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ARCHIVAL SCIENCE AS AN INFORMATION SCIENCE

Abstract

The paper argues that archival science is the science of contextual transfer. Contextual transfer takes place when information is transferred from one place and point in time (context) to other places and points in time. Archival science examines this transfer: what makes information usable across contexts; what information should be transferred; how the information should be organized, managed, and preserved; what the transferred information is used for and what are the impacts that the information has for individuals and the society. This view to archival science connects it explicitly with other information sciences and opens possibilities for both the records profession and its research.

Keywords: archival science, information science

1. INTRODUCTION

It is often said that archival science was born when Dutch "Manual for the Arrangement and Description of Archives" was published in 1898 by S. Muller, J. A. Feith, R. Fruin. Until that time, archival science was an auxiliary science that was dependent on other sciences, but thanks to the manual, one understood that an archival fonds can be examined as such, as a whole that has its own internal laws, without any help from other sciences, like diplomatics, jurisprudence, and paleography. This made archival science an independent area of research and opened doors to its further development. The 1898 manual was

"the first real effort to articulate systematically the concepts and methods that find their validity in archival theoretical ideas with internal consistency and logic, rather than in their historical, legal, or cultural context. Therefore... it must be considered the first scientific archival treatise." (Duranti, 1997).

So, what is archival science? Luciana Duranti (1997) equates it with professional knowledge and conceptions. For her archival science is "the body of knowledge about the nature and characteristics of archives and archival work" and archival theory "the whole of the ideas archivists hold about what archival material is." (Duranti, 1997.) Theo Thomassen (2001) says that the object of archival science is "process-bound information, which is to say: both the information itself and the processes that have generated and structured that information" and that aims of the science "are establishment and maintenance of archival quality" (Thomassen, 2001.) Robert Garon (here Couture & Ducharme, 2005) believes that the archival science has an object that sets it apart from related disciplines: recorded information.

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2. TRADITIONAL VIEW ON ARCHIVAL SCIENCE

These definitions are only examples of how we formulate archival science as a discipline. Generally, we think about it in terms of characteristics of archives and records. There is a strong connection to profession: a profession distinguishes itself from an occupation primarily by the underlying academic discipline; it is the specific body of knowledge that uniquely identifies the profession (Thomassen, 1999). Some writers, like Jozo Ivanović (2004), go even further and argue that archival science exists to separate the profession from the others. The role of archival theory and discourse is, according to Ivanović, to provide the archival profession with "moral foundation and formulation of archival credo, periodically confessed on congresses, conferences and in similar occasions" (Ivanović, 2004).

Theo Thomassen (1999) argues that the independence and autonomy of the archival profession and the archival science presuppose one another. Thomassen emphasizes the autonomy of archival science. By autonomy he means that archival science

"...must be developed in academic freedom, it must not have the mere status of an auxiliary science and it must not be fully subservient to the archival institutions." (Thomassen, 1999.)

This fear of having "the mere status of auxiliary science" has historical roots. Line of defense against this threat are concepts. An independent science defines phenomena in its research area in its own terms. In archival science these terms include concepts like "records", "archives", and "principle of provenance".

Today the threat for archival science has changed. In my opinion, the biggest danger is no more that archival science would be demoted to an auxiliary science. Instead, the danger is that archival science is isolated from other sciences. Despite of its long historical roots archival science is a newcomer in academic world (Couture & Ducharme, 2005; Cunningham, 2005; Gilliland & McKemmish, 2004; McLeod & Hare, 2010; Tough & Moss, 2006) in which research is today often a collaborative process. To get partners – and funding – you need to communicate with other research areas. Artificial intelligence (AI) provides a good example: how can one develop applications of AI in archival science, if AI researchers are unable to understand what archival science is talking about?

My scientific world view is that a separate area of research exists regardless of the way we speak about it. In other words, concepts in social science and humanities are not mere social constructions or instruments used to discuss and interpret the world around us (Töttö, 2005): the concepts have a relationship to the reality going beyond what we observe, although we may find it hard to say what the relationship actually is. Therefore, I believe that we should be ready to formulate the area of archival science in terms that make it more open to other fields of research.

But how could one do this? Archives are a multifaceted phenomenon. There is an abundance of connections to other areas. Many issues in the society have a linkage to archives: legislation, accountability, work processes, information systems, information management, big data, privacy, information seeking and retrieval, research infrastructure, democracy, accountability, societal, organizational, and personal memory, knowledge organization, identity – all these give, among others, a perspective to archives and archival science. It is natural that archival science may be found in different scientific contexts. The most typical contexts are science of history and library and information science. Whatever the context is, it is reflected in the content of archival science (Bastian & Yakel, 2006; Yusof & Chell, 1998).

3. SCIENCE OF CONTEXTUAL TRANSFER

My personal background comes from the context of information studies (or library and information science, if you prefer that name). In my home university, Tampere University, Researchers and PhD students in archival science are part of a research group known as RIME – Research Group for Information and Media Practices. The RIME website states that the research group

“...focuses on practices by which individuals, teams and organizations process information during its life cycle. The main activities constitutive of such practices include producing, seeking, use, sharing, management and organization of information.” (<https://www.uta.fi/sis/trim/groups/rime.html>)

Thus, the question is, if this is the context for archival science, how could one formulate its focus so that archival science is integrated with other research areas without losing its distinctive character?

My suggestion is that this can be done with the idea of “contextual transfer” that explicitly connects archival science with other information sciences. Contextual transfer takes place when information is transferred from one place and point in time (context) to other places and points in time in usable form. Archival science examines this transfer:

1. What information should be transferred (appraisal);
2. What makes contextual transfer successful (characteristics of records, metadata, description);
3. How the information should be created, organized and managed (planning of records management, design of information systems, knowledge organization, arrangement);
4. How the information is kept available across contexts (maintenance, preservation);
5. What are the rules governing transfer (legislation, ethics, best practices);
6. How the information is used and what are the impacts of the transfer for individuals, organizations, and the society (privacy, memory, identity, research).

I have previously (Henttonen, 2017) made a related, parallel argument: professionally records and archives management exists to transfer information in usable and understandable form across time and space (contexts). This idea repeats itself in different forms in records and archives management literature. For instance, in the life cycle model organization first uses records to support its work. Thereafter they are transferred to an archival institution to be used by new user groups in purposes for which the records were not initially created. While records continuum model, on the other hand, does not make a distinction between the active or semi-active phase of records (records management) and the historical phase (archives), it also states that records (and archives) serve several users and purposes in different contexts. Records continuum model shows how records and archives management consists of processes that make information available to ever larger user groups starting from the immediate neighborhood of information creation inside the organization and expanding from that to the whole organization and finally to the society at large. (For life cycle and records continuum models, see e.g. An, 2003.) A third example: Recordkeeping Metadata Working Meeting of the Dutch Archiefschool and Netherlands Institute for Archival Education and Research noted in year 2000 that recordkeeping metadata functions supports the transfer of records across domains and over time. Recordkeeping metadata was consequently defined as “structured or semi-structured information which enables the creation, management, and use of records through time and within and across domains in which they are created.” (Hedstrom, 2000, 2001.) A parallel idea can be found in the Open Archival Infor-

mation System (OAIS) model. The model says that one should define a "designated community" and make decisions about metadata from the perspective of the needs of this community. The information is "alive when used and useful for the designated community; otherwise the information is just stored and therefore only data" (Nilsson, 2007, p. 17). Change of designated community may involve changes in metadata:

For example, when the designated community changes from a particular scientific community to the general public, additional metadata may need to be added to the representation information and the preservation description information recordkeeping metadata and archival description to enable the general public to understand these resources. Even if the designated community remains the same, the evolution of the knowledge base of the community may also require the enhancement of metadata to keep the preserved resources understandable. (Niu, 2013.)

The idea of contextual transfer has corollaries both for the records profession and the archival science, but for both the change is more a repackaging of old ideas and way of looking them from a different perspective than actual reform in what is being done.

4. CONCLUSIONS

From the perspective of contextual transfer records professionals are – or they should be – specialists of this transfer and needs of the possible user communities. They should have understanding on what it entails to keep information usable in different future user scenarios and be able to combine this knowledge with the design of work processes in which this information is created, managed, and used. For the archival science, the change is that we should recognize the broad range of activities that we are looking at. For both for the profession and the science the traditional approach has been to favor narrow focus and exclusive definitions. Thus, there are "records" and "non-records", "archives" and "collections", "electronic records management systems" and "business information systems", aso. Interest has been in that part of the dichotomy that clearly falls in accepted professional categories. Consequently, this approach has lead consciously or inadvertently – and at least in what is talked about (in contrast to what is actually done) – to leaving most of the digital information out of the scope, because it does not fall in these accepted professional categories.

This approach also limits research. Graig Gauld (2018) has written about lack of new ideas in archival science. He says that "the body of new, cutting-edge theoretical work that seeks to radically alter the outlook and practice of the archival profession has... thinned considerably in the last decade" and notes that with some exceptions

...if you were asked to name the archival theorists who first come to mind then you would most likely come up with something along the lines of Terry Cook, Verne Harris, Eric Ketelaar, Brien Brothman, Tom Nesmith, Frank Upward, Sue McKemish, Jeanette Bastian and Randall Jimerson... It is not to do the names on this list a disservice, however, to state that these authors produced their main ideas, in some cases pioneering ideas for the profession, a number of years ago. (Gauld, 2018.)

The solution Gauld offers is going back to basics. He writes that

...our core professional tenets and competencies, those that have underpinned us since the days of the Manual of Archival Administration [published by Sir Hilary Jenkinson in 1922], have a place in the 21st century. We need to mount a spirited defence of the archive and to communicate it loudly and proudly beyond our professional boundaries. (Gauld, 2018.)

Like Gauld, I believe that "core professional tenets and competencies have a place in the 21st century". Nevertheless, it is also my belief that both the science and the profession should take a broad view on matters.

If we take a closer look at information in archives or examine what takes place in the society, we see that narrow views do not match the reality. For example, in any archives there are paper documents that do not fill all the criteria of a proper record. For instance, there are documents in which organizational context is recognizable but whose author or exact date of creation is not known. Likewise, people use all the time information that is not properly contextualized from the archival point of view.

We should be able to understand how and when this is possible. Thus, instead of "records" and "non-records", we should see different shades of "recordness" and evidentiality, and to be willing to cope with all forms of information, being ready to get involved with different measures when we see a reason for action. We should be ready to look at all kinds of information and all kind of information usage across contexts, recognizing that "usability" is not a fixed concept and what it requires may change from one situation to another, and to be ready to combine our knowledge of this with knowledge about how the usability can be achieved with minimal cost and effort. Thus, for instance, we might sometimes see that the digital information must be fully contextualized with records metadata, but in other cases be satisfied with more general descriptive information.

This readiness is of paramount importance in digital world where borderlines between records, publications, and other forms of information are often fuzzy. This approach might be the path to professional success in organizations which need more general solutions for management of all their data than specialists coping with only slice of this information. It would also open new paths for research and theorization.

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