

ACDH *meets* MLA2S

Make it (net)work! - MLA2S Networking Seminar #07

Mission Statement

The institute promotes research in the humanities through the targeted use of digital methods and develops innovative technologies for the humanities. Building on the methodological and theoretical paradigms of **digital humanities**, the institute bundles relevant expertise, integrates existing resources, and thereby sustainably increases the efficiency of research.

The focus of our institute's digitally oriented research and service portfolio includes, in particular, the processes of **digitization, modeling of humanities and cultural research data, data processing and analysis, data management and long-term archiving, web development, knowledge transfer, and the provision and publication of processed resources** and research results.

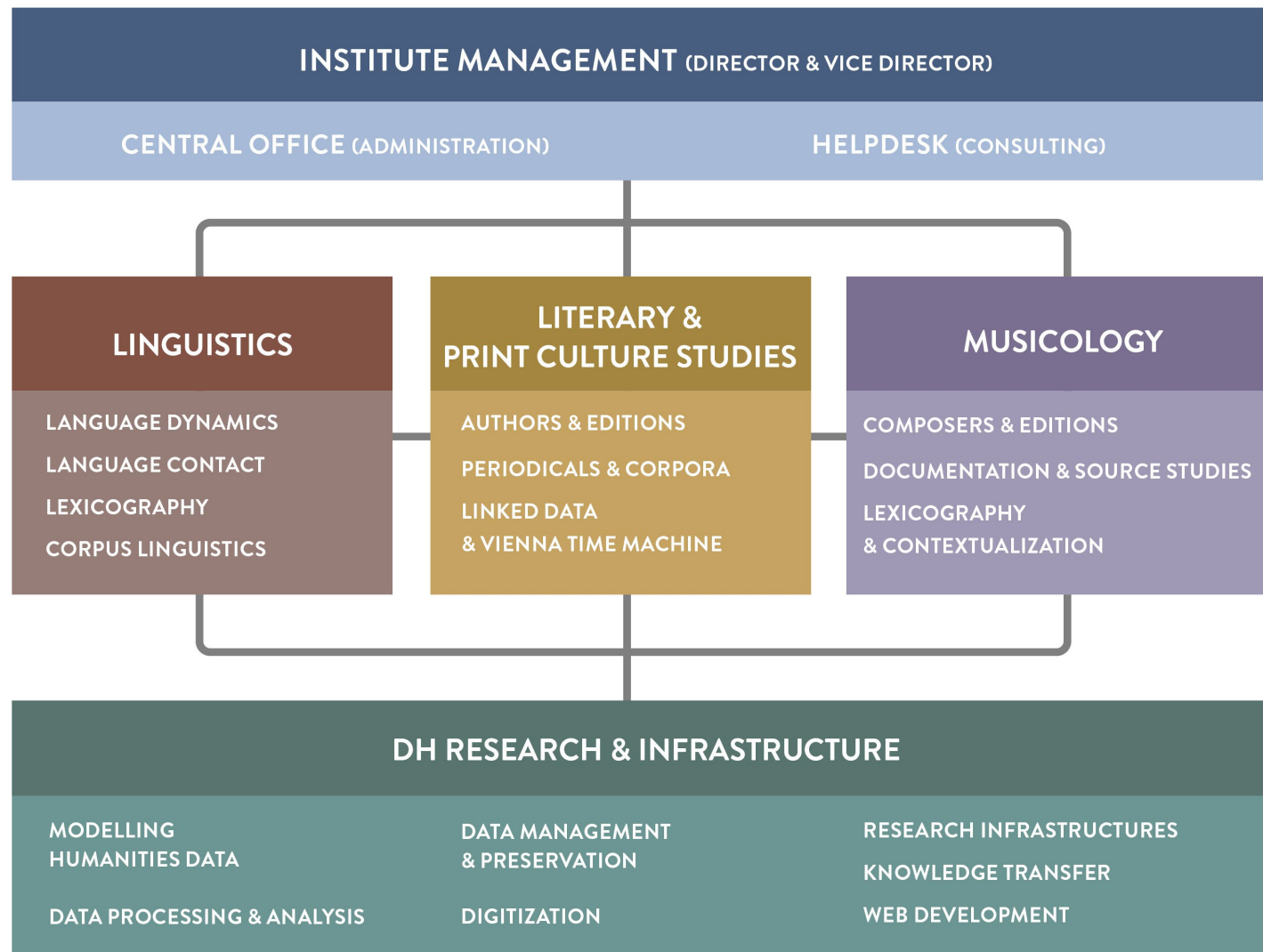
The institute's digitally oriented research in the humanities and cultural studies, which is also reflected in its structure, focuses in particular on the paradigms of **linguistics, literary and print culture studies, and musicology**.

Mission Statement – AI

The institute acts as a **bridge between AI research and basic research in the humanities**. Its activities focus primarily on the design and implementation of research projects that use AI methods and tools.

With its wide-ranging professional and technical expertise, its high-quality, manually curated data material, and its numerous collaborations, the ACDH is ideally positioned to develop specialized models (further).

ACDH Research Units



DHRI – Research & Activities key areas

DH RESEARCH & INFRASTRUCTURE

MODELLING
HUMANITIES DATA

DATA PROCESSING & ANALYSIS

DATA MANAGEMENT
& PRESERVATION

DIGITIZATION

RESEARCH INFRASTRUCTURES

KNOWLEDGE TRANSFER

WEB DEVELOPMENT

Linguistics – Key research areas

LINGUISTICS

LANGUAGE DYNAMICS

LANGUAGE CONTACT

LEXICOGRAPHY

CORPUS LINGUISTICS

RESEARCH

Research Units

→ DH Research & Infrastructure +

→ Linguistics –

Team

Research +

Resources +

News & Events +

→ Literary & Print Culture Studies +

→ Musicology +

Projects +

Resources +

Home > Research > → Linguistics

Linguistics



Linguistics – Resources

LINGUISTICS

LANGUAGE DYNAMICS

LANGUAGE CONTACT

LEXICOGRAPHY

CORPUS LINGUISTICS



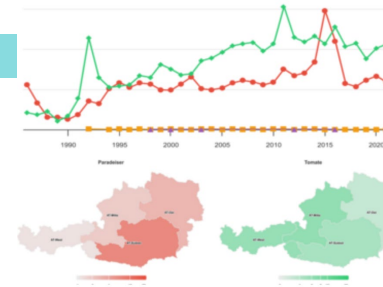
WBÖ – ONLINE DICTIONARY



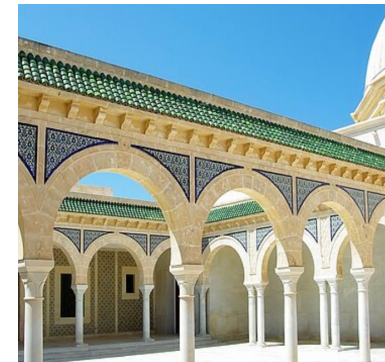
DIÖ CORPUS



DLYS – DICTIONARY OF
LOANWORDS IN YALKUT
SHIMONI



CORPUSUM – VISUALIZATION
TOOL FOR CORPUS REQUESTS



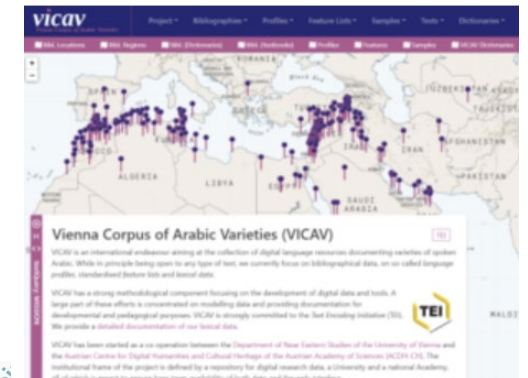
TUNICO-CORPUS



LIÖ – LEXICAL INFORMATION
SYSTEM AUSTRIA

Preposition type	Base form
andre	ando ando
angle	angle
avri	avri avri
bi	bi bi
dzi	dži

DATABASE OF ROMANI
DIALECTS



LP – Key research areas

LITERARY & PRINT CULTURE STUDIES

AUTHORS & EDITIONS

PERIODICALS & CORPORA

LINKED DATA
& VIENNA TIME MACHINE

RESEARCH

Research Units

→ DH Research & Infrastructure +

→ [Linguistics](#) +

→ **Literary & Print Culture Studies** -

Team

Research +

Resources +

News & Events +

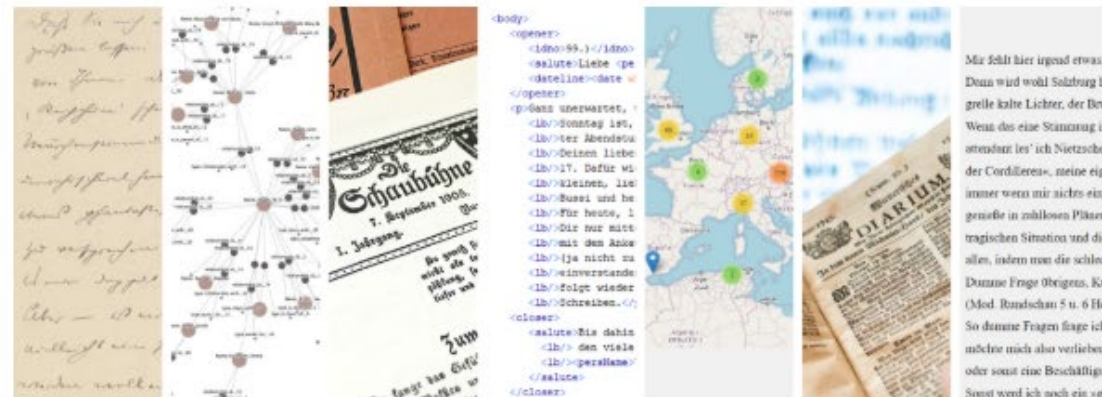
→ Musicology +

Projects +

Resources +

Home > Research > → Literary & Print Cu... ▾

Literary & Print Culture Studies



LP – Resources

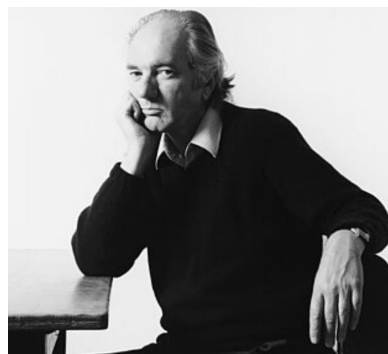
LITERARY &
PRINT CULTURE STUDIES

AUTHORS & EDITIONS

PERIODICALS & CORPORA

LINKED DATA

& VIENNA TIME MACHINE



THOMAS BERNHARD –
WITTGENSTEINS NEFFE



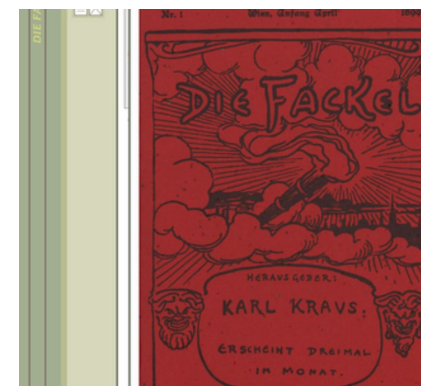
AUDEN MUSULIN PAPERS



BRENNER ONLINE



ARTHUR SCHNITZLER
INTERVIEWS



AAC-FACKEL

Wienerisches
DIGITARIUM.

WIENERISCHES DIGITARIUM

PERSONEN DER
MODERNE
BASIS **PMB**



PMB - PERSONEN DER
MODERNE BASIS

Musicology – Key research areas

MUSICOLOGY

COMPOSERS & EDITIONS

DOCUMENTATION & SOURCE STUDIES

LEXICOGRAPHY

& CONTEXTUALIZATION

RESEARCH

Research Units

→ DH Research & Infrastructure +

→ Linguistics +

→ Literary & Print Culture Studies +

→ Musicology –

Team

Research +

Resources +

Publication Series +

News & Events +

Institutional History

Projects +

Home > Research > → Musicology

Musicology



Musicology – Resources

MUSICOLOGY

COMPOSERS & EDITIONS

DOCUMENTATION & SOURCE STUDIES

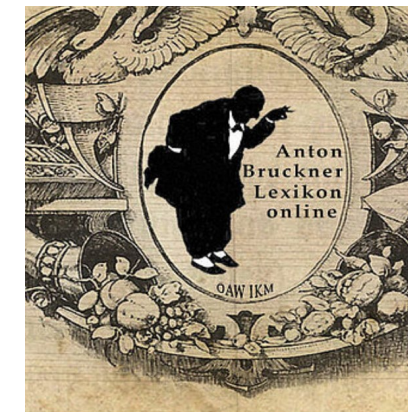
LEXICOGRAPHY
& CONTEXTUALIZATION



SCHUBERT-DIGITAL



FUX CONCERTATO



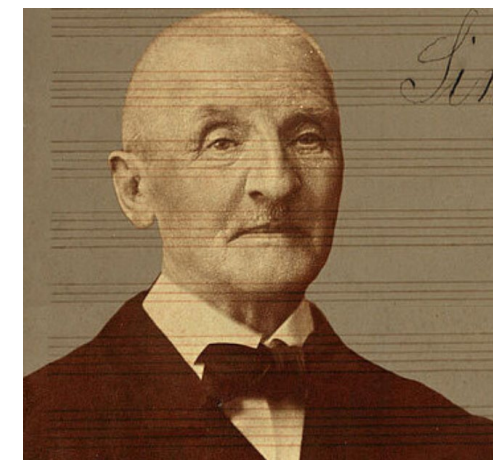
ABLO – ANTON
BRUCKNER
ENCYCLOPAEDIA ONLINE



MEDIEVAL MUSIC
MANUSCRIPTS – IMAGE
DATABASE



OEML – THE AUSTRIAN
ENCYCLOPEDIA OF
MUSIC



BRUCKNER ONLINE

Resources

- Editions (text and music)
- Corpora (text and language)
- Dictionaries and encyclopedias
- Research Platforms



Potentials and
Challenges for
AI methods/&tools

ACDH as DH centre of expertise

- Comprehensive service and cooperation offerings for digital research aspects
- Cooperation within the ACDH, the Austrian Academy of Sciences, and the national and international context
- Standardized and continuously optimized processes
- Data management, ARCHE repository

➔ Coordination by **Consulting-Team** (“Helpdesk”)

Research Topics & Activities in a nutshell

- Identifying, analyzing, visualizing, documenting of 'patterns' and 'peculiarities' in texts, languages, music and networks (named entities)
- Paradigms: linguistics, literary studies, musicology but also historical studies, archeology, political science, East Asian studies, theology, ... → humanities in general (**text** as central framework)
- Development and processing of digital **resources** in a wide variety of formats → FAIR principles

ACDH *meets* AI

AI-powered leaps in humanities research

- **Unprecedented amounts of language data thanks to massively improved**
 - automated speech transcriptions
 - automated text recognition
- **Philological analyses over comprehensive (textual) datasets, for example**
 - layout analyses (e.g. research on historical newspapers)
 - pattern recognition, clustering (e.g. stylometry, author attribution)
 - text mining, information extraction (e.g. research on language discourses, NER)
 - word sense disambiguation (e.g. research on language variation and change)
 - lexicographic data mining (e.g. research on historical vocabulary)
- **AI-generated knowledge graphs from heterogeneous sources and unstructured data**

AI/ML strategy at ACDH

- Critical (!) use – evaluation of the quality, reflection on the usefulness, advantages/disadvantages compared to other (traditional) methods
- Focus on data quality & transparency
(bias, context, attribution, ethical use, critical evaluation)
- Offer high-quality research data (text data, in particular) for ML training and validation
- Broker between domain experts and ML world – knowledge transfer, technology scouting (in alignment with RIs CLARIN and DARIAH)
- Promoting knowledge exchange externally (researchers, DH community) and internally ('upskilling' initiatives)
- Concentrate on the combination of stochastic and knowledge-based approaches (language vs. structured data)

Today's insights

- **Daniel Elsner, Wolfgang Koppensteiner & Katharina Korecky-Kröll:** Using LLMs to write a historical dialect dictionary
- **Stefan Resch:** Using Word Embeddings to analyse differences and shifts of semantics over time, space, and corpora
- **Robert Klugseder:** Model Context Protocol (MCP) Servers for Research, Automation, and AI Experiments

Recent developments

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