German History–*Digital*: A Platform for Transnational Historical Knowledge Co–creation

Matthew Hiebert
hiebert@ghi-dc.org
German Historical Institute (Washington DC)
United States of America

Simone Lässig
laessigs@ghi-dc.org
German Historical Institute (Washington DC)
United States of America

Andreas Witt
andreas.witt@uni-koeln.de
University of Cologne, Germany

The German Historical Institute Washington (GHI) is in the development phase of German History-*Digital* (GH-D), a transatlantic digital initiative to meet the scholarly needs of historians and their students facing new historiographical and technological challenges. In the proposed paper we will discuss the research goals, methodology, prototyping, and development strategy of GH-D as infrastructure to facilitate transnational historical knowledge co-creation for the large community of researchers and students already relying on digital resources of the GHI and for the growing constituency of citizen scholars.

Despite its great progress, the digital humanities have yet to broadly impact research in German history. The past ten years have witnessed the proliferation of online resources relevant to the field, yet these materials largely remain siloed in different systems, with material difficult to discover or gather by scientists into corpora. Historians themselves are today increasingly producing scholarly content in digital form, but there remains no established criteria for the peer review of digital publications and projects. This ultimately limits the time and energy the research community is willing to invest into digital knowledge production and thus confines the Digital Humanities' potential for growth.

Preservation and future access to digital materials is also of critical importance, particularly in the North American context where continental and national digital research infrastructures for digital humanities are lacking; there is currently no equivalent to European research infrastructures like CLARIN or DARIAH. In respect to scientific methodology, there is growing expectation that historians take

advantage of an abundance of digital tools, yet there remains insufficient integration between tools for historical research and between tool sets and online resources. The importance of citizen science and knowledge co-creation for the future of historical research is also recognized, yet for these developments to occur there must exist beyond e-lists and other legacy communication technologies scholarly environments for the creation of area-specific research communities, scientific collaboration, and public engagement.

The planning for GH-D involved surveying over four hundred scholars of the many thousands already using digital resources produced by the GHI. The most prominent of these resources is the digital source collection „German History in Documents and Images" (GHDI), which is widely used at universities in the German and English speaking world. Launched in 2003 and currently undergoing a technical and conceptual revamp in conjunction with GH-D, GHDI currently includes thousands of pages of English-language translations of German historical texts, as well as images and maps, all of which are accessed by approximately 5,000 visitors per day. Our planning for GH-D also continues to involve consultations and workshops with expert historians and digital humanists, and the establishment of partnerships with institutions and major initiatives that share our concern for the future of history in the digital age.

The German History-*Digital* platform addresses needs of digital scholarship through five goals and integrated work packages concerted to these goals: *discovery, analysis, production, preservation, and community*.

We believe GH-D provides a new model in the design and development of a social knowledge creation environment for humanities-oriented research. The proposed paper will be structured by providing technical and theoretical explication of the core work packages within relevant DH contexts.

Discovery

A major challenge facing scholarship online is that a vast number of digital resources, particularly those produced independently by scholars or smaller institutions, do not have standardized metadata records and are not accessible via any centralized scientific index. GH-D involves development of a peer-reviewed index of scholarly digital objects using Dublin Core (DC) and CLARIN's Component MetaData Infrastructure (CMDI) standards via a customized Blacklight technology stack.

Preservation

For scholars developing historical digital projects in North America, there exists no inter-institutional infrastructure for preserving their data and making it openly available. With consultative and knowledge support from CLARIN-D, which is part of the European research infrastructure CLARIN, the GH-D project will establish the first portal to CLARIN in North America at GHI Washington. Central to this process is the implementation of a repository that allows a sustainable storage of the content and the inclusion in a digital environment to ease access, search and an interoperable data formats. The content of the repository and the repository itself adheres to international, widely accepted and supported standards. The high quality of the technical solution and the conformance to standards is secured by an independent organization that gives out the Data Seal of Approval. Like the majority of CLARIN centres in Germany, the GH-D will use a Fedora Commons repository with Apache Solr for indexing and search, components included in the technology stack of Project Hydra. Our partnership with CLARIN promotes open access, open science and knowledge co-creation in the North American context, and is an important component in the overall digital humanities research strategy of the GHI. As an institute of the Max Weber Stiftung, we are also in partnership with DARIAH-DE and arrangements have been made for DARIAH to provide long term preservation of GHI digital projects in their entirety, beginning with the first edition of German History in Documents and Images. Beginning with the GHDI project, GH-D is part of the DARIAH-DE Service Lifecycle program.

Production and Publication

As a knowledge co-creation platform, GH-D will bring together editors, researchers and citizen scientists in the development of innovative online projects. Three such pilot projects are currently in development based on customization, including support for TEI, and internationalization of the Scalar 2.0 platform. GH-D is using Scalar 2.0 for the baseline content management system, particularly on account of its interface features, support for RDF, connectivity to external repositories, Dublin Core support. Hypothes.is integration, and its multiple path navigation system.

Analysis

Historians are increasingly using digital humanities tools to analyze data and express their research findings. A further advantage of storing digital objects within the CLARIN repository the GHI wants to built up is that the full range of corpus linguistic analytic tools of CLARIN can be applied by scientists to GHI textual content. During the first phase of the project we also look to prototyping connectivity to PARTHENOS, another major European infrastructure project. PARTHENOS integrates within a virtual research environment (VRE) access to data from numerous national archives and a broad set of digital tools which can be chained together into analytic processing workflows.

Community

The GH-D platform integrates blog aggregation, an advanced discussion system, community-oriented tools, and social media, to facilitate collaborative knowledge communities and open research. This is a pioneering aspect of our project that will investigate the adoption by historians of social and community digital tools in their research activities. We also intend to make use of the unique role the GHI

plays as a hub of transatlantic scholarly dialogue and a major knot within an international network of historians in order to facilitate connections between different scholarly communities.