

## Editor's notes

### *Rebuilding, Preserving and Reproducing*

Welcome to the second issue of Volume 41 of the IASSIST Quarterly (IQ 41:2, 2017).

The IASSIST Quarterly has a focus on curation, preservation and reproduction of research, and all three bases are covered in this issue. The reproduction of earlier results from archived data is a validation of the data and also of the earlier research. The mimicking reuse of data for reproduction of the original results is the normal first step before use of the data for new purposes. This IQ starts with a paper on reproduction. Before reproduction is possible, intensive work is required at the earliest stage to curate the data, and in the case of older data - as presented in this issue - a costly process of rebuilding the data from old formats and forms of storage. Between the establishment of the data as a resource and the subsequent reproduction, the preservation process secures the data for future use. The middle paper brings special attention to preservation of 3D digital data.

At the IASSIST 2017 conference the presentation 'Reproducing and Preserving Research with ReproZip' was given at the session 'E3: Tools for Reproducible Workflows Across the Research Lifecycle'. This is presented here as a paper with the title 'Using ReproZip for Reproducibility and Library Services' by Vicky Steeves, Rémi Rampin, and Fernando Chirigati. The authors work at New York University as Librarian for Research Data Management and Reproducibility, PhD candidate, and Research Engineer. They present ReproZip, an open source tool designed to help overcome the technical difficulties involved in preserving and replicating research, ranging from digital humanities to machine learning as well as library services. The paper addresses the concept of computational reproducibility leading to capture and preservation of digital environments, and the creation of a file that encapsulates metadata about the computational environment - including the operating system, hardware architecture, and software library dependencies - in order to achieve reproducibility. The authors state that ReproZip can be used to reproduce a plethora of applications, including data analysis tools, scripts and software.

At the same conference in the session 'E1: Preservation Matters' Jennifer Moore of Washington University Libraries in St. Louis and Hannah Scates Kettler of University of Iowa Libraries presented their paper 'Who cares about 3D data preservation?'. Well, the IQ does! 3D digital data preservation is necessary when for example an anthropologist produces digital 3D data as a preservation and presentation mechanism for an artefact. The 3D digital data has - like other data - to be treated for preservation. The artefact could be a building, and the paper holds much technical information and literature that refers to various interesting 3D projects; for example the Augmented Asbury Park app that projects lost - and now virtual - buildings and attractions upon their earlier physical space using augmented reality.

The last paper in this issue is 'Retirement in the 1950s: Rebuilding a Longitudinal Research Database' by Amy M. Pienta and Jared Lyle, respectively Associate Research Scientist and Director of Curation at ICPSR at the University of Michigan. This tells the story of the successful recovery of the important data from

Gordon Streib's Cornell Study of Occupational Retirement (CSOR). The paper includes the caveat that the work involved in rescuing these old data was many times more expensive than curating newer data would be. The CSOR followed a large (over 4,000 person) national cohort of retirement-age men and women in the period 1952 to 1958. The study is of great value for research in such areas as the relationships between health and gender and retirement. The data was deemed unrecoverable, as the punched cards did not directly match the documentation. Further work and additional materials were required to make it possible. The data is enriched by collections of several types of health records and examinations; some remaining in paper form that can be consulted for closer investigation on-site at ICPSR.

Submissions of papers for the IASSIST Quarterly are always very welcome. We welcome input from IASSIST conferences or other conferences and workshops, from local presentations or papers especially written for the IQ. When you are preparing a presentation, give a thought to turning your one-time presentation into a lasting contribution. We permit authors 'deep links' into the IQ as well as deposition of the paper in your local repository. Chairing a conference session with the purpose of aggregating and integrating papers for a special issue IQ is also much appreciated as the information reaches many more people than the session participants, and will be readily available on the IASSIST website at <http://www.iasistdata.org>.

Authors are very welcome to take a look at the instructions and layout:

<http://iasistdata.org/iq/instructions-authors>

Authors can also contact me via e-mail: [kbr@sam.sdu.dk](mailto:kbr@sam.sdu.dk). Should you be interested in compiling a special issue for the IQ as guest editor(s) I will also be delighted to hear from you.

Karsten Boye Rasmussen - December, 2017