

Transformations slowly into the future

Welcome to this double issue volume 33 issues 1 and 2 (2009) of the IASSIST Quarterly. This is a special issue centered on the developments of the Data Documentation Initiative or its now familiar acronym: the DDI.

We have slowly made some changes to the IASSIST Quarterly (IQ). Our distribution has changed to being 'web only.' We have stopped printing but continued to make PDF versions available on the IASSIST website and you can access from the website <http://iassistdata.org/iq> the generated PDF versions of the journal. At the same time as producing new issues of the IQ we have been helped by other people scanning old issues of the IQ. Right now Michele Hayslett at Chapel Hill is producing scans of the old issues. If you take a look at the IASSIST website you will notice that the look and feel of the website have also changed; it looks bright and sharp and you should hopefully find the interface to be more intuitive. Another recent change is that the IQ is now a fully reviewed journal and the IQ also in the last years started to run special theme issues - like this DDI double issue. These changes have demanded more work from more people and have only been possible because many people are doing IASSIST work in addition to their day jobs. Finally access is in the process of being broadened as we have just signed an agreement with EBSCO to make the IQ accessible through their platform.

In this issue the special editors Mary Vardigan from ICPSR and Joachim Wackerow from GESIS have collected from recent workshops and IASSIST conferences important papers on the development of the Data Documentation Initiative as it reaches 'DDI 3.' In the following pages they present the articles: Metadata-Driven Survey Design by Jeremy Iverson, Questasy: Online survey data dissemination using DDI 3 by Marika de Bruijne and Alerk Amin, Implementing DDI 3: The German Microcensus Case Study by Andias Wira-Alam and Oliver Hopt, Metadata Creation, Transformation and Discovery for Social Science Data Management: The DAMES Project Infrastructure by Jesse M. Blum, Guy C. Warner, Simon B. Jones, Paul S. Lambert, Alison S. F. Dawson, Koon Leai Larry Tan, Kenneth J. Turner, DDI 3 Development at DDA by Jannik Jensen and Dan Kristiansen, and Controlled Vocabularies for DDI 3: Enhancing Machine-Actionability by Taina Jääskeläinen, Meinhard Moschner, and Joachim Wackerow. As IQ editor I would like to thank all the authors and the special editors for their work.

Instead of introducing the papers this editorial will look backwards at some of the history of the DDI. A perspective could be riding on how Bruno Latour explains Actor-

Network-Theory (1987, 2005). The ANT-method is exemplified in Latour's description of the development of the Diesel engine. When Mr. Diesel presented the design of the engine he did not present a prototype. That took years to develop and relied heavily on many other technical skills and routines. Early on, Diesel took out a patent but nearly 10 years later the idea was close to collapse as the machines needed much attention and were continuously being modified. It took what Latour terms as 'translations' and a complicated mixture of connections that translated the problems and solutions before the Diesel engine was truly functional. Before entering the description of these 'translations' Latour instructs us: 'in this technoscience game we are watching, the object is modified as it goes along from hand to hand. It is not only collectively transmitted from one actor to the next, it is collectively composed by actors' [1987, p. 104].

Similarly the DDI has slowly developed towards maturity. We find the roots of the development of the DDI in several data archives and individuals, but we also find them in collaborative organizations - amongst which IASSIST was one of the most important. Before the foundation of the DDI, IASSIST established the 'Codebook Action Group' in 1993. Before that an even earlier development of a description standard at the study level had taken place. A report of the documentation activities at a selection of data archives was presented in the IASSIST Quarterly (Rasmussen, 1995). Funding for further developments on the issues of standardization of social science metadata was established by ICPSR in Ann Arbor and the DDI committee was formed and had its first meeting in May 1995.

In 2000 I described and reported the progress of the DDI in a Danish book; however, Danish is not the most widespread language. It might be fruitful to remember that the DDI was focused on 'independence.' As a standard the DDI should be independent of platform, media, presentation, applications, and independent of commercial interests by being a standard without royalties. In Latour terms we can say that the then current dependencies were transformed into independencies.

Much work and experiments were carried out with the DDI, but nearly a decade went by before articles directly addressing the DDI appeared in reviewed journals like *Historical Methods* (Block & Thomas, 2003), *Social Science Computer Review* (Blank & Rasmussen, 2004), and *Archival Science* (Rasmussen & Blank, 2007). When Jacobs and Humphrey in 2004 in *Communications of the ACM* presented their viewpoint on 'Preserving Research Data' they also referenced the DDI. Many people and organizations have contributed to the development or 'transformation' of the DDI, and many people have reported in journals, at workshops and at conferences - notably the IASSIST conferences! One of the members of

the first DDI committee, Mary Vardigan, has also done a good job in making this special issue of the IQ come into being. So a very special 'thank you' to Mary and to her co-editor Joachim Wackerow.

This month (July 2010) I met Joachim (Achim) in Germany where GESIS was having celebrations, one of these being the 50th anniversary of the Zentralarchiv in Cologne. There have been tremendous developments during its lifespan. Technical developments are changing the possibilities in archiving and also in the relationships between people and roles e.g., in the collaboration between depositors, archive staff, and researchers. New people are also entering the scene and they will be the next 'transformers.'

Things take time. We can at times become impatient and this impatience can act as an extra driving force behind the slow transformations towards more mature solutions. With this latest report on the DDI development we can hope that the message will reach even more people. Whether you are somewhat familiar with the DDI or a newcomer in the field of data documentation I hope you will find articles of interest in this issue. And you might be among the next people developing and disseminating the standards further.

References

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Articles for the IASSIST Quarterly are very welcome. Articles can be papers from IASSIST conferences, from other conferences, from local presentations, discussion input, etc. Contact the editor via e-mail: kbr@sam.sdu.dk.

Karsten Boye Rasmussen - July 2010

Guest Editors' Notes

Welcome to a special double issue of the IASSIST Quarterly featuring articles focused on the Data Documentation Initiative (DDI), a metadata standard for the social sciences. We are proud to present these six articles, which explore various projects related to DDI 3 and its enhanced features.

The articles draw on previous presentations and papers created in connection with the 2009 "Expert Workshop on Implementation of DDI3 -- Advanced Topics" held in Wadern, Germany; the 2009 European DDI Users Group (EDDI) meeting held in Bonn, Germany; and the IASSIST conferences held in Tampere, Finland (2009) and Ithaca, New York, USA (2010).

Jeremy Iverson's article on metadata-driven survey design highlights the reuse of metadata starting at the very beginning of the research data life cycle and also discusses the benefits of using metadata to drive the process of collecting, visualizing, and analyzing survey data. This is a powerful and efficient approach that should be taught in survey methods courses in order to save costs and to enable data producers to leverage the metadata they create across the life course of research data.

Also related to data collection is the article on the Questasy online survey documentation tool by Marika de Bruijne and Alerk Amin. Questasy permits internal users to document longitudinal data and to make this documentation available to external users on the Web. A benefit of DDI 3 for this system is that it facilitates tracking of Question Items across waves in the study, where each wave can have Question Constructs and Variables that refer to the same Question Item. This system was developed for the LISS panel online survey at the University of Tilburg in the Netherlands.

"Implementing DDI 3: The German Microcensus Case Study" by Andias Wira-Alam and Oliver Hopt looks at using DDI 3 to document the German Microcensus through a customized DDI 3 editor and a Web view providing different perspectives for the end users based on the same DDI 3 items. Interestingly, Andias and Oliver discuss basing some of their decisions about software design on Jannik and Dan's use case describing the development of the DDI 3 metadata authoring tool – see Building a Modular DDI 3 Editor.

"Metadata Creation, Transformation and Discovery for Social Science Data Management: The DAMES Project Infrastructure" by Jesse M. Blum, Guy C. Warner, Simon B. Jones, Paul S. Lambert, Alison S. F. Dawson, Koon Leai Larry Tan, and Kenneth J. Turner shows the wide variety

of data management tasks that DDI 3 can support and document, including recodes, merging, and data cleaning. Using DDI 3 to document these phases of the data life cycle is an exciting development.

"DDI 3 Development at DDA" by Jannik Jensen and Dan Kristiansen of the Danish Data Archive provides a fascinating look into the development of an authoring tool for DDI metadata, a tool that is being designed to play a central role in the work flow at the DDA archive. It focuses as well on the underlying reusable middleware and general considerations on open source software development for DDI. This article provides the reader with an up-close view of strategic decisions made at DDA to incorporate the functionality of DDI 3 into the architecture of the DDA archive.

With its focus on machine-actionability and data typing, DDI 3 needs a strong system of controlled vocabularies to supplement the creation of metadata. The article on controlled vocabularies by Taina Jääskeläinen, Meinhard Moschner, and Joachim Wackerow presents the case for using controlled vocabularies and the ways in which they benefit the user. The article also showcases the work of the DDI Controlled Vocabularies Group and its efforts to create vocabularies for DDI 3, which will be made available as separate products using a format called Genericode.

We hope you enjoy reading these articles, and we offer our thanks to all of the authors. We also want to express our appreciation to IASSIST for the opportunity to publish this work in the IQ. We are grateful for the ongoing support of the IASSIST community and its nurturance of DDI from the very beginning.

Sincerely,

Mary Vardigan and Joachim Wackerow