AHRC TOWARDS A NATIONAL COLLECTION SMG PROJECTS:

CURATORIAL REFLECTIONS

TIM BOON

Heritage Connector end of project workshop

SCIENCE MUSEUM GROUP

WHAT I'LL COVER

- A. Why I was keen to submit the Heritage Connector bid in the first place.
- B. Some things we learnt about the relations between digital and the curatorial in 'Heritage Connector'
- C. How we're going to apply that in our new 'Congruence Engine' project.

A. WHY I WAS KEEN TO SUBMIT THE HERITAGE CONNECTOR BID IN THE FIRST PLACE

- Strategic Reasons
 - Research Strategy: Funding to support what the Museums want to do anyway; keen to expand beyond traditional curatorial research.
 - Digital Strategy: harnessing the power of digital.
- Reasons deriving from my own work experience
 - Curators' privileged position in relation to collections.
 - The 97% not on display.
 - A public historical urge to share access.
 - But do you have to be a curator to gain this privilege?

1. Eureka moment on HC: Historicising collections data.

See: <u>https://thesciencemuseum.github.io/heritageconnector/post/2021/03/17/history-ai/</u>

1942-40/3: Filings coherer, glass tube, designed or used by Sir Oliver Lodge, England, 1898

L	Form 100 Sc. M.	
Inventory No. 1923 - 434	Cat. No.	
Object: One case, 3' 6" x 2' 1", containing historical W/T		
apparatus used by the Marconi Company in the original		
Trans-Atlantic tests with three framed and glazed		
photographs relating to the above.		
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1. Historicising collections data

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Price 1s. 0d. Net.

8. MARCONI WIRELESS TELEGRAPH APPARATUS. Lent by The Institution of Electrical Engineers. Plate 3.

A number of objects are shown which illustrate the work of the Marconi Company between the years 1898 and 1902. They include oscillation transformers or "jiggers (A—G), condensers and inductance coils (H—K), and types of detectors used by Senatore Marconi (L—N).

The mercury-iron anti-coherer is one of several which were used in Newfoundland when the first transatlantic wireless signals were received there in 1901. (See also No. 17.)

In the mercury-iron coherer the original form of which was devised by P. Castelli, a signalman in the Italian Navy, two electrodes, either both of iron or one of iron and one of carbon, are placed in a glass tube, and between the electrodes is a drop of mercury. The Marconi magnetic detector is described at No. 33. Inv. 1923-434, S.M. 2159.

Slightly better description from the 1925 catalogue.

In many cases the catalogue data are *much* fuller



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...but, most of the time, the richer data in the published catalogues has not made it into the online record.



...except when a gallery or other project buys the time to do the additional research and cataloguing...

Science Museum Group Collection © The Board of Trustees of the Science Museum

Carbon-mercury-iron semiconductor diode detector, of the type invented by J C Bose in 1899, modified version, unknown maker, 1899-1901. Known as the 'Italian Navy coherer', used by G Marconi in Newfoundland to receive the first wireless communication across the Atlantic, December 1901.

This may be the detector which received the 'S' signals in Newfoundland in Marconi's Atlantic wireless telegraphy experiment in December 1901. The originator of the device was (Sir) Jagadis Chandra Bose (1858-1937), professor of physical science, Presidency College, Calcutta, India. It received the name 'Italian Navy coherer' because the principle of Bose's invention became known in 1899 or 1900 to technical experimenters in the Italian Navy who made unimportant modifications to it. Having done so, they became curiously reluctant to acknowledge the true inventor of the device. Marconi, too, was reluctant to identify precisely the apparatus employed in Newfoundland, suggesting instead that several different types of coherer were used. The fact that it was the Italian Navy detector only emerged gradually in a series of vague statements made by Marconi and others during 1902 and 1903.

Italian Navy' detector, 1899-1901

MADE: 1899-1901 in Unknown place MAKER: Unknown INVENTOR: Jagadish Chandra Bose



It took working together to reveal this to us: we didn't know what each other knew. Digital ways of thinking about the collections differ from curatorial understandings

Digital	Curatorial
The 'universe' is the best data we can get our hands on	The 'universe' is the physical collection each curator cares for
The objects themselves are 'out of scope' and such data as we have must be the route to better access.	The objects are what it's all about and the data are barely adequate representations of them.
The data are weak and inconsistent	The data have a history and can be explained
Enriching data sources can be found online	There is a literature that enables deeper context and understanding

- Within *Heritage Connector*, this realisation provided the context for the linked open data approach.
- I began to think that LOD is a good metaphor for how curators think already: that objects are linked by many associations: of named individuals or companies, places and personalities of use, geographical location and historical period, or scientific discipline. And then again: relevant literature.
- The visualisations that Kalyan and the others have produced look like a figurative mind map of how curators mentally inhabit their collections.
- This has opened pathways for what we are going to do in the next project.

C. HOW WE'RE GOING TO APPLY THAT IN OUR NEW 'CONGRUENCE ENGINE' PROJECT

- We will put dialogue between the digital and curatorial / historical at the heart of *Congruence Engine*
 - Congruence Engine will create a 'real world' demonstration of what it will be like when it is possible to work across the UK's collections unencumbered by the current institutional siloes.
 - It will bring together historians and curators to work on industrial collections data from several different institutions at one time in:
 - Textiles, Energy, Communications.
- We will combine datasets of objects, pictures, films, maps, etc; we will incorporate bibliographies and archives.
- We will try out different digital humanities tools, and kinds of AI technique trialled in *Heritage Connector*, as tools to support historical investigations of our industrial past, all the while adjusting them to support those investigations. The idea is that, by the end, we will have demonstrated what the world will be like when working across collections is a normal, everyday, activity.

C. HOW WE'RE GOING TO APPLY THAT IN OUR NEW 'CONGRUENCE ENGINE' PROJECT

Congruence Engine will recognise the potential mutual benefit of our investigation to digital development and to curatorial and historical practice.

- Recognise that enhancing and increasing collections online needs both digital and curatorial/historical expertise.
- It could enable types of 'curatorial' history that draw on evidence in different media – just like an exhibition

CONGRUENCE ENGINE

Co-Investigators: Science Museum Group, The Universities of Leeds, London, and Liverpool, British Film Institute, National Museums Scotland, Historic England.

Collaborating Organisations: Tyne & Wear Archives & Museums (Discovery Museum), Bradford Museums and Galleries (Bradford Industrial Museum), Wikimedia UK and Manchester Digital Laboratory (MadLab)

Data providing project partners: National Museum Wales, National Museums Northern Ireland, The National Archives, National Trust, The V&A, BBC History, Birmingham Museums Trust, BT Heritage & Archives, Grace's Guide to Industrial History, Isis Bibliography of the History of Science, Society for the History of Technology, Saltaire World Heritage Education Association, Whipple Museum of the History of Science (Tools of Knowledge Project),

Project Design: Core Industrial Investigations



Ends

QUESTIONS?

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