

Collections as data at the National Library of Scotland: access, engagement, outcomes

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The National Library of Scotland

Over 31 million items in collection (excluding web archive, and owned-in-perpetuity digital collections)

'One Third Digital' by 2025

In-house mass digitisation programme

Strategy 2020-2025, 'Reaching People': strong focus on engaging with new audiences through the collections



Introducing the Digital Scholarship Service

Digital Scholarship Service



**ENCOURAGE, ENABLE &
SUPPORT USE OF
COMPUTATIONAL
RESEARCH METHODS
WITH THE COLLECTIONS**



**ENSURE THAT THE
COLLECTIONS ARE USED
TO THEIR FULL POTENTIAL**



**ESTABLISH A LIBRARY
CULTURE WHICH
UNDERSTANDS DIGITAL
SCHOLARSHIP**



**PRACTISE AND PROMOTE
TRANSPARENCY IN OUR
DATA CREATION
PROCESSES**



**ANTICIPATE THE FUTURE
OF RESEARCH**



TEXT



IMAGE



METADATA



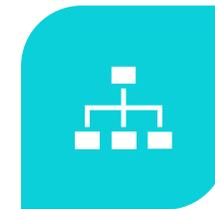
AUDIOVISUAL



MAPS



WEB ARCHIVE



ORGANISATIONAL

**1. Making
data
available**

**2. External
engagement**

Collaboration

Projects

PhDs, residencies, fellowships

Beyond research community

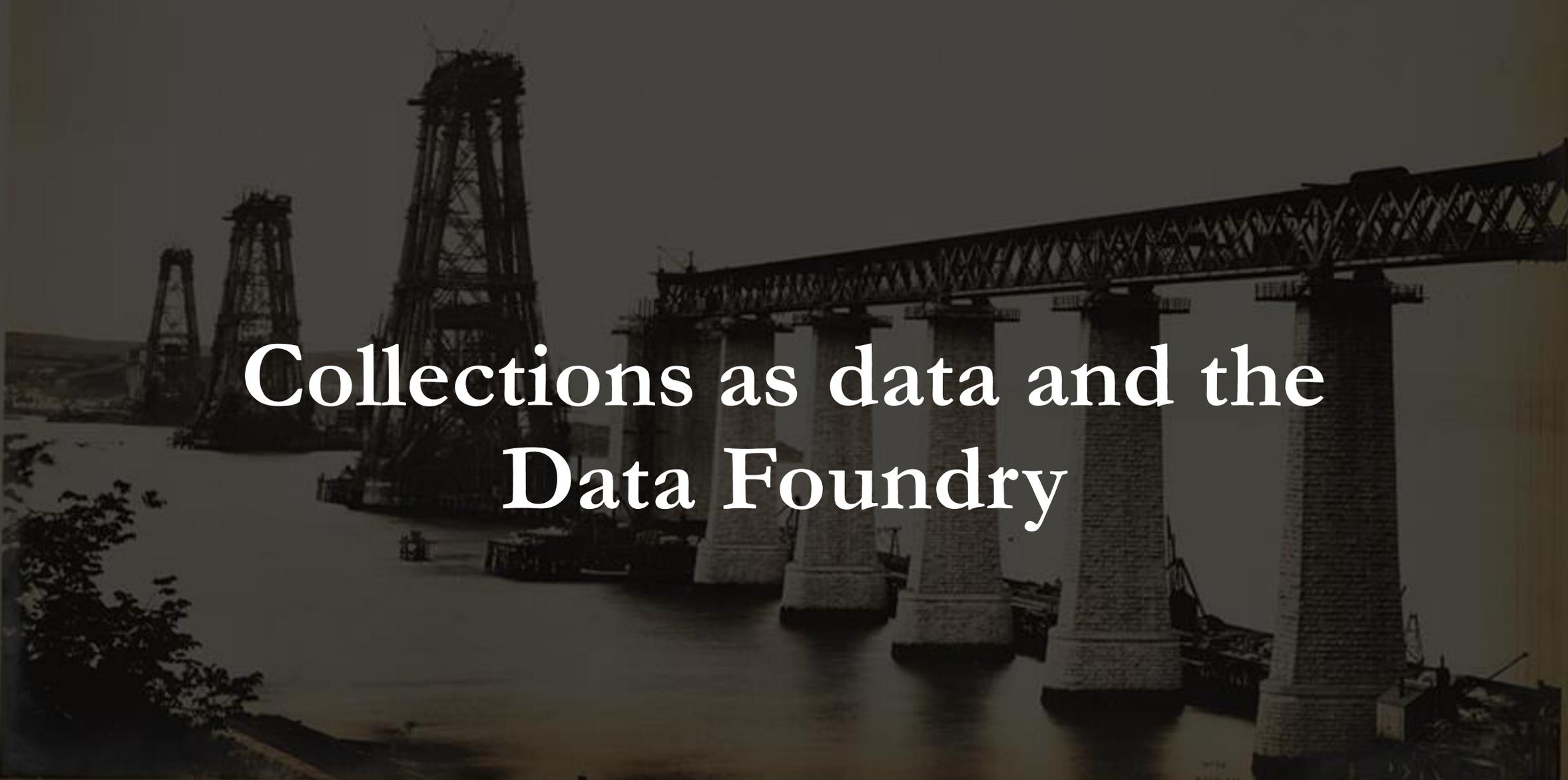
**3. Internal
engagement**

Awareness

Training

Champions

Culture



Collections as data and the Data Foundry

No-nonsense data

Identifying user needs

Pro	Intermediate	Beginner
All the tech skills!	Limited tech skills	No tech skills
Will find a way to get the data no matter how presented	Understands value of different formats and approaches for research questions: theoretical rather than practical understanding	Wants to use online tools to explore datasets
But – has expectations of existing standards (where they exist) & consistency	Wants to get hold of the data easily to check what's there	Just wants the text
	Likely to employ an RA to do the work	

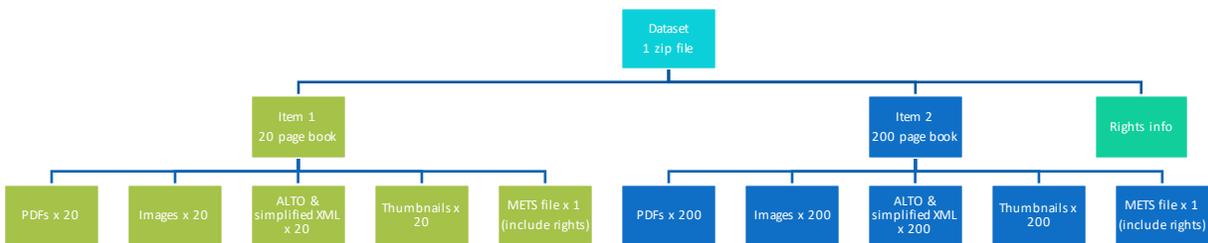
Plus broader audience includes other libraries (standards, presentation of data etc)

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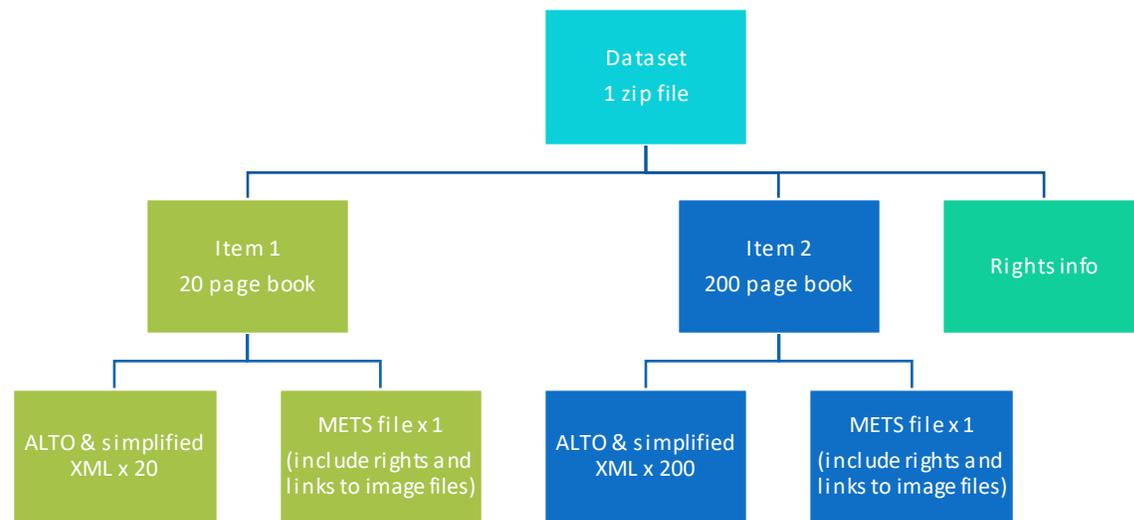
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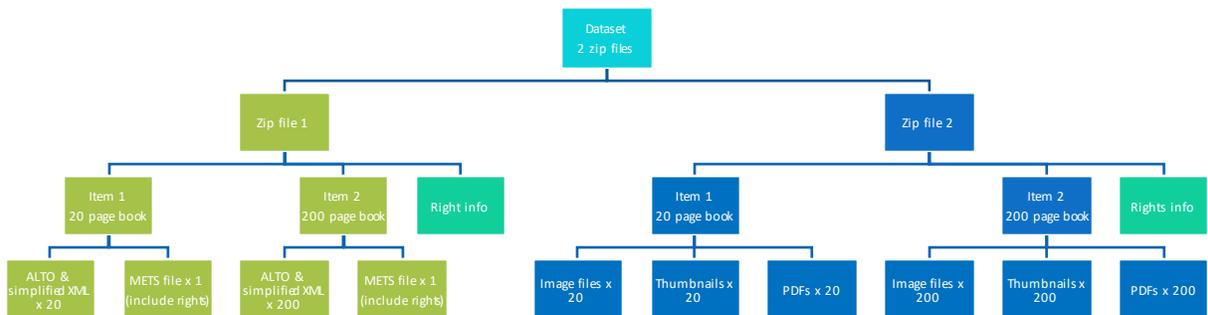
A



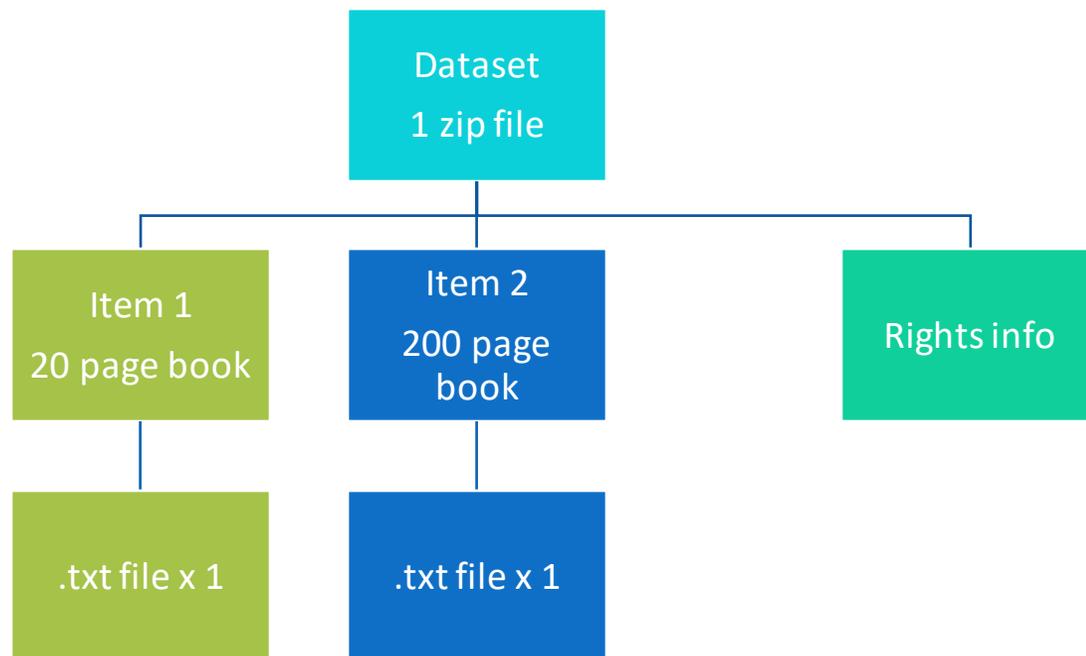
B



C



D



Making decisions

- Standards:
 - METS/ALTO and Plain text
 - MARC/Dublin Core
 - Tiered downloads
- Image sizes/quality to include
- Storage (local/cloud)
- What metadata to include and what is available
- How to be transparent: gathering and presenting dataset context
- Now moving on to more metadata collections, web archive data, spatial data

Data Foundry

Data collections from the National Library of Scotland

<https://data.nls.uk/>

Our principles

National Library of Scotland data



Open

The National Library of Scotland publishes data openly and in re-useable formats.



Transparent

We take the provenance of our data seriously, and are open about how and why it has been produced.



Practical

We present datasets in a variety of file formats to ensure that they are as accessible as possible.

A whole-Library effort

Developers

Curators

Metadata

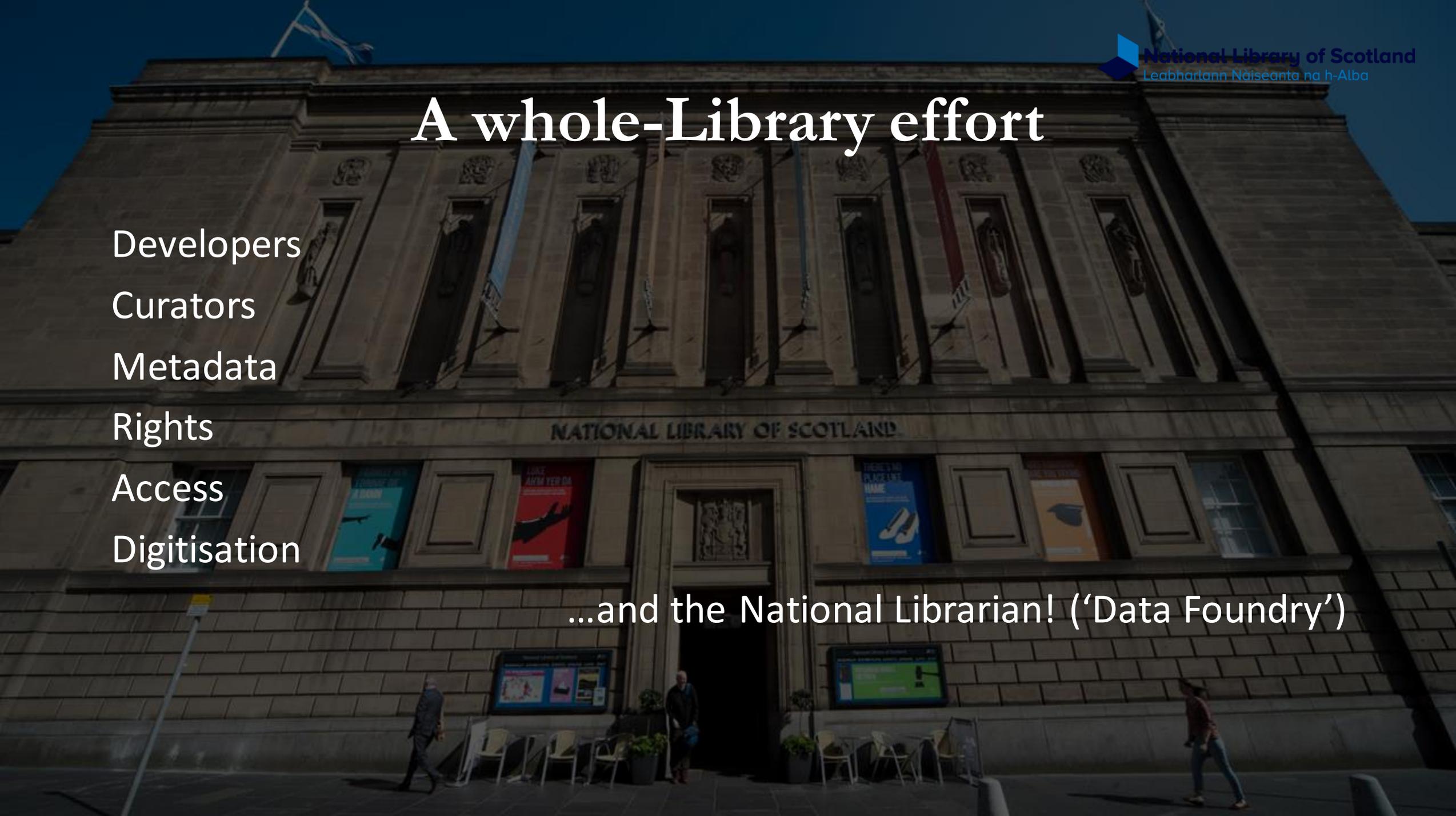
Rights

Access

Digitisation

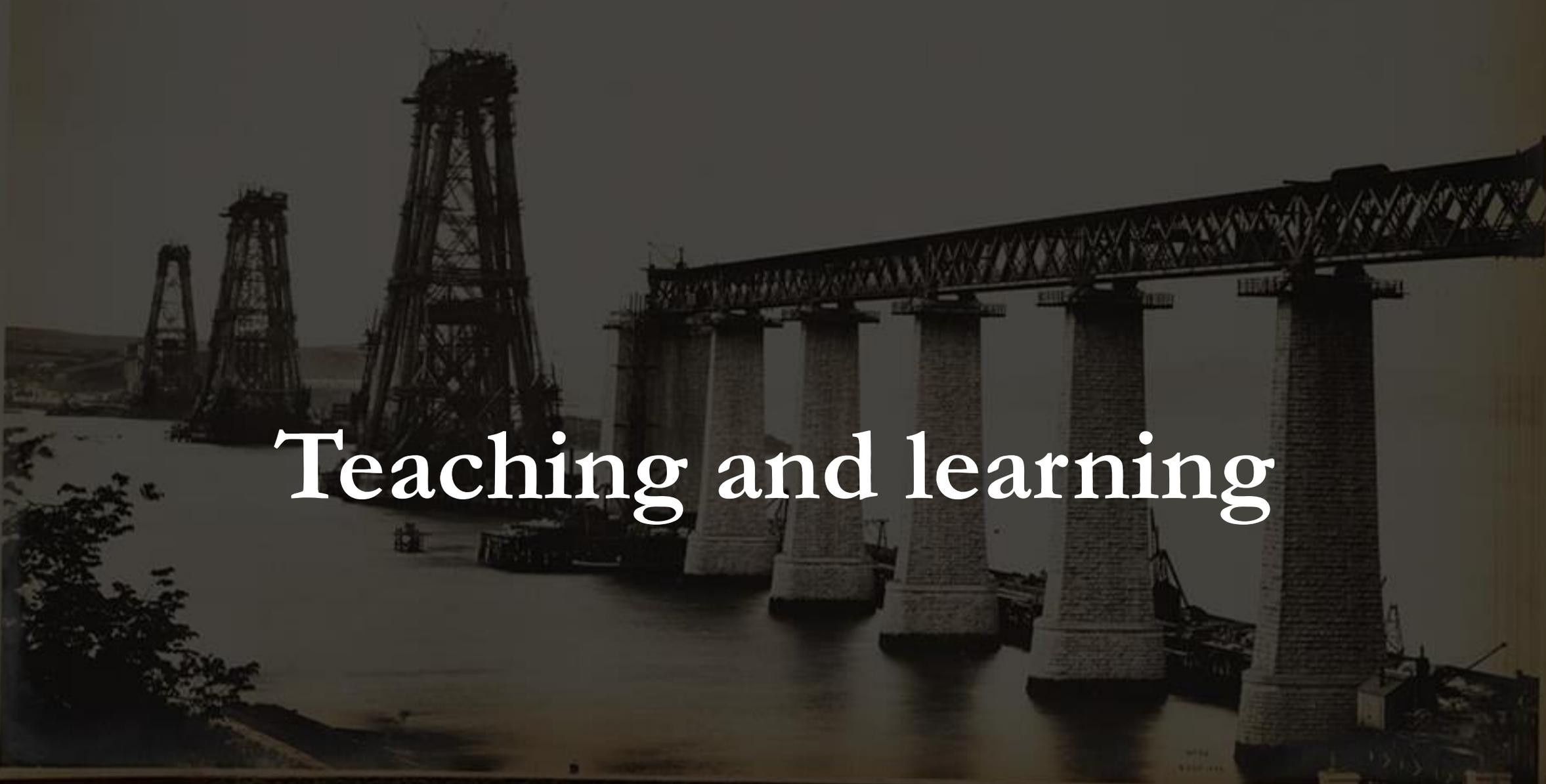
NATIONAL LIBRARY OF SCOTLAND

...and the National Librarian! ('Data Foundry')





Engagement activity and outcomes



Teaching and learning

1870 - 1900
*Birth of poster
& Art Nouveau*

for roughs
1900 - 1914
The New Century
& Early Modernism

1914 - 1919
PROPAGANDA

1919 - 1950
MODERNISM
& ART DECO

1950 - 1972
POP ART
& PSYCHEDELIC

1972 - 1990
THE 1980s
Post Modernism

GLOBAL
POSTER
COLLECTION



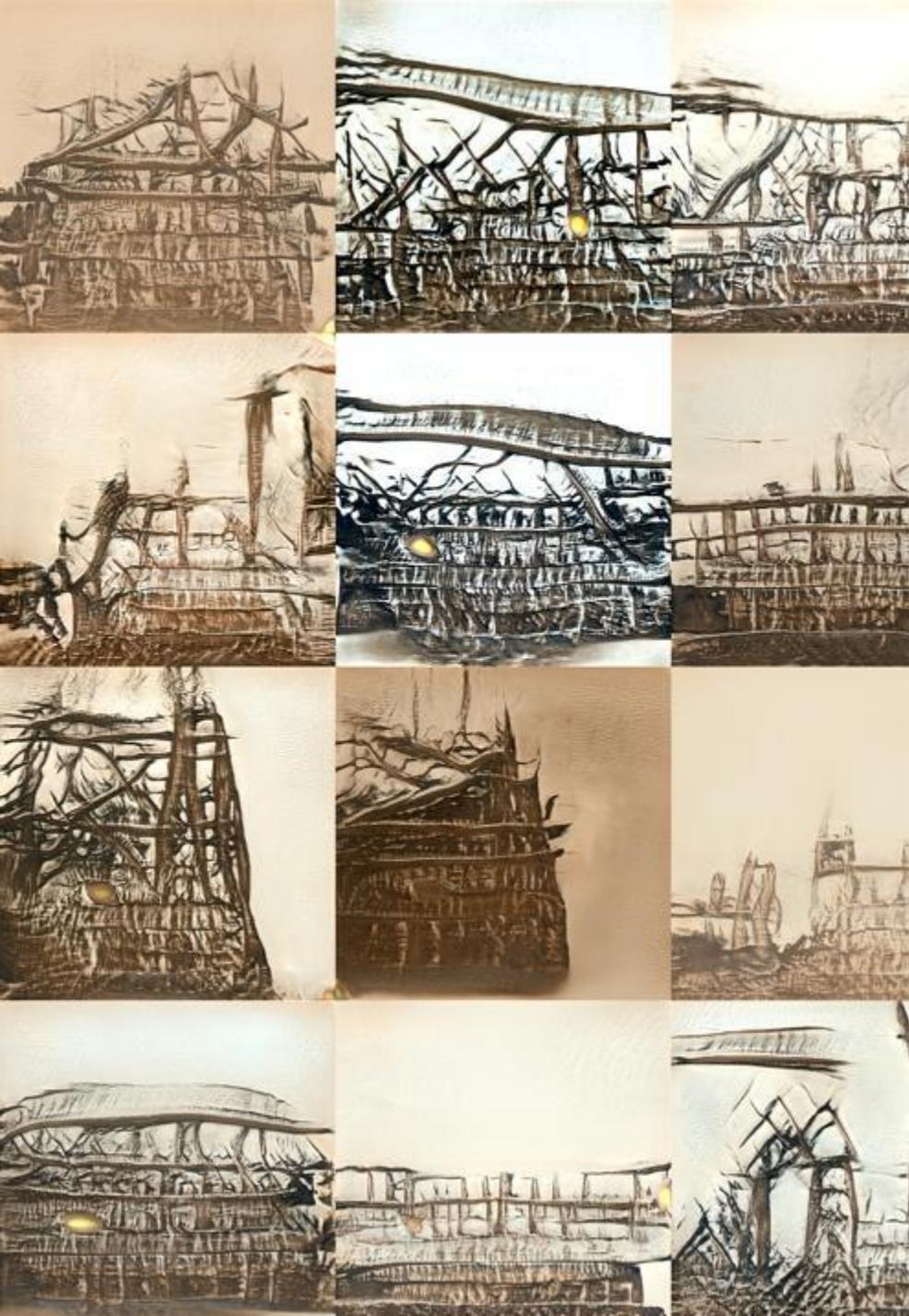


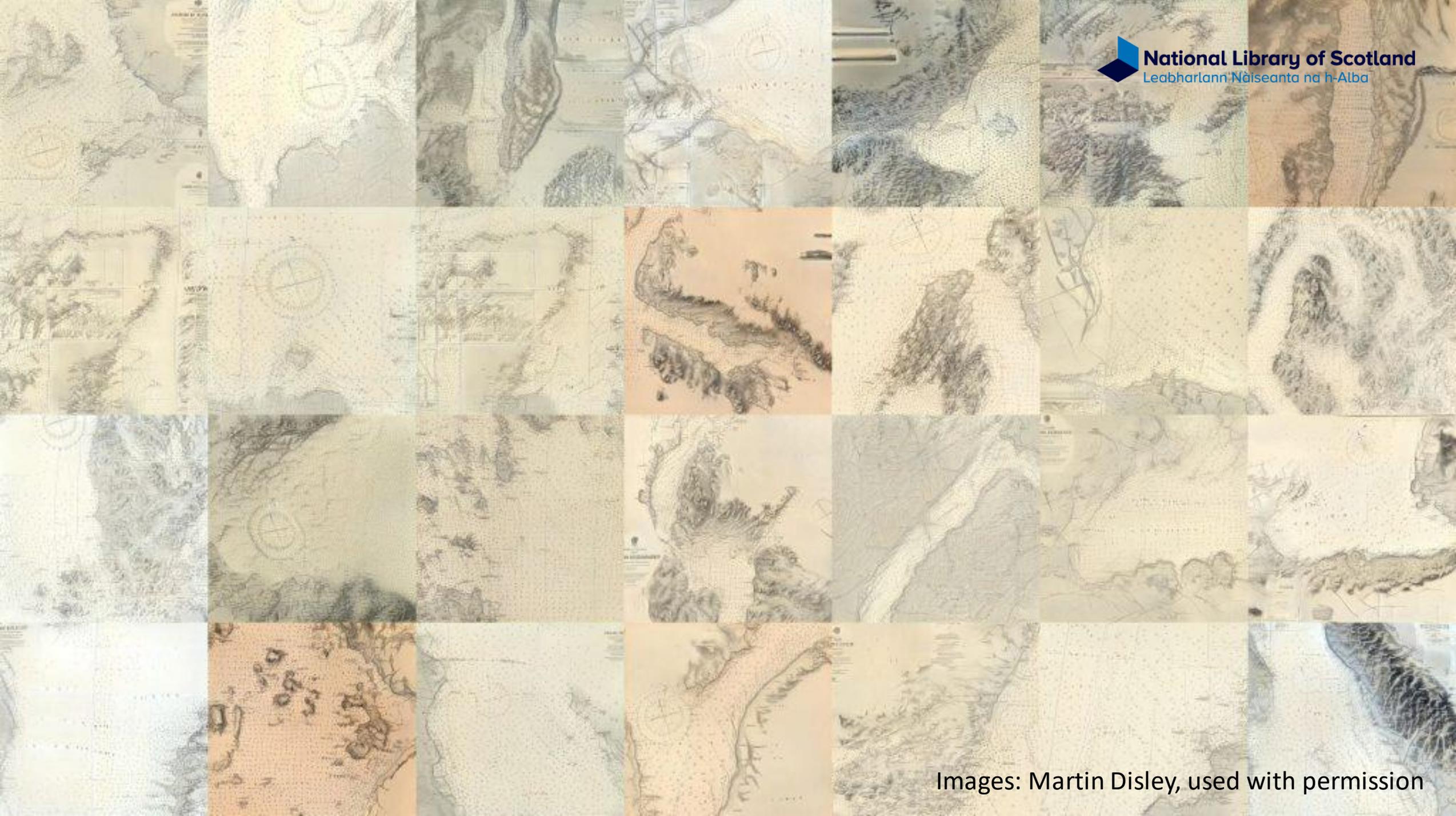


Creative partnerships

the dataset is not the map is not the territory

- Martin Disley @martin_disley
- Funded by Creative Informatics (University of Edinburgh)
- Using GAN techniques with the collections
- <https://data.nls.uk/projects/artist-in-residence/>





Is it true? The post-truth archive factory

- Marion Carré @Ma_rionC
- Collaboration with Goethe-Institut Glasgow, Alliance Française Glasgow and Institut Français d’Ecosse
- Challenge: how does AI open up new ways of interacting with library and archival collections and what are the challenges and dangers of using this technology in archival research?
- Will you archive ‘fact’ or fake news?
- Take part: <https://data.nls.uk/projects/artist-in-residence-marion-carre/>



...

How do we construct an archive? How do we construct truth? Using Artificial Intelligence to create a fake archive, our Artist in Residence @Ma_rionC asks these questions using #NLSdata in her new work, Selective Memories.



2:55 PM · Nov 11, 2021 · Twitter Web App





Research collaborations

Annual fellowship

- Dr Giles Bergel (University of Oxford)
 - VGG computer vision tools
 - Chapbooks dataset
 - Exploring what can be learnt from their illustrations about chapbooks' origins; about relationships between chapbook printers, publishers and distributors; and about the type and range of imagery available to their readers.
- Dr Rosa Filgueira (St Andrews University)
 - AI toolkit for the collections: bringing AI tools to those who can't code
 - Initially with the Encyclopaedia Britannica dataset
- Dr Gustavo Candela (University of Alicante)
 - Linked Open Data – Moving Image Archive metadata

PhD studentships



Joe Nockels

'Adopting Transkribus in the National Library of Scotland: Understanding how handwritten text recognition will change management and use of digitised manuscripts'.

Supervisors: Professor Melissa Terras (University of Edinburgh), Dr Paul Gooding (University of Glasgow), Dr Sarah Ames and Stephen Rigden (National Library of Scotland).

Funder: Scottish Graduate School for Arts and Humanities, AHRC Collaborative Doctoral Award

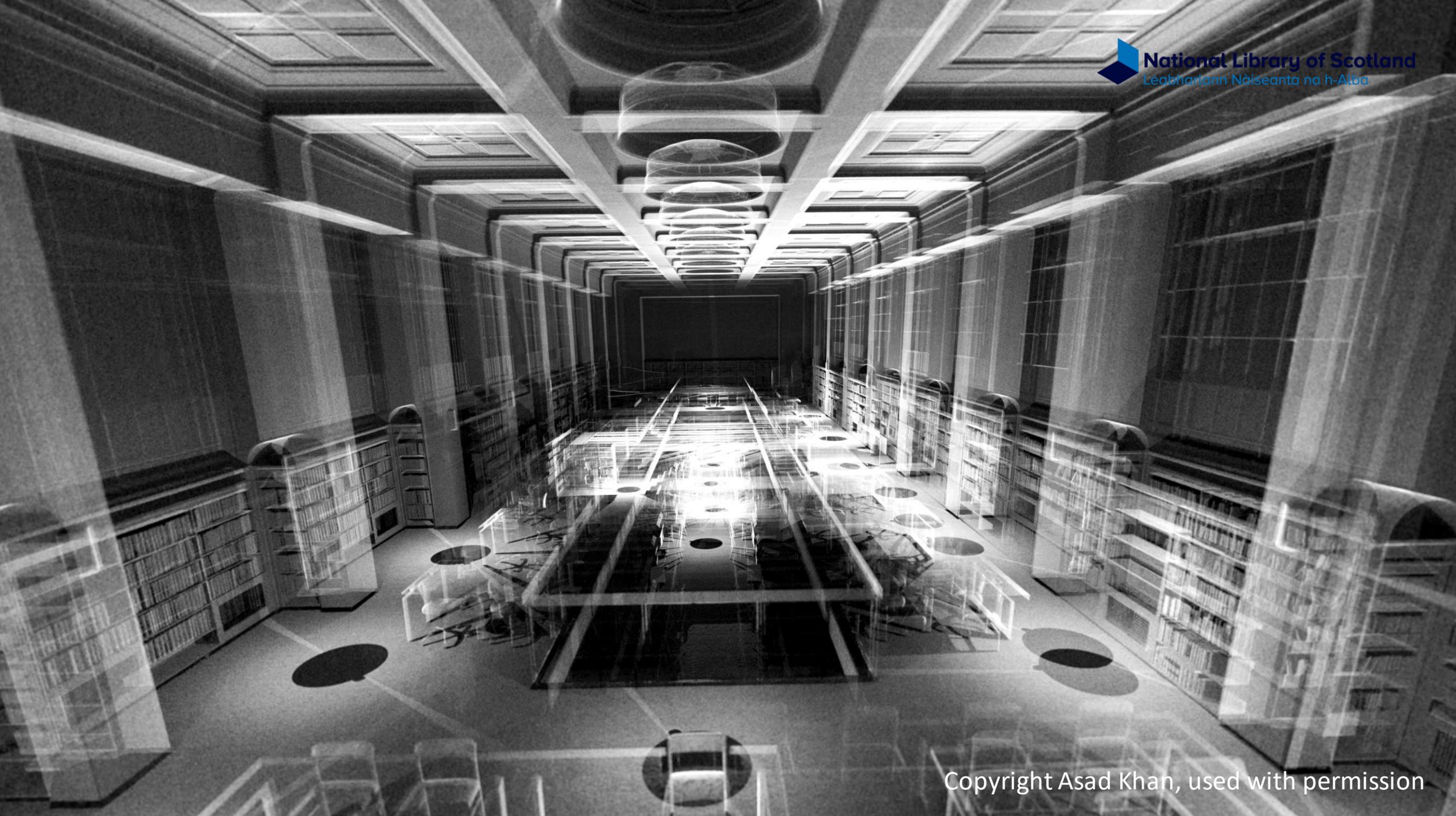


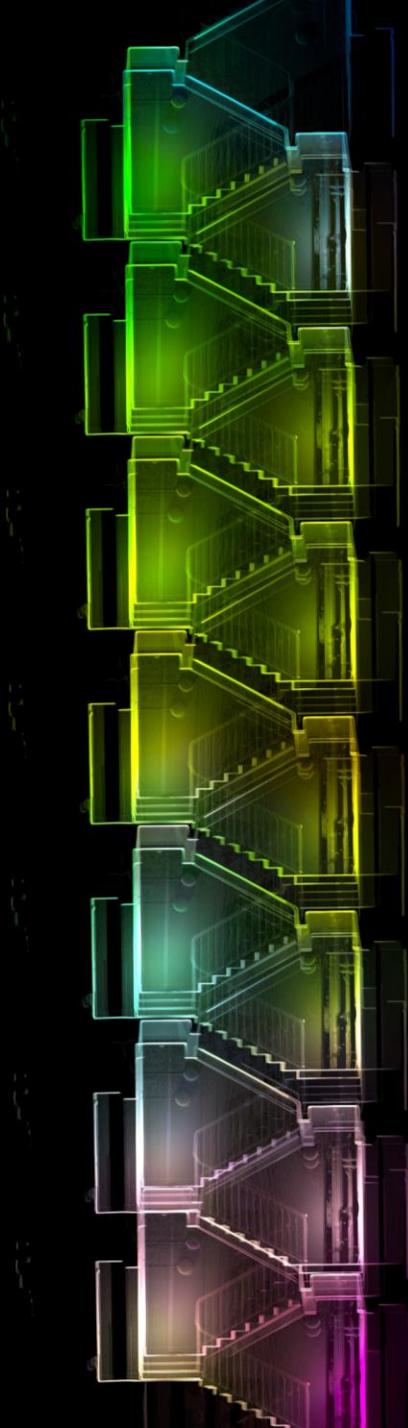
Ash Charlton

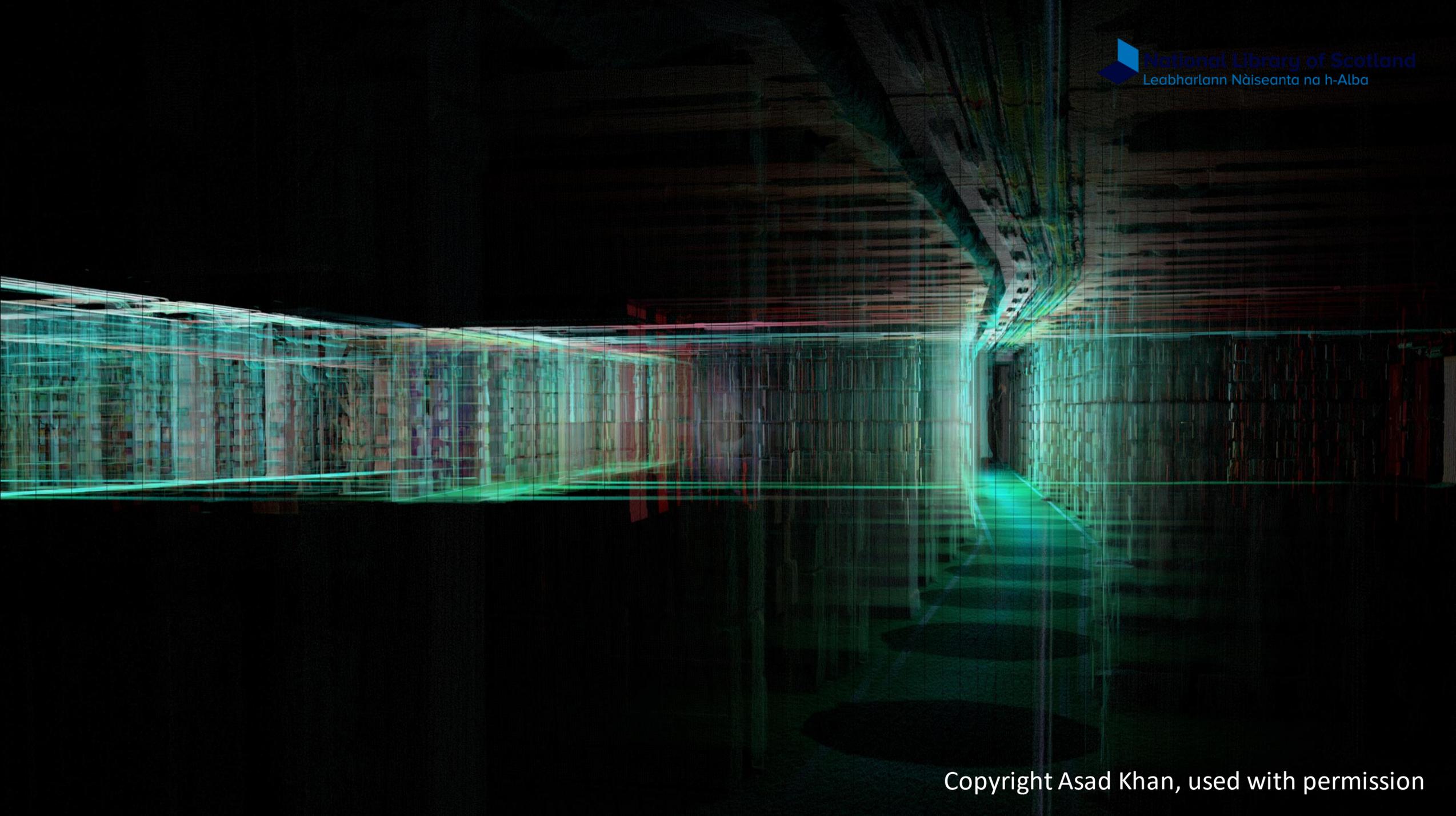
'Slavery and Race in the Encyclopaedia Britannica (1768-1860): A Text Mining Approach'.

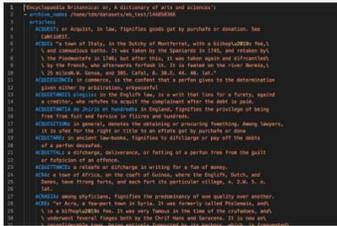
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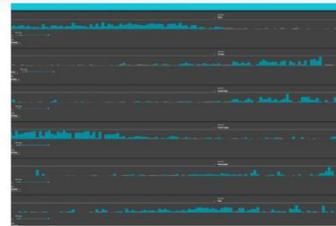




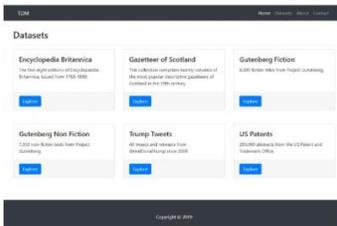
High Performance Computing meets
Encyclopaedia Britannica



Data visualisation student projects



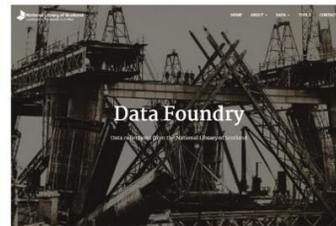
3,000 Scottish chapbooks...as music!



Text and data mining platform



Artist in Residence

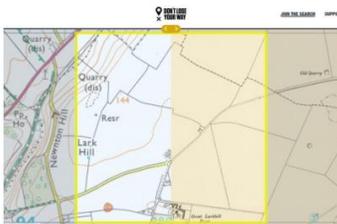


The National Librarian's Research
Fellowship in Digital Scholarship

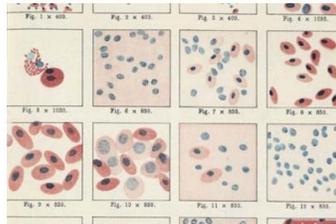
Projects

<https://data.nls.uk/projects/>

Examples of collaborative and individual projects over
the past 6 months



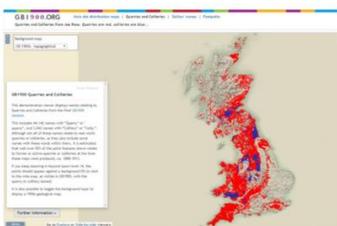
Finding lost footpaths using GB1900



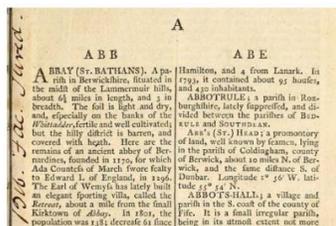
Teaching digital humanities with A
Medical History of British India



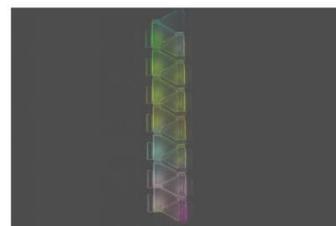
AI in Residence



Mapping quarries and collieries



Geoparsing the Gazetteers of Scotland



The Library as LiDAR (coming soon)



Challenges

**Change! Workflows,
processes, culture...**

OCR quality

Copyright

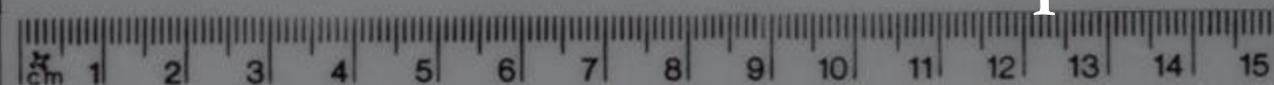
**How can we be clear about
the provenance of our data?**

Resourcing! No developers

**What does collections data
look like?**

Versioning

**Scale and scope of digital
scholarship**



I.—CIRCULARS.

II.—PAPERS

SET AT THE

EXAMINATION FOR LEAVING CERTIFICATES, 1889,

HELD BY THE

SCOTCH EDUCATION DEPARTMENT.

III.—RESULTS OF THIS EXAMINATION.

IV.—REPORT BY PROFESSOR J. EGGELING.



LONDON:

PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,

BY EYRE AND SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

And to be purchased, either directly or through any Bookseller, from
EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., and
ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; or
HODGES, FIGGIS, & Co., 104, GRAFTON STREET DUBLIN.

1889.

Price Sixpence.

What have we learned so far?

1. It's worth putting effort and resource into presenting and promoting data collections
2. There is more to digitisation than online image galleries
3. DS has implications across the Library
4. Historic practices affect everything: it's difficult to break the cycle
5. Our users have exciting, refreshing, innovative approaches to using collections, which we can learn from



Thank you!

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@semames1 | #NLSdata