



Digital  
Humanities  
& Heritage

**1st DARIAH-HR** International Conference,  
Zadar, Croatia / **13 - 15 October 2021**

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Digital Humanities & Heritage

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# Digital Humanities & Heritage

1st DARIAH-HR International Conference, Zadar, Croatia

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# PROGRAM

## Day One: 13/10/2021

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### 9:30 - 17:00 Pre-Conference Workshop / SSHOC & ELDAH: Data Protection in Research Practice: The GDPR and the ELDAH Consent Form Wizard

Walter Scholger, Vanessa Hanneschläger, Paweł Kamocki,  
Koraljka Kuzman Šlogar

## Day Two: 14/10/2021

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### 9:30 - 10:45 Opening Session

Welcome speech

Mirna Willer: Relevance of 'Cultural Information' for Digital Humanities  
(Reflections on the Ideas Behind Seminars "Archives, Libraries, Museums:  
Possibilities for Co-operation Within the Environment of the Global  
Information Infrastructure")

Anna Maria Tamaro: Intersection of Digital Humanities and Digital  
Library

### 10:45 - 11:15 COFFEE BREAK

### 11:15 - 12:45 Session 02: Digital Humanities & Open Science

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Jennifer Edmond: The Arts and Humanities: From Tourists to Citizens in  
the Republic of Data

Jadranka Stojanovski: From Concepts, Elements and Principles to  
Practices and Standards of Open Science

Ivan Marić: Croatian Open Science Cloud Initiative - HR-OOZ

Discussion

### 12:45 - 14:00 LUNCH BREAK

### 14:00 - 15:30 Session 03: Cultural Heritage in Digital Humanities

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Erzsébet Tóth-Czifra: When Open Data Starts With a Handshake: The  
Heritage Data Reuse Charter

Shangyun Shen: The Joint Programming Initiative Cultural Heritage and  
Global Change

Cécile Chantraine Brailon, Laurence Delbarre-Willard: Playing in a  
Traditional Venue vs. Playing in a Non-traditional Venue: Measuring  
Performance

Discussion

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### 16:00 - 17:00 Session 04: Posters & Projects

Session Chair: Marijana Tomić

Benedikt Perak: The Use of Natural Language Processing Tools and  
Resources in Digital Humanities

Karl Heinz: ICARUS - More Than Just a Network

Anamarija Žugić Borić: Working Group Theatralia

Drahomira Cupar: Tezaurus.hr

## Day Three 15/10/2021

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Session Chair: Tihomir Živić

Marko Tadić: Current Pan-European Language Technologies Initiatives:  
An Opportunity for Low-Resourced Languages

Achim Rabus: AI-Assisted Transcription of Glagolitic Sources Using  
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Antoine Doucet, Axel Jean-Caurant: The NewsEye Approach to Historical  
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### 11:00 - 11:15 COFFEE BREAK

### 11:15 - 12:45 Session 06: Information Organization for the Digital Humanities

Session Chair: Mirna Willer

Koraljka Golub: Information and Knowledge Organisation in Digital  
Humanities

Ana Vukadin: Metadata Standards and Digital Humanities: The Example of the KAM Cataloguing

Walter Scholger: Communicating Digital Heritage: Ethical and Legal Barriers - And Some Ways to Overcome Them - To Open Access

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**12:45 – 14:00 LUNCH BREAK**

**14:00 - 15:30 Session 07: Digital Infrastructures**

Session Chair: Ivan Marić

Edward Gray: DARIAH ERIC: Empowering Arts and Humanities Research on a National and International Level

Marko Tadić: Common Language Resources and Technology Infrastructure (CLARIN-ERIC)

Šime Smolić: The Survey of Health, Ageing and Retirement in Europe (SHARE-ERIC)

Marijana Glavica: Consortium of European Social Science Data Archives (CESSDA-ERIC / CROSSDA)

Dragan Bagić, Luka Jurković, Jelena Ostojić: European Social Survey European Research Infrastructure (ESS-ERIC)

Discussion

**15:30 - 15:45 CLOSING SESSION**

**15:45 - 16:00 COFFEE BREAK**

**16:00 - 17:00 Session 08: Posters & Projects**

Session Chair: Vlatka Lemić

Maurizio Toscano, Lidia Bocanegra Barbecho, Salvador Ros Muñoz, Elena González-Blanco: Insights on Scholarly Primitives From Digital Humanities Research in Spain

Alba Irollo: Bringing Digital Cultural Heritage to Digital Humanities

Caroline Maximoff: Time Machine – On the Way to the 'Big Data of the Past'

Marijana Tomić, Laura Grzunov: Citizen Science in Croatian Glagolitism

## ABSTRACTS

## Data Protection in Research Practice: The GDPR and the ELDAH Consent Form Wizard

**Vanessa Hanneschläger** (CLARIAH-AT)

**Paweł Kamocki** (IDS Mannheim / CLIC)

**Koraljka Kuzman Šlogar** (Institute of Ethnology and Folklore Research / DARIAH-HR)

**Walter Scholger** (University of Graz / CLARIAH-AT)

Co-organisation: SSHOC, DARIAH-EU ELDAH Working Group

In this workshop, we will discuss the European legal framework for data privacy and processing personal data (General Data Protection Regulation, GDPR). The workshop will help participants understand how their research is affected by the GDPR and what issues to pay attention to.

First, there will be a general introduction to the topics of data protection and the processing of personal data in the context of research, education and cultural heritage to summarize the pertinent articles of the GDPR. Second, we will speak about the most common scenarios in which humanities' and social sciences' researchers encounter data protection issues. Examples of this include surveys, interviews and other research activities involving human participants, but also common academic scenarios like communication (mailing-lists, newsletters) and events (e.g. regarding picture and video recordings). For many of these activities, researchers have to obtain legal consent from their participants in order to comply with the GDPR.

Therefore, the DARIAH Working Group ELDAH (Ethics and Legality in Digital Arts and Humanities, [ELDAH – Ethics and Legality in the Digital Arts and Humanities – a working group of DARIAH-EU](#)) has developed a tool that provides standardized consent form templates for obtaining legal consent from human participants: the DARIAH ELDAH Consent Form Wizard (CFW <https://consent.dariah.eu/>). The CFW enables digital scholars and the wider research infrastructure community to quickly and easily obtain a standardized consent form that is legally valid throughout the European Union.

The workshop participants will be introduced to this tool and will get a chance to test it by applying it to their own research practices. They will use the tool to download templates to obtain research participants' consent; these templates can be adjusted to their specific needs in a few simple steps. Workshop participants will also have a chance to give feedback on the CFW: to point out elements that are missing and suggest additional consent scenarios.

## Relevance of 'Cultural Information' for Digital Humanities

Reflections on the Ideas Behind Seminars "Archives, Libraries, Museums: Possibilities for Co-operation Within the Environment of the Global Information Infrastructure"

### Mirna Willer

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This presentation will offer some reflections on the annual seminars entitled "Archives, Libraries, Museums: Possibilities for Co-operation Within the Environment of the Global Information Infrastructure" (1997-2019, 2021), and try to show the relevance of the cultural heritage information sector's place in the complex of 'Digital Humanities'.

The seminars have been organized around the idea that libraries, archives and museums are faced with the same, common challenges in order to rethink and transform their functions and services within the new pervading information and communication technologies. The complexity of the problem made it quite clear that an interdisciplinary approach in which experts from these three communities would learn from and teach each other was not enough, and that active co-operation with the ICT community, academia, and sectors like publishing, cultural tourism and, indeed, cultural industries is needed.

To accomplish that, it was necessary to rethink the theoretical framework of information sciences that would accommodate the impact of new technologies in the lifecycle of an information cultural object, and to analyse, test and harness that technology in the services libraries, archives and museums provide for their established and prospective users. In this process of cross-fertilization between and among communities, new concepts relevant for the curatorial and presentation aspects of the cultural heritage held in these institutions came to be recognized: authority, provenance, authenticity, evidence. These aspects of information finding aids (catalogues) have become even more important in the context of Semantic Web's

two operational principles: AAA: Anyone can say Anything about Anything, and OWA: Open World Assumption.

That this idea of the relevance of information finding aids is not a new one, but needs revisiting, can be already read in Prof. Ivo Maroević's introduction of the concept 'cultural information' in his keynote opening of the 2<sup>nd</sup> seminar in 1998 entitled *Problems of Identification and Description of Cultural Information (In Museums, Libraries and Archives)*. When formalized, he stated, "cultural information will become data and will be converted into a stable document that will transfer in time the testimonies of some other times in relation to the material that we have identified as cultural goods" (Maroević, 2000, pp. 22–23).

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Maroević, Ivo (2000) 'Problemi identifikacije i obrade kulturnih informacija (u muzejima, knjižnicama i arhivima)' in Willer M. and Katić T. (eds.) *2. i 3. seminar Arhivi, knjižnice, muzeji: mogućnosti suradnje u okruženju globalne informacijske infrastrukture: zbornik radova*. Zagreb: Hrvatsko muzejsko društvo, pp. 17–23.

## The Arts and Humanities: From Tourists to Citizens in the Republic of Data

### Jennifer Edmond

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This presentation will look at the integration of the arts and humanities disciplines into the ecosystem of the European Open Science Cloud ([EOSC Association](#)), taking the perspectives of the past, present and future possibilities. In particular, it will look at the specificities of research in these disciplines, as well as the challenges, but also specific enablers they may pose to the founding vision of the EOSC as a 'New Republic of Letters' founded on the open sharing of data. Finally, it will discuss the role and position of DARIAH-EU and its national nodes as facilitators in the transition of researchers from having the status of outsiders ('tourists') to fully integrated 'citizens' in the EOSC's policies, platforms and programmes.

## From Concepts, Elements and Principles to Practices And Standards of Open Science

### Jadranka Stojanovski

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Although the concepts, elements, and principles of open science are intertwined in literature, most of us would agree that its basic concepts are openness and transparency, rigour, reproducibility and replicability, and the consolidation of the corpus of knowledge. Open science is "covering all aspects of the research cycle from scientific discovery and review to sharing knowledge, publishing, and outreach" and refers to a broad concept of "open scholarship" (Burgelman et al., 2019, p. 1). Openness is mainly associated with open access to publications, which is just the tip of the iceberg (Tóth-Czifra & Wuttke, 2019) as open science also refers to open research data, open formats, open source, transparent and rigorous research assessment, and extensive communication with peers and broader public. In addition, open science aims to accelerate research, primarily by sharing research data, ensuring reproducibility and replicability, and improving the quality and impact.

How quickly and successfully open science practices can be applied is most evident in the times of the COVID-19 pandemic, during which both publishers and scientists have shown a much greater willingness to open up and share. The immediate access to new knowledge has proved crucial in the development of vaccines and has shown enormous possibilities in solving the burning issues humanity is facing. However, at the same time, it has been shown that openness cannot solve all issues on its own, both in scholarly communication and in practices applying new knowledge, unless scientific rigour, reliability, and appropriate communication with the public are conditioned.

Humanities share some unique characteristics that lead to different communication and research practices, and consideration of distinctiveness among various humanities disciplines will enrich the discourse of open science. As opposed to STEM, there are no agreed and final answers to the questions asked in the humanities, and different authors will use different arguments and come to different conclusions without striving for consensus with their colleagues (Knöchelmann, 2019, p. 2). The concept of authorship is therefore fundamentally different in the humanities than in science. Furthermore, unlike the ubiquitous imperative of international visibility, global impact and excellence present in STEM fields, the importance of national and

regional topics, and consequently small niche journals serving language-specific communities, should not be overlooked in the humanities. The data themselves in the humanities are significantly different, and the texts of primary sources, archival materials or works of art (film, paintings) often cannot be shared in digital format and open access easily. Speaking about 'digital', unlike in science, scholars in the humanities have primarily treated digital tools as external and complementary to their research practices, which led to the creation of digital humanities.

Engaging in open science practices, such as preprints, open licensing, and open peer review will benefit the development of open humanities. However, instead of following open science practices and norms from other, much more dynamic and diverse disciplines, scholars in the humanities need to recognize the best principles for their scientific discipline and translate them into the best practices of the open humanities.

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<https://doi.org/10.3389/fdata.2019.00043>

Knöchelmann, Marcel. 'Open science in the humanities, or: Open humanities?', *Publications*, 7(4), pp. 1–17. <https://doi.org/10.3390/publications7040065>

Tóth-Czifra, Erzsebet; Wuttke, Ulrike (2019) *Loners, Pathfinders, or Explorers? How are the Humanities Progressing in Open Science?* [Online].

<https://doi.org/https://doi.org/10.25815/x516-wf23>

## Croatian Open Science Cloud Initiative - HR-OOZ

### Ivan Marić

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One of the priorities of the European Commission for the following period is the development and integration of open science policy, which will improve the quality, efficiency, and responsiveness of research (European Commission, n. d.).

Over the years, various institutions and initiatives in Croatia have promoted openness and built support for open science. Based on these efforts, on September 3rd 2021, SRCE, together with 17 prominent national institutions with an active role in open science, officially established the National Open Science Cloud (NOSC) Initiative named Croatian Open Science Cloud Initiative (abbrev. locally HR-OOZ Initiative). The aim of the HR-OOZ Initiative is to build a modern, high-quality, internationally relevant, and competitive science system based on the principles of open science, which is harmonized and connected with the European research area (ERA) and relevant European initiatives.

The Initiative gathered representatives of key stakeholder groups: research performing organizations (RPOs), research funding organizations (RFOs), research supporting organizations and policy makers.

List of RPOs that joined the Initiative includes all public universities and the Croatian representatives and national coordinators of European Research Infrastructure Consortium (ERICs): Institute of Ethnology and Folklore Research (DARIAH-ERIC), Faculty of Humanities and Social Sciences of the University of Zagreb (ESS-ERIC, CLARIN-ERIC, and CESSDA-ERIC) together with the Ruđer Bošković Institute (CERIC-ERIC, OpenAIRE NOAD, NI4OS-Europe project partner).

Besides SRCE, which is the main e-infrastructure and data services provider for the Croatian science and higher education system plus the national Research Data Alliance (RDA) node and the NI4OS-Europe project partner, the main research funding organization in Croatia, Croatian Science Foundation, also joined the Initiative, together with the Ministry of Science and Education of the Republic of Croatia and the National and University Library in Zagreb. The inclusion of representatives of all stakeholder groups will ensure wider acceptance, impact, and sustainability of the Initiative's results.

The HR-OOZ Initiative will act through the Council of the HR-OOZ Initiative, the body responsible for the management and coordination of the HR-OOZ Initiative. Members of the Council are heads of contracting parties or persons authorized by them to represent the institution in the Council.

Among various tasks, the main goals of the Council are establishing the governance structure and technological principles of the HR-OOZ and drafting the proposal of the National Plan for Open Science. To achieve the aforementioned goals, the Council of the HR-OOZ Initiative set up two task forces, one for drafting the proposal of the national plan and policies for open science and one for defining the structure and principles of HR-OOZ.

While the HR-OOZ Initiative will create legal and organizational preconditions for building a national open science cloud, SRCE, together with its partners in the ongoing strategic project Croatian Scientific and Educational Cloud (HR-ZOO) is building a new generation of e-infrastructure for advanced science and modern education, providing the Croatian scientific and academic community with advanced computing, storage resources and network connectivity for a longer period of time. The HR-ZOO project and HR-OOZ Initiative are two complementary activities, which, when completed, will result with the creation of a fully functional national open science cloud in Croatia.

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European Commission (n. d.) *Open Science* [online]. Available at: [Open Science | European Commission](#) (Last accessed: 15 July 2021)

## When Open Data Starts With a Handshake: The Heritage Data Reuse Charter

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In many Arts and Humanities research settings, data creation and curation forms a strong continuum between cultural heritage institutions which select, host, and curate digital artefacts and makes them available to research; digital humanities labs which enrich digitized source materials and open them up to computational analysis; researcher communities which bring new insights by further enrichment and analysis of these resources; and finally, research infrastructures and publishers who disseminate, sustain and preserve the body of scholarly knowledge.<sup>1</sup>

In reality, this natural continuum is broken and separated by different institutional, epistemic, funding and legal silos in which cultural heritage institutions, research performing organizations and research infrastructures operate. Enabling all these relevant actors to work together to establish together mechanisms for improving the use and re-use of cultural heritage resources by researchers is an absolute precondition of FAIR data in the Arts and Humanities domain.<sup>2</sup>

The Heritage Data Reuse Charter<sup>3</sup> aims to serve as an instrument towards that vision. It allows all parties involved in Cultural Heritage data exchange to clarify their goals at the beginning of the project, to specify access to data, provenance information, preferred citation standards, hosting responsibilities etc. on the basis of which the parties can arrive at mutual reuse agreements that could serve as a starting point for a FAIR-by-construction data management, right from the project planning/application phase. Later on, the Charters can serve as cornerstones of Data Management Plans.

<sup>1</sup> See for instance: Ames, Sarah, 'Transparency, Provenance and Collections as Data: The National Library of Scotland's Data Foundry', *LIBER Quarterly* 31(1) (2021), pp. 1–13. <https://doi.org/10.18352/lq.10371>

<sup>2</sup> Tasovac, Toma; Chambers, Sally; Tóth-Czifra, Erzsébet, 'Cultural Heritage Data from a Humanities Research Perspective: A DARIAH Position Paper', 2020. ([hal-02961317](https://hal.archives-ouvertes.fr/hal-02961317))

<sup>3</sup> [Heritage Data Reuse Charter | Information and developments around the Heritage Reuse Charter](#); see also: Tóth-Czifra, Erzsébet; Romary, Laurent, 'The Heritage Data Reuse Charter: from principles to research workflows', 2020. ([halshs-02475692](https://halshs.archives-ouvertes.fr/halshs-02475692)); Seillier, Dorian; Baillet, Anne; Puren, Marie; Riondet, Charles, 'Survey on researchers requirements and practices towards Cultural Heritage institutions: Documentation and analysis' [Technical Report], Inria Paris, 2017. ([hal-01562860](https://hal.archives-ouvertes.fr/hal-01562860))

The exchange protocol and the resulting mutual agreements between the involved parties can be flexibly applied to projects of different scales and in platform-independent ways. Institutions can embed them into their own exchange protocols while research teams can incorporate them to their Research Data Management workflows. As such, they can show evidence for responsible and fair conduct of cultural heritage data, and fair (but also FAIR) research data management practices that are based on partnership with the holding institution.

## The Joint Programming Initiative on Cultural Heritage and Global Change

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The Joint Programming Initiative on Cultural Heritage and Global Change (JPI CH)<sup>1</sup> was created in 2010 based on an instrument launched by the European Commission. It is a Member-State-driven initiative bringing together national research funding organisations, ministries, and research councils from Europe to address societal challenges in the European Research Area (ERA) frame. With the objective to promote the safeguarding of cultural heritage in its broader sense through better-coordinated research and innovation, JPI CH brings together 17 member countries and has founded more than 50 research projects through six thematic calls over the years.

In its SRIA 2020, the initiative outlines four priority research areas:

- a reflective heritage for a resilient society
- sustainable management of cultural heritage
- cultural heritage in a changing context
- cultural heritage facing climate and environmental change.

JPI CH is directed by a Governing Board gathering all country representatives and advised by an Advisory and Scientific Board. The Pillars and Task Forces are responsible for activities such as scientific and policy conferences, workshops, dissemination activities, coordinates policy alignment between JPI CH partners, or establishes relationships with other regional, European, and international networks, programmes and initiatives. With these activities, JPI CH intends to complement the European Commission's activities under Horizon Europe and other programmes by taking advantage of national programmes, improving research coordination, promoting a multidisciplinary and holistic approach of cultural heritage, increasing awareness of citizens, policy makers and stakeholders.

<sup>1</sup> [JPI on Cultural Heritage](#).

In the first trimester of 2021, JPI CH launched the website Heritage Research Hub. It is a platform on and for the cultural heritage research community and aims to:

- create an online location where everyone who works in or with cultural heritage-related research can share and search for different content, including news, events, funding and training opportunities or open vacancies
- inform about the cultural heritage research general framework by introducing the heritage research policies, the various stakeholders involved or research projects
- collect and display online resources on and for heritage research
- provide information about the JPI CH and its activities.

## Playing in a Traditional Venue vs. Playing in a Non-traditional Venue: Measuring Performance

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The paper proposal we are submitting presents the results of the analysis of an experiment carried out in November 2019 in the Hauts de France, as part of a computerised research in Performing Arts. This consisted of measuring and comparing, using scientific equipment and digital tools, the performance of a theatre scene in a traditional venue with the performance of the same scene in a non-traditional venue, in order to understand how the space in which actors and artists evolve influences their acting and the way they perform.

With the recognition of performance as a practice of artistic expression in the 1960s (Goldberg, 2011, p. 7), Performance Studies developed, particularly in the Anglo-Saxon world, which consider theatre to be primarily a performative activity and, as such, favour a phenomenological approach to performances and the analysis of reception. Since the end of the last century, traditional theatre studies have also been enriched by the notions of Performance Studies, thanks to the development of digital technology and the resulting abundance of audiovisual data on performances (Pavis). The researcher is therefore now accustomed to conducting his work based on the analysis of videos he has collected or that artists have made available. As a result, the 'performative turn' is gradually taking place, i.e. an epistemological shift from traditional Theatre Studies to Performance Studies to give rise to 'theatrical' analyses, combining several methodological approaches to theatre (Pavis, 2002, p. 381). However, this evolution of research in the Performing Arts is also linked to the possibilities offered by digital technology to scientifically exploit the information collected to give rise to innovative studies that were not previously possible.

Our study is part of this epistemological change that is currently taking place in Performing Arts research thanks to the use of computer tools. The analysis of the data collected with the Qualisys motion capture system, during the experimentation carried out in 2019 both at the SCV\_Equipex IrDIVE research space (Innovation Research in the Digital and Interactive Visual Environments / ANR ANR-11-EQPX-0023 / Tourcoing) and at the Saint Amand les Eaux theatre, has already made it possible

to formulate some hypotheses as to how the playing space and its configuration constrain the interpretation and performance of artists in terms of the conduct of their movements, movements and postures (constraints linked to the position of the audience, the presence of material elements or the appreciation of distances). Indeed, while performance studies have defined that space plays a role in the artists' interpretation, they have essentially worked on the basis of observational data and testimonials (McAuley, 2010, p. 15). They did not seek to 'measure' interpretation using digital tools, as is the case for the first time in the innovative experiment that will be described, analysed and interpreted in the course of our paper.

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## The Use of Natural Language Processing Tools and Resources in Digital Humanities

### Benedikt Perak

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In the rich fabric of modern digitalization, linguistic data is one of its most important threads. Digital transformation would be unimaginable without processing various signals and symbolic codes that humans use for communication. However, this weaving is not as straightforward as imagined. The complexity, multidimensionality, variety, ambiguity, diachronic development, conceptual and social contextualization of language present big obstacles to the creation of ready-made linguistic digital applications.

The Natural Language Processing (NLP) has been growing in importance as an interdisciplinary field of research that merges insights from linguistics, computer science, and artificial intelligence. In the last decades, NLP has evolved from storing texts on a set of punch cards in 1950s, to the era where millions of webpages can be processed in less than a second (Cambria and White, 2014). The constant improvement of the computational power and resources for storing and processing linguistic data have given rise to several approaches used to harness, process, analyse and represent textual data in a meaningful way. Its applications are widespread in our popular culture, from spelling checkers, information retrieval and text-based search engines, corpus creation and tagging, translation and recommendation systems, text prediction, named entities and sentiment analysis algorithms, text classification systems, automatic text summarization and generation to virtual assistants and chatbots.

This poster presentation will give an overview of NLP research approaches, resources and tools that can be a valuable and relevant ingredient for researchers in the Digital Humanities.

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## ICARUS – More Than Just a Network

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The International Centre for Archival Research (ICARUS) ([International Centre for Archival Research: ICARUS](#)) is a Europe-wide network of archives and archival institutions that has been in existence since 2008. Its aim is to promote exchange between the participating institutions at all levels. In addition to these classic goals of a network, which are achieved not least through regular meetings, ICARUS itself operates three digital platforms – Monasterium, Matricula-online, Topotheque – and makes their content available free of charge to researchers and the interested public.

Monasterium ([Monasterium.net | ICARUS](#)) is one of the world's largest digital resources for medieval and early modern charters, which are presented in words and images, enriched by metadata of different indexing depth. In addition, the system has a collaborative editing environment through which improvements and enhancements can be entered individually and new holdings can also be uploaded. Currently, a new conception of the portal is under discussion, which should bring this resource up to the latest technical standard.

The Matricula-online portal ([Matricula | ICARUS](#)) provides several million digital images of church records from about 40 dioceses in eight countries (Germany, Austria, Slovenia, Luxembourg, Poland, Serbia, Italy and Bosnia-Herzegovina). This portal has proven to be indispensable for the community of family and genealogical researchers in recent years and has recorded the largest number of hits in a comparison of the three portals.

The third portal – the Topotheque ([Topothek Portal – Das lokale Online-Archiv](#)) – houses materials that are of great importance for local and regional lore, such as old photographs, postcards, films or other documents that illustrate the diversity of life in the community. These are mainly privately owned objects that are particularly at risk of being lost.

In order to ensure that the network continues to be optimally geared to the needs of its members in the future, an internal reorganization process (AGENDA 2023) has been underway for some time, which is intended to sharpen the profile of ICARUS and redefine the way in which the network functions.

## Working Group Theatralia

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Theatralia is a DARIAH-EU Working Group<sup>1</sup> dedicated to observing complex relations which arise from the usage of digital tools and technologies in theatrical production, theatre research and theatrical archives management. Furthermore, it aims to provide education on digital tools and services that are useful to performance scholars and practitioners working in the above-mentioned fields.

The Theatralia Working Group was officially approved by the DARIAH-EU in May 2021 with Anamarija Žugić Borić (DARIAH-HR) in her capacity as the Chair and professor Tihomir Živić (The Josip Juraj Strossmayer University of Osijek) in his capacity as the Co-Chair. However, the initial idea of the Working Group was presented in 2018 at the DARIAH Theatre Forum in Osijek, Croatia. The main impetus for the establishment of such a working community was the fact that there *de facto* isn't any extant infrastructure in Theatre and Performance Studies that would support, promote, and assess digital humanities projects (Caplan, 2015, p. 348). This difficulty is doubled by the still prevailing traditionalist viewpoint of many theatre scholars, which are focused on the notion of theatre as a monolithic structure that consistently performs the repertoire it had previously established.

The other serious predicament is the fact that the rigid organizational schema as seen in theatre also translates to academia. As theatre workers in this concept of theatre predominantly carry out work tasks that are affiliated with their profession, theatre and performance scholars and digital humanities scholars are isolated from each other through the organization of academic knowledge that is divided into disciplines and fields with strict boundaries (Tuhwai Smith, 2012, cited in Cowan, 2018, p. 650).

On the other hand, many scholars highlight the inherent kinship between computer technology and performing arts (Laurel, 1991; Saltz, 1997, cited in Saltz, 2008, p. 336), underlining their shared concepts of make-believe and virtual reality (think of Artaud in 1958) (Saltz, 2008, p. 336), as well as mediation, liveness, ephemerality, spectatorship and collaboration (Caplan, 2015, p. 349). This epistemological shift is

<sup>1</sup> [Theatralia](#).

evident in the slowly arising notion of (digital) scholarship as performative work that abandons the dominance of text and its previous secondary position to the primary source. In other words, digital scholars' work looks increasingly like art (Caplan, 2015, p. 349).

Accordingly, the prevalent concept of Theatre Studies is slowly being replaced by that of Performance Studies. The spotlight thus turns on theatrical performance as an event, i.e. performativity as a unique occurrence of an act in a specific place and moment. This is where the intangible aspect of a theatrical performance, which has been seriously neglected for a long time in the work of theatre scholars and archival experts, assumes greater importance.

Hence the objective of Theatralia is to take into account the intangible cultural heritage aspect while blurring the boundaries between digital humanities and theatre scholars, as well as different performance disciplines.

One of Theatralia's first projects is to co-create a digital ecosystem for performing arts (DEPA) that will, as stated in the 2021 COST Action proposal, deploy the linked data technology in operative systems across the performing arts sector, the heritage sector, digital humanities and in adjacent areas. The main proposer of the project is professor Beat Estermann from the Bern University of Applied Sciences. The initiative should provide one step forward towards implementing the interdisciplinary approach in Theatre and Performance Studies, at the same time getting closer to the renouncement of text as the sacred product of scholarly research in favor of a more performative approach.

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## Tezaurus.hr

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Knowledge organization and enabling access to content in recent years became crucial for users and the usage of digital content. To ensure access to content, all materials should be described with usable access points which are understandable enough. Creating access points to cover different aspects and different users' needs is not an easy task. For quality subject indexing, certain skills and tools are required. Tools for subject indexing are referred to as controlled vocabularies. The creation and maintenance of controlled vocabularies (such as thesauri or subject headings list) suitable for subject indexing is demanding work that requires following standards for the creation of quality controlled vocabularies. All this should be accompanied by a flexible system to accommodate all different needs, languages, and approaches to subject indexing. Tezaurus.hr is such a tool.

Tezaurus.hr is a Croatian platform developed by ArhivPRO within the Indigo platform as a part of the infrastructure for different projects under DARIAH-HR. One of the first thesauri developed within the platform was the *Thesaurus for Watermarks*, as a part of the interdisciplinary project *Digitization, Bibliographic Description and Research of Texts Written on Glagolitic, Croatian Cyrillic and Latin Scripts Until the End of 19th Century in Zadar and Šibenik Area* lead by Marijana Tomić, PhD from the University of Zadar, Croatia.

The main goal of this poster is to present the possibilities of Tezaurus.hr as an essential infrastructural project which enables the collaborative creation of different controlled vocabularies. Vocabularies from Tezaurus.hr can be created and used across GLAM communities and is planned to be offered for free to all upon completion. Currently, there are several Croatian GLAM institutions collaborating in the creation of vocabularies within the platform. Tezaurus.hr is a platform meant to be a database for all vocabularies, used across different domains (within digital humanities and beyond, if necessary), it is multilingual and is meant to be expanded and developed further to accommodate all needs for different communities. The

main idea behind the Tezaurus.hr is that all vocabularies are stored in one place, and at the same time can be used as a bridge between different collections in different institutions. On the other hand, each vocabulary developed within the platform can be used as a 'stand-alone tool' that can help anyone who is looking for vocabulary to use for indexing materials. The platform allows the integration of different metadata standards and vocabularies from different known resources (such as Getty thesauri, Geospatial thesauri, UDC, etc.).

Many projects in social sciences and humanities recognized the necessity and importance of controlled vocabularies across disciplines and recently made a significant effort in the creation of different (multilingual) thesauri. It cannot be stressed enough how controlled vocabularies are especially important when thinking about access to the content of specialized (digital or digitized) collections which would otherwise be lost for users without controlled access points. Tezaurus.hr shows great potential to all in GLAM communities interested in collaborative development of controlled vocabularies that can be created, used, and reused by all. It is expected to play an important role as infrastructural support in future projects in digital humanities.

## Current Pan-European Language Technologies Initiatives: An Opportunity for Low-Resourced Languages

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Several pan-European initiatives in the field of Language Technologies (LT) are being presented. Starting with the CLARIN FP7 RI project (2008-2011), over the existing CLARIN ERIC RI (2012-), to META-NET (2010-2013) network and CEF (2014-2020) funding opportunities, this logical line of development will also cover the current initiatives: ELRC ([European Language Resource Coordination — supporting Multilingual Europe | European Language Resource Coordination](#)), ELG ([European Language Grid](#)) and ELE ([European Language Equality](#)). All these initiatives provide(d) opportunities for under-resourced languages to enhance the level of the development of their LT.

## AI-Assisted Transcription of Glagolitic Sources Using Transkribus

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In this presentation, I discuss recent advances in AI-assisted Handwritten Text Recognition (HTR) technologies for Croatian Glagolitic handwritten and early printed texts. After elaborating on some general principles of the user-friendly HTR platform Transkribus ([Transkribus](#)) and of training models using this platform, I discuss the characteristics of the models for Glagolitic. Specifically, the models use the Latin script to transcribe the Glagolitic source. In doing so, they transcribe ligatures and expand abbreviations correctly in the majority of cases. The computed Character Error Rate (CER) of the models for angular Glagolitic handwriting and early printings is below 6% (i.e. 94 out of 100 characters are transcribed correctly). I apply the models to different sources and discuss the results obtained.

The application of HTR models for the transcription of Glagolitic manuscripts and early printings can save a great amount of time in the digitization process and make mass digitization feasible. Thanks to fuzzy search (keyword spotting) implemented in Transkribus, even uncorrected HTR transcriptions can be used for different kinds of analyses. Selected Glagolitic HTR models have been made publicly available via the Transkribus platform. Every scholar concerned with working on Glagolitic manuscripts and early printings is encouraged to test them.

What remains to be done is to develop HTR models for cursive Glagolitic handwriting. In order to train such models efficiently and quickly, I suggest joining forces and to collect and re-use already existing transcriptions of manuscripts originally made for other purposes than HTR, e.g. for creating printed editions or digital corpora.

## The NewsEye Approach to Historical Newspapers

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Historical newspapers are a unique window to the past, giving regular accounts of ancient times however written in the present tense. This talk will present the H2020 project NewsEye (a digital investigator for historical newspapers), and the ways it builds up specific approaches and tools to analyse large collections of historical newspapers written in any language. We will present its results along a workflow from digitisation to actual humanities research, including text recognition, article separation, semantic enrichment corpus building and possibly cross-lingual corpus analysis. All these results culminate in the NewsEye platform ([NewsEye: NewsEye](#)), which will be briefly demonstrated.

## Information and Knowledge Organisation in Digital Humanities

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The talk explores the role of knowledge organisation in the Digital Humanities, with the focus on how information is described, represented and organised in both research and practice. Based on the forthcoming volume *Information and Knowledge Organisation* by Routledge ([Information and Knowledge Organisation in Digital Humanities](#)), the talk will show use cases from around the globe to explore the potential uses of, and challenges involved in, applying the organisation of information and knowledge in the various areas of Digital Humanities.

Dominant topics seem to be focused on the digital worlds of cultural heritage collections, while other themes involve machine learning, knowledge graphs, text analysis, text annotations, and network analysis. Also represented are semantic technologies, conceptual schemas, data augmentation, digital scholarly editing, metadata creation, browsing, visualisation and relevance ranking. Most importantly, perhaps, the book provides a starting point for discussions about the impact of information and knowledge organisation and related tools on the methodologies used in the Digital Humanities field.

## Metadata Standards and Digital Humanities: The Example of the KAM Cataloguing Code

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Metadata schemes and vocabularies used in libraries, archives and museums (LAM) are often perceived by the Digital Humanities (DH) community as too formalized or specific to institutional business needs. Yet highly structured, standardized data not only underpins many Web technologies and services, but has a possible significant role in supporting long-term data trustworthiness, reliability and reuse.

In order to be seen as purposeful for DH projects, LAM metadata standards need to support diverse levels of granularity, enable cross-domain communication, and be adaptable to various information systems. This paper presents the implementation of these principles in the new Croatian cataloguing code, *Rules for Resource Description and Access in Libraries, Archives and Museums* (KAM). It has been developed as a data content standard with the aim to be used in all types of heritage institutions in Croatia, and to represent a national implementation policy of relevant international models and standards. The paper briefly analyzes the structure of KAM, explains its relationship to conceptual models of LAM communities, discusses its usefulness in research repositories, and summarizes possible future lines of development.

## Communicating Digital Heritage: Ethical and Legal Barriers – And Some Ways to Overcome Them – To Open Access

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For years, there has been a strong effort across the European Union (and beyond) to facilitate the digitization of and subsequently free public access to our countries' digital heritage.

While some European and national legislation has been very helpful in reducing researchers' and heritage experts' uncertainties and worries (e.g. Orphan Works Directive 2012/28), other recent legislations have added to the complexity of our respective fields (e.g. Digital Single Market Directive 2019/790, General Data Protection Regulation 2016/679).

Obviously, a balance needs to be struck between our intention to preserve our cultural heritage by digital means and make it as freely and openly accessible to the public as possible, and the need to protect individuals' rights to privacy and authorship. Numerous expert groups have addressed this challenge and provided guidance, training and tools for researchers, curators and audiences alike. This presentation will address some of the principle challenges and difficulties regarding the digitization of digital heritage and making it available, and introduce some of the initiatives and tools that try to overcome them.

## DARIAH ERIC: Empowering Arts and Humanities Research on a National and International Level

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DARIAH<sup>1</sup> is a European research infrastructure consortium (ERIC), dedicated to the arts and humanities. Founded in 2014, it has been a leader in promoting and enabling arts and humanities research as scholars confront the realities of research in a digital age.

During this talk, we will examine how DARIAH is organized, and how this organization helps the consortium complete its missions of empowering arts and humanities researchers across Europe, and beyond. Particular attention will be paid to the ways in which different national DARIAH consortia, such as DARIAH-HR, are organized and interact with their national communities as a facilitator of digital arts and humanities research. Indeed, each member country of DARIAH forms its own national consortium, which adapts to the needs and particularities of its communities in order to better serve them. This diversity is the strength of DARIAH, allowing for flexibility, though the commitment to our overall missions and values remains the same.

After seven years of existence, DARIAH is coming into a phase of maturity, where exchanges between national nodes, as well as with the DARIAH Coordination Office and other European-level DARIAH bodies, allow for more integrated coordination between DARIAH nodes and a greater participation in our activities. This presentation will detail this new, dawning era for DARIAH by providing concrete examples of what DARIAH can and has done for arts and humanities research. These actions span from training and education efforts, to financial support, engagement in European research projects such as H2020 and Horizon Europe,<sup>2</sup> logistical aid, and creating a space where researchers can meet and exchange.

<sup>1</sup> [DARIAH | Digital Research Infrastructure for the Arts and Humanities.](#)

<sup>2</sup> [Horizon 2020 | Horizon 2020.](#)

## Common Language Resources and Technology Infrastructure (CLARIN-ERIC)

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The Croatian consortium (HR-CLARIN)<sup>1</sup> of the European research infrastructure CLARIN ERIC<sup>2</sup> is a national infrastructure public service with a role of ensuring long-term preservation and dissemination of language technologies, that are composed of language resources, language tools and language (online) services, predominantly for the Croatian language, but also for other languages. It is an expert centre in data curation for Croatian language data and its purpose is to provide an unavoidable research data source for researchers, teachers, students mostly from the Humanities and Social Sciences, but also for all other interested users.

The national consortium coordinator is located at the Faculty of Humanities and Social Sciences, University of Zagreb and with other partners it will fulfill the obligations expected for a full participant in the CLARIN ERIC. Croatia participated as an active consortium member in the preparatory phase FP7 RI project CLARIN, and in 2018 the Republic of Croatia has decided to officially join CLARIN ERIC as a full member with the additional financial support of the Croatian Ministry of Science and Education starting from 2019.

The national consortium is composed of the following institutions:

- University of Zagreb, Faculty of Humanities and Social Sciences
- University of Zagreb Computing Centre (SRCE)
- University of Zagreb, Faculty of Electrical Engineering and Computing
- Institute of Croatian Language and Linguistics
- Old Church Slavonic Institute
- National and University Library in Zagreb
- Croatian Academy of Sciences and Arts, Library Croatian Language Technologies Society.

<sup>1</sup> [HR-CLARIN](#).

<sup>2</sup> [CLARIN ERIC: Homepage](#).

The HR-CLARIN consortium is committed to further developing the existing Croatian language resources and tools in accordance with the CLARIN specifications and incorporate them into the CLARIN ERIC infrastructure. The HR-CLARIN consortium priorities are:

- making Croatian language resources and tools accessible and interoperable within the CLARIN-ERIC community
- establishing a HR-CLARIN B-Centre in the medium-term future
- establishing a HR-CLARIN K-Centre for Croatian language in the long-term future
- taking part in CLARIN ERIC projects and activities
- raising awareness about CLARIN ERIC to researchers in the (digital) humanities and social sciences at the (inter)national level.

As the Croatian language became the 24<sup>th</sup> official language of the EU in 2013, the HR-CLARIN consortium is highly motivated to provide language resources, tools and services that will help researchers and other interested stakeholders to process texts in Croatian in a notably easier manner than before.

## The Survey of Health, Ageing and Retirement in Europe (SHARE-ERIC) in Croatia

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The Survey of Health, Ageing and Retirement in Europe (SHARE)<sup>1</sup> is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of about 140,000 individuals aged 50 or older (around 480,000 interviews collected since 2004). SHARE covers 28 European countries and Israel. SHARE was identified as successfully implemented in the European Strategy Forum on Research Infrastructures (ESFRI) Roadmap 2010 and was the first Research Infrastructure (RI) to be established as the European Research Infrastructure Consortium (ERIC) in March 2011. Austria, Belgium, the Czech Republic, Germany and the Netherlands are the founding members of SHARE-ERIC, with Switzerland having an observer status. Italy joined in June 2011, followed by Greece, Israel, Slovenia and Sweden in 2013, Poland in 2014, France in 2015, Hungary in 2017, Croatia and Cyprus in 2018, and Bulgaria in 2019. SHARE ERIC has been recognised as an ESFRI Landmark by the ESFRI in March 2016. Nowadays SHARE is considered as a clear reference pillar of scientific excellence and of competitiveness of the European Research Area, delivering world-class scientific services.

Croatia joined SHARE – the longitudinal biennial study of people aged 50 or older – in 2015. SHARE became the first longitudinal study ever conducted in the field of social sciences in Croatia. A high importance of the SHARE study for Croatian scientific community and society was recognized by placing SHARE in the “Croatian Research and Innovation Infrastructures Roadmap 2014-2020” within large scale Pan-European research infrastructures. Currently, Croatia is participating in the SHARE wave 9, the fourth consecutive wave. In this ‘journey’ Croatia used different sources to fund SHARE, mainly for data collection activities. Wave 6 has been co-financed by the European Union Programme for Employment and Social Innovation (EaSI) while main field operations of the SHARE wave 7 have been financed through Horizon 2020

<sup>1</sup> The Survey of Health, Ageing and Retirement in Europe (SHARE).

(SHAREDEV3). SHARE waves 8, 9 and partially wave 10 in Croatia are financed from the European Social Fund 2014 – 2020.

The Faculty of Economics & Business – Zagreb (FEB) became a Scientific Partner Institution of SHARE-ERIC in 2014, having constant support from the Croatian Ministry of Science and Education (MSE). In 2019, the FEB became a *National coordinating institution* for SHARE in the Republic of Croatia led by Prof. Šime Smolić and Prof. Ivan Čipin. Accession and full membership of the Republic of Croatia to SHARE-ERIC in 2018 has been effectuated with the strong support of the Ministry of Labour, Pension System, Family and Social Policy (MROSP) as the SHARE project coordinator in Croatia and the MSE. The SHARE project is considered to be of crucial importance in the implementation of evidence-based policies regarding pension system reform, improving the efficiency of Croatian labour market institutions etc.

## CROSSDA - Croatian Social Science Data Archive as a Service Provider for CESSDA ERIC

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The Croatian Social Science Data Archive (**CROSSDA**) is a national infrastructure public service with a role of ensuring long-term preservation and dissemination of social science research data. It is an expert centre in data curation and its purpose is to provide a vital research data resource for researchers, teachers, students, and all other interested users. The data archive was established at the Faculty of Humanities and Social Sciences, University of Zagreb to fulfill obligations of a Service Provider for **CESSDA ERIC**, and to serve as a national coordination centre for the curation of social science data. Croatia became a member of CESSDA ERIC in 2019 with the support of the Croatian Ministry of Science and Education.

CROSSDA is committed to providing data management support for researchers during the entire lifecycle of the project, from hypothesis development and grant preparation to data collection (original or from secondary sources) and data analysis, and in the end, it ensures that the data are preserved and reusable for a long time after the project ends. It promotes data sharing and secondary analysis to achieve wider and more effective use of existing data not only in research and education but also to inform policy making and professional practice.

CROSSDA conducts its role by acquiring and managing digital objects to ensure that the data are seamlessly accessible in open formats and well documented for efficient re-use. In its work, CROSSDA follows international professional standards, policies and procedures and it cooperates with similar institutions around Europe and the rest of the world. The type of data that are curated at CROSSDA are quantitative and qualitative, collected by researchers in the disciplines of sociology, psychology, education science, information science, political science, economics and other social sciences, or other scientific areas, as long as the data are useful in understanding society or the individual.

CROSSDA is building a local network of data users and stakeholders (researchers as producers, depositors and data users, librarians, IT experts, policy makers,

funders, journal editors), and it is continuously included in regional and international collaboration projects with CESSDA and its service providers.

Policies related to open access to research results, that would require or motivate scientists to share and preserve their data, are still developing in Croatia. Therefore, part of the activities of the data archive is also focused on public advocacy for the introduction of such policies. Policies can be adopted on different levels: government, funding institutions, research organisations or smaller research groups, and professional organisations. CROSSDA offers infrastructure that is necessary to support the implementation of such policies.

## European Social Survey in Croatia: Past, Present and Future Developments

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Authors will present developments of Croatian participation in the European Social Survey ([European Social Survey](#) | [European Social Survey \(ESS\)](#)). The European Social Survey (ESS) is an academically driven cross-national survey that has been conducted across Europe since its establishment in 2001. Every two years, face-to-face interviews are conducted with newly selected, cross-sectional samples. The survey measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations. In 2013, ESS was awarded ERIC (European Research Infrastructure Consortium) status.

For the first time, Croatia joined ESS in rounds 4 (2008) and 5 (2010), but it missed the three next waves. Authors will present circumstances in which Croatia returned to ESS in round 9, now with the status of a full member country of ESS-ERIC, the model of financing and organization of team and main research activity. In the presentation, special attention will be dedicated to plans for future developments, both for the promotion of usage of data among researchers and policy-related usage of data.

## Insights on Scholarly Primitives From Digital Humanities Research in Spain

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This poster has been awarded with the Best Poster Award at the DARIAH2020 virtual annual event ([DARIAH-EU Twitter: Best Poster Award](#)).

In order to provide the global community of scholars working in this field with a greater understanding of the current Spanish scenario, LINHD has recently promoted a research on the evolution of Digital Humanities in Spain in the last 25 years, a timeframe comparable with Unsworth's first formulation of scholarly primitives.

More than 1,000 records have been mapped, distributed as follow: 577 researchers; 368 projects; 88 resources; 9 post-graduate courses; and 8 specialised journals. Digital resources (i.e. repositories of documents, collections of artefacts, crowdsourcing platforms, dictionaries, databases, etc.), which are the object of this poster, have been produced, most of the time, with the aim to publish a service to improve the basic of day-to-day research workflow in the Humanities.

Our initial objectives were:

- to classify and describe the digital resources mapped according with the classical and new scholarly primitives, in order to highlight presences, absence and recurring associations of these categories
- to visualize the relationships between scholarly primitives and other dimensions in our data, like discipline and typology
- to identify how the introduction of digital tools and methods has affected the basic functions of research in the Humanities in Spain over time.

Data analysed is part of a larger dataset that can be downloaded at <https://doi.org/10.5281/zenodo.3893546>.

The whole dataset has been extensively analysed in [Digital humanities in Spain: Historical perspective and current scenario](#).

## Bringing Digital Cultural Heritage to Digital Humanities

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Digital transformation strategies undertaken by cultural institutions should take into account users' needs in specific sectors. In the case of academia and research, these needs can be represented by infrastructures like DARIAH, where the sharing of experience also takes the shape of use cases. This is why Europeana ([Europeana](#)), as the European Union's initiative for digital cultural heritage, builds bridges towards research communities. This contribution will present and discuss Europeana Research's activities.

## Time Machine – On the Way to the 'Big Data of the Past'

### Caroline Maximoff

Time Machine Organisation (TMO)

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The amount of available digital cultural heritage increases every day, thanks to numerous digitization initiatives all around the world. But this is only the first step!

How can we enable the general public to make active use of this precious data encompassing our common history? By creating a collective digital information system mapping Europe's economic, social, cultural and geographical evolution across times – the Time Machine!<sup>1</sup>

Time Machine does not intend to be yet another platform just collecting digitized cultural heritage, but will emphasize the following interoperable modules on its way to create 'Big Data of the Past':

- data – enabling persistent digital access to millennia of linked historical data
- computing – developing AI methods to explore, connect, and simulate historical information (4D reconstructions, etc.)
- exploitation – focusing on Social Sciences & Humanities (SSH) models of historical evidence that lead to new, plausible narratives, radically transforming the manner in which SSH engages with and interfaces with the past.

The scientific community behind Time Machine is organized within the international association TMO (Time Machine Organisation) that currently comprises close to 600 members, including leading European institutions from the academic, research, and GLAM sector. Headquartered in Vienna/AT and led by an international team of visionaries and renowned scholars, TMO aims to tackle the challenges of the adventurous Time Machine vision in close cooperation with its members.

But where to begin the journey into the past? As suitable starting points we identified the 'Local Time Machines', i.e. collections of all kind of data connected to a specific geographic location. TMO is keen on identifying and inviting projects and research activities aimed at e.g. mining and visualising data of a certain locality or working on specific computational tools in connection with digital heritage. Be welcome to join our initiative!

<sup>1</sup> [Time Machine Europe](#).

## Citizen Science in Croatian Glagolitism

### **Marijana Tomić**

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This poster will present the first phase of the project *Civil Science In the Field of Glagolitics: from crowdsourcing to knowledge*. The Glagolitic script is a historical script, one of the three scripts used in Croatia (Glagolitic, Latin and Croatian Cyrillic (called *bosanica*) scripts). It was introduced in the 9<sup>th</sup> century, and was used in the Slavic countries until the 16<sup>th</sup> century, although in Croatia it was used up until the 19<sup>th</sup> century when it was fully replaced by the Latin script.

This project is conducted by the Centre for Research in Glagolitism, and it is also implemented within the activities of the DARIAH-HR digital research infrastructure. The aim of the project is to explore appropriate forms of public involvement in scientific research in the field of Glagolitic, which would transform citizens from a passive recipient of the findings of scientific research conducted in academic institutions into active research associates. The research within this project was conducted on a corpus that consists of manuscripts written in cursive form of the Croatian Glagolitic script. The manuscripts were previously digitized and published on the portal in order to be available to the general public and to enable collaborative work. The possibility of participation of the general public proved to be an important component for the field of Glagolitic because there are many amateurs and researchers of Glagolitic heritage who are not part of scientific circles but can contribute to Glagolitic research in the Zadar area. Therefore, the first phase of the project involved the development of a crowdsourcing scenario for gathering transcriptions of a selection of Glagolitic manuscripts.

This poster will present the eight-point scenario included in the first phase of the project. Special attention will be paid to the third point of the scenario, which includes the decision on the infrastructure to be used to carry out the tasks (digital tools and research infrastructure). The decision was to use the Transkribus<sup>1</sup> tool because the aim of the Transkribus is to support all those involved in the transcription of historical, printed, or handwritten documents. It provides document capture, text

<sup>1</sup> [Transkribus | AI powered Handwritten Text Recognition](#).

recognition and image recognition and offers tools for annotating personal names and places, commenting monitoring user activities. By implementing all parts of the scenario that will be presented on the poster, we achieved the goal of the 1st phase of the project, which was to engage the public in the transcription of local historical manuscripts written in cursive form of the Glagolitic script. For future research, the 2nd and 3rd phases will be conducted. They will include determining the propensity of project participants to participate in project activities and determining attitudes, motivation and expectations of amateurs towards crowdsourcing campaigns in the field of Croatian Glagolitics.

## BIOGRAPHIES



### DRAGAN BAGIĆ

Dragan Bagić is Associate Professor at the Department of Sociology, Faculty of Humanities and Social Sciences, University of Zagreb. His research interests include political sociology, industrial relations, sociology of migration and social research methodology. He has more than 20 years of experience in survey-based social research, both scientific and applied. In 2019, he was named the first national coordinator of ESS-ERIC ([European Social Survey | European Social Survey \(ESS\)](#)) for Croatia. He was also one of the initiators of the establishment of the Croatian Social Science Data Archive ([CROSSDA – Croatian Social Science Data Archive](#)). Currently he is serving as vice-dean for research and international cooperation.



### LIDIA BOCANEGRA BARBECHO

PhD in History (2006), University of Lleida and Master in European Project Design (2018) at Venice International University. Senior researcher with a Tenure Track position at Contemporary History Department at University of Granada. Digital Humanities, Digital Culture and Citizen Science specialist with main focus on crowdsourcing projects, current history and migration studies. Currently, L. Bocanegra is PI of three ongoing research projects: *Co-History - Analysis of Public Participation in Historical Research From the Perspective of Citizen Science* ([cohistoria.es](#)), funded by the Junta de Andalucía (FEDER); *Crowdsourcing in History. New Participatory and Inclusive Methodological Challenges in Historical Research in Spain*, funded by the Spanish Ministry of Science and Innovation (MICINN); and *e-xiliad@s Project* ([e-xiliad@s](#)), funded twice by the Spanish Ministry of Labour and Immigration. Since 2015, Lidia is responsible for the Digital Humanities area through the Medialab UGR (Laboratory of Research in Culture and Digital Society) at the University of Granada; she is also an expert evaluator for the European Commission, through the Research Executive Agency (2015, 2020).

Lidia has carried out research stays in Italy, Argentina (PhD Grants), Ireland, Cuba and Colombia (postdoctoral grants). During her postdoctoral period, she researched and worked (2007-2012) at ICT multinationals companies in Cork-Ireland (Trend Micro, VoxPro Group/Google); whose technological expertise she adapted and applied, by way of knowledge transfer, to HD research projects. In 2020, Lidia has been awarded with the prize for the *Best participation/presence in social media* with the project

e-xiliad@s, through the prestigious Association of Hispanic Digital Humanities (2020); she was also awarded by the Best Poster: *Insights on Scholarly Primitives From Digital Humanities Research in Spain* by the DARIAH Annual Event 2020: Scholarly Primitives. L. Bocanegra is the author, co-author and editor of about forty scientific publications, the vast majority in high-impact publications and scientific journals.



### CÉCILE CHANTRAINE BRAILLON

Cécile Chantraine Brailon has been a university professor in Hispanic Studies at La Rochelle University since 2018 and her research focuses on Hispanic-American theatre and performing arts. After having conducted a line of research as part of the ANR CHispa project (2014-2017 / Project leader: Fatiha Idmhand) on the scientific exploitation of writers' archives through digital technology, she is currently working on several complementary programmes on the computerisation of research in the Performing Arts: the VISUAL STAGING programme (CPER MAuVE 2019-2022 with Carole Viñals), the e-spect@teur project at the University of La Rochelle (ACI JCJC, 2020) and the ESNA regional project (École du Spectateur de Nouvelle Aquitaine, 2021-24). She is also leading a work package in the Erasmus+ Partnership DiMPA project (Digital Methods Platform for Arts and Humanities / 2020-2023). Her current research interests aim to contribute to the theorization of the analysis of the performing arts: to this end, she also focuses her work on the design of digital tools offering specific functionalities for research in this field, concerning not only preservation (conservation of the creative process and performance), but also the analysis of performing arts data (genetic criticism, semiology, cultural analysis).



### DRAHOMIRA CUPAR

Drahomira Cupar, PhD, is an assistant professor at the University of Zadar, Department of Information Sciences, Croatia. She obtained her PhD in Information Sciences in 2013. She is currently working at the Department of Information Sciences at the University of Zadar and teaching undergraduate and graduate courses in scholarly communication and academic writing, classification and subject indexing, and sociology of reading. She served as the President of the Croatian Reading Association (CroRA) ([Hrvatsko čitateljsko društvo](#)) (2012-2014). She is a member of the following professional organizations: Croatian Library Association (CLA) ([Croatian Library](#)

[Association](#)) (president of the Committee for classification and subject indexing), CroRA, ISKO (International Society for Knowledge Organization) ([International Society for Knowledge Organization: ISKO](#)), IFLA (Information Coordinator for Subject Analysis and Access Section) (<https://www.ifla.org/>). She was involved in the organization of several conferences and events organized by the Department (LIDA, PubMet, BOBCATSSS and summer schools) and is a co-director for the biennial international conference Libraries in the Digital Age (LIDA). She is a recipient of the CLA award Eva Verona which is presented to the best young LIS professionals (2012). She participates in the European project OPERAS-P ([OPERAS-P](#)) and TRIPLE ([Triple – Transforming Research through Innovative Practices for Linked Interdisciplinary Exploration](#)). She is a coordinator of the DARIAH-HR project Tezaurus.hr.



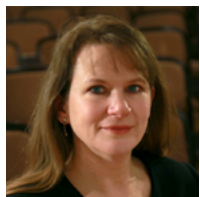
### LAURENCE DELBARRE WILLARD

Laurence Delbarre Willard is an engineer in instrumentation and experimental techniques at the SCALAB research laboratory and technical manager at EquipEx IrDIVE. She first worked as a Technical Manager Engineer for experimental physics at the Université du Littoral Côte d'Opale, then joined the University of Lille in 2012 for the acquisition of the IrDIVE platform's equipment, its installation and commissioning, and today contributes to the implementation and support of research projects with the various laboratories and partners using IrDIVE equipment. She participates in training on the implementation of experimental devices and their use for researchers and students (oculometry, recording of physiological parameters, kinematics, behavioural analysis: PPNESA European Master students). Her achievements include the 3D digitisation of sculptures ("La petite Châtelaine" C. Claudel, Musée de la Piscine Roubaix for Inventit, Oct.2014, and the Dubut vase "Persée délivrant Andromède", Palais des Beaux-arts de Lille, May 2015), capturing the singer's gestures with motion capture at A. Petit's show (Fresnoy, January 2015), etc.



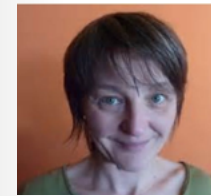
### ANTOINE DOUCET

Antoine Doucet is a tenured full Professor in computer science at the L3i laboratory of the La Rochelle University since 2014. At La Rochelle, he leads the research group in document analysis, digital contents and images (about 50 people) and directs the ICT department of the Vietnam-France University of Science and Technology of Hanoi. In addition, he is the coordinator of the H2020 project NewsEye ([NewsEye: NewsEye](#)), running until 2022, focusing on augmenting access to historical newspapers across domains and languages. He further leads the effort on semantic enrichment for low-resourced languages in the context of the H2020 project Embeddia ([EMBEDDIA – Cross-Lingual Embeddings for Less-Represented Languages in European News Media](#)). His main research interests lie in the fields of information retrieval, natural language processing, (text) data mining and artificial intelligence. The central focus of his work is the development of methods that scale to very large document collections and that use as few external resources as possible, in order to be particularly applicable to documents of any type written in any language, from news articles to social networks, and from digitized manuscripts to digitally-born documents. Antoine Doucet holds a PhD in computer science from the University in Helsinki (Finland) since 2005, and a French research supervision habilitation (HDR) since 2012.



### JENNIFER EDMOND

Jennifer Edmond is Associate Professor of Trinity College Dublin, co-director of the Trinity Center for Digital Humanities and Director of Trinity's MPhil in Digital Humanities and Culture. Jennifer also serves as President of the Board of Directors of the pan-European research infrastructure for the arts and humanities, DARIAH-EU ([DARIAH | Digital Research Infrastructure for the Arts and Humanities](#)). She represents this body on the Open Science Policy Platform (OSPP), which supports the European Commission in developing and promoting Open Science policies. Until 2016, Jennifer coordinated the €6.5m CENDARI FP7 (2012-1026) project and is a partner in the related infrastructure cluster, PARTHENOS ([PARTHENOS Project – Pooling Activities, Resources and Tools for Heritage E-research Networking, Optimization and Synergies](#)). She was also coordinator of the 2017-2018 ICT programme-funded project KPLEX ([KPLEX project](#)), which investigated bias in big data research from a humanities perspective, and is currently a partner on the CHIST-ERA project PROVIDE-DH ([Providedh – PROgressive Visual DEcision-Making in Digital Humanities](#)), which is investigating progressive visualisation as a support for managing uncertainty in humanities research.



### MARIJANA GLAVICA

Marijana Glavica works at the library of the Faculty of Humanities and Social Sciences, University of Zagreb, where she is responsible for the implementation, development and maintenance of library information systems. She also teaches information literacy to psychology students. In recent years, her main interests are in the area of research data management in social sciences, particularly publishing and archiving research data. She has been involved in several international projects in cooperation with the Consortium of European Social Science Data Archives ([CESSDA](#)) and its service providers, through which she worked on the establishment of the Croatian Data Archive and Services for the Social Sciences. Currently, she is representing Croatia in the CESSDA ERIC Service Providers' Forum.



### KORALJKA GOLUB

Koraljka Golub is the head of the iSchool at Linnaeus University, [Information Institute \(iInstitute\) | Inu.se](#). She is also co-leading a Digital Humanities Initiative at Linnaeus University ([Research in Digital Humanities | Inu.se](#)). Her core research is in the field of digital libraries and information retrieval, with particular focus on topics related to knowledge organization, integrating existing knowledge organization systems with social tagging and/or automated subject indexing, and evaluating resulting end-user information retrieval.

Three of her major research projects from the past are:

EASTER ([EASTER | Project Home Page](#)) which dealt with the evaluation of algorithms for automated subject classification and indexing in the context of information retrieval

EnTag ([Enhanced Tagging for Discovery \(EnTag\) | Home Page](#)), on the potential of combining social tagging with Dewey Decimal Classification and Library of Congress Subject Headings

TRSS ([Terminology Registry Scoping Study | Home Page](#)), a scoping study of terminology registries for UK's further and higher education needs.

She works as an associate professor at the Department of Library and Information Science, School of Cultural Sciences, Linnaeus University ([Linnéuniversitetet | Inu.se](#)). She also serves as an adjunct at the School of Information Studies, Charles Sturt

University (School of Information and Communication Studies), Australia. For over five years in the recent past she worked as an information science researcher at UKOLN, University of Bath (UKOLN), United Kingdom.

Her educational background covers technology, social sciences and humanities. In 2007 she obtained her doctoral degree from the Department of Information Technology, Lund University (Lund University), Sweden, on the topic of automated subject classification. Her earlier degrees are from the Department of Information Sciences and the Department of English, University of Zagreb (UniZG), Croatia.



### ELENA GONZÁLEZ BLANCO

Elena González Blanco is the Research Director of “LyrAlcs”, an AI and TL project at the Center for the Governance of Change at IE University and a professor of Artificial Intelligence applied to business at the IE University School of Technology. Likewise, she is the Global Head of Digital for Wealth Management and Insurance of Santander and was General Manager of Europe at the insurtech startup Coverwallet. She is an expert in Digital Transformation and Innovation, a specialist in the field of linguistic technology and has been responsible for Product Development in Artificial Intelligence at Minsait-Indra. She is also an internationally renowned researcher, and led POSTDATA, the ERC excellence European research project on linguistic technology and the semantic web.

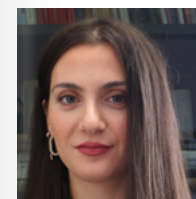
She was the director and founder of the first Laboratory for Innovation in Digital Humanities in Spain: [www.linhd.uned.es](http://www.linhd.uned.es), and is also a member of numerous international committees (member of the Scientific Advisory Board of the largest European research infrastructure for linguistic technology CLARIN and advisor of the Venture Capital Related).

She is a doctor and has been a teacher and researcher at Harvard University, King's College, UNAM and Bonn. She was ranked number #1 in 2018 and #3 in 2019 in the Choiseul Ranking *Economic Leaders of the Future of Spain* ([www.choiseul.es](http://www.choiseul.es)). She has been selected as one of the Top 100 women in Spain in the 2016, 2017 and 2018 editions of the [www.lastop100.es](http://www.lastop100.es) contest and awarded the Julián Marías 2017 research award in the under-40 category.



### EDWARD J. GRAY

Edward J. Gray is the Research Infrastructure Coordinator at the TGIR Huma-Num (CNRS) and the Officer for National Coordination at DARIAH ERIC, the European Research Infrastructure for the Digital Arts and Humanities. He leads the Curation Task Force in the SSHOC Project, which is developing the SSH Open Marketplace, a discovery platform for digital humanities tools and services. He earned his doctorate in history from Purdue University, where his dissertation, “The Marillac: Family Strategy, Religion, and Diplomacy in the Making of the French State during the Sixteenth and Seventeenth Centuries”, examined the ways in which familial politics impacted the formation of the early modern French state. His dissertation research has been funded by a bourse Chateaubriand from the French Embassy in the United States, a Vincentian Studies Institute Grant from DePaul University, and a Purdue Research Foundation Grant from Purdue University. While a *doctorant invité* at the École nationale des chartes in Paris, he earned a master's degree in Technologies numériques appliquées à l'histoire (TNAH), where he is also *chargé de cours*. Before working at Huma-Num, Edward was the Digital Humanities Coordinator at the Maison Européenne des Sciences de l'Homme et de la Société in Lille. In addition to early modern religion and politics and the digital humanities, he is also interested in interrogating the periodization of the ‘medieval’ and ‘early modern’, and exploring global approaches to early modern history. He received an M.A. in History from Purdue University in 2015 and a B.A. in History and French from the University of Alabama in 2013.



### LAURA GRZUNOV

Laura Grzunov works as a research assistant at the Department of Information Sciences at the University of Zadar. She teaches seminars and exercises in the courses Digital Humanities, Information Organization, Theory and Practice of Information Organization, Processing of Old and Rare Materials, Evaluation of information services and Information Collection Management. Since 2017, she has been an associate on the university project *Digitization, Bibliographic Description and Research of Texts Written on Glagolitic, Croatian Cyrillic and Latin Scripts Until the End Of 19th Century in Zadar and Šibenik Area* which is being carried out at the University of Zadar by Centre for Research in Glagolism. She is also one of the collaborators on the scientific project *Civil Science In the Field of Glagolitics: from crowdsourcing to knowledge*

which is implemented at the Center for Research in Glagolism at the University of Zadar and within the activities of DARIAH-HR digital research infrastructure.



### VANESSA HANNESSCHLÄGER

Vanessa Hanneschläger is a digital humanist and German literature scholar. She obtained her PhD from the University of Vienna and worked as a researcher at the Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH) of the Austrian Academy of Sciences and is currently doing her postdoc at the German Literature Archive. She is co-chair of the DARIAH working group ELDAH ([ELDAH – Ethics and Legality in the Digital Arts and Humanities – a working group of DARIAH-EU](#)), vice-chair of the CLARIN Legal and Ethical Issues Committee ([CLIC](#)), and the lead of the DARIAH ELDAH Consent Form Wizard project. Vanessa is actively pursuing Open Science. She was a Wikimedia Germany Open Science Fellow in 2017/18, and won the Open Minds Award in 2017. She is a member of the Open Science Network Austria (OANA) and teaches Digital Humanities / Open Science at the University of Vienna.



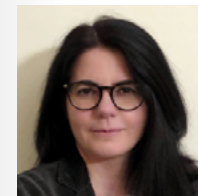
### KARL HEINZ

After the studies of history, tibetology and the Czech and Hungarian language, acquisition of the academic degree Magister at the University of Vienna in December 1995. Subsequently attendance and completion of the training course at the Institute for Austrian Historical Research for archival science and historical auxiliary science and acquisition of the academic degree Master of Advanced Studies (MAS) in September 1995. In June 2004, completion of doctoral studies (History) in June 2004.

From 1995 onwards, freelance historian especially in the research fields of Lower Austrian local history, diplomatic and palaeographic research, Austro-Hungarian relationship and humanism in East-Central Europe. For two years from 2000, management of the *Netzwerk Geschichte* association with a focus on job placement within the history department. From 2003, coordinator of the Monasterium platform ([Monasterium.net | ICARUS](#)) and from 2008, co-founder of ICARUS – International Centre for Archival Research ([ICARUS | International Centre for Archival Research](#)) and General manager of ICARUS.

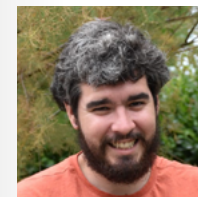
Various publications and lectures regarding digitization and online presentation

of primary sources. Participation in organizing the online resources Monasterium, Matricula ([Matricula | ICARUS](#)) and Topotheque ([Topothek Portal – Das lokale Online-Archiv](#)), and collaboration in various European projects, such as ENArC, Co:op, Time Machine and European Digital Treasures.



### ALBA IROLLO

Dr. Alba Irollo is in charge of Europeana Research at the Europeana Foundation ([Europeana Foundation](#)), The Hague, which oversees Europeana, the European Commission's initiative for Digital Cultural Heritage. Europeana Research's area embraces the interconnections between Digital Cultural Heritage and the so-called Digital Humanities. In particular, Dr. Irollo oversees research projects, partnerships and collaborations with universities, research institutions and infrastructures, as well as cultural heritage institutions engaged in improving their digital collections for research purposes. She represents Europeana at DARIAH and LIBER. She supervises the Europeana Research Grants Programme and together with the board chair, coordinates the activity of the Europeana Research Advisory Board. She also leads the Europeana Research Community. Before joining the EF, she spent a period of time at the European Commission itself in Brussels. In the Cabinet of the European Commissioner for Education, Culture, Youth and Sport, she gained wide-ranging experience in the field of cultural policy. Inter alia, she worked on the preparatory phase of the European Year of Cultural Heritage (2018). She holds a PhD in History of Art and, besides being busy with cultural policy, is an active researcher in the fields of History of Collecting and Heritage/Museum Studies.



### AXEL JEAN-CAURANT

Dr. Axel Jean-Caurant is a research engineer at the L3i laboratory of the University of La Rochelle University. He obtained his PhD in computer science in 2018 and his thesis was on the accessibility of documents inside digital libraries. The focus of his work was put on two distinct aspects. The first is to understand how researchers are using these online platforms and how to train them to understand the changes data has undergone during the digitisation processes. The second is the study of the impact of the quality of documents on accessibility. Axel is now working full time on the NewsEye project ([NewsEye: NewsEye](#)) and is in charge of developing a demonstrator which will hold the data the project researchers are interested in, along with the different tools developed during the project.



### LUKA JURKOVIĆ

Luka Jurković is an assistant and a doctoral student at the Department of Sociology, Faculty of Humanities and Social Sciences, University of Zagreb, where he received his master's degree in 2019. He is currently a teaching assistant on several courses in classical social theory, as well as statistics and research methodology in the social sciences. Since June 2020 he is a member of the Croatian national team of the European Social Survey (ESS) where he is responsible for preparing the national questionnaire and sample design, as well as conducting data collection and data processing. Prior to joining Croatia's national ESS ERIC team, he worked as a research assistant for a market research company, where he was responsible for the setup, preparation, and implementation of market and public opinion research projects. In his brief time as an assistant at the Department of Sociology, he has published four papers in peer-reviewed academic journals and has participated in several national and international academic conferences. His major research interests include sociology of health, work-life balance, sociology of sexuality, and quantitative research methodology.



### PAWEŁ KAMOCKI

As a lawyer and linguist, Paweł Kamocki, currently at the Institute for German Language in Mannheim, combines expertise in the areas of IT law, intellectual property, data protection and corpus linguistics. His interests include open innovation, privacy by design and by default, and research data management. He is the head of the CLARIN Legal Issues Committee (<https://www.clarin.eu/governance/legal-issues-committee>), has worked for many years in various working groups on legal issues in digital research, and has produced a large number of relevant publications and presentations in this area.



### KORALJKA KUZMAN ŠLOGAR

Koraljka Kuzman Šlogar acquired her MA degree in history, ethnology and museology and subsequently PhD in ethnology and cultural anthropology at the Faculty of Humanities and Social Sciences, University of Zagreb. Since 2001, she has been employed at the Institute of Ethnology and Folklore Research in Zagreb and, as head of the Department of Documentation, has been working on the planning and management

of different digitization projects and the creation and development of a digital repository of intangible cultural heritage. She has been involved in the projects of publishing archival material, making ethnographic documentary films and creation of virtual and museum exhibitions. Simultaneously, she has been working on scientific projects in the fields of digital humanities and cultural anthropology, she participates in national and international conferences and is the author of numerous scientific and professional papers.

Currently the focus of her interest is the development of the e-infrastructure for the arts and humanities, work on the development of the functionality of digital platform and repository and linking with similar institutions at national and international level in order to create a virtual scientific-research network. She is a national coordinator for Croatia at DARIAH-ERIC ([DARIAH-HR](#)) and co-chair of the DARIAH-EU Working group on Ethics and Legality in the Digital Arts and Humanities ([Ethics and Legality in the Digital Arts and Humanities \(ELDAH\)](#)). She is a member of different national and pan-European working groups and several committees.



### IVAN MARIĆ

Ivan Marić is the Director of the University of Zagreb University Computing Centre SRCE, where he began his career in 1990. During his time in SRCE, he played an important role in the creation and construction of the Croatian academic and research network at the beginning of 1990's, and has since then participated in numerous national initiatives related to building Croatian e-infrastructure. Currently, he leads the national strategic project Croatian Scientific and Educational Cloud (HR-ZOO) ([HR-ZOO | Srce](#)), which aims to build a new generation of e-infrastructure for advanced science and modern education, and is the president of the Council of the Croatian Open Science Cloud initiative (HR-OOZ).

On the international level, he is actively involved in building and governing major pan-European e-infrastructures like GEANT and EGI. Mr. Marić holds several positions in international organizations as the national representative for Croatia – he is an official Croatian delegate in the EOSC Steering Board and the EOSC Association General Assembly. He has been the Croatian representative in the Future Internet Forum (FIF) from 2016, and an e-IRG delegate from 2006. He is also the Croatian representative in the Horizon Europe Research Infrastructure Programme Committee.



### CAROLINE MAXIMOFF

Caroline Maximoff is an administrative and communication/dissemination expert working internationally, based in Vienna, Austria. Born on 30 September 1980 in Germany to Austrian and Russian-Italian descended parents, the family moved back to Austria early on, where Caroline finished primary school and secondary humanistic education (modern language branch) in 1998. After three years of studying architecture at the Technical University of Graz/AT, she moved to Vienna to continue to study History of Art at the University of Vienna/AT.

From September 2005 to August 2006, Caroline attended an ERASMUS year-abroad at the University College Dublin/IE, enrolling in history, art, and archaeology classes.

In 2008, Caroline began working for the recently founded archival association ICARUS – International Centre for Archival Research ([International Centre for Archival Research: ICARUS](#)) taking over various tasks from general administration, community management, communication and dissemination to more specific project and financial management of several EU-funded projects.

In May 2011, she took over the administration and project management position for the project ENArC ([ENArC | European Network on Archival Cooperation](#)) in the St. Pölten Episcopal Archives and supporting the application of the project MEN & BOOKS until her maternity leave in December 2012 (until October 2014). Carrying on the administrative, financial and project management duties for the project co:op ([co:op – the creative archives' and users' network](#)) until her second maternity leave starting in April 2015, Caroline left the St. Pölten archives and started working again for ICARUS in September 2016.

Since March 2020, Caroline is part of the core staff of the Time Machine Organisation ([Time Machine Organisation](#)) being in charge of the financial administration and community management. In May 2020, she took over the additional role of Chief Communication Officer during the maternity leave of Ms Kerstin Muff.



### JELENA OSTOJIĆ

Jelena Ostojić is an assistant and doctoral student at the Department of Sociology, Faculty of Humanities and Social Sciences, University of Zagreb. She previously worked at the Study of Social Work, the Department of Social Policy and in the Department of Analytics and

Research of the Croatian Employment Service. She participates in several research projects whose thematic backbones are industrial relations, precariousness in the labor market, and working conditions of temporary employees. She is a member of the Croatian national team of the European Social Survey.



### BENEDIKT PERAK

Benedikt Perak, PhD philologist, corpus linguist, data scientist, is employed as an assistant professor at the Faculty of Humanities and Social Sciences, University of Rijeka, where he has been teaching courses in the field of linguistics, digital humanities and data science at the undergraduate and graduate level.

The main area of his research interest is related to the implementation and development of methods of digital humanities, natural language processing and data science in the field of social interaction and platforms for the development of digital assistants and advanced communication based on machine learning technologies and artificial intelligence.

He is the founder and head of the Laboratory for Research of Cultural Complexity at the Department of Cultural Studies ([Laboratorij za istraživanje kulturne složenosti | Cultural Complexity Lab - CULTURAL STUDIES](#)) as well as the Laboratory within a University Center for Artificial Intelligence and Cyber Security ([Centre for Artificial Intelligence and Cybersecurity - AIRI](#)), founded with the aim of establishing an infrastructure for conducting interdisciplinary scientific research of complex cultural phenomena in the interdisciplinary field of social sciences and humanities and support for the realization of scientific research projects in the real sector.

Benedikt is the leader and collaborator on several domestic and international projects and the author and curator of interactive projects related to the digitization of cultural heritage and the promotion of culture in tourism management. He is also the author of a number of scientific papers published in prestigious journals and a lecturer at numerous national and international conferences.

Finally, he is a member of numerous scientific consortia and professional institutions and organizations related to the development of digital systems.

A list of his papers can be found at [Pregled po CROSBi profilu: Benedikt Perak \(CROSBi Profil: 26656, MBZ: 324151\) - CROSBi](#).



### ACHIM RABUS

Prof. Dr. Achim Rabus holds the Chair of Slavic Linguistics at the University of Freiburg, Germany. From 2013 until 2016, he was employed as a Professor at the University of Jena and the Aleksander Brückner Center for Polish studies at the Universities of Halle and Jena. Rabus defended his PhD thesis on the language of East Slavic spiritual songs in 2008 and his Habilitationsschrift on Slavic language contact in 2014. In 2012, he was awarded a Feodor Lynen fellowship to conduct research at the University of California, Berkeley, sponsored by the Alexander von Humboldt Foundation. From 2011 until 2016, he was a member of the Junior Academy Program of Heidelberg Academy of Sciences and Humanities. Since 2009, Rabus has been a member of the Special Commission on the Computer-Supported Processing of Mediæval Slavonic Manuscripts and Early Printed Books to the International Committee of Slavists, and since 2018, the President of the Commission.

He has been the principal investigator of several philological, sociolinguistics, and Digital Humanities projects. His current research focuses on Slavic sociolinguistics, dialectology, Handwritten Text Recognition, and (digital) historical linguistics.



### SALVADOR ROS MUÑOZ

Salvador Ros is Director of the Laboratory of Innovation on Digital Humanities at UNED (Spanish Distance University), POSTDATA ERC, Starting Grant Technical PI at UNED and Module Convenor of Module V, devoted to innovation and technology in border security, and the European Master in Strategic Border Management. Salvador Ros has been Director of Learning Technologies at UNED for six years and Vice Dean of Technologies at the Computer Science School for six years. He has received the Extraordinary Doctoral Award at UNED for his PhD dissertation and two special best paper awards as well. He is an expert in strategic management and innovation in the public sector. He graduated in the Leadership Program for Public Sector Management from the IESE Business School, Universidad de Navarra, in Strategic University Senior Management from the Universidad de Nebrija y Politecnica de Barcelona, and in the Leadership Program for Innovation and Entrepreneurship in the Public Sector from the Deusto Business School, Universidad de Deusto.

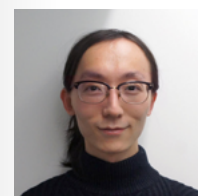
He is a senior member of the IEEE Education Society since 2007. His research and professional activity, in general, is focused on enhanced learning technologies for distance learning scenarios and learning analytics, big data, and AI applied to science and humanities. He is also a strategic consultant for the public sector.



### WALTER SCHOLGER

Walter Scholger studied History and Applied Cultural Sciences in Graz (Austria) and Maynooth (Ireland). He is the institute manager of the Centre for Information Modeling – Austrian Centre for Digital Humanities at the University of Graz (Austria). He is involved in several international projects focusing on the legal aspects of academia and digitization, a member (and co-lead) of several working groups of DH umbrella organizations dedicated to DH curricula development, digital publication and Open Science.

A veteran contributor to DARIAH-EU, he was one of the driving forces behind the DH Course Registry ([Digital Humanities Course Registry](#)) and has been active in several Working Groups, serving as Co-Lead of the Working Group on Ethics and Legality in Digital Arts and Humanities ([Ethics and Legality in the Digital Arts and Humanities \(ELDAH\)](#)) since 2017. In January 2019, he was appointed Deputy National Coordinator for DARIAH Austria and also serves as the speaker of the CLARIAH-AT consortium, the national association for Austrian contributions to the CLARIN and DARIAH ERICs.



### SHANGYUN SHEN

Shangyun Shen works as a research specialist and communications manager at the secretariat of the JPI CH (European Joint Programming Initiative on Cultural Heritage [JPI CH](#)) in the Fondation des sciences du patrimoine, France. He is responsible for the administration of the initiative's online platform Heritage Research Hub and the social media linked to it. He also assists the preparation and launching of the transnational calls funded by the JPI CH.

Shangyun holds a joint master's degree on Sustainable Heritage Management from the KU Leuven, Paris 1 Panthéon-Sorbonne, and the Padua University. He also has a second master's degree in Cultural and Religious Studies from the Hebrew University of Jerusalem. He has worked on several online publications focusing on the ICH of Egyptian Copts.



## ŠIME SMOLIĆ

Šime Smolić is associate professor at the University of Zagreb, Faculty of Economics and Business (FEB) where he obtained his PhD in 2012. He has been the country team leader of the SHARE (*Survey of Health, Ageing and Retirement in Europe*) ([The Survey of Health, Ageing and Retirement in Europe \(SHARE\)](#)) study in Croatia since 2014 for the 4th consecutive wave, and a representative of the FEB – Scientific Partner Institution – in SHARE-ERIC. He has also been a researcher for the project *Health, Cultural, and Biological Determinants of Longevity: Anthropological Perspective on Survival in Very Old Age* (HeCuBa) from 2018. Since November 2020, he has been leading the work package 'Quality of healthcare' in the Horizon2020 project '*Non-intended Health, Economic and Social Effects of the Covid-19 Epidemic Control Decisions: lessons from SHARE (SHARE-COVID19)*' He has published more than twenty papers in peer-reviewed journals, and more than ten papers in conferences. His major research interests are health economics, economics of ageing, health economy and survey analysis. His teaching includes several courses: health economics, macroeconomics, economics of education and Croatian economy. He has been awarded for his teaching excellence in three academic years within the English taught undergraduate study programme at the FEB. During his career, he worked on several major projects: consultant – survey specialist for the World Bank survey on SMEs in Croatia (2018-2019), analysts in the project *Demographic Atlas of Croatian Medical Doctors* (2017, 2019, Croatian Medical Doctors Chamber), *In-Depth Analysis of the State Budget Expenditures of the Republic of Croatia* – chair of the *Health Care System Analysis* working group (2015, Croatian Ministry of finance and World Bank); contributor to the National Health Care Strategy 2012-2020 (2012, Croatian Ministry of Health). He is a reviewer for many international scientific journals, and a member of EAST (Central and Eastern European Ageing Societies) and ESRA (European Survey Research Organization). He speaks fluent English and Italian.



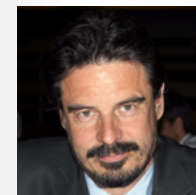
## JADRANKA STOJANOVSKI

Jadranka Stojanovski is an Associate Professor at the University of Zadar and a research librarian at the Ruđer Bošković Institute with more than 20 years of professional experience in designing and creating scholarly information infrastructures, following open science principles. She has an interdisciplinary background in physics and information sciences gained during MSc studies in Physics and MA studies in Information Sciences

at the University of Zagreb. She also has a PhD in Information Sciences gained during studies in Information and Communication Sciences at the University of Zagreb. Her research is mainly in the areas of open science, scholarly communication, peer review, and research assessment.

She takes part in international communities, networks and projects concerning different aspects of open scholarly communication, including the Horizon 2020 projects NI4OS Europe, OPERAS-P Preparing Open Access in the European Research Area Through Scholarly Communication, TRIPLE Transforming Research through Innovative Practices for Linked Interdisciplinary Exploration, and OpenAIRE Advancing Open Scholarship, TD COST Action TD1306 New Frontiers of Peer Review (PEERE) and CA COST Action CA15137 European Network for Research Evaluation in the Social Sciences and the Humanities (ENRESSH).

She is also a Croatian representative in the European Commission expert group on National Points of Reference on Scientific Information (E03477) and European Research Area and Innovation Committee (ERAC) Standing Working Group on Open Science and Innovation (SWG OSI).



## MARKO TADIĆ

Marko Tadić,<sup>1</sup> linguist, full professor at the University of Zagreb, Faculty of Humanities and Social Sciences, Department of Linguistics. He has been the head of the Chair of Algebraic and Computational Linguistics at the same Department since 2001 and an associated member of the Croatian Academy of Sciences and Arts since 2008. He was also a member of the Standing Committee for the Humanities of the European Science Foundation (2009-2012) and a member of the National Council for the Humanities of the National Scientific Council of the Republic of Croatia (2004-2013, 2017-). His interests are in corpus linguistics, computational linguistics, language technologies and research infrastructures in (e-)humanities and social sciences. He published more than 80 papers and 5 books. He is also the co-author of the *Croatian Frequency Dictionary* (1999). He is also the (co)author of important language resources for

<sup>1</sup> Personal web page: [http://www.ffzg.unizg.hr/oling/?page\\_id=88](http://www.ffzg.unizg.hr/oling/?page_id=88).  
References in bib.irb.hr bibliographic base: <http://bib.irb.hr/lista-radova?autor=157043>.  
Google Scholar: [http://scholar.google.hr/citations?user=zpAvfFwAAAAJ&hl=en&citsig=AMstHGT-3v1t\\_0mYxWXngmNs1pkKZ\\_DqqNg](http://scholar.google.hr/citations?user=zpAvfFwAAAAJ&hl=en&citsig=AMstHGT-3v1t_0mYxWXngmNs1pkKZ_DqqNg).  
ORCID: <http://orcid.org/0000-0001-6325-820X>.  
ResearchGate: [https://www.researchgate.net/profile/Marko\\_Tadic3](https://www.researchgate.net/profile/Marko_Tadic3).  
Academia.edu: <https://ffzg.academia.edu/MarkoTadic>.

the Croatian language such as the *Croatian National Corpus* ([hnk.ffzg.hr](http://hnk.ffzg.hr)), *Croatian Morphological Lexicon* ([Hrvatski morfološki leksikon](http://Hrvatski_morfološki_leksikon)), *Croatian Dependency Treebank* ([Croatian Dependency Treebank - Zagreb](http://Croatian_Dependency_Treebank_-_Zagreb)) and the portal *Language Technologies for Croatian Language* ([jthj.ffzg.hr](http://jthj.ffzg.hr)). He was the leader of Croatian teams participating in several nationally funded projects as well as the FP7 RI project CLARIN ([CLARIN ERIC: Homepage](http://CLARIN_ERIC_Homepage)), FP7 project ACCURAT ([www accurat-project.eu](http://www accurat-project.eu)), ICT-PSP projects Let'sMT! ([Tilde MT](http://Tilde_MT)) and CESAR ([w.w.cesar-project.net](http://w.w.cesar-project.net)), FP7 project XLike ([HomePage - Linux Training](http://HomePage_-_Linux_Training)), the European Social Fund project HR4EU ([HR4EU](http://HR4EU)) and he is now leading the CEF projects MARCELL (<https://marcell-project.eu/>), EU Presidency Translator ([hr.presidencymt.eu](http://hr.presidencymt.eu)) and the Maria Skłodowska-Curie project CLEOPATRA ([www.cleopatra-project.eu](http://www.cleopatra-project.eu)). He is the president and one of the founders of the Croatian Language Technologies Society.



### ANNA MARIA TAMMARO

Anna Maria Tammaro has centered her research and teaching on digital library and digital heritage. Following the principle of putting the user community at the center, she has published the results of her research on the support of the digital library to the community and in particular to digital humanities scholars.

She obtained her PhD from the University of Northumbria with a thesis on the internationalization of LIS education for the digital library. She subsequently became involved in the design and teaching of joint courses between different universities.

She has been teaching in Parma since 2000 as a coordinator and lecturer of the International Information Studies Master (MAIS) with Northumbria University and subsequently (2006) of the International Master Digital Library Learning (DILL) with the University of Oslo, Tallinn and Parma. She has been a lecturer in the joint course of the Universities of Parma and Modena and Reggio since 2011, teaching digital publishing. Tammaro also dealt with open education and designed and taught (2016) the MOOC "Digital Library in Theory and Practice" on the European EMMA platform: the course in Italian, Spanish and English had 1500 participants.

Tammaro has coordinated and participated in numerous European projects on the digital library such as the most recent ROMOR, NMPLIS, NAVIGATE, OBERRED, concerning information literacy, gamification and research data management and NEWCOMER on community libraries.

Anna Maria Tammaro has been the Editor in Chief of the international journal *Digital library perspectives* (Emerald) since 2018.

She is active in international associations and is currently a member of the board of directors of ASIS & T and a member of AILIS. She was previously a member of the IFLA Governing Board (2007-2009; 2011-2013).



### MARIJANA TOMIĆ

Dr. Marijana Tomić is Associate Professor and Head of the Department of Information Sciences, University of Zadar, Croatia, and Head of the Centre for Research in Glagoliticism. She teaches courses in the theory and practice of information organization, cataloguing of old and rare books, book history and digital humanities on undergraduate, graduate and postgraduate levels. She is a (co)supervisor of final and doctoral thesis. She is a member of the Section for the History of Books and Libraries of Croatian Library Association. She is a chair of the interdisciplinary scientific project *Digitization, Bibliographic Description and Research of Texts Written on Glagolitic, Croatian Cyrillic and Latin Scripts Until the End Of 19th Century in Zadar and Šibenik Area (Written heritage)* which is being carried out at the University of Zadar by the Department of Information Sciences in co-operation with the Vestigia Manuscript Research Centre of the University of Graz, Austria, and is available at the portals *Pisana baština* ([Pisana baština](http://Pisana_baština)) and *GлагоLab* ([GлагоLab](http://GлагоLab)). She was involved in the five-year project *Production, Publishing and Maintaining National Cataloguing Rules: 2014-2018*. She is participating in a number of scientific projects, including *Linguistic, Paleographic and Codicological Analysis of Fragments of the Collection of Ivan Berčić of Zadar Provenance in Virtual Research Environment* (IP.01.2021.22) and *Protection of Zadar Cultural Heritage From the Negative Impact of Microorganisms* (IP-2021-01) and ERASMUS+ project *We Are All Together to Raise Awareness of Cultural Heritage* (WAAT). She is a recipient of the CLA award *Eva Verona* which is presented to the best young LIS professionals (2010), award for the best study of Croatian Renaissance heritage published in a scientific monograph (2014) and the University of Zadar Rector's Award (2019).



### MAURIZIO TOSCANO

Maurizio Toscano is currently working at the Spanish Foundation for Science and Technology (FECYT) as the project leader of the H2020 BRIDGE2HE project and lead developer of two recently launched web platforms: Horizon Europe NCP Portal ([Horizon Europe NCP Portal: Home](#)) and Horizon Europe NCP Virtual Campus ([Horizon Europe NCP virtual campus](#)).

He has a PhD *cum laude* from the University of Granada, with a thesis on the design and implementation of Web Information Systems in History, Art History and Archaeology. He graduated in Cultural Heritage Conservation from Università degli Studi della Tuscia (Viterbo, Italy), with a thesis on architectural archaeology applied to early medieval churches, and has a master's degree in Information and Communication Technology in Archaeology from the Università di Siena, with a thesis on quantitative archaeology and spatial analysis.

In the last 8 years, he has been actively involved in drafting and executing several European, national and regional research projects. In the European context, from 2014 to 2017, he has been the project leader and technology manager for Eachtra Archaeological Projects Ltd. in the MEMOLA FP7 project ([MEMOLA Project MEditerranean MOUNTainous LANDscapes | an historical approach to cultural heritage based on traditional agrosystems](#)). Since then, he worked in three other H2020 projects: REACH, DESIR and INCULTUM. He is an expert evaluator for the European Commission for Cultural Heritage and for the Spanish Evaluation Agency (AEI) in the field of Digital Humanities. Since 2019, he has been a member of the Board of Directors of the international association for Hispanic Digital Humanities (HDH).



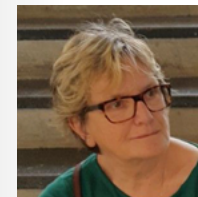
### ERZSÉBET TÓTH-CZIFRA

Erzsébet works as the Open Science Officer of DARIAH-EU, where she is responsible for fostering and implementing policies and practices related to the open dissemination of research results in the humanities. Her advocacy activities include providing workshops, webinars and other training activities on a regular basis. She is also involved in European infrastructure-building projects such as OpenAire Advance ([advance](#)), OPERAS-P ([OPERAS-P](#)) and TRIPLE ([Triple – Transforming Research through Innovative Practices for Linked Interdisciplinary Exploration](#)). She received her PhD in Cultural Linguistics and also has a background in scholarly communication.



### ANA VUKADIN

Ana Vukadin works as a bibliographic standards and metadata officer in the National and University Library in Zagreb, Croatia. She is the current editor-in-chief of the *Rules for Description and Access to Resources in Libraries, Archives, and Museums* (KAM). Her areas of interest include bibliographic conceptual models, ontologies, authority control, controlled vocabularies, and semantic interoperability across the LAM community. She has authored the book *Metadata for Transmedia Resources* (Chandos, 2019), and has served as a member of several IFLA bodies, including the Cataloguing Section Standing Committee and the Bibliographic Conceptual Models Review Group.



### MIRNA WILLER

Dr Mirna Willer retired as Full Professor at the Department of Information Sciences, University of Zadar, Croatia in 2018, where she taught from 2007. She taught courses in theory and practice of information organisation at the undergraduate, graduate and postgraduate levels. She worked from 1980 to 2007 as a systems librarian, standards officer and senior researcher at the National and University Library in Zagreb, Croatia, responsible for implementing IFLA UNIMARC bibliographic and authority formats in the Library's library management software, and for incorporating national cataloguing rules into the formats. She was responsible for the design and implementation of the Croatian Web Archive ([HAW](#)). She has been a member and chair of various national and international professional bodies. In 1997, in the capacity of Chair of the Professional Board of the Croatian Library Association she promoted the idea of investigating the possibility of co-operation between libraries, archives and museums. The seminar *Archives, Libraries, Museums: Possibilities of Co-operation within the Environment of the Global Information Infrastructure* dealt with the vision of this idea, theoretical framework from the aspect of information sciences, and ALM's standards aiming at the creation of the environment for the 'interoperability of content'. The seminars have been organized annually ever since. From 2013 to 2021, she served as Chair of the Professional Board for the project which resulted in the publication of the "Rules for description and access to resources in libraries, archives and museums".

She publishes widely. She wrote two books: *UNIMARC u teoriji i praksi* (*UNIMARC in Theory and Practice*) (1996) and *Bibliographic Information Organization in the Semantic Web* co-authored with Gordon Dunsire (2013).



## ANAMARIJA ŽUGIĆ BORIĆ

Anamarija Žugić Borić<sup>1</sup> studied Comparative Literature and Latin Language and Literature at the Faculty of Humanities and Social Sciences, University of Zagreb, Croatia, where she is currently writing a PhD thesis on music as an aspect of dramaturgy in contemporary theater in Croatia. Prior to joining Croatia's National DARIAH Coordination Office in her capacity as an assistant, she worked as a TA at the Department of Classical Philology, University of Zagreb, and as an assistant in the Division of the History of Croatian Theater, Croatian Academy of Sciences and Arts. She also worked as a publishing house editor. Anamarija Žugić Borić is also a freelance music and theater critic, copywriter, copyeditor, and proofreader. She was engaged in various DH projects and workshops, in particular in the Open Philology Workshop in Leipzig, in the Croatiae auctores Latini (CroALa) collection and in the digitization of theatrical materials for the Digital Collection and Catalog of the Croatian Academy of Sciences and Arts. Her research interests include performing arts, digital theater, theatrical sound and music, archival processing, NLP, digital collections and digital editions. She is the Chair of the DARIAH-EU working group Theatralia, dedicated to exploring the possibilities of information and communications technology in the Performing Arts.

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