

# Arno Bosse

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## WORK EXPERIENCE

### **University of Basel**

Basel, Switzerland

#### Lead, Research and Infrastructure Support (2025–present)

Philosophisch-Historische Fakultät

<https://rise.unibas.ch/>

#### Responsibilities:

- Oversight over the Research and Infrastructure Support (RISE) team with responsibility for its strategic and operational direction;
- Support researchers in the humanities and social sciences in the design, proposal preparation, and implementation of digitally methodological research projects, and ensure the development and continued enhancement of RISE's services;
- Collaborate with the central units of the university as well as with external partner institutions, and represent RISE in relevant committees and professional communities.

### **Royal Netherlands Academy of Arts and Sciences (KNAW)**

Amsterdam, The Netherlands

#### Manager, Funding and Partnerships (2019-2025, 0.8 FTE)

Digital Infrastructure Department, KNAW Humanities Cluster

<https://di.huc.knaw.nl>

#### Responsibilities:

- Oversight and coordination of the Digital Infrastructure department's role in external grant applications, in particular EU research and innovation actions and Dutch national research infrastructure proposals;
- Technical consultant for researchers at the KNAW Huygens Institute and liaison to the developer teams in the Digital Infrastructure department;
- Chair of the cross-institute internal selection committee for EU and Dutch national research proposals at the KNAW Humanities Cluster;
- Member of the KNAW Humanities Cluster grant team, representing the Digital Infrastructure department.

#### Highlights:

- Co-developed the proposal strategy and co-wrote (as grant holder) a successful €2.8M EU Horizon 2020 research and innovation action grant application on sensory data mining and olfactory cultural heritage (*Odeuropa*, <https://odeuropa.eu>);
- Collaborated with historians, literary scholars, linguists and social scientists in the KNAW Humanities Cluster to advise and (co-)develop technical plans for their research and infrastructure proposals;
- Undertook a comprehensive analysis of three years of grant application data (2017-20) from the KNAW Humanities Cluster to identify trends in scholarly and computational research goals, funding sources, technical methodologies, staffing, budgets, and success factors.

WORK  
EXPERIENCE  
(cont.)

Technical Infrastructure lead (2023-2025, 0.2 FTE)  
*Globalise* project, Huygens Institute, KNAW Humanities Cluster  
<https://globalise.huygens.knaw.nl>

Responsibilities:

- Develop a strategy for the front-end design and functionality of the research portal;
- Liaise with the Cluster's software development and digital infrastructure teams;
- Oversee the work of the (to be hired) external design and software development bureau(s) for the *Globalise* project's research portal.

Highlights:

- Initiated and co-wrote successful research applications for the *Globalise* project on preparing FAIR+ structured data and leveraging AI for post-HTR correction;
- Collaborated with the Cluster's developers to create a multi-lingual language detection pipeline for the *Globalise* corpus;
- Mentored a M.A. Artificial Intelligence student developing a visual feature-based document boundary and classification pipeline for the *Globalise* corpus.

**University of Oxford**  
Oxford, United Kingdom

Digital Project Manager (2015-2019)  
Cultures of Knowledge project, Faculty of History  
<https://culturesofknowledge.org>

Responsibilities:

- Worked closely with the project director and online editor to co-develop the research goals and long-term funding strategy for *Cultures of Knowledge*;
- Developed and led the technical agenda for *Early Modern Letters Online* (<http://emlo.bodleian.ox.ac.uk>) and oversaw the work of a geographically dispersed team of developers (Helsinki, Oxford and Amsterdam);
- Planned and made recommendations to the project director on allocating the project's resources; prepared and oversaw the project's budget;
- Managed the overall operations of the project; ensured that its goals were correctly implemented and complied with the university's and external funders' policies and procedures;
- Co-developed and co-wrote the project's UK and USA research grant applications;
- Oversaw collaborative projects with UK and European academic partners;
- Contributed to the EU COST Action, *Reassembling the Republic of Letters* (<https://www.cost.eu/actions/IS1310/>) as a member of the 'Data Exchange and Strategic Planning' working group.

Highlights:

- Developed the strategy and co-wrote a successful \$468,000 proposal (awarded 2017) to the Andrew W. Mellon Foundation to create three early modern, Linked Open Data resources: *EM People* (prosopographical name authority), *EM Places* (historical gazetteer), and *EM Dates* (historical calendar conversions).
- Together with partners at Queen Mary University London and Cambridge University, co-wrote a successful £1M proposal (*Networking Archives*, awarded 2018) to the UK Arts and Humanities Research Council to curate and analyse a 'meta-archive' of c. 430,000 early modern letter records.

WORK  
EXPERIENCE  
(cont.)

**Personal Sabbatical**

Munich, Germany

Home nursing care for my father (part-time, 2011-12; full-time, 2013-2014).

Göttingen State and University Library  
Göttingen, Germany

Wissenschaftlicher Mitarbeiter / Research Associate (2010-2012)  
Research & Development Department

Responsibilities:

- National Project Coordinator for the German “Digital Research Infrastructure for the Arts & Humanities” (DARIAH-DE) consortium
- Technical consultant for the “Innovation” and “Usability” working groups of the German National Library digital web portal
- Technical consultant for the *Digital Blumenbach* project

**The University of Chicago**

Chicago, USA

Director of Technology, Humanities Computing (2005-2010)  
Division of the Humanities (<https://humanities.uchicago.edu>)

Responsibilities:

- Oversight over all technology resources, projects and policies supporting the Humanities Division’s research and administrative needs; 6 full-time staff; 5 co-reports
- Responsible for c. 360 humanities faculty, lecturers, and staff; 21 degree-granting graduate departments; 13 interdisciplinary centres and committees
- Shared oversight of the Humanities Division’s Visual Resources Center, Digital Media Archives, Visual Art Resources Center, and Language Center

Highlights:

- Consolidated standalone IT units into a new Humanities Computing department and increased staff; maintained balanced budgets in all reporting units; created new revenue streams from IT consulting & hosting services.
- Facilitated and expanded the division’s collaborative research partnerships with affiliated university units, including the Regenstein Library, University IT Services, Computation Institute, ARTFL (<https://artfl-project.uchicago.edu>), the Smart Museum of Art, and the Oriental Institute
- Oversaw the roll-out of research & administrative IT infrastructure for faculty and staff with central facilities for databases, file sharing, web- and scholarly publishing, departmental websites, digital asset management, media streaming and long-term digital storage
- Co-authored a successful \$1.8M internal proposal to the University of Chicago for a new College and Humanities Division, “Language Center” (<https://languages.uchicago.edu>)
- Consulted on and co-authored successful faculty research grants from the National Endowment for the Humanities (NEH), American Council of Learned Societies (ACLS), US Department of Education, and the University of Chicago

WORK EXPERIENCE  
(cont.)

Technical Project Manager, *Kanji alive* project (2002-2005)  
Division of the Humanities, University of Chicago  
<https://kanjalive.com>

Digital Media Specialist, Faculty Digital Media Lab (1996-2002)  
Networking Services and Information Technology, University of Chicago

Technical Intern, Systems Engineering Group (1992-1996)  
NeXT Computer Germany  
Ismaning-Munich, Germany

EDUCATION

Ph.D. candidate (a.b.d.), Comparative Literature, University of Chicago, 2005-2010  
“From Kinema to Caligari: Reconceiving Early German Expressionist Cinema”  
Dissertation Advisors: Katie Trumpener (chair), Reinhold Heller, Yuri Tsivian

M.A., Comparative Literature, University of Chicago, 2002  
Graduate coursework in Cinema Media Studies, Art History, and Comparative Literature

Graduate M.A. coursework in Literature and Art History, 1992-1996  
Ludwig-Maximilians Universität, Munich

B.A., Art History & Literature, Reed College, 1992  
Senior Thesis: “Abraham and Isaac ‘in the land of vision’: Narrative Structures in the Baptistry Competition Panels and the Sacrifice of Isaac (Genesis 22:1-19)”  
Thesis Advisors: Nathalia King, Peter Parshall

RESEARCH GRANTS AWARDED  
(selection)

*Using vision-language models to enhance our understanding of historical document collections*  
NWO Open Science Infrastructure, 2025  
Co-written with Rutger van Koert (KNAW)

*Enriching Digital Heritage with LLMs and Linked Open Data*  
Lorentz e-Science Center Workshop, 2024  
Co-written with Gethin Rees (British Library), Tariq Yousef (University of Southern Denmark), Rossanna Damiano (University of Turin), and Leif Erikson (University of Exeter)

*Combatting Bias: Guidelines for Creating FAIR+ Data in the Humanities and Social Sciences*  
NWO TDCC-SSH, 2023  
Co-written with Lodewijk Petram, Manjusha Kruppath (KNAW)

*Leveraging AI for HTR post-correction*  
e-Science Open Competition, 2022  
Co-written with Lodewijk Petram (KNAW)

*Nose Wise: Olfactory Modelling and Data Mining for Cultural Heritage Collections*  
Lorentz Center Workshop, 2020  
Co-written with Inger Leemans and Marieke van Erp (KNAW)

*Odeuropa: Negotiating Olfactory and Sensory Experiences in Cultural Heritage Practice and Research*  
EU Horizon 2020 (DT-Transformations-12-2018-2020), 2020  
Co-written with Inger Leemans and Marieke van Erp (KNAW)

*Geborgen IJs (“Making historical transcriptions accessible with AI”)*  
Dutch National Archives, 2019  
Co-written with Hennie Brugman and Martin Reynaert (KNAW) and Atos Nederland BV.

RESEARCH  
GRANTS  
AWARDED  
(selection)

*Improving access to early modern gothic script through optical character recognition*  
ICT with Industry (NWO and Lorentz Center), 2019  
Co-written with Rutger van Koert (KNAW) and Lotte Wilms (Koninklijke Bibliotheek)

*Networking Archives: Assembling and analysing a meta-archive of correspondence, 1509-1714*  
Arts and Humanities Research Council, 2018  
Co-written with Howard Hotson and Miranda Lewis (Oxford University); Ruth Ahnert (Queen Mary University London), and Sebastian Ahnert (Cambridge University)

*Cultures of Knowledge: Networking the Republic of Letters, 1550-1750*  
Andrew W. Mellon Foundation, 2017  
Co-written with Howard Hotson and Miranda Lewis (Oxford University)

*NEH Institutes for Enabling Geospatial Scholarship*  
Scholar's Lab, University of Virginia, 2009-2010  
Co-written with Jim Nye, Regenstein Library (University of Chicago)

*Cinematics, a Digital Laboratory for Film Studies*  
American Council of Learned Societies (ACLS), Digital Innovation Grant, 2006  
Co-written with Yuri Tsivian, Cinema & Media Studies (University of Chicago)

*Kanji Alive: A Kanji Teaching Tool for the Web*  
The Consortium for Language Teaching and Learning, National Level Award, 2004  
Co-written with Harumi Lory, East Asian Languages & Civilizations (University of Chicago)

PUBLICATIONS

Hindermann, Maximilian, Lea Katharina Kasper, Sorin Marti, and Arno Bosse. "From Experiments to Epistemic Practice: The RISE Humanities Data Benchmark." In *Journal of Open Humanities Data* (2026). <https://doi.org/10.5334/johd.470>.

Hindermann, Maximilian, Sorin Marti, Lea Katharina Kasper, and Arno Bosse. "The RISE Humanities Data Benchmark: A Framework for Evaluating Large Language Models for Humanities Tasks." In *Journal of Open Humanities Data* 24 (2026). <https://doi.org/10.5334/johd.481>.

Lip, Gavin, Victor de Boer, Arno Bosse, and David Grantsaan. "Fine-Tuning Large-Language Models for Early Modern Dutch Translation." In *Computational Humanities Research* 2 (2026): e3. <https://doi.org/10.1017/chr.2026.10022>.

Romein, C. Annemieke, Tobias Hodel, Femke Gordijn, Joris J. van Zundert, Alix Chagué, Milan van Lange, Helle Strandgaard Jensen, et al. "Exploring Data Provenance in Handwritten Text Recognition Infrastructure: Sharing and Reusing Ground Truth Data, Referencing Models, and Acknowledging Contributions." In *Journal of Data Mining and Digital Humanities, Historical Documents and Automatic Text Recognition* (2024). <https://doi.org/10.46298/jdmdh.10403>.

Petram, Lodewijk, Leon van Wissen, Sophie Arnoult, Sterre Berentzen, Tanne van den Berg, Arno Bosse, Femke Brink, et al. "GLOBALISE: A Plurivocal Approach to Unlocking Colonial Sources." Poster presented at *DHBenelux* 2023, Brussels, Belgium, 31 May-2 June 2023. <https://doi.org/10.5281/zenodo.7989679>.

Tuominen, Jouni, Eetu Mäkelä, Eero Hyvönen, Arno Bosse, Miranda Lewis, and Howard Hotson. "Reassembling the Republic of Letters - A Linked Data Approach." In *CEUR Workshop Proceedings 2084* (2018): 76-88. <http://ceur-ws.org/Vol-2084/paper6.pdf>.

PUBLICATIONS (cont.)	<p>Bosse, Arno. "Dimensions of Data: Space." In <i>Reassembling the Republic of Letters in the Digital Age: Standards, Systems, Scholarship</i>, edited by Howard Hotson and Thomas Wallnig. Göttingen: Göttingen University Press, 2019. <a href="https://doi.org/10.17875/gup2019-1146">https://doi.org/10.17875/gup2019-1146</a>.</p> <p>Bosse, Arno. "Exchanging and Sharing Metadata: Technical Systems." In <i>Reassembling the Republic of Letters in the Digital Age: Standards, Systems, Scholarship</i>, edited by Howard Hotson and Thomas Wallnig. Göttingen: Göttingen University Press, 2019. <a href="https://doi.org/10.17875/gup2019-1146">https://doi.org/10.17875/gup2019-1146</a>.</p> <p>Bosse, Arno. "Time." In <i>Reassembling the Republic of Letters in the Digital Age: Standards, Systems, Scholarship</i>, edited by Howard Hotson and Thomas Wallnig. Göttingen: Göttingen University Press, 2019. <a href="https://doi.org/10.17875/gup2019-1146">https://doi.org/10.17875/gup2019-1146</a>.</p>
TEACHING EXPERIENCE	<p>Preceptor, Master of Arts in the Humanities Program, University of Chicago, 2003-2005</p> <ul style="list-style-type: none"> <li>■ "Philosophical Foundations of Literary Criticism"</li> <li>■ M.A. Thesis Writing Instructor</li> <li>■ Graduate Student Advisor</li> </ul> <p>German Graduate Language Examiner, University of Chicago, 2002-2004  Teaching Instructor, Center for Teaching &amp; Learning, University of Chicago, 2003  German Language Instructor, University of Chicago, 2000-2003  Teaching Assistant, Humanities Common Core, University of Chicago, 1999-2000</p>
AWARDS AND FELLOWSHIPS	<p>George B. Walsh Award for Innovative Computing in the Humanities  Division of the Humanities, University of Chicago</p> <ul style="list-style-type: none"> <li>■ "The Montaigne Bordeaux Edition Project" (2003) with Philippe Desan Department of Romance Languages &amp; Literatures</li> <li>■ "Kanji Alive Project" (2002) with Harumi Lory Department of East Asian Languages &amp; Civilizations</li> </ul> <p>Doolittle-Harrison Dissertation Research Fellowship, University of Chicago, 2002  Humanities Division Graduate Fellowship, University of Chicago, 1997-2000</p>
RECENT TALKS (selection)	<p>"AI-supported explorations of the Rijksmuseum Collections", Rijksmuseum, 2026  "Improving the (Re)searchability of Archives with AI", Dutch National Archives, 2024  "Linking Projects: Beyond", RSA, online, 2021  "Tracing Places and Dates in an Early Modern context", Time in Space, Pisa, 2019  "Reconstructing Historical Networks", German Historical Institute, Washington D.C., 2018  "Early Modern Places: A historical geo-gazetteer", Spatial Humanities, Lancaster 2018  "Digitizing the Enlightenment", Voltaire Foundation, University of Oxford, 2018  "Early Modern People, Places and Dates", British Museum, 2017</p>
SERVICE	<p>Advisory Committee, Institute for Spatial History Innovation, Pittsburgh University, 2026  Member of the A.I. policy review board, KNAW, 2025  Humanities Cluster representative on the KNAW work council, 2024-2025  Reviewer, Harvard University/Villa I Tatti, Digital Fellowship Programme, 2018-2024  Reviewer, Workshop on Computer VISion for ART Analysis, 2022  Coordinator, "Exploring Machine Learning" workshop, DHOxSS Oxford, 2017  Coordinator, "Analysing Humanities Data" workshop, DHOxSS Oxford, 2016  Reviewer, ADHO Digital Humanities Conference, 2010-2020  Grant Reviewer, NEH Office of Digital Humanities, 2008-2009</p>
LANGUAGES	<p>Native English speaker; fluent in German; proficient in Dutch and Afrikaans</p>