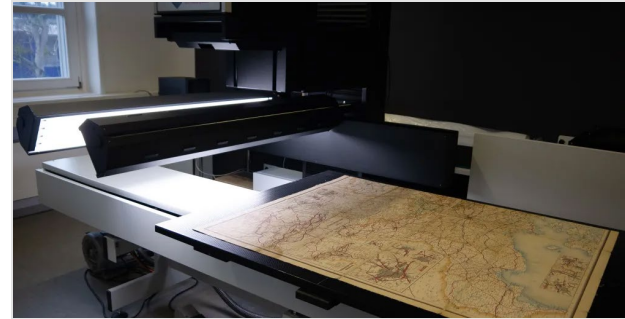


(Digital) Cultural Heritage, Digital Archive and Digital Preservation - different labels for the same concept?

Digital and Ecological Sustainability of Cultural Heritage (New Trends in Digital Culture Studies, Online Workshop 2) – DIGHT-Net / University of Turku

Ulf Preuss M.A. (University of Applied Sciences Potsdam) / 25. April 2025



Digitisation Lab. University of Applied Sciences Potsdam.
Information Sciences Department. Link: <https://www.fh-potsdam.de/en/study-further-education/labs-workshops/digitisation-lab>



Archive Workshop. University of Applied Sciences Potsdam.
Information Sciences Department. Link: <https://www.fh-potsdam.de/en/study-further-education/labs-workshops/archive-workshop>

Topics

- About analogue and digital cultural heritage
- About labels and concepts
- Who takes care of the cultural heritage?
- How to take care of (digital) cultural heritage with sustainable methods?
- Conclusion

About analogue and digital cultural heritage

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Definition

*"The **digital heritage** consists of **unique resources of human knowledge and expression**. It embraces cultural, educational, scientific and administrative resources, as well as technical, legal, medical and other kinds of **information created digitally, or converted into digital form from existing analogue resources**. Where resources are "born digital", there is no other format but the digital object. Digital materials include texts, databases, still and moving images, audio, graphics, software and web pages, among a wide and growing range of formats. **They are frequently ephemeral, and require purposeful production, maintenance and management to be retained.***

Many of these resources have lasting value and significance and therefore constitute a heritage that should be protected and preserved for current and future generations. This ever-growing heritage may exist in any language, in any part of the world, and in any area of human knowledge or expression."

UNESCO: Charter on the Preservation of the Digital Heritage. Adopted at the 32nd session of the General Conference of UNESCO, 17 October 2003. Document Code CL/3865 16.1.2009. Link: <https://unesdoc.unesco.org/ark:/48223/pf0000179529>



About
analogue and
digital cultural
heritage

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Tasks

What makes an object a piece of cultural heritage?

- ***Appraisal***
- ***Collecting (change of custody private or public)***
- ***Cataloguing***
- ***Presentation***
- ***Access***
- ***Preservation***
- ***Research***



About analogue
and digital
cultural heritage

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Trustworthiness

Cultural Heritage in Archives:

*"Archives are managed and preserved in ways that ensure their **authenticity, reliability, integrity** and **usability**."*

International Council on Archives (ICA): Universal Declaration on Archives. Adopted at the General Assembly of ICA. Oslo, Sept. 2010. Link: <https://www.ica.org/app/uploads/2024/01/English-%E2%80%93-Universal-Declaration-on-Archives-UDA.pdf>

- *Museums and libraries with cultural heritage collections have the same task.*
- *There should be no difference between analogue and digital content.*

About analogue and digital cultural heritage

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Collection building

Collecting Digital Heritage

“Selection is used when heritage professionals — **archivists, librarians, and curators** — identify material for addition to their collections based on specific criteria. (...) The selection criteria are generally expressed or defined in a collecting or acquisition policy, and may be based on the following criteria (which may also be combined):

- **Function:** Documentary heritage institutions such as archives will select records for long-term value based on the work carried out by an institution or government. (...)
- **Subject/Topic.** An institution will focus on and attempt to document one or more subject areas. (...)
- **Creator/Provenance.** An institution will focus on particular creators of heritage or provenance. (...)
- **Type/Format.** An institution might collect by the type or format of content (...).”

UNESCO: The UNESCO/PERSIST Guidelines for the Selection of Digital Heritage for Long-Term Preservation. Ed. II. 2021. Link: <https://repository.ifla.org/server/api/core/bitstreams/b5089a59-05d8-4105-b35c-ca4076f86a68/content>



About analogue
and digital
cultural heritage
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Functions of
digital
representations

Original object vs. digital representation



Potsdam Museum - Forum für Kunst und Geschichte: Sideview with Image of Friedrichs II. Digitized by: Bernd Hiepe. CC BY NC SA 4.0 International. Link: <https://www.museum-digital.de/brandenburg/index.php?t=objekt&oges=8562>



About analogue
and digital
cultural heritage

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Functions of
digital
representations

Original object vs. digital representation



7-inch reel of 1/4-inch-wide (6.4 mm) recording tape, typical of non-professional use in the 1950s–70s. Studios generally used 10 1/2 inch reels on PET film backings. Image by Daniel P. B. Smith. CC BY-SA 3.0. Link: https://en.wikipedia.org/wiki/Reel-to-reel_audio_tape_recording#/media/File:Magtape1.jpg



About labels
and concepts

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Archive

Archive - what does it mean?

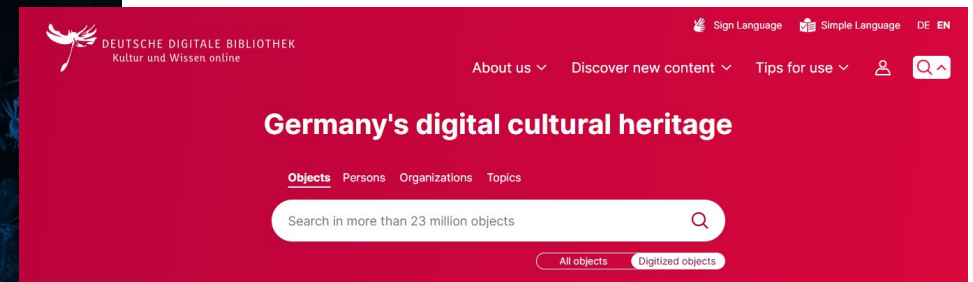
***Labels like "Archive", "Library" or "Museum"
are not protected.***

About labels and concepts - Digital Archive

Digital Archive - what does it mean?



europeana. Link: <https://www.europeana.eu/en>



Deutsche Digitale Bibliothek. Link:
<https://www.deutsche-digitale-bibliothek.de/?lang=en>

New in the Deutsche Digitale Bibliothek



Radtraktor Belarus MTS
- 5 MS



Hamburg:
Doppelschilling 1599



ROSe



Die Lokomobil-Fabrik R.
Wolf Magdeburg-
Buckau (1912)

About labels
and concepts

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Digital Archive

Digital Archive - what does it mean?

- ***Focus on presentation and access to digital files and data of a general or specific collection (e.g. Archive.org: Internet Archive. Audio. [Link](#))***
- ***Focus on research of a specific topic (e.g. within a scientific project)***
- ***Focus on collecting and preservation of born-digital and/or digitized content (incl. context information) (e.g. broadcasting corporations)***

About labels and concepts - Digital Preservation

Digital Preservation - what does it mean?

- ***Significant properties of a digital object***
- ***Files are saved on a digital storage medium and secured by a data backup, but that is not necessarily digital preservation***
- ***Strategies for digital preservation: format migration, emulation, refresh of storage medium***



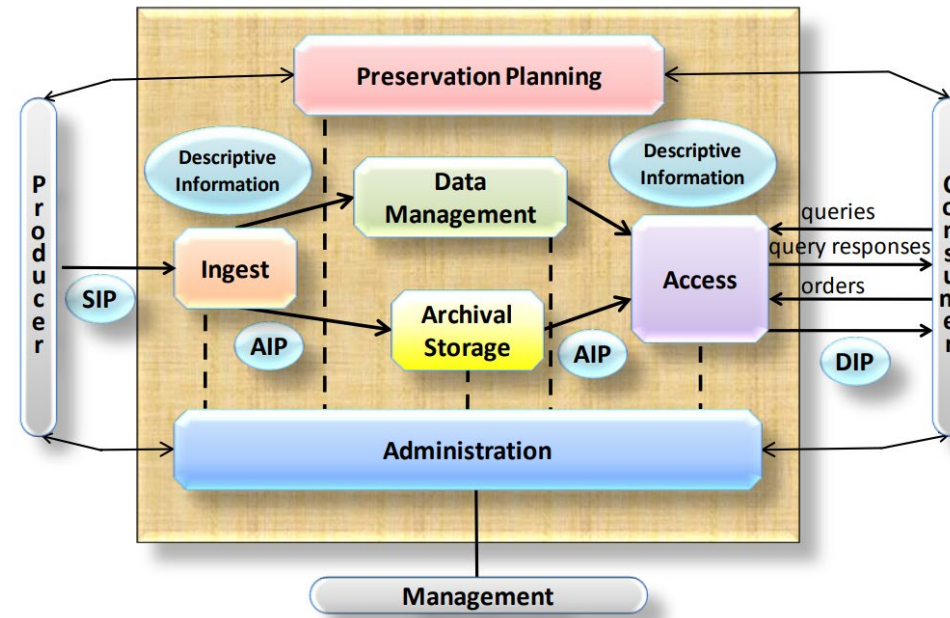
Image of a book page scanned with 24-Bit color, 8-Bit grayscale and 1-Bit black and white.

About labels and concepts

- Digital Preservation

Digital Preservation - what does it mean?

- *Functional Entities of an Open Archival Information System (OAIS)*



CCSDS. Recommended practice for an OAIS reference model. CCSDS 650.0-M-3. Dec. 2024.

<https://public.ccsds.org/Pubs/650xom3.pdf>



About labels
and concepts

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Digital
Preservation

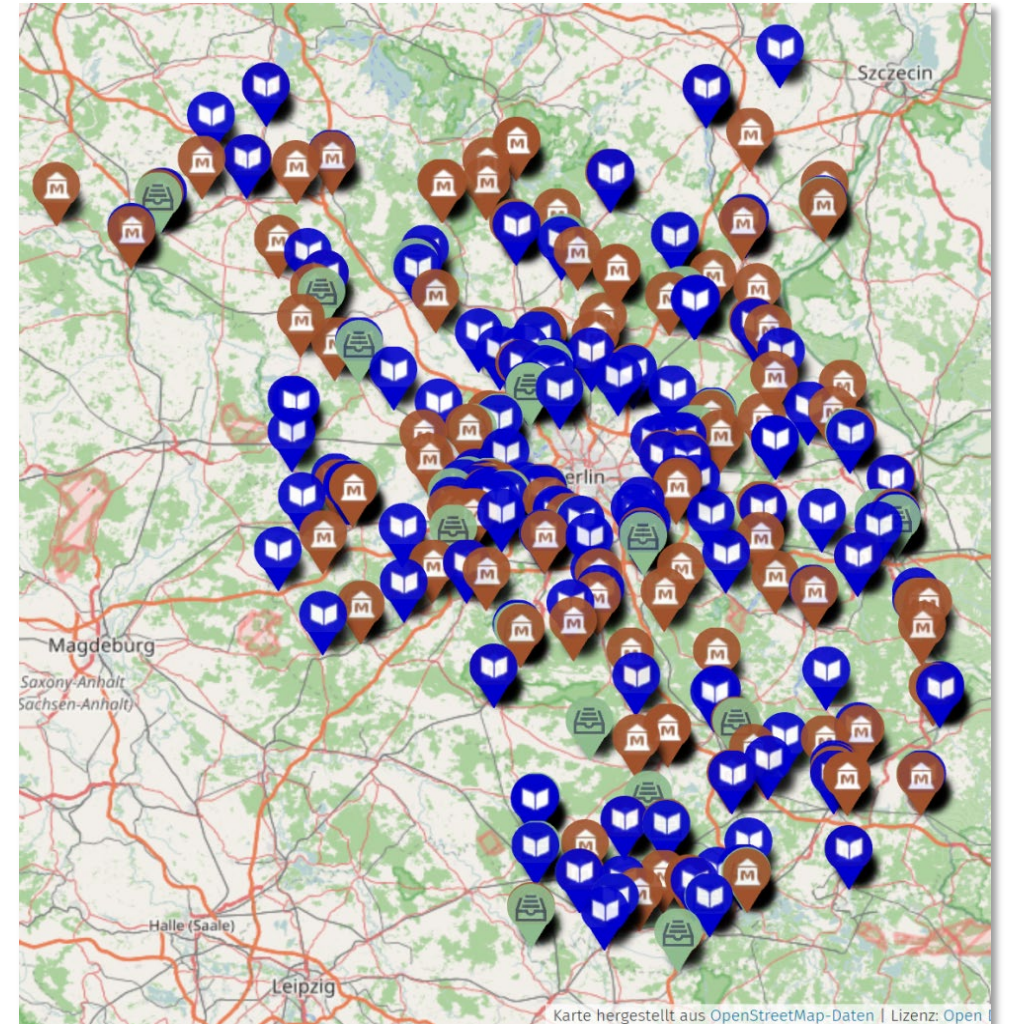
Digital Preservation - what does it mean?

- ***Content that must be preserved for access and use in the future***
- ***Technical infrastructure and***
- ***organizational, legal, industrial, scientific and cultural issues***
- ***Implementing standards like: OAIS reference model, ISO Standards for description, for digitization of cultural heritage ...***

Who takes care
of the cultural
heritage?

*Cultural Heritage
Collections can be
found in private,
scientific or public
institutions.*

*The are often
distributed in terms
of the types of
institutions, the
amount of items
collected, a certain
areal context ...*



Distribution of archives, libraries and museums in the German Federal State of Brandenburg. Cla_S CC BY SA 4.0 [Link](#)



How to take care
of (digital)
cultural heritage
with sustainable
methods?

- *Be clear on available resources (now and in the foreseeable future) -> digital preservation is a huge challenge for every institution, small or large*
- *Appraisal of content*
- *Definition of digital preservation needs within your context*
- *Basic task like cataloguing are more essential than ever for reuse in the digital preservation process*
- *Using collaborative systems or infrastructures (if available)*

Conclusion

- *A common understanding of terms and concepts is essential.*
- *Resources are limited*
- *We can not preserve everything*
- *Technology is “just” a tool that gives us a way to do a certain task. It changes over time for sure.*
- *We need to take care of digital cultural heritage constantly or it will be lost for sure.*
- *Sustainability is not achieved by using technology, but by building communities that care.*

Contact

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