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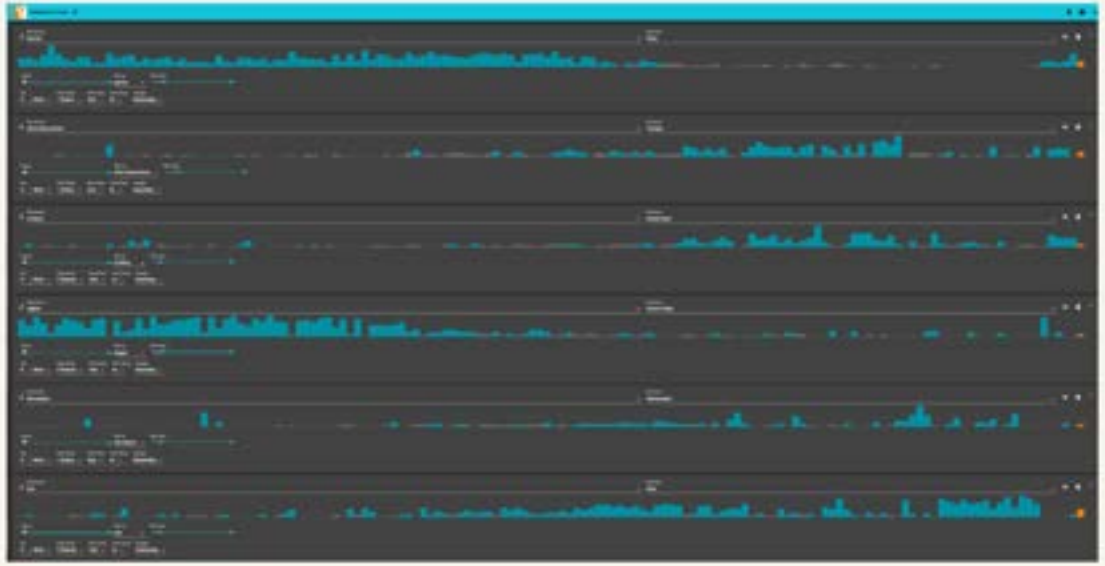
AI-READY COLLECTIONS AT THE NATIONAL LIBRARY OF SCOTLAND

INES BYRNE

DIGITAL TRANSITION MANAGER

NATIONAL LIBRARY OF SCOTLAND

JISC *MAKING YOUR COLLECTIONS AI-READY* WEBINAR 22 NOVEMBER 2023



A Song of Scottish Publishing, 1671-1893

Posted on 15 Dec 2019 by Shawn

The Scottish National Library has made available a collection of chapbooks printed in Scotland, from 1671 – 1893, on their website here. That's nearly 11 million words' worth of material. The booklets cover an enormous variety of subjects. So, what do you do with it?

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Shawn Graham, Associate Professor of Digital Humanities at Carleton University, Canada

A Song of Scottish Publishing: https://soundcloud.com/shawn-graham-60451318/chapbook-music

https://electricarchaeology.ca/2019/12/15/a-song-of-scottish-publishing-1671-1893/

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Digital Scholarship Service Levels

Level 1: self-service (making datasets available)

Level 2: plus short consultation (aligns with 121time we give readers in the reading room)

Level 3: funded service (Library as collaborator / partner in funded projects)

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Data 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.

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Making data available

TEXT

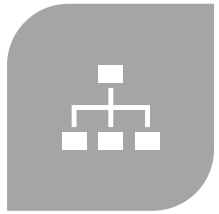
IMAGE

METADATA

AUDIOVISUAL

MAPS

WEB ARCHIVE



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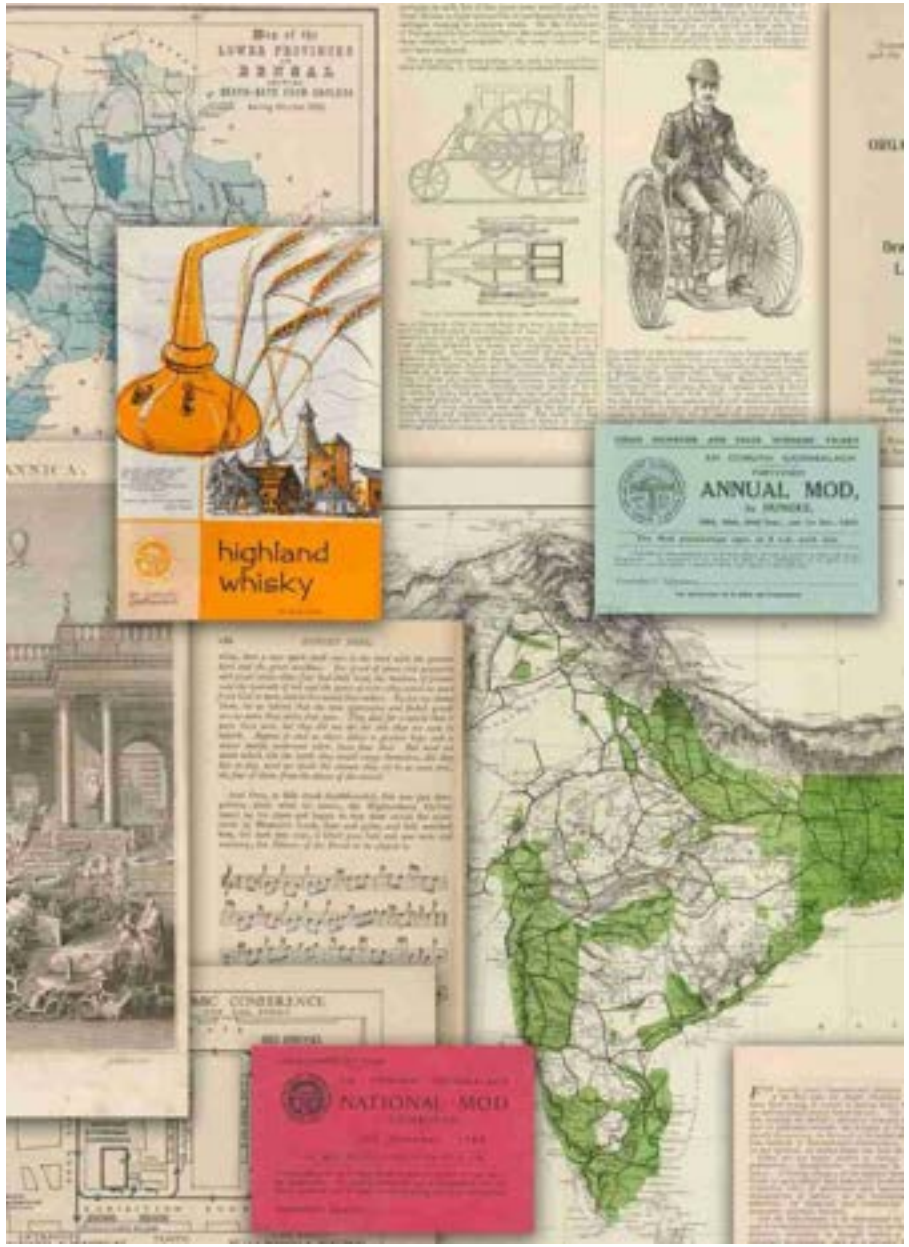

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PREREQUISITES

dozens of digitised collections, mainly OCRed texts

tens of thousands of digitised and geo-referenced maps

an ongoing digitisation workflow

a rights assessment process

a DAMS

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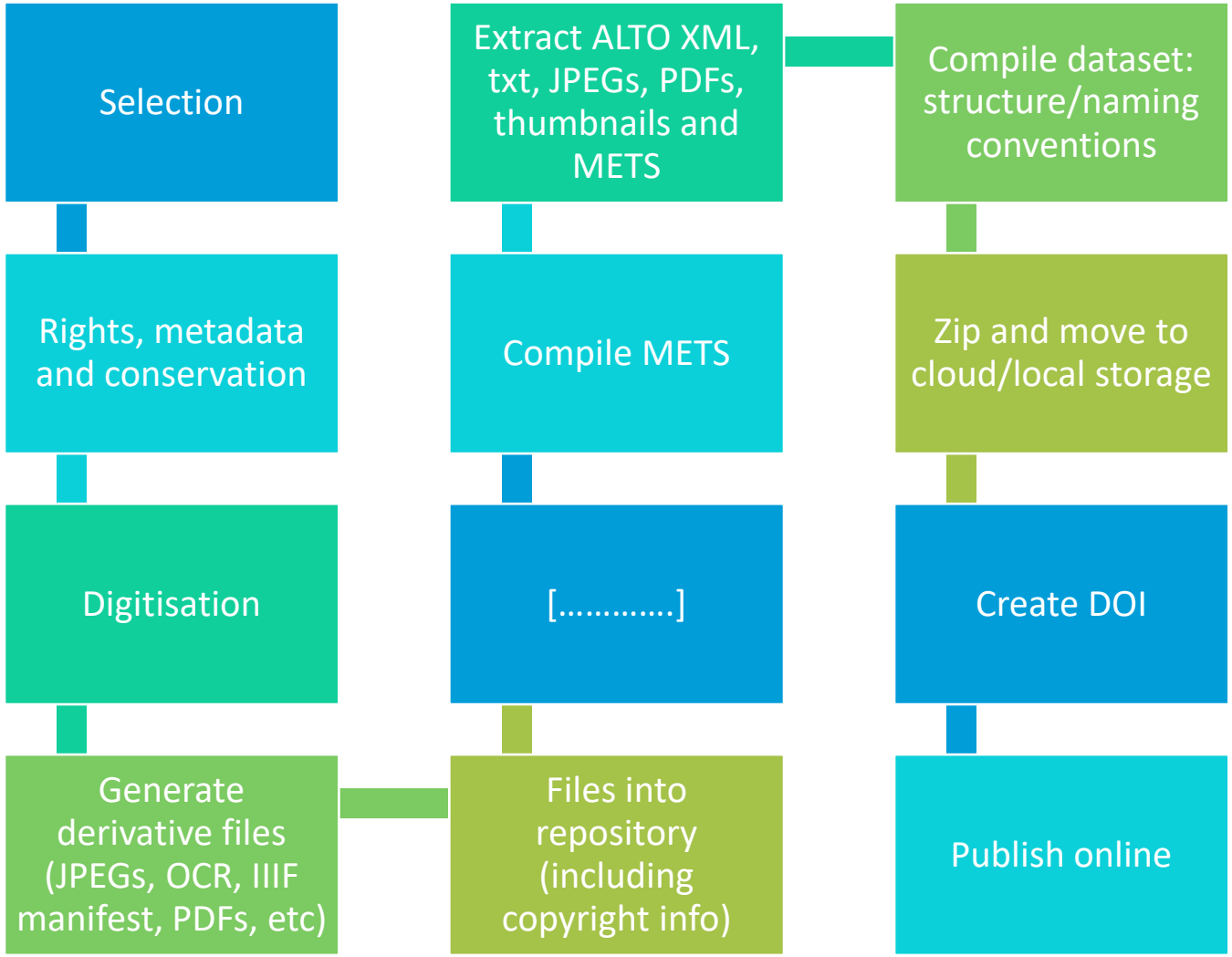
WORKFLOW: digitisation to data



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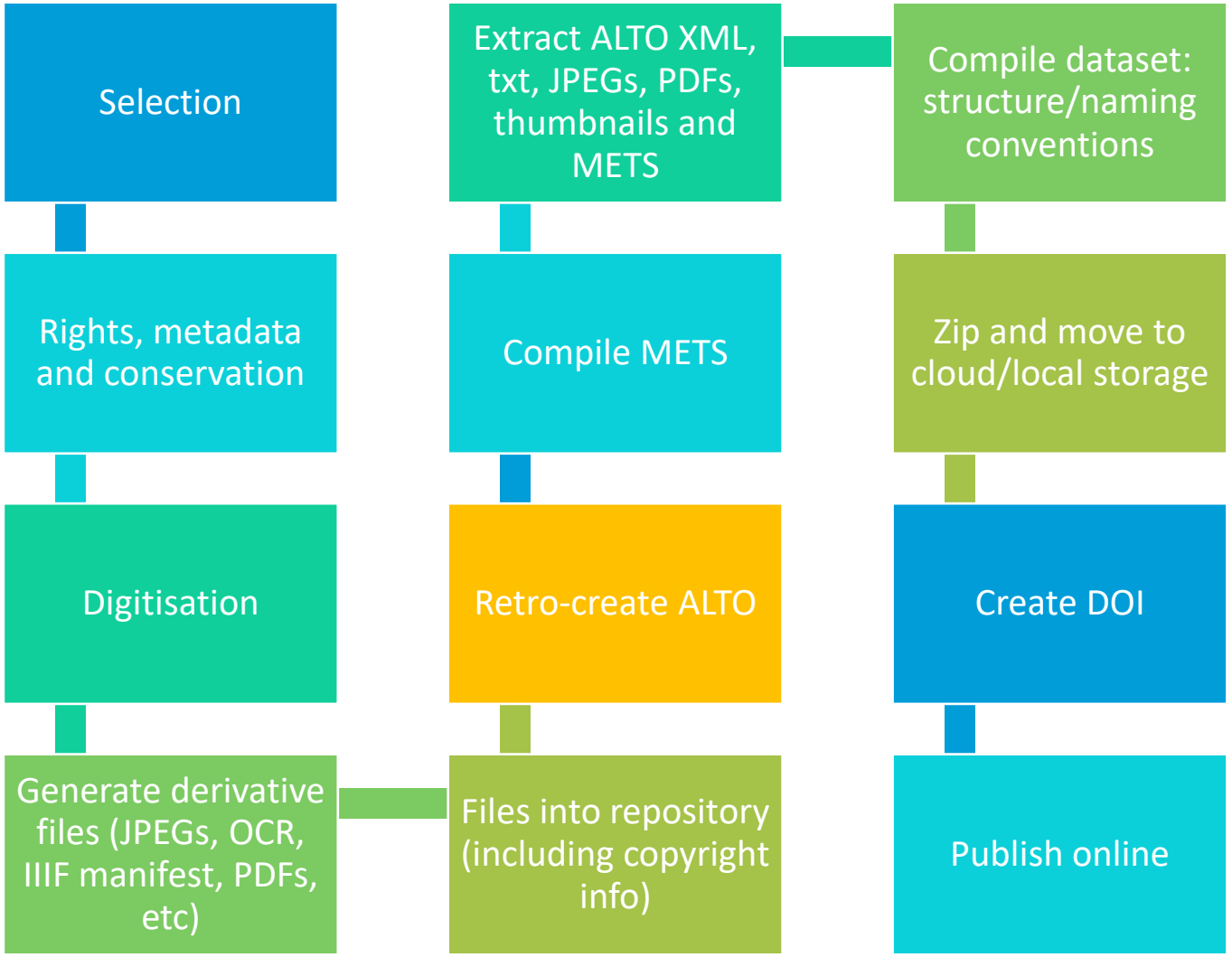
CHANGING PROCESS: digitisation to data



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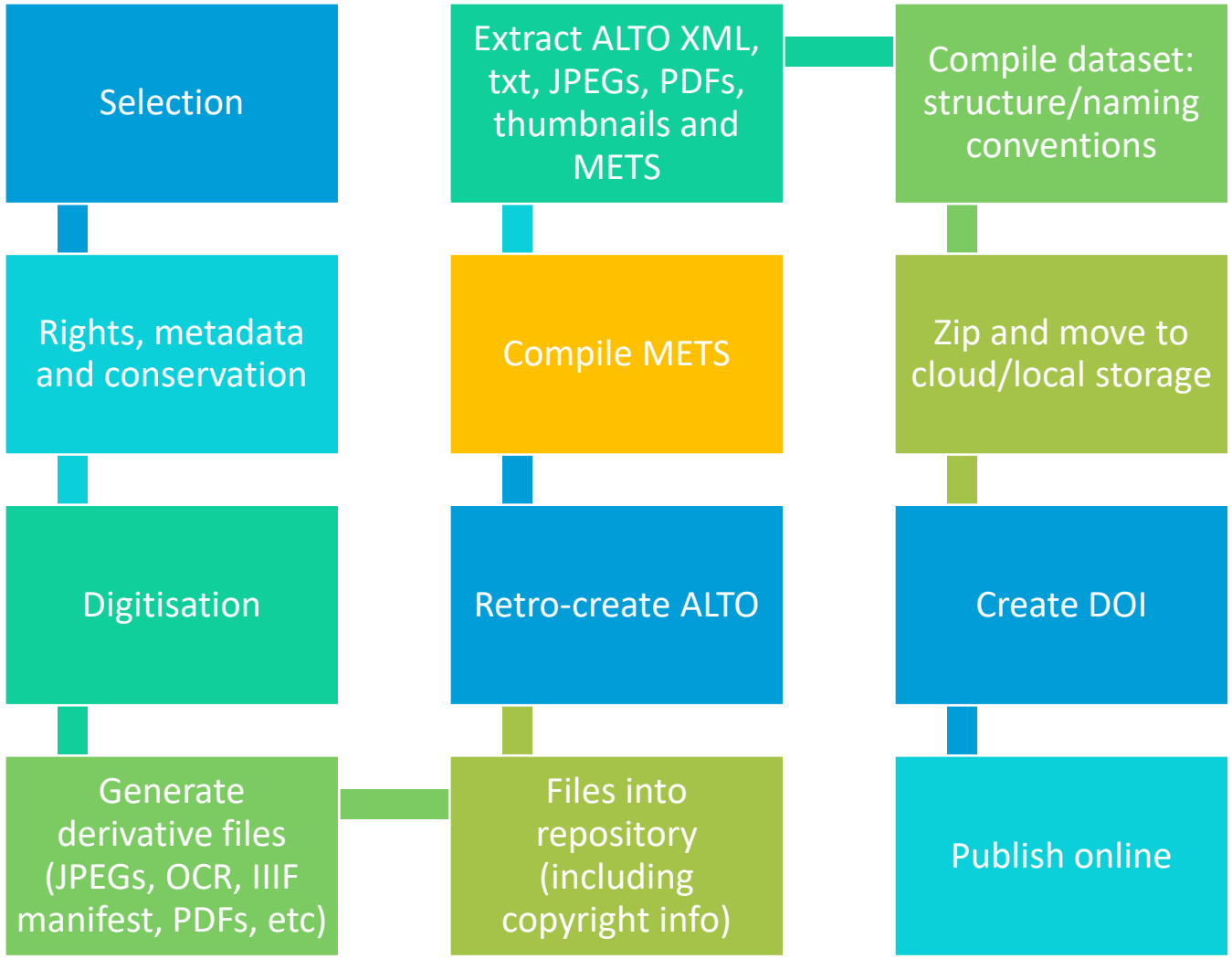
CHANGING PROCESS: digitisation to data



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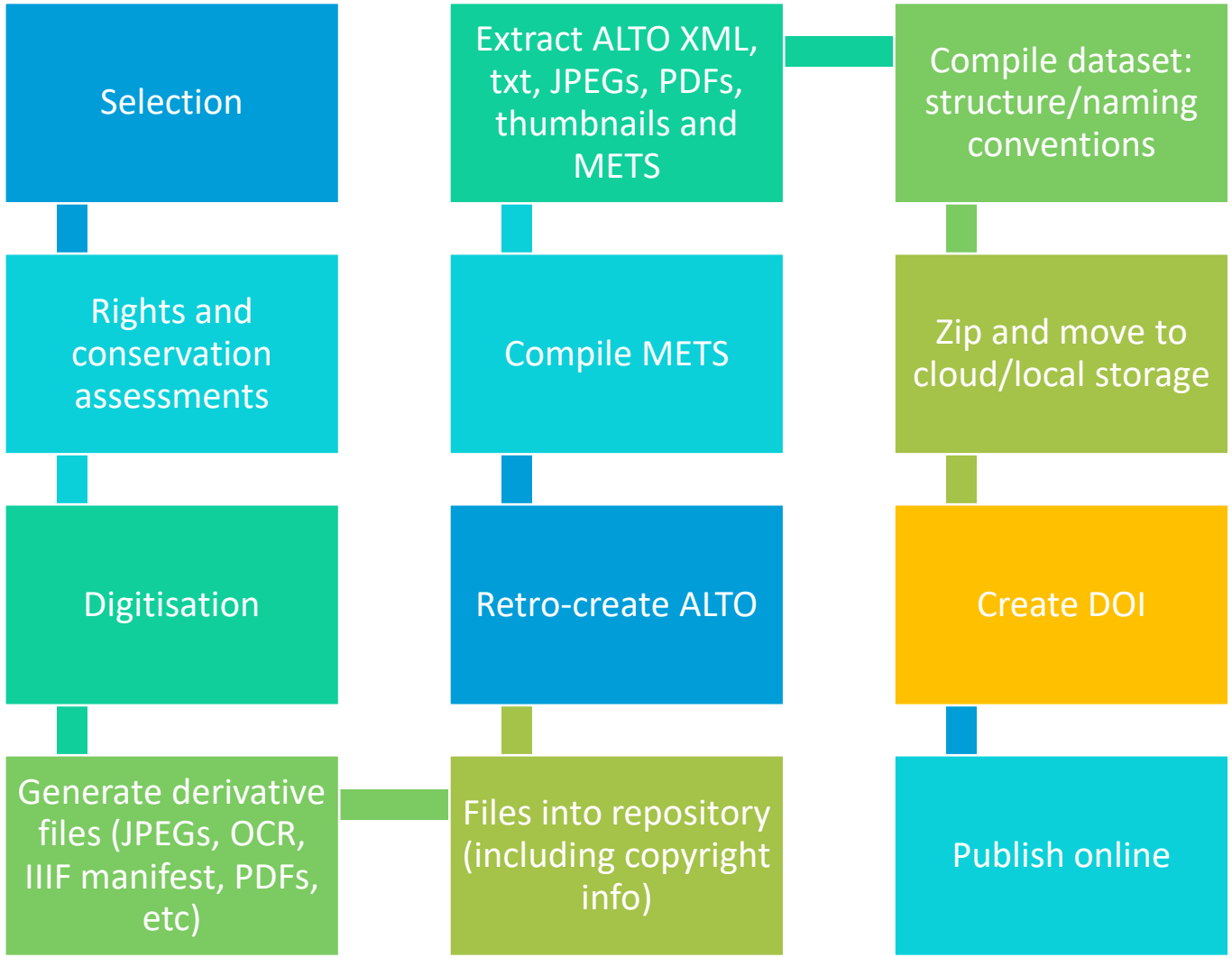
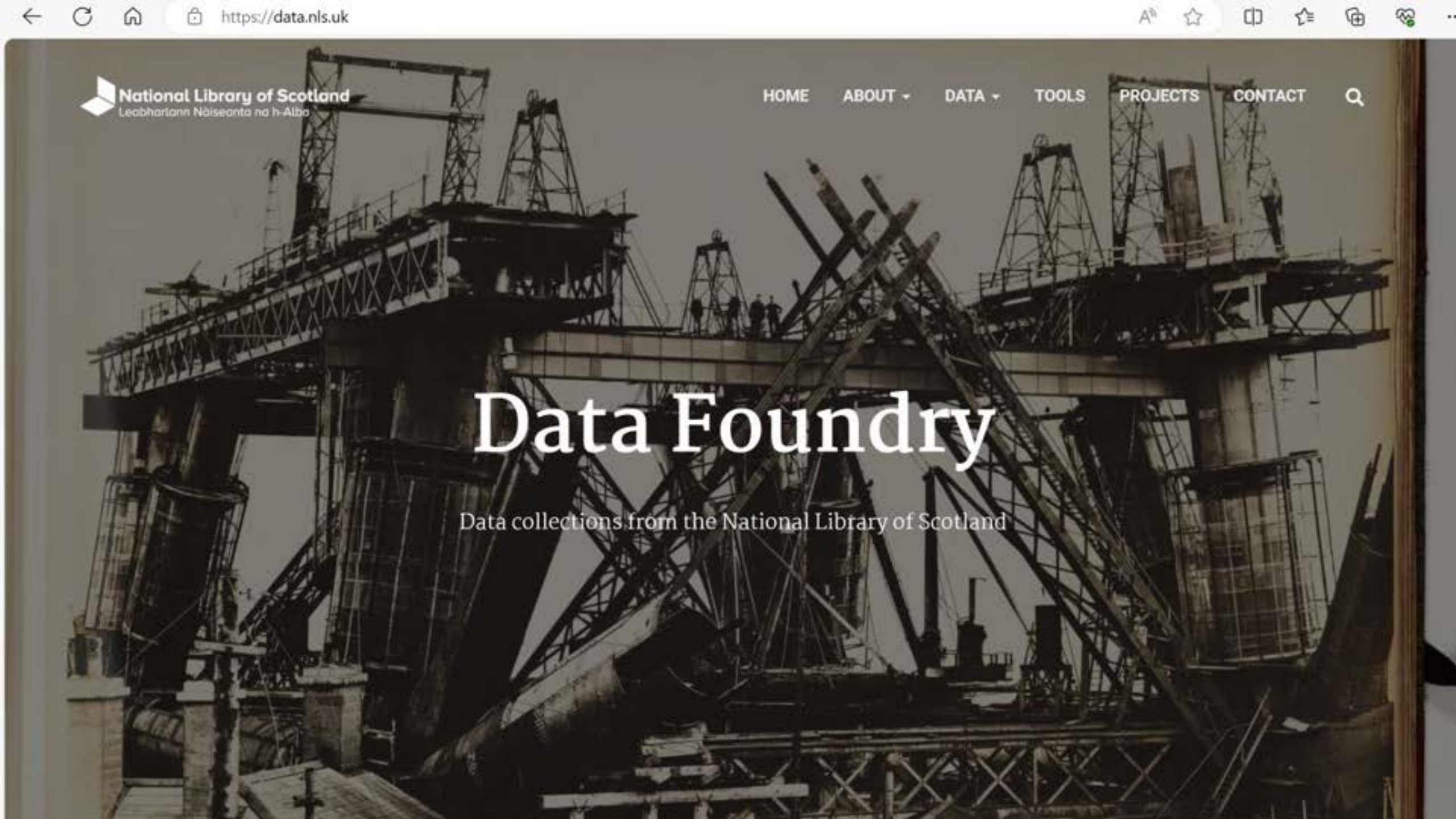
CHANGING PROCESS: digitisation to data




https://data.nls.uk
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HOME
ABOUT
DATA
TOOLS
PROJECTS
CONTACT
Data Foundry
Data collections from the National Library of Scotland

Encyclopaedia Britannica

Original OCR: no clean-up

155,388 ALTO XML files at page level

155,388 image files

METS metadata files at item level

19,257,785 lines and 166,729,009 words

Covers years 1768-1860

The first eight editions of Encyclopaedia Britannica, issued from 1768-1860, comprise a total of 143 volumes. The Britannica was first issued in Edinburgh in 100 weekly parts (forming 3 volumes) from 1768 to 1771 and illustrated with 160 copperplate engravings. The enterprise was undertaken by the partnership of printer Colin Macfarquhar (1744-1793) and engraver Andrew Bell (1726-1809) who paid


Encyclopædia Britannica;

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Rights information

Encyclopaedia Britannica: up to 1853

Items in this collection up to 1853 are free of known copyright restrictions. For details visit the Library's **copyright page**.

Encyclopaedia Britannica: 1854–1860

Items in this collection between 1854 and 1860 are likely to be free of known copyright restrictions. For details visit our **copyright page**.

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Download the data

Trial the data

Download a sample of the dataset for initial evaluation.

File contents: 1 plain text readme file; 832 ALTO XML files; 1 METS file; 832 image files.

File size: 132 MB compressed (220 MB uncompressed)

Download sample dataset

All the data

File contents: 1 plain text readme file; 1 CSV inventory file; 155,388 ALTO XML files; 195 METS files; 155,388 image files.

File size: 23.5 GB compressed (44.0 GB uncompressed)

Caution: large dataset

Download full dataset

Just the text

File contents: 1 plain text readme file; 1 CSV inventory file; 195 plain text files.

File size: 336 MB compressed (946.88 MB uncompressed)

Download text data

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Cite the data

DOI: **https://doi.org/10.34812/cg4r-dn40**

Dataset creator: National Library of Scotland

Dataset publisher: National Library of Scotland

Publication year: 2019

Suggested citation: National Library of Scotland. *Encyclopaedia Britannica*. National Library of Scotland, 2020. **https://doi.org/10.34812/cg4r-dn40**

DIGITISED COLLECTIONS DATASET STRUCTURE

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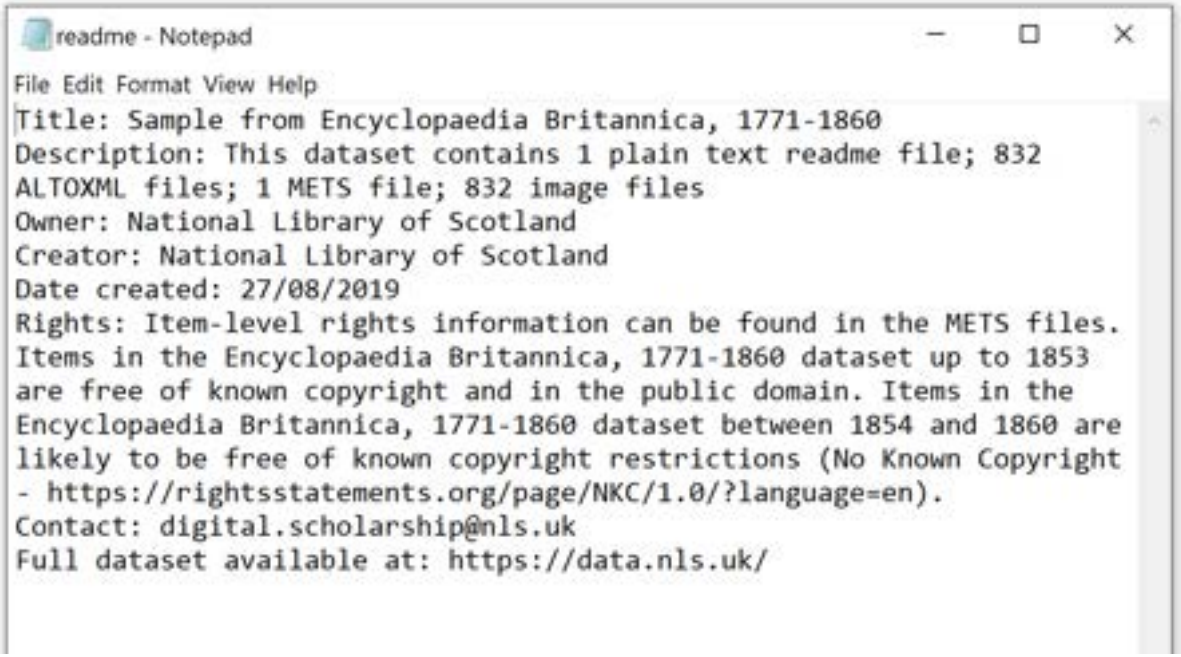

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DIGITISED COLLECTIONS DATASET STRUCTURE

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DIGITISED COLLECTIONS DATASET STRUCTURE

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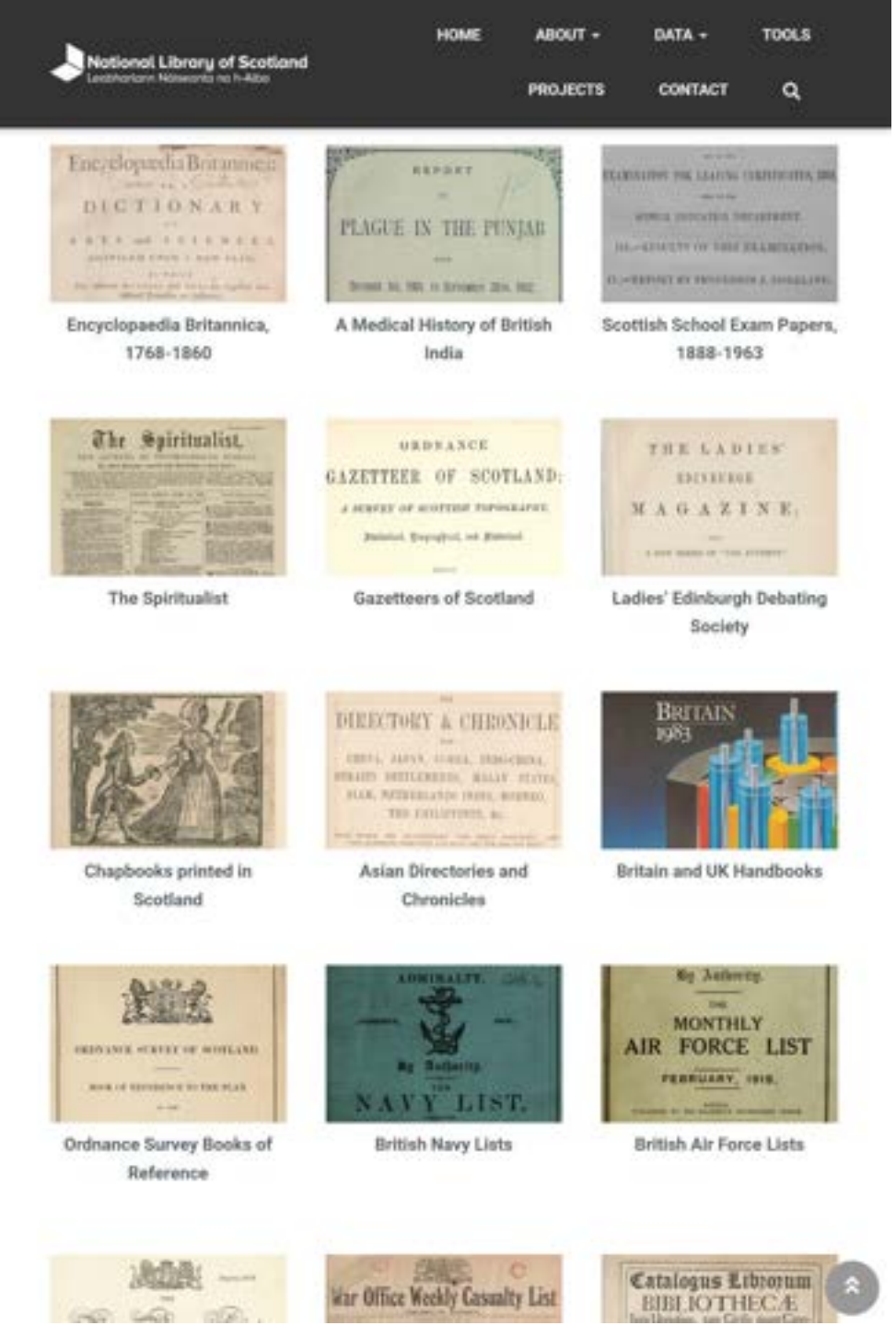

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DIGITISED COLLECTIONS DATASETS

newspapers novels

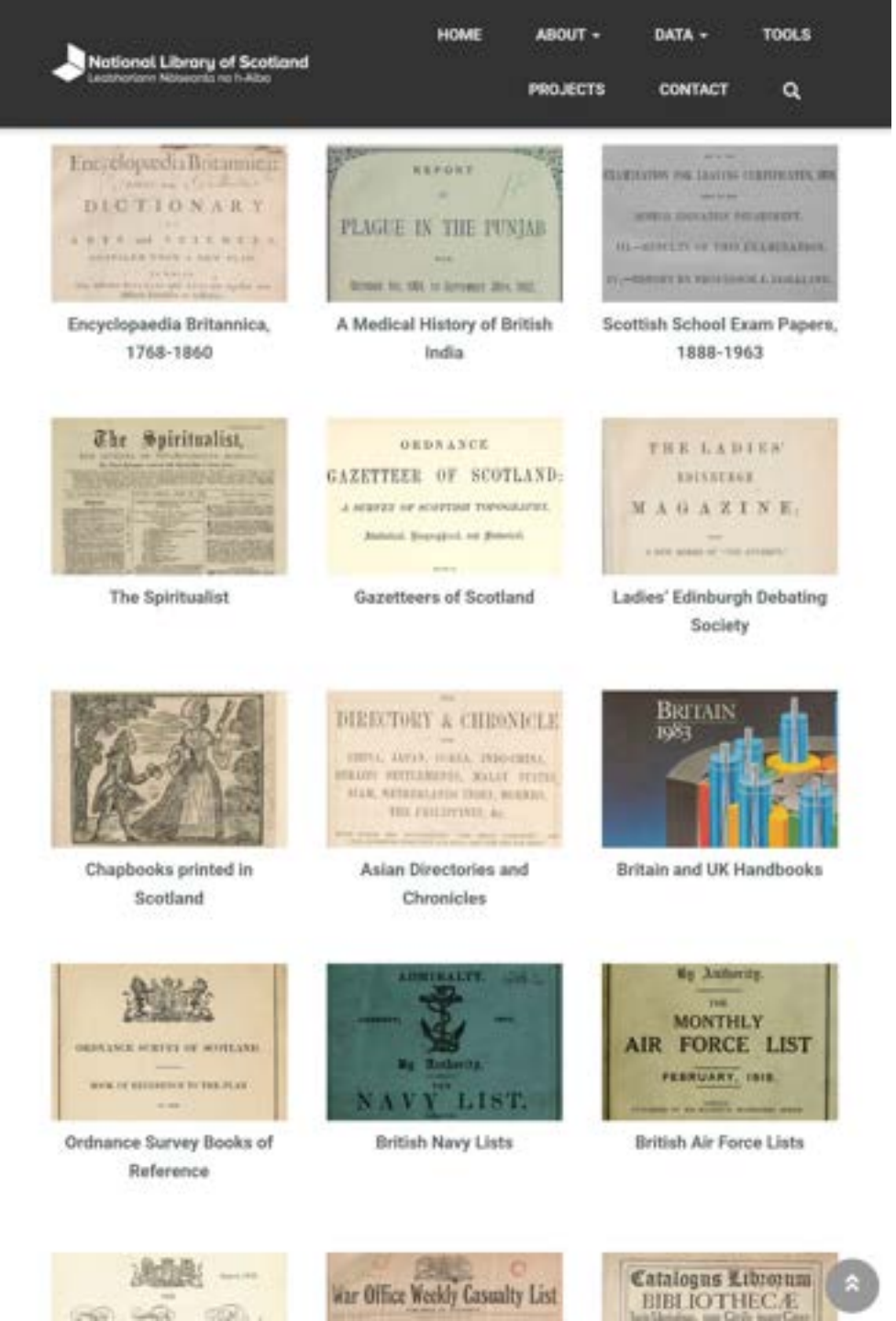
exam papers

gazetteers military lists

encyclopaedia

medical papers

chapbooks



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DIGITISED COLLECTIONS DATASETS

Largest dataset:

- 117.000 ALTO xml files
- 22.5 million words
- 17.5 GB uncompressed

Smallest dataset:

- 1,700 ALTO xml files
- 970.000 words
- 420 MB uncompressed

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Metadata collections

Download metadata collections in MARC and Dublin Core.

The National Bibliography of Scotland


Moving Image Archive


National Library of Scotland catalogue of published material (version 1)


John Adair – county maps 1680-1720


Tay Bridge Enquiry

English Ballads

Map and spatial data

Explore map and spatial data from the collections.


GB1900 gazetteer


Edinburgh Boundaries


Stevenson Maps and Plans of Scotland


LiDAR point-cloud: National Library of Scotland George IV Bridge


Roy Gazetteer


Edinburgh OS 25 inch transcriptions


Historic Footpaths


Living with Machines: railspace and building datasets

Organisational data

Our organisational data is available as CSV files.


Transactions over £25,000


Government procurement card spend


Collections size (coming


Environmental data

CHALLENGES

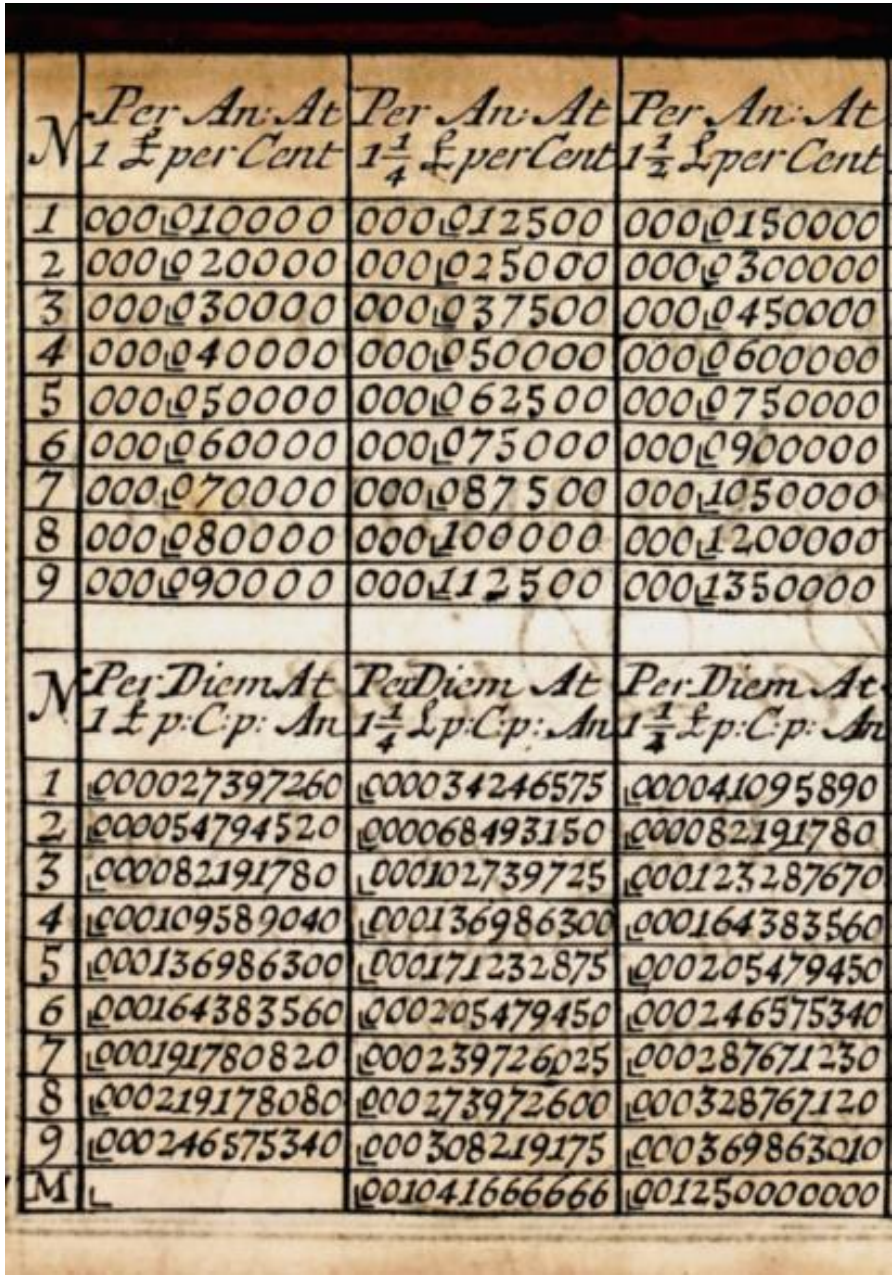
WORKFLOWS / PROCESSES

OCR

COPYRIGHT

COLLECTIONS AS DATA – DATA AS COLLECTIONS

PROVENANCE



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4	000 £ 04000	000 £ 05000	000 £ 06000
5	000 £ 05000	000 £ 06250	000 £ 07500
6	000 £ 06000	000 £ 07500	000 £ 09000
7	000 £ 07000	000 £ 08750	000 £ 10500
8	000 £ 08000	000 £ 10000	000 £ 12000
9	000 £ 09000	000 £ 11250	000 £ 13500

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3	£ 00008 21917 80	£ 00010 27397 25	£ 00012 32876 70
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M	£	£ 00104 16666 66	£ 00125 00000 00

Image: Marion Carré
https://www.marioncarre.com/living-organism

What's in it for AI ?

Dr Giles Bergel: chapbook image recognition

Dr Rosa Filgueira: *frances* AI toolbox trained on Encyclopaedia Britannica dataset

Living with Machines using our maps as training data

Joe Nockels: HTR research on manuscripts and maps images. Our first dataset generated by AI.

Martin Disley: training GAN systems to generate new works of art

Marion Carré: training AI algorithm to produce fake text

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TAKE AWAYS

The journey of a collection

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TAKE AWAYS

IT’S A MIND SHIFT AND A JOURNEY

BE TRANSPARENT AND CONSISTENT

ANALYSIS SKILLS SIT EXTERNALLY

STARTING SMALL IS ALLOWED

DON’T WAIT FOR PERFECTION

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READING

GUSTAVO CANDELA: A Checklist to Publish Collections as Data in GLAM Institutions
https://arxiv.org/abs/2304.02603

THOMAS PADILLA: Vancouver Statement on Collections as Data
https://zenodo.org/records/8342166

TIMNIT GEBRU et al.: Datasheets for Datasets

https://arxiv.org/abs/1803.09010

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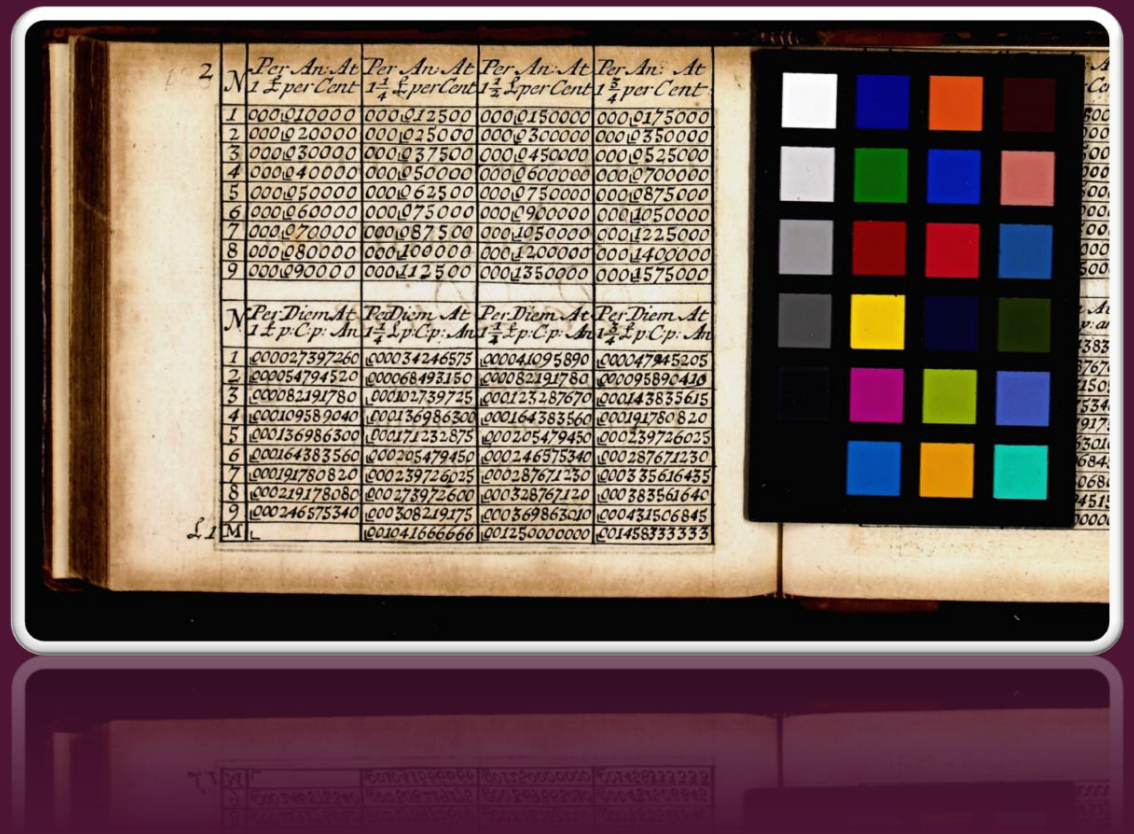
THANK YOU



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