Unus pro omnibus! Generic research tool for all Humanities disciplines.

André Kilchenmann∗† and Flavie Laurens∗‡

1Data and Service Center for the Humanities DaSCH – Switzerland

Abstract

The "digital turn" has changed research in the Humanities to a large extent: many new digital tools and methods exist with which you can access and analyze texts, videos, sound and music. However, those tools are most of the time standalone applications and it is more difficult to combine various records. A good illustration of this situation is research projects with moving image as main (re)source. Scholars record current events and interview contemporary witnesses like historic or ethnographic projects. Here, moving images or videos need to be transcribed which could be a "simple" interview transcription. But in some disciplines like sociology or film and media studies, these multimedia objects must be extended which complexify the process. In those cases, scholars would also like to annotate the source, to describe the composition of the image, the soundtrack, or the movement of the camera. It’s a linkage between various sources and descriptions. The question is: How can we bring them all together?

At the Data and Service Center for the Humanities (hereinafter called DaSCH) in Basel, Switzerland, we have to deal with all different data sets from all disciplines in the Humanities. The DaSCH is a national research infrastructure which provides data handling services like data curation, long-term access, and research and analysis tools to work with qualitative data. We bring a wide variety of data, data models and media (digital representations) from different disciplines together: from archaeology to philosophy; from moving image to books, audio and still images. An important aspect of managing qualitative data in the Digital Humanities is that, in most cases, the preservation of data sets alone makes little sense. We have to store data sets that can be accessed, re-used, connected and annotated.

To reach this goal and to provide qualitative data handling services, the DaSCH develops and maintains a software platform called "Knora" consisting of a database based on a Resource Description Framework (RDF) triple store and Application Programming Interfaces (APIs). Knora handles data from database, as well as media files stored on our own IIIF-based-media server. Those tools are part of the backend, the server side. Scholars with good IT-skills can interact with APIs and work with their data. For scholars with limited IT-knowledge, we need to provide a simple, generic user interface.

We are developing an intuitive, easy-to-use web-based application, called "Knora-App", placed on top of Knora to directly use its powerful data management functionalities. Data

∗Speaker
†Corresponding author: a.kilchenmann@unibas.ch
‡Corresponding author: flavie.laurens@unibas.ch
models and data will automatically follow accepted standards, be findable, accessible interoperable, and re-usable (FAIR principles). With Knora-App, scholars will have a ready-to-use platform in order to create their own data models, upload data, attach metadata, and perform analyses and data-visualization as they could do with a desktop data management tool. Even scholars with small data sets will have access to long-term accessibility at minimal cost and time to keep their research data alive, guaranteeing longevity of the data.

**Keywords:** vre, database, rdf, iiif, api, archive, research, data center, web, application