# Where is the library, or is it an archive? Assessing the impact and implications of archaeological information collections

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# **Abstract**

Preliminary observations made during the analysis of an interview study of Swedish professionals working with the management of archaeological information are discussed. The paper proposes that three perspectives called library, archive and museum characterise the articulations of informants on what archaeological information is, what is its relevance and impact and how it should be managed and made accessible.

# Keywords: digital libraries, digital archives, concepts, impact, archaeology

# Introduction

While nations have made considerable investments in creating technologies, infrastructures and standards for digitisation, preservation and dissemination of archaeological heritage, there is relatively little in-depth research on the impact and implications of the efforts.

We know a lot about technical and practical challenges in the different phases of producing and using archaeological information, but significantly less on how the practices, technical, theoretical and administrative, decisions affect and influence the use and reuse of information.

#### Literature review

The complexities of the management and use of archaeological documentation and information have been acknowledged for a long time (Reilly and Rahtz, 1992). The introduction of computers in archaeological work has facilitated the processing of information, integration of isolated datasets in to massive data infrastructures. At the same time, new documentation instruments have enabled archaeologists to capture more precise data than before. The necessity of developing new strategies for addressing the use and management of archaeological and other cultural heritage data in the fast digitalising contexts of information use of the stakeholders the information has been underlined in the recent literature (Huvila 2009; Arnold & Geser, 2009).

There is a broad consensus on principled importance of preserving archaeology, but the recurring emphases of the need to improve archival practices (e.g. Richards 2002; Degraeve 2012) and a large number of national and international initiatives for addressing the preservation of archaeological information including the Archaeology Data Service (ADS) in UK, DANS/EDNA in the Netherlands, IANUS in Germany and large European projects including ARENA, ARENA2 and ARIADNE.

In contrast to the relatively large corpus of literature on institution specific case studies and technical issues of preservation, there is less literature on the production and use and potential use of archaeological information. Both ADS and IANUS have conducted analyses of their stakeholders (Beagrie & Houghton, 2013; Schäfer et al., 2014), but there is very little research on the information practices of the other stakeholders of archaeological information than archaeologists (e.g., Huvila, 2007, 2009).

# **Theoretical framework**

The theoretical framework of the study is based on the ecological approach to information work studies (Huvila, 2008) and Pickering's (2008) theorising on the relation of material entities and human practices.

# **Research questions**

The aim of the short paper is to discuss preliminary observations made during the analysis of an interview study of Swedish professionals working with the management of archaeological information. The main question discussed in the presentation is assess how the conceptualisations and practices of managing analogue and digital collections of archaeological information, and those of the nature of the archaeological information itself, influence their outcomes. What difference does it make if a professional is working with a 'digital archive' of geographic information, 'library' of grey literature, or a 'collection' of physical information (i.e. artefacts). How it might change the provided information service, and the work and activity of its users.

#### Methods

The empirical material consists of sixteen qualitative interviews of Swedish archaeology professionals with special interest in issues pertaining to the archiving and preservation of archaeology. The design and conducting of the interviews was based on the semi-structured thematic interview approach of Hirsjärvi and Hurme (1995). All interviews were conducted by the author, taped and transcribed by a professional transcriber. The interviews lasted in average 60 minutes. The empirical approach has some obvious limitations. Even if the author has done his best to avoid taking researcher degrees of freedom, additional studies are needed to confirm the exploratory results of this study.

# Results

The findings show how the interviewees conceptualise their work and its constituents, and how the various corpora of archaeological information they are working with relate to the notions, purported functionalities and definitions of digital libraries, archives, museums and information infrastructures.

The central finding of the study is that the perspective of an archaeological information repository as a 'library', 'archive', 'museum' or another type of repository is closely dependent on the work roles of individual actors and their organisational contexts. Among the 16 informants, 5

articulated museum, 9 archive and 9 library-oriented perspectives.

Administrators have a strongest tendency to conceptualise archaeological information repositories as *archives* of archaeological records whereas researchers who work on data intensive archaeological research, had a tendency to conceptualise the repositories as digital *libraries*. A *museum* perspective was the most prominent for informants who worked with the management of archaeological finds. The perspectives were not specific to individuals, but seemed to represent different perspectives to the use of archaeological information in different work related situations. An individual informant could conceptualise repositories from more than one perspective.

The analysis shows further that the ways how informants conceptualised and practiced their work and its constituents relate to how they see its potential impact and context of relevance. The conceptualisation of the repositories and the information infrastructure as a whole were not as directly related to the institutional affiliation of the informants than to how they worked and had worked with the information as a part of their daily pursuits and their work role, either explicitly acknowledged or implicitly assumed one. Archive and administration oriented daily work tended to relate to an emphasis of the documentation of administrative procedures. Archaeological contractors had the most complex rapport with the repositories. Partly, they were in favour of a processual perspective of information repositories as an archive to which they feed certain obligatory records as a token of their completed projects. At the same time, however, they acknowledged the potential usefulness of archaeological information libraries they could use to support their information seeking. Museum oriented informants did see the relevance and impact of archaeological information in somewhat different terms as an ingredient to something that would reside outside of the administrative-scholarly practices of contract archaeology.

# **Discussion**

The orientation of the perspectives to the archaeological information and its relevance can be explained from the perspective of the informants' work roles and the *mangle* (the dance of agency, see Pickering, 1995) of the information, its material containers (i.e. documents) and the stakeholders. It seems that, in contrast to direct institutional affiliations (the articulation of library, museum or archive perspectives did not seem to depend on the current or former employers of the informants), the assumed work role (i.e. the given and assumed idea of the purpose and aims of one's own work) could be a strong determining factor that explains the articulations (as e.g. in Huvila, 2007). At the same time, another factor that seems to relate to the preferred perspective is the material form of archaeological information the individual informant

primarily works with. Precisely here, it is possible to see echoes of the Pickeringian mangle of practice, the dance of agency between human-beings and the material objects that participate in a shared process of becoming.

The relevance of these observations to the evaluation of archaeological information infrastructures is that it seems possible to argue that notions of archive, library and museum (understood here in colloquial and non-specific metaphorical concepts) can be used as broad categories of understanding how the different stakeholders value the contributions, services and offerings of repositories. In contrast to the somewhat prevalent archives oriented discussion of the preservation of archaeological information, museums oriented discussion of the need to make archaeological information accessible (often with direct references to very different types of information) and mixed library and archives oriented wants and needs of the potential users of this information, these perspectives could be brought together to improve the repositories, their services and their use by assuming a holistic view of the mangle of the practices of using and producing them.

# **Conclusions**

The practical conceptualisations of information and information systems are related to their usability and usefulness in different contexts. Even if the contents and functionality of a digital or analogue repository would be the same, the propensity to see it as an 'archive' or a 'library' has a major potential impact on its perceived usefulness, usability and key functions.

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# **Curriculum Vitae**

Dr. Isto Huvila, Ph.D., docent, is a senior lecturer in information and knowledge management at the School of Business and Economics, Information Studies, Åbo Akademi University in Turku, Finland and an associate professor at the Department of ALM at Uppsala University in Sweden. His primary areas of research include information and knowledge management, information work, knowledge organisation, documentation, and social and participatory information practices. The contexts of his research ranges from archaeology and cultural heritage, archives, libraries and museums to social media, virtual worlds and corporate and public organisations. Huvila has published on the topics ranging from information work management, archaeological information management, social media, virtual reality information issues to archival studies and museum informatics, ancient history and archaeology. He received a MA degree in cultural history at the University of Turku in 2002 and a PhD degree in information studies at Åbo Akademi University (Turku, Finland) in 2006.

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