I did research on it I also came to the Diocesan Archive of St. Pölten where I met Thomas Aigner. This was how he heard about my family history, and he suggested that I set up a family topotheque. I was thrilled right away. In 2014 I started to upload the first objects.

Two years of preparative work

About two years later I went public. Initially I started out with approximately 800 objects, and now I have 1988 items online. The topotheque has made it much easier to get in touch with people and exchange information with them. I am for example constantly in communication with the State Archives of Trieste, the Ysterreich topotheque, the Jihlava museum, the Austrian State Archives, the Lower Austrian Provincial Archives as well as with many historians. It was through one of these communications that I received my grandfather's curriculum vitae which had been totally unknown to me before, as well as further service descriptions and documents on my ancestors.

A sophisticated system

I also wanted to use my family topotheque for a summary of the individual family members. First I set up a system of shortnames which are listed in the index. Whenever I indicate an ID number in one of my responses, this number can be used to find the object in the topotheque. Many objects are also localised geographically. When you display a family member with the help of the respective shortname, a map immediately shows the locations where events from that person's life took place.

Genealogy is always a tough and slow process, and every little step can be considered a success. But it is important to never give up. With the help of tools such as the topotheque which are user-friendly as well as able to provide all the functionality that is needed, work gets done much faster than before. And once all the topotheques that are available have been connected, genealogy will be even more exciting and interesting.

A special treasure from the family topotheque Bischoff: a photo from 1905 from Trieste. Archduchess Maria Josepha, the mother of Emperor Karl, in conversation with Elmo Bischoff's grandfather, Orestes Bischoff.

Elmo Bischoff was born in 1944 in Sitzenberg, Lower Austria. Before retiring in 2006 he worked as a trained retail merchant.

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Already thinking about how to start your own family topotheque?

Our present for you: Launching a family topotheque comes with a free membership of ICARUS4all.

Link to registration:

bit.ly/2V8ZUHh

Connecting on a common interest: From genealogy to regional heritage

In the age of digitisation, personal contact is more important than ever. The Austrian Society for Research on Genealogy and Regional Heritage (ÖFR) is a new point of contact for everyone who is interested in the history of their family or region.

When I started to do research on my Austrian ancestors about five years ago, my first stop was Matricula. It was "learning by doing" because I was pretty much the only one among my family and friends with my new hobby. Many other amateur researchers are in the same position. Sure, we enjoy the advantages that come with digitised church records because we simply would not be able to visit the various parishes and archives in person besides our jobs and families. But we certainly miss out on two important things: learning more about genealogy, and meeting with like-minded spirits.

Organising get-togethers

One day I came across a note which announced a meeting of amateur genealogists in Vienna. I was curious and registered – and I was not disappointed. Listening to a highly interesting presentation, getting to know new people. In a nutshell: the meetings continued to take place on a monthly basis, and I soon became one of the regulars.

About two years ago, these so-called "Genealogenstammtische" had outgrown their infancy. The regular meetings were now also taking place in the Lower Austrian towns of Krems and Mistelbach, and the monthly presentations had led to an impressive collection of specialist knowledge. Against this backdrop, a new society was founded by and under the leadership of Leopold Strenn: The Austrian Society for Research on Genealogy and Regional Heritage (ÖFR) aims at supporting its members and the interested public in all questions on this fascinating topic. The main objectives to reach this goal are the sharing of knowledge on genealogy and regional heritage as well as the aspect of community.

A variety of topics and the benefits of networking

The monthly meetings have become a regular event for many of our participants. In March 2019, the Vienna "Genealogenstammtisch" already took place for the 50th time! Following a presentation, each meeting leaves enough time to exchange ideas, give and get tips or reading help – and of course also to chat. The wide range of topics covered in these presentations so far included "The penal reports of the estate of Arbesbach" by Felix Gundacker, "Foundling children in the historical suburb of Vienna" by Marta Melchart as well as a variety of pre-

sentations covering the area of land records, surveys and cadastral maps by Leopold Strenn.

The sharing and transfer of knowledge is yet another important aspect for the Austrian Society for Research on Genealogy and Regional Heritage. The society's website regularly features new articles and holds a huge amount of information on sources for genealogical research as well as tips for beginners. In addition to the website, ÖFR's WIKI provides a vast collection of structured links. Content is regularly added to this site.

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Links

ÖFR website: oefr.at
ÖFR-WIKI: wiki.oefr.at
Mailing list: GenList.at

Gabi Rudinger is a freelance translator and technical writer and has been interested in genealogy and regional heritage for many years. In the autumn of 2017 she became First Vice President of ÖFR.

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We would be happy to welcome you at one of our monthly meetings – no membership required!

Our next events are announced here:
oefr.at/events