



Pathways to Interdisciplinary and Transdisciplinary Research: the SHAPE-ID Toolkit

Find tools and resources to make informed decisions about interdisciplinary and transdisciplinary research with the Arts, Humanities and Social Sciences, the Sciences, Technology, Engineering and Mathematics, and societal partners.

Research Infrastructures

for collaborative research in the Arts, Humanities and Social Sciences

Abstract

This publication explains reasons for developing research infrastructures in the Arts, Humanities and Social Sciences (AHSS), and briefly introduces some European examples. These projects demonstrate how research infrastructures serve as meeting platforms for interdisciplinary endeavours and may support AHSS integration.

Compiled by

Maciej Maryl

Suggested citation

SHAPE-ID (2021). Research infrastructures for inter-and transdisciplinary research. Compiled by Maciej Maryl. SHAPE-ID topic guide series. Zenodo. [10.5281/zenodo.5116029](https://doi.org/10.5281/zenodo.5116029)

CCY-BY license

We encourage you to share and adapt these resources under [Creative Commons Attribution \(CCY-BY\) license](https://creativecommons.org/licenses/by/4.0/).

Online source – SHAPE-ID Toolkit

This publication is an extract of the SHAPE-ID Toolkit. For a general overview, visit: [10.5281/zenodo.4743703](https://doi.org/10.5281/zenodo.4743703).

The Toolkit provides tools and resources to make informed decisions about interdisciplinary and transdisciplinary research with the Arts, Humanities and Social Sciences, the Sciences, Technology, Engineering and Mathematics, and societal partners.



Contents

I. Research Infrastructures for Arts, Humanities and Social Sciences

Suggested citation:

SHAPE-ID (2021). Research Infrastructures for Arts, Humanities and Social Sciences. Compiled by Maciej Maryl. In SHAPE-ID (ed.): Research infrastructures on inter-and transdisciplinary research. SHAPE-ID topic guide series. Zenodo.

[10.5281/zenodo.5116029](https://doi.org/10.5281/zenodo.5116029)

II. OPERAS: Open Scholarly Communication in the European Research Area for Social Sciences and Humanities

Suggested citation:

SHAPE-ID (2021). OPERAS: Open Scholarly Communication in the European Research Area for Social Sciences and Humanities. Compiled by Maciej Maryl. In SHAPE-ID (ed.): Research infrastructures on inter-and transdisciplinary research. SHAPE-ID topic guide series. Zenodo.

[10.5281/zenodo.5116029](https://doi.org/10.5281/zenodo.5116029)

III. CLARIN: Common Language Resources & Technology Infrastructure

Suggested citation:

SHAPE-ID (2021). CLARIN: Common Language Resources & Technology Infrastructure. Compiled by Maciej Maryl. In SHAPE-ID (ed.): Research infrastructures on inter-and transdisciplinary research. SHAPE-ID topic guide series. Zenodo.

[10.5281/zenodo.5116029](https://doi.org/10.5281/zenodo.5116029)

IV. DARIAH: Digital Research Infrastructure for the Arts and Humanities

Suggested citation:

SHAPE-ID (2021). DARIAH: Digital Research Infrastructure for the Arts and Humanities. Compiled by Maciej Maryl. In SHAPE-ID (ed.): Research infrastructures on inter-and transdisciplinary research. SHAPE-ID topic guide series. Zenodo.

[10.5281/zenodo.5116029](https://doi.org/10.5281/zenodo.5116029)

Research Infrastructures for Arts, Humanities and Social Sciences



Introduction

Research infrastructures (RIs) are meant to support scholars at various stages of the research workflow. Humanities and Social Sciences have a long history of infrastructures like archives, libraries, or galleries.

Currently RIs serve as platforms strengthening interdisciplinary dialogue within and between research communities.

Keywords

Infrastructure, research, support, sustainability, training, AHSS

Summary

The digital transformation has allowed research infrastructures (RI) to adapt modern scholarly needs, enabling them to provide various types of support for scholarly needs such as access to materials and services, training and education or even advocacy among funders and policy makers for community-relevant issues.

The main difference between RIs and e-infrastructures (e.g. large repositories) lies in the former's situatedness in a particular research community of practice, meaning that they can respond to the needs of particular disciplines. Thus RIs serve as an interdisciplinary meeting platform for researchers from different disciplines, archivist, librarians, ICT professionals, who all work towards addressing their research questions with the support of modern technology.

The European Commission defines RIs broadly as “facilities, resources and related services that are used by the scientific community to conduct top-level research in their respective fields”. To ensure better alignment of such infrastructures with the key research needs and to streamline the cooperation between smaller, national entities, EC created ERICs (European Research Infrastructure Consortia), international legal entities active in the European Research Area.

ERICs aim at supporting particular international scholarly community. For instance [DARIAH](#) maintains focus on digital use of research data generated by various AHSS disciplines, whereas [CLARIN](#) provides resources, tools and services for language-based research. ERIC is thus a larger, often federated RI, which serves the same purpose, yet on a larger scale.

The key feature of all RIs is that they need to serve their users as their mission (as well as funding) depends on it. Hence RIs conduct regular surveys in order to better understand the needs of communities they serve and stress user-involvement activities. Researchers in need for guidance, know-how, tools or resources should feel encouraged to approach RIs and ask for their help in interdisciplinary endeavours.

Further Resources

- SHAPE-ID Case Study: [DARIAH](#)
- SHAPE-ID Case Study: [CLARIN](#)
- SHAPE-ID webinar [Infrastructures for Interdisciplinary Engagement: Lessons from the Digital Humanities](#) (18 Feb 2021)
- European Commission: [Legal Framework for a European Research Infrastructure Consortium : ERIC : Practical Guidelines](#). Website Brussels: Publications Office of the European Union. 2010.
- Moulin C, Nyhan J, Ciula A, et al.: [Research Infrastructures in the Humanities. Science Policy Briefing](#). Strasbourg: European Science Foundation. 2011.
- Duşa, Adrian, Dietrich Nelle, Günter Stock, and Gert G. Wagner, eds. [Facing the Future: European Research Infrastructures for the Humanities and Social Sciences](#). Berlin: Scivero. 2014.
- Main ERICs in AHSS:
 - [DARIAH](#) (Digital Research Infrastructure for the Arts and Humanities)
 - [CLARIN](#) (Common Language Resources & Technology Infrastructure)
 - [CESSDA](#) (The Consortium of European Social Science data Archives)
 - [ESS](#) (The European Social Survey)
- Relevant RIs applying to become ERICs:
 - [E-RIHS](#) (European Research Infrastructure for Heritage Science)
 - [OPERAS](#) (Open Scholarly Communication in European Research Area for the Social Sciences and Humanities)
 - [RelReS](#) (Research Infrastructure on Religious Studies)

Suggested citation

SHAPE-ID (2021). Research infrastructures on inter-and transdisciplinary research. Compiled by Maciej Maryl. SHAPE-ID topic guide series. Zenodo. doi.org/10.5281/zenodo.5116029

CCY-BY license

We encourage you to share and adapt these resources under [Creative Commons Attribution \(CCY-BY\) license](#).



OPERAS: Open Scholarly Communication in the European Research Area for Social Sciences and Humanities



Introduction

OPERAS federates tools, services and resources for open scholarly communication in social sciences and humanities.

Through its network of member institutions and cooperating partners OPERAS addresses scholarly communication needs of European researchers.

Keywords

Infrastructure, research, open access, scholarly communication, training, Arts, Humanities

Summary

OPERAS is an international not-for-profit association, currently in the process of applying for the [ERIC](#) (European Research Infrastructure Consortia) status. It consists of over 50 organisations from 17 European countries active in the field of scholarly communication: research institutions, publishers, libraries, and ICT providers. Its mission is to “to coordinate and federate resources in Europe to efficiently address the scholarly communication needs of European researchers in the field of SSH”. Whereas projects like [DARIAH](#) and [CLARIN](#) focus on the analysis and handling of AHSS data specific to particular disciplines, OPERAS’ scope lies in providing tools and services for the efficient communication of AHSS outputs at various stages of the research workflow, from discovery and collection, to enrichment, interpretation and dissemination.

OPERAS supports various stakeholders in the AHSS to make the transition to digital and open modes of scholarly communication, while remaining attentive to discipline-specific outputs such as monographs and scholarly editions. By federating the tools and services provided by its members, OPERAS aims to facilitate the open dissemination of outputs (e.g. through supporting innovative business models for scholarly publishers), as well as their visibility and discoverability (e.g. by providing one-point access to scattered open AHSS resources through the GOTRIPLE platform).

OPERAS empowers smaller entities like publishers, journal platforms or repositories to create scholarly-led alternatives to large commercial platforms, to prioritise the accessibility of resources for researchers over revenue. Moreover, the consortium stresses the importance of

“bibliodiversity”, i.e. scholarly communication in national languages through local infrastructures, as an important feature of AHSS research, which often achieves a strong local impact when communicated in the vernacular.

OPERAS stakeholders interact in seven [Special Interest Groups](#), dedicated to issues ranging from technical aspects (tools, services, standards) to multilingualism, business models and advocacy. Thus, OPERAS creates a transversal platform to translate the specific needs of AHSS researchers into services supporting the communication of their work. The [services](#) under development by consortium members focus on discovery ([TRIPLE](#)), certification of open access monographs ([DOAB](#)), [metrics](#) on the usage of open publications and providing one access point ([Publishing Service Portal](#)) to the various publishing services of OPERAS members.

Researchers who wish to take advantage of OPERAS services, incorporate novel, digital tools into their dissemination workflows, or simply wish to publish in open-access publications can learn more through [OPERAS events](#), or get in touch with the [national nodes](#). Institutions interested in a more extensive and sustainable cooperation may [join the consortium](#).

Further Resources

- [OPERAS – open scholarly communication in the european research area for social sciences and humanities area through scholarly communication \(operas-eu.org\)](#)
- [Triple – Transforming Research through Innovative Practices for Linked Interdisciplinary Exploration \(gotriple.eu\)](#)
- Maryl M, Błaszczńska M, Szulińska A and Rams P. The case for an inclusive scholarly communication infrastructure for social sciences and humanities [version 1; peer review: 2 approved]. F1000Research 2020, 9:1265 <https://doi.org/10.12688/f1000research.26545.1>
- Twitter: [@OPERASEU](#)

Suggested citation

SHAPE-ID (2021). Open Science and the Arts, Humanities and Social Sciences. Compiled by Maciej Maryl. SHAPE-ID topic guide series. Zenodo. doi.org/10.5281/zenodo.5116035

CCY-BY license

We encourage you to share and adapt these resources under [Creative Commons Attribution \(CCY-BY\) license](#).



CLARIN: Common Language Resources & Technology Infrastructure



Introduction

CLARIN provides tools and services for transdisciplinary research in various Arts, Social Sciences and Humanities disciplines, which benefit from the use of computational linguistic technology. Through its network of members and observers CLARIN stimulates transnational access to its services, serving as an umbrella for various scholarly initiatives.

Keywords

Infrastructure, research, support, sustainability, training, language, Arts, Humanities, Social Sciences

Summary

CLARIN is an ERIC (European Research Infrastructure Consortium), constituted by smaller national consortia operating in its member countries. Its mission is to “create and maintain an infrastructure to support the sharing, use and sustainability of language data and tools for research in the humanities and social sciences.” Unlike DARIAH, which focuses on various data types and methods through distributed tools and services, CLARIN aims at federating the language resources by adopting own standards and certifying its Service Providing Centres. This is to ensure the compatibility between linguistic resources (e.g. corpora) and tools for processing them in various languages.

CLARIN aims to support researchers, students, educators, developers, policy makers, citizen-scientists. Importantly, CLARIN caters not only for the community of linguists but also for other scholars in AHSS disciplines as Artificial Intelligence, Literary Studies, History, Journalism and Media Studies, Ethnography and Anthropology, Migration studies, Political Studies, Sociology and Psychology.

Researchers interested in an overview of opportunities offered by CLARIN can take the advantage of the [Virtual Language Observatory](#) to locate the resources they may wish to analyse and then choose a particular analytical tool through the [Language Resource Switchboard](#). Scholars requiring individual support in data processing or tailored tools are encouraged to contact [National User Involvement representatives](#) who serve as liaisons between the infrastructure and the broader research community. A dedicated page on [how to use the infrastructure](#) would be a good place to start.



Further Resources

- [CLARIN - European Research Infrastructure for Language Resources and Technology | CLARIN ERIC](#)
- [CLARIN - Common Language Resources and Technology Infrastructure - VideoLectures - VideoLectures.NET](#)
- [Tour de CLARIN | CLARIN ERIC](#)
- Twitter: [@CLARINERIC](#)

Suggested citation

SHAPE-ID (2021). CLARIN the European Research Infrastructure for Language Resources and Technology provides tools for researchers. Case study compiled by Maciej Maryl. In: SHAPE-ID (2021): Case studies collection on inter- and transdisciplinary research. Zenodo. [10.5281/zenodo.4743691](https://doi.org/10.5281/zenodo.4743691)

CCY-BY license

We encourage you to share and adapt these resources under [Creative Commons Attribution \(CCY-BY\) license](#).



DARIAH: Digital Research Infrastructure for the Arts and Humanities



Introduction

DARIAH provides tools and services for transdisciplinary research in Art & Humanities, taking advantage of ICT technologies.

Through its network of member countries and cooperating partners DARIAH stimulates transnational access to its services, serving as an umbrella for various scholarly initiatives.

Keywords

Infrastructure, research, support, sustainability, training, Arts, Humanities

Summary

DARIAH is an ERIC (European Research Infrastructure Consortium), constituted by smaller national consortia operating in its member countries. Its mission is to “empower research communities with digital methods to create, connect and share knowledge about culture and society”. DARIAH is structured around Virtual Competency Centres (VCCs) which are dedicated to the RI’s key areas of interest: (1) e-infrastructure, (2) research and education liaison, (3) scholarly content management, (4) advocacy, impact, and outreach.

DARIAH caters for various A&H disciplines, facilitating transdisciplinary and trans-sectoral cooperation between a range of stakeholders, including researchers, ICT professionals, librarians, and archivists. They can participate in over 20 transdisciplinary, self-organised [Working Groups](#), focused on specific issues such as different types of data (biographical, bibliographical, lexical geospatial), ethics, visual media, digital methods, etc.

DARIAH is targeting not only researchers acquainted with new technologies who consider themselves digital humanists, but also scholars following more traditional, disciplinary approaches, who wish to broaden their approach by taking up new methods and tools. Such services may be useful on various stages of research – from discovering and collecting assets, structuring, annotating and analysing them, to publishing and disseminating. Unlike CLARIN, which works towards federating its resources and services, DARIAH is more of a distributed infrastructure, focused on enabling access to and uptake of a [variety of tools](#) developed by its partners.

The infrastructure has a strong teaching component, offering access to various resources through [DARIAH Campus](#) and [Parthenos training modules](#). It also maintains the [Digital Humanities Course Registry](#), monitoring the relevant learning opportunities available all over the world. Researchers who wish to integrate digital methods into their disciplinary research workflows can approach DARIAH through various avenues: by participating in [DARIAH events](#), joining [Working Groups](#), contacting [national members](#) or creators of DARIAH-affiliated tools.

Further Resources

- [DARIAH | Digital Research Infrastructure for the Arts and Humanities](#)
- Dallas, Costis, et al. 2017. '[European Survey on Scholarly Practices and Digital Needs in the Arts and Humanities - Highlights Report](#)'. Zenodo.
- [DARIAH can help researchers to use digital methods at every stage of their research | DARIAH Campus](#)
- Twitter: [@DARIAHeu](#)

Suggested citation

SHAPE-ID (2021). DARIAH the European Research Infrastructure Digital Research Infrastructure for the Arts and Humanities provides tools for researchers. Case study compiled by Maciej Maryl. In: SHAPE-ID (2021): Case studies collection on inter- and transdisciplinary research. Zenodo. [10.5281/zenodo.4743691](https://doi.org/10.5281/zenodo.4743691)

CCY-BY license

We encourage you to share and adapt these resources under [Creative Commons Attribution \(CCY-BY\) license](#).

