Caring for data to shape the future

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People ask:

What is DARIAH? What is an infrastructure? And a Research infrastructure? What is it for?

As we explain what it is and how it can be useful to them, then they say:

Ah! OK! And what can we find at DARIAH? And then how can we use it? What is it for us?
DARIAH is a special platform where knowledge comes together, happens and is shared.
1. Shaping new approaches to data management in arts and humanities with a really old approach - training
KNOWLEDGE CREATION PARADIGM

Data curation & preservation → Research → Creation → Learning & Training → Share & Reuse
IS CONSTANTLY CHANGING
Data and challenges and responsibilities of the digital humanities

A. Awareness and training
B. Digital heritage
C. The frightening and overwhelming loss of digital heritage
D. Preservation of digital heritage
E. Organization of digital heritage
F. Collaborative work
G. A cultural change
A. Awareness and training
DIGITAL SKILLS & TRAINING

CHALLENGES

"After careful consideration of all 437 charts, graphs, and metrics, I’ve decided to throw up my hands, hit the liquor store, and get snokered. Who’s with me?!"

95% of the respondents use any type of digital tools to disseminate their work.

Figure 1. Digital tools used to disseminate the work
Digital infrastructures are particularly used in the first phase of the research.

- Around 60% are users of digital humanities;
- Most of them (44%) use more than one DH infrastructure.
What distinguishes Digital Humanities *users* from *non users*?

<table>
<thead>
<tr>
<th></th>
<th>Users</th>
<th>Non-Users</th>
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</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>Older researchers</td>
<td>Younger researchers</td>
</tr>
<tr>
<td><strong>Academic degree</strong></td>
<td>PhD degrees are more frequent</td>
<td>PhD degrees are less frequent</td>
</tr>
<tr>
<td><strong>Professional activity</strong></td>
<td>Higher % of teachers</td>
<td>Higher % of students</td>
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<tr>
<td><strong>Cross-disciplinarity</strong></td>
<td>More frequent</td>
<td>Less frequent</td>
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<tr>
<td><strong>Provision of research under open access</strong></td>
<td>More frequent</td>
<td>Less frequent</td>
</tr>
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B. Digital Heritage
Charter on Conservation of Digital Heritage

It was defined what was meant as digital heritage: unique resources of human knowledge and expression, whether cultural, educational, scientific or administrative, as well as technical, legal, medical and other kinds of information created digitally, or converted into digital form from existing analogue resources (http://portal.unesco.org).

It added that digital documents could cover a wide and increasingly diverse range of formats, such as texts, databases, still and moving images, audio, graphics, software and web pages, which are often ephemeral, thus requiring specific actions of maintenance and management since its inception.
DIGITAL HERITAGE

Risks
Digital | Crowdsourcing | Storage | Ontologies

New legacies
Preserve information resources and creative material produced digitally

Vulnerability and ephemerality

Collective commitment
Responsibility in preserving digital heritage for future generations
What if Notre Dame de Paris had disappeared / been deleted?

Sales of *The Hunchback of Notre-Dame* book shoot in France after cathedral fire

Victor Hugo’s book leads Amazon platform sales ...

13 billion visitors per year on site and on digital media?

Some new cathedrals / heritage forms are digital ...

The World is prepared to show, explain, study, rebuild.... Digital Heritage?
Do we master the stored information? Is reliable what is published? And what is not 800 years old and every day happens, is created, invented?
DIGITAL SCULPTURE

Renewal, Chad Knight
C. The frightening and overwhelming loss of digital heritage
Digital Heritage Loss

MISSING DATA
As research articles age, the odds of their raw data being extant drop dramatically.

SOURCE: "Scientists losing data at a rapid rate", in Nature News, 19/12/2013
https://www.nature.com/news/scientists-losing-data-at-a-rapid-rate-1.14416
D. Preservation of digital heritage
E. Organization of digital heritage
F. Collaborative work
FROM DATA

TO

BIG DATA

SOURCE: https://www.slideshare.net/sfamilian/working-with-big-data-jan-2016-part-1
G. Cultural change
2. Preserving information, sharing knowledge, democratizing access – Open Science
OPEN SCIENCE ECOSYSTEM

Science

Culture

Social appropriation of knowledge

Open access to data and publications public funded

Collaborative and participative research processes

Assessment models according to OS paradigm

Implementation of FAIR principles to the results of research

Open Innovation

Articulation with international strategies and policies

Social appropriation of knowledge
OPEN SCIENCE PILLARS

Open access: publications and data
  Repositories | Repository Directories
  Shared infrastructures | Shared networks
  Common Networks | European Open Science Cloud

Open Research | Open Innovation

Participatory and collaborative knowledge | Co-creation - co-production
  Citizen Science
  Co-accountability
  Science for Society

Source: https://www.ciencia-aberta.pt