

When Library and Archival Science Methods Converge and Diverge: KAUST's Multi-Disciplinary Approach to the Management of its Audiovisual Heritage

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Abstract:

Libraries and Archives have long recognized the important role played by audiovisual records in the development of an informed global citizen and the King Abdullah University of Science and Technology (KAUST) is no exception. Lying on the banks of the Red Sea, KAUST has a state of the art library housing professional library and archives teams committed to the processing of digital audiovisual records created within and outside the University. This commitment, however, sometimes obscures the fundamental divergences unique to the two disciplines on the acquisition, cataloguing, access and long-term preservation of audiovisual records. This dichotomy is not isolated to KAUST but replicates itself in many settings that have employed Librarians and Archivists to manage their audiovisual collections. Using the KAUST audiovisual collections as a case study the authors of this paper will take the reader through the journey of managing KAUST's digital audiovisual collection. Several theoretical and methodological areas of convergence and divergence will be highlighted as well as suggestions on the way forward for the IFLA¹ and ICA² working committees on the management of audiovisual records.

Keywords: archives, libraries, records, audio-visual, metadata

¹ The International Federation of Library Associations, abbreviated as IFLA.

² The International Council on Archives, abbreviated as ICA.

Introduction

There are many similarities between a library and archives. The most obvious similarity is that archives and libraries are centers of information, knowledge and education. This commonality, however, obscures fundamental differences between their acquisition processes. The attempt to gloss over these differences is not new. Some 72 years ago, Randolph Church (1943), Virginia State Librarian, remarked to the annoyance of many archivists of the time that, while a library can exist without being an archival agency, archival repositories serve no useful purpose unless there is a library to supplement them (Ibid). Church lived and died convinced that an archival agency that is not affiliated with a library must do so as a matter of survival or face extinction. Essentially, his view was that the life of archivists depended absolutely on that of librarians. Church's strong sentiments on the role of library classification systems to archives were not new and, in fact, were implemented with tragic consequences by two of France most prominent archivists after the 1789 French revolution.

The French Revolution and the External Imposition of Library Cataloguing Standards on the Archives

The French Revolution catapulted the value of records and of the archival profession to new heights. A year after the revolution the revolutionaries established the concept of a National Archives—that has now become the feature of every country—with full time staff to manage their triumphant legacy records (Bailey, 2013). The concept of a National Archives where citizens can use archives to audit the actions of their government is a distinctly French tradition and one of France's more noteworthy cultural contributions. Laudable as this contribution was, the initial hiring of librarians as heads of the archives presented a temporary setback for the emerging archival science. Records were removed from their context and reclassified according to an externally imposed library classification nomenclature at the *Archives Nationales* (Bailey, 2013). Soon after assuming office Camus and Daunou established twenty-four classifications for the re-arrangement of documents within the French National Archives. Property, legal, and historical records were taken to the *Bibliothèque Nationales*. The result was chaos for the context of these archival records. After France many countries that did a similar experiment came up with the same results. Thus was born the cardinal archival principles of *respect des fonds* and original order.

laws issued between 1812 and 1857 in Naples, Prussia, Holland and France prescribed that the archives of one creator...had to be maintained separately from the archives of another creator, and kept in the same order as when their creators functioned. These two principles, formally proclaimed as juridical, became the historical core of archival science, and the application of the principle of provenance (*principio di provenienza* in Italian, *provenienzprinzip* in German, *herkomstbeginsel* in Dutch, *respect des fonds* in French), and the principle of the original order (*metodo storico*, *strukturprinzip* or *registra-turprinzip*, *structuurbeginsel*, *respect de l'ordre primitive*), evolved from a legal obligation to a scientific and cultural choice when the teaching of what was then archival doctrine was for the first time officially incorporated in the schools of law and jurisprudence (Duranti, *Archival Science*, 1996, p.4).

Even today, despite 215 years of historical lessons, many librarians still believe that the re-arrangement of archival records through library subject classification systems is acceptable. Below is a discussion of the main characteristics of archival documents and why ISAD, the archival descriptive standard rather than MARC accommodates them.

The Nature of Archival Materials

Archival records are said to possess the following five main characteristics that make them different from library materials.

Impartial

Archival records are impartial. What this means is that archival materials are created to capture some immediate action but not necessarily to serve future needs and, therefore, highly likely to be free from suspicion on their later day use for the reconstruction of the past.

Authentic

Researchers use archives because they find them authentic. The quality of authenticity is derived from their circumstances of creation. Terry Eastwood (*Archivaria* 37, 1994) states that authenticity is contingent on the facts of records creation, maintenance, custody and the concomitant procedures guiding these phases. Therefore, for records to be considered as evidence of past activity, the procedures governing them must be subject to clear and transparent verification.

Natural

Archival records that are properly guided by clear administrative controls accumulate naturally to become files, series and fonds. Archival records are not a product of an artificial construct like books that can be localized to key subject areas and shelved accordingly.

Interrelated

The very fact that archival records accumulate naturally in any given administrative entity makes them interrelated from the time of creation. Documents then become like Siamese twins that share a bond established before and during creation. The archival bond is one of the key components of documents that set the library and archival professions apart. It is the clue that holds records together; in the language of genetics, the mitochondria of documents. However, Luciana Duranti (1997) notes that the archival bond should not be confused with the general term “context” because every record has a juridical-administrative context, a provenancial context, a procedural context, and a documentary context, if one proceeds from the general to the specific. But context is by definition outside the record, even if it conditions its meaning and, in time, its interpretation within the record. On the other hand the archival bond is an essential part of the record, which would not exist without it.

Therefore, the archival bond marks the development of the activity in which the document participates, rather than of the act that the document embodies because it contains within itself the direction of the cause-effect relationship. Therefore, the archival bond determines the meaning of the record. This is the reason why selection at the item level is generally considered unacceptable. Archival documents are not arranged according to some predetermined classification scheme like museum or library collections and by virtue of natural circumstances have their relationships established by the needs and functions of the administrative body that produces them. Terry Eastwood (*Ibid*) shares the view that the relationships among the records make it self-evident that no single document—unless under exceptional circumstances—can stand as sufficient memorial of the past activities. Documents produced by an administrative body are generally interdependent. This is why it is central to archival theory to understand the connection between functional activities and documents. This understanding, what Duranti (*Ibid*) calls cause-effect relationship, does not necessarily apply to library theory and practice.

Unique

The characteristic of authenticity, naturalness, interrelatedness and impartiality altogether make archives unique. The place of each record in relation to other documents; its contextual relationship is special and significant to the whole. This relationship is similar to the relationship human or plant genes share with each other. Any alteration of the natural sequencing can have adverse effect on the whole. Church’s *American Archivist* article of 1943 was particularly surprising to many archivists because by 1940 all the theoretical ideas about archival material and archival functions that constitute the foundation of archival science had been formulated and widely pronounced and articulated.

the concept of archives as *universitas rerum*, that is, as the indivisible and interrelated whole of the actions of its creator; archival documents as the natural, impartial, authentic, interdependent and unique means, residues and evidence of their creator’s

activities; the archival bond as the original and necessary link among archival documents, determined by the functions, competencies and activities generating them; and archival work as primarily focused on respect and preservation of the documents themselves, of their provenance and order, of their capacity to serve as evidence and to guarantee administrative, legal and historical accountability, and of their character as general sources for any use, interest and research, were generally known and universally shared (Duranti, Archival Science, p.6).

ISAD (G), Archival Theory and Library Cataloguing Rules

The International Standard on Archival Description (ISAD) is an archival cataloguing method that has taken on board the above theoretical principles of respect des fonds, original order and the content and context of archives necessary for the provision of authentic and reliable information over time. For instance, the principle that archival description proceeds from the general to the specific is the practical consequence of the principle of respect des fonds (ISAD, 2000). Common to all archives is the credibility of the records and a need to demonstrate that the records under care are authentic, reliable, and have not been tampered with. In other words, are in their original order, still interrelated, natural and can serve as an impartial residue of past actions. The seven elements of ISAD, namely, the Identity Statement Area, Context Area, Content and Structure Area, Conditions of Access and Use Area, Allied Materials Area, Notes Area and the Description Control Area all speak directly to the organic, cohesive and integral nature of archival documents. Upon completion of an ISAD compliant unit of description be it a fonds, sous fonds, series, sub-series, file or item, information about the form, content, structure, control of the creation, creators, receipt, transmission is then readily made available. This is significant because our faith or lack of faith on the documents under description and our ability to use them confidently for scientific purposes all depend on the provision of this vital information about them.

MARC or any library catalogue—as shown below—does not address these elements. When a group of documents are presented with adequate information to identify them; to track and trace their origin and chain of custody over time; to know their subject matter and their initial arrangement at birth; to understand conditions of their availability and related groups of records as ISAD does, the result can only be faith on the documents that make up the unit of description and on the archival repository that makes such information available to researchers. ISAD enhances the trustworthiness of the unit of description, minimizes the risk of documents manipulation and aids the scientific expansion of human knowledge and of development. Trust in the records is not just assumed or given away for free; it is earned through a proper and detailed satisfaction of ISAD mandatory elements. Trust is a bye-product of the processes that ISAD compels an archival repository demonstrate on the unit of description. Only and only when a repository demonstrates a mastery of the unit of description and its context can that unit of description- be it a fonds, series, file or item- be trusted to serve as a scientific evidence of past events. Below are six levels of description that ISAD recognizes.

- Fonds
- Sous/sub fonds
- Series
- Sub series
- File
- Item

Figure 1: Based on Fe Angela Verzosa's "Model of the Levels of Arrangement of a Fonds" (2012)

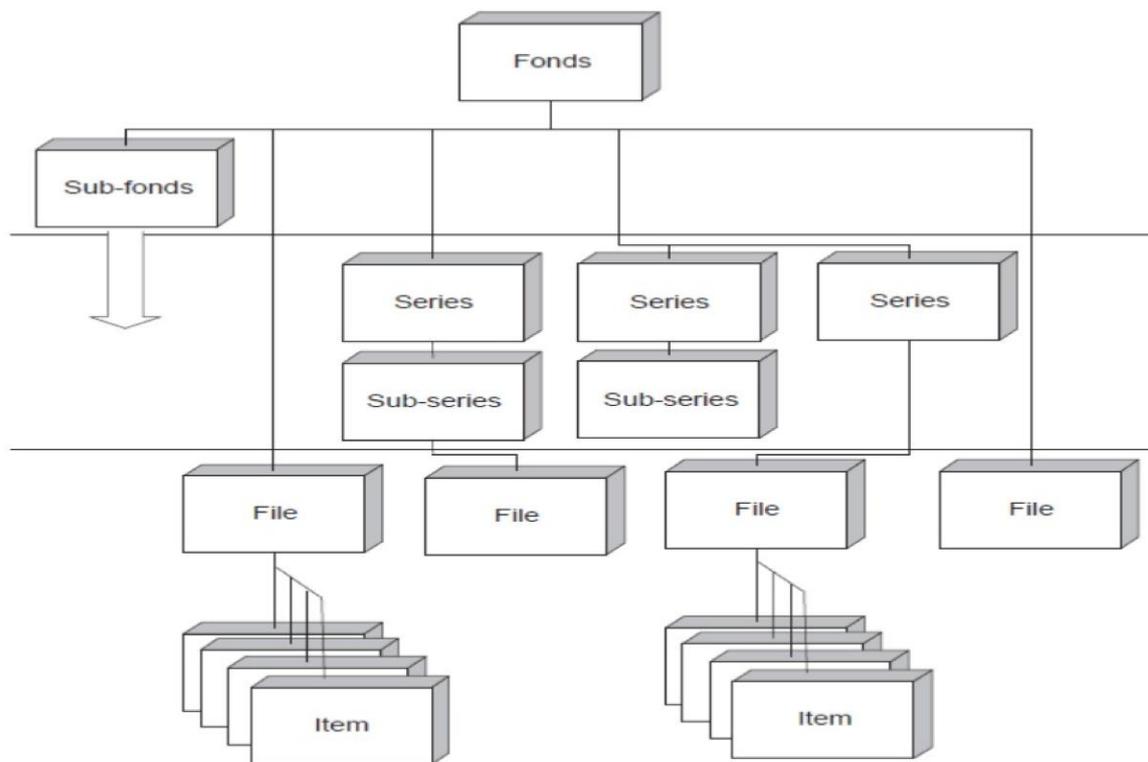


Figure 2: Sample of Digital Photographs Selected from the KAUST Campus Construction Fonds



Table 1: ISAD KAUST Campus Construction Fonds Description

IDENTITY STATEMENT AREA	
1.1 REFERENCE CODE(S)	E.g. KAUST/Campus construction.
1.2 TITLE	KAUST Campus construction photographs.
1.3 DATE(S)	2006-2008.
1.4 LEVEL OF DESCRIPTION	Fonds.
1.5 EXTENT AND MEDIUM OF THE UNIT OF DESCRIPTION (QUANTITY, BULK, OR SIZE)	E.g. 20000 digital photographs.
CONTEXT AREA	
2.1 NAME OF CREATOR(S)	KAUST Communications Department.
2.2 ADMINISTRATIVE / BIOGRAPHICAL HISTORY	Campus photographs are the original digital photographs taken before, during and after the construction of KAUST.
2.3 ARCHIVAL HISTORY	This series was created by KAUST's Communications Department and transferred to the Archives.
2.4 IMMEDIATE SOURCE OF ACQUISITION OR TRANSFER	Communications Department.

CONTENT AND STRUCTURE AREA	
3.1 SCOPE AND CONTENT	This fonds consists of several records series, namely, photographs taken before, during, and after construction, and the ceremony marking the completion of the project.
3.2 APPRAISAL, DESTRUCTION AND SCHEDULING INFORMATION	As per KAUST's Communications department's retention & disposition schedule.
3.3 ACCRUALS	Annual accruals expected.
3.4 SYSTEM OF ARRANGEMENT	By department, year and date of graduation.
CONDITIONS OF ACCESS AND USE AREA	
4.1 CONDITIONS GOVERNING ACCESS	Restricted.
4.2 CONDITIONS GOVERNING REPRODUCTION	Consult KAUST's Archives for use.
4.3 LANGUAGE/SCRIPTS OF MATERIAL	English.
4.4 PHYSICAL CHARACTERISTICS AND TECHNICAL REQUIREMENTS	Digital photographs. Require constant hardware and software migration.
4.5 FINDING AIDS	For a full description all the available finding aids visit KAUST Archives's website at < http://archives-records.kaust.edu.sa/ >.

ALLIED MATERIALS AREA	
5.1 EXISTENCE AND LOCATION OF ORIGINALS	All photographs described here are originals.
5.2 EXISTENCE AND LOCATION OF COPIES	KAUST Communications department has copies.
5.3 RELATED UNITS OF DESCRIPTION	Communications, Legal and the President's office could have copies.
5.4 PUBLICATION NOTE	Unpublished photographs.
NOTES AREA	
6.1 NOTE	The organization of the fonds should be respected.
DESCRIPTION CONTROL AREA	
7.1 ARCHIVIST'S NOTE	Prepared by Dr Lekoko Kenosi and Chris Graves.
7.2 RULES OR CONVENTIONS	Description based on ISAD-G. Second edition, Ottawa, 2000.
7.3 DATE(S) OF DESCRIPTIONS	30 th May 2015.

Figure 3: Series Level Description of the Computer, Electrical and Mathematical Sciences and Engineering (CEMSE) Division's Graduation Photographs



Table 2: Series Example Of ISAD-G Description of the Computer, Electrical and Mathematical Sciences and Engineering (CEMSE) Division's Graduation Photographs

IDENTITY STATEMENT AREA	
1.1 REFERENCE CODE(S)	E.g. KAUST/Graduation/CEMSE/MSc/001
1.2 TITLE	CEMSE MSc students graduation.
1.3 DATE(S)	18 th December 2014.
1.4 LEVEL OF DESCRIPTION	Series
1.5 EXTENT AND MEDIUM OF THE UNIT OF DESCRIPTION (QUANTITY, BULK, OR SIZE)	3000 digital photographs.

CONTEXT AREA	
2.1 NAME OF CREATOR(S)	KAUST Communications Department.
2.2 ADMINISTRATIVE / BIOGRAPHICAL HISTORY	CEMSE is one of the three KAUST Academic Divisions. The Division opened its doors to new students in 2009 when KAUST enrolled its first group of graduate students.
2.3 ARCHIVAL HISTORY	This series was created by KAUST's Communications Department and transferred to the Archives.
2.4 IMMEDIATE SOURCE OF ACQUISITION OR TRANSFER	Communications Department.
CONTENT AND STRUCTURE AREA	
3.1 SCOPE AND CONTENT	This series consists of digital photographs of CEMSE MSc graduation photos only.
3.2 APPRAISAL, DESTRUCTION AND SCHEDULING INFORMATION	As per the KAUST's Communications Department's Retention & Disposition Schedule.
3.3 ACCRUALS	Annual accruals expected.
3.4 SYSTEM OF ARRANGEMENT	By Department, Year and Date of Graduation.

CONDITIONS OF ACCESS AND USE AREA	
4.1 CONDITIONS GOVERNING ACCESS	Publicly available.
4.2 CONDITIONS GOVERNING REPRODUCTION	Consult KAUST's Department of Communication for use.
4.3 LANGUAGE/SCRIPTS OF MATERIAL	English and Arabic.
4.4 PHYSICAL CHARACTERISTICS AND TECHNICAL REQUIREMENTS	Digital photographs. Require constant hardware and software migration.
4.5 FINDING AIDS	For a full description all the available finding aids visit KAUST Archives's website at < http://archives-records.kaust.edu.sa/ >.
ALLIED MATERIALS AREA	
5.1 EXISTENCE AND LOCATION OF ORIGINALS	All photographs described here are originals.
5.2 EXISTENCE AND LOCATION OF COPIES	KAUST Communication Department has copies.
5.3 RELATED UNITS OF DESCRIPTION	Other university academic departments (e.g., BESE Divison) have their own graduation photographs, too.
5.4 PUBLICATION NOTE	
NOTES AREA	
6.1 NOTE	CEMSE graduation photographs should never be mixed with other university departments' photographs.

DESCRIPTION CONTROL AREA

7.1 ARCHIVIST'S NOTE	Prepared by Dr Lekoko Kenosi and Chris Graves.
7.2 RULES OR CONVENTIONS	Description based on ISAD- G. Second Edition, Ottawa, 2000.
7.3 DATE(S) OF DESCRIPTIONS	30 th May 2015.

Table 3: KAUST MARC Item Level Description of a Video Recording

MARC Field No.	MARC Field Name	Bibliographic Entry
020	ISBN	9780970351111 0970351119
245	Title Statement	Cosmos [videorecording] :a personal voyage /series director, Adrian Malone ; written by Carl Sagan and Ann Druyan & Steven Soter ; senior producers, Geoffrey Haines-Stiles, David Kennard.
300	Physical Description	7 videodiscs (ca. 794 min.) : sd., col. ; 4 3/4 in.
500	General Note	Originally produced for television in 1980. Includes Carl Sagan and Ann Druyan updates, new footage, music & effects only soundtrack, subtitled science facts updated. Titles of episodes VIII and XII on container are Travels in space and time and Encyclopedia galactica.
505	Formatted Contents Note	[disc 1]. episode I. Shores of the cosmic ocean (ca. 61 min.) -- [disc 2]. episode II. One voice in the cosmic fugue ; episode III. Harmony of the worlds (ca. 119 min.) -- [disc 3]. episode IV. Heaven and hell ; episode V. Blues for a red planet (ca. 124 min.) -- [disc 4]. episode VI. Travellers' tales ; episode VII. Backbone of night (ca. 121 min.) -- [disc 5]. episode VIII. Journeys in space and time ; episode IX. Lives of the stars (ca. 122 min.) -- [disc 6]. episode X. Edge of forever ; episode XI. Persistence of memory (ca. 123 min.) -- [disc 7]. episode XII. Encyclopaedia galactica ; episode XIII. Who speaks for Earth? (ca. 124 min.).
520	Summary, etc.	Carl Sagan's complete Emmy and Peabody award-winning thirteen episode mini-series exploring cosmology and astronomy.
538	System Details Note	DVD; Dolby digital 5.1 surround; region 0.
650	Subject Added Entry	Cosmology. Astronomy. Science.
700	Added Entry – Personal Name	Sagan, Carl, 1934- Malone, Adrian. Druyan, Ann, 1949- Soter, Steven. Haines-Stiles, Geoffrey. Kennard, David, 1923-

Conclusion

21st century archivists have developed cataloguing standards that respect the theoretical principles of archival science. ISAD and AtoM are web based standards that do not compromise the organic nature of archival documents. The IFLA and ICA working groups on audiovisual archives should collaborate more and develop generic standards that can accommodate the key theoretical underpinnings of both disciplines. The new Resource Description and Access (RDA) cataloguing standard, championed by the Canadians and designed to replace the Anglo-American Cataloguing Rules (AACR2), is one such initiative.

About the Authors

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³ The International Research on Permanent Authentic Records in Electronic Systems, abbreviated as Interpares.

⁴ The Society of American Archivists, abbreviated as SAA.

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