

Not Your Daughter's Archives:

Reflections of an Aging Archivist on the Issues of Electronic Preservation
檔案的代溝：一個年長檔案管理員與電子檔案保存的問題

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The Archives at The University of Hong Kong (HKU)

Before the Handover in 1997, HK's government archives operated under the British Archival Law through the Colonial Office in London. After the Handover, there is no archival or freedom of information law in HK.

Against this background, HKU in anticipation of its 100th anniversary (in 2011), hired the first professional academic archivist in 2006 to set up the HKU University Archives (HKUA), and establish an archives and records management programme.

HKUA's priority was building the collections and providing reference services that supported HKU's three-year long centenary celebration (2010-2012).

After this, HKUA has had time to reassess its future needs, and among its reassessed priorities is the need to establish policies and procedures for the **preservation of digital records**, along with HKUA's other formats of records.

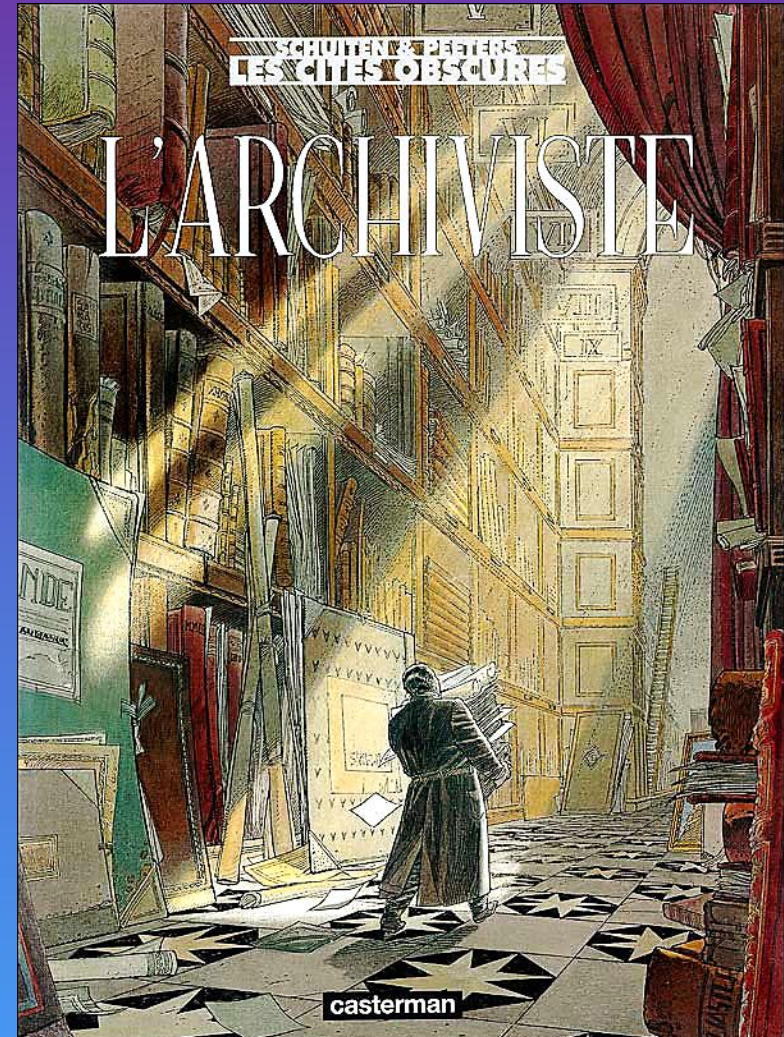
Not Your Daughter's Archives: Introduction

A little bit about myself as an archivist...

Since becoming an archivist in 1991, my education and experience began before the Internet existed as we know it today and in the early days of personal computing. The first priority for me has been to update my professional knowledge in the specific area of electronic records management and digital archives.

Completing certification as a Digital Archives Specialist in 2015, was followed up by the retaking of the Academy of Certified Archivists exam – knowing that the exam would reflect the changes in required knowledge since my first exam in 1994.

Yes, I AM that OLD! 😊



Not Your Daughter's Archives: Reflection #1

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- The core responsibilities, practices, and standards of archival work still apply to digital objects, but they are married to new practices and standards from the digital preservation community.
- The digital archivists' responsibilities for their collections remain:
 - Identify and Appraise
 - Collect (Accession)
 - Arrange and Describe
 - Preserve and Conserve
 - Provide Access
 - Maintain legal and professional knowledge, standards and practice
 - Education and Outreach to promote use/support



Not Your Daughter's Archives: Reflection #2

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- Together, the digital archivist and the IT professional will research the tools and systems that will allow them to:
 - collect and monitor digital records
 - create metadata
 - repair and preserve
 - provide accessAll according to international standards and practices.

- Together with other stakeholders, principally records creators, donors, and senior management of the institution, archivists will develop the local implementation of global standards and plan for improvements.



Not Your Daughter's Archives: Reflection #3

During this first 20 years (since around the mid-1990s) of the Internet as we know it, archival organizations around the world have been developing standards for information systems and platforms, metadata, delivery to the users, and digital preservation. There is no need for each archive/institution to reinvent the wheel.



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- Your digital collections have a better chance of being preserved for a longer time if you:
 - Follow established international/national standards and practice
 - Use the ISO Open Archival Information System (OAIS) reference model and the resulting ISO Standard 16363 to help you to develop requirements and specifications for a digital preservation system.
 - Use open-source coding products and not completely proprietary software to manage your collections
 - Do not try to ingest every data format out there, because running emulation programmes is costly and difficult to coordinate. Set standards for SIPS.



Not Your Daughter's Archives: Reflection #4

Avoid acronym overload. As a start, learn the differences between a Digital Preservation System (DPS), a Collection Management System (CMS), a Digital Access Management System (DAMS), and an Institutional Repository (IR).



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- Use a chart to help you organize a lot of new knowledge at once, like the **Tool-Comparison Table** on pp. 34-35 of “Module 12” of the *Digital Preservation Essential Series* (O’Meara and Stratton, 2016) published by the Society of American Archivists (SAA).
- Much of the intimidation factor in dealing with new archival formats is simply due to the new jargon and acronyms, as well as the confusion arising from imprecise use of terms from more than one discipline. That happens when different professions collaborate in new endeavors.
- Do not be afraid to ask questions of each other, and to insist upon the precise use of terminology for better communication.



Not Your Daughter's Archives: Reflection #4a

Tool-Comparison Table

	Generates METS	Processes METS structmap and maintains relationships between objects	Generates PREMIS	Generates MODS	Generates and records checksums	Generates unique IDs	Performs file format ID	Performs file format normalization	Has API	Manages descriptive metadata
DIGITAL PRESERVATION SYSTEM										
Archivematica	X	X	X	X	X	X	X	X	X	X
Preservica		X	Generates something similar		X	X	X	X	X	X
Rosetta		X	X		X	X	X	X	X	X
Fedora/Hydra	X	X	X	X	X	X	X	X	X	X
COLLECTIONS MANAGEMENT SYSTEMS										
Archivists' Toolkit	Can export METS			Can export MODS					X	X
Archon									X	X
ArchivesSpace	Can export METS	Can import METS	Might be able to export PREMIS in future	Can export MODS		X			X	X
ICA AtoM		Can Import METS	X	X						X
INSTITUTIONAL REPOSITORIES										
DSpace	Can export METS	Can import METS	Can import/ export PREMIS	Can import/ export MODS	X	X			X	X
EPrints	Can export METS			Can export MODS	X	X	X		X	X
Greenstone	X	X				X			X	X
Digital Commons						X				X
Fedora/Hydra	X	X	X	X	X	X	X	X	X	X
DIGITAL ASSET MANAGEMENT SYSTEMS										
Content DM	X					X			X	X
Digitool	X	X	X			X			X	X
ResourceSpace						X	X		X	X

Table source: pp. 34-35 of "Module 12" of the *Digital Preservation Essential Series* (O'Meara and Stratton, 2016) published by the Society of American Archivists

Not Your Daughter's Archives: Reflection #5

To quote Frank Boles, former President of SAA:

“It is essential to establish that all combinations of media and recording techniques are equal as archival media. None is privileged above another, nor is one less acceptable than the rest.”



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- The cost of preserving electronic media is greater than the cost of preserving hard copy – both texts and images.
- However, *all* archival collections cost money.
- All archivists have to advocate their programmes and compete for financial support. We are now adding to the list of preservation needs that must be paid for.
- The size of the archives piece of your institutional budget pie may never be large, but the size of pie itself is not static.



Not Your Daughter's Archives: Reflection #6

Just like the shifts from stone carvings to papyrus, from handwritten manuscripts to printed works, and from the hand press to mechanized presses, the shift to digital documentation has not and will not happen overnight or even be complete within a half-century.



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- Along with the pace of change not being as quick as people would like to claim, here are some other observations:
 - It is better to do something to prepare for the care of digital records than to do nothing, aiming for levels of digital preservation that can be adopted incrementally and be applied across all types of archival collections
 - The field will continue to change and there is no perfect time to start
 - It is good to balance best practices with local requirements with the emphasis on best practice
 - Planning must come first, but it should not delay the doing.



Not Your Daughter's Archives: Final Thoughts

The very nature of archivists' work means that we will never know whether or not we have done a good job. It will be judged by those who come after us long after we are gone.

Archivists tend to think that we are not doing enough, or not doing it quickly enough, NOT TRUE! Therefore, do not judge yourself too harshly, and while we do the best we can, it is a waste of time to judge ourselves against colleagues or other institutions as we are all in the same boat, rowing in the same direction.

Let go of the worry and angst about all the records we have lost or are losing as a result of this technological shift. This loss of archival materials has always been with us, especially during times of change. We cannot now nor have we ever been able to fill in all the holes in the historical record.





Thank You!