

ai + history collaboratory

Session 3

Exploring MCP as an Interface
with Historical Databases

24 February 2026 | 4:00 pm UK

today's agenda

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|---|--|--------|
| 1 | Quick introductions
<i>Members + two guests</i> | 5 min |
| 2 | What is MCP? Three models
<i>Typology, ecosystem, who's building</i> | 10 min |
| 3 | Dan Cohen — loose coupling
<i>Northeastern University Library + screenshots</i> | 5 min |
| 4 | Tom Scheinfeldt — reference interview
<i>Sourcery for ArchivesSpace — demo</i> | 10 min |
| 5 | Ra-MCP — what we built & found
<i>Five-phase methodology, Solr testing — demo</i> | 20 min |
| 6 | IWAC + use cases + wrap-up
<i>Frédéric Madore's collection, your databases, next steps</i> | 10 min |

our group

members

Gavin Beinart-Smollan
Maurice Brenner
David Brown
Abi Cunningham
Marc Eagle
Jacob Forward
Colin Greenstreet (convenor)
Lucas Haasis
Sam Kaislaniemi
Thiago Krause
Oren Okhovat
Mark L. Thompson

session 3 guests

Frédéric Madore

University of Bayreuth — Data Curator, IWAC
Islam West Africa Collection; AI + historical sources

Jiayu Yang

University of Bayreuth — Data Curator

Oliver Baumann

University of Bayreuth — Data Curator

Folami Kolade

Temple University — PhD Student
Historical and business research methodologies

what is MCP? three architectural models

*Model Context Protocol — a standard that defines how AI models request and receive information from external data sources.
Think of it as a universal plug.*

A. SOURCE-ORIENTED

One server per archive or database

Analogy: A dedicated assistant for each library you visit

Examples: Riksarkivet, Gallica, Northeastern Library, MarineLives

B. TASK-ORIENTED

One server per research function across sources

Analogy: A research assistant who can search many libraries

Examples: Paper Search (arXiv + PubMed + Scholar), Multi-source academic

C. PROTOCOL-ORIENTED

One server per data standard or protocol

Analogy: A translator who speaks every library's language

Examples: SPARQL (Wikidata), IIIF (manuscript images), OAI-PMH (metadata)

Who's building? Mostly solo developers. Institutions provide APIs but not MCP servers — with notable exceptions: Riksarkivet (AIRA), Northeastern Library (Cohen), UConn (Scheinfeldt).

Dan Cohen: loose coupling in practice

Institutions retain control while providing structured AI access — a dial, not a switch.

LIBRARY SEARCH

The screenshot shows the Northeastern University Library's Scholar OneSearch interface. A red search bar at the top contains the query "erie canal". Below it, a grid of search results includes titles like "Surprising waters : the history and art of New York's Erie Canal" by Utter, Beatt, L., Hopkins Benton, Ashley, author; Quinn, Karen E., author. The results are filtered by "Full Text Online" and "Peer-reviewed Journals". A sidebar on the left allows users to "Filter My Results" by sort order (Relevance), search other libraries (WorldCat), and show only full-text online or peer-reviewed journals.

110,175 results — overwhelming

CHATGPT

The screenshot shows a ChatGPT interface. At the top, there is a message from "ChatGPT" asking if I am starting a research project on the Erie Canal. Below this, a user message asks for 10 diverse articles on all aspects of the Canal. ChatGPT responds with a link to a page titled "Thought for 38s" which features four historical black-and-white photographs of the Erie Canal. The page also includes a brief summary of the research project and two numbered links to external articles.

Popular web articles — no depth

Northeastern University Library MCP Server + Claude plugin (October 2025)

"We want to foreground the expressive works of human beings — the articles, books, documents, and works of art, rather than the AI's digests of these objects."

CLAUDE + MCP

The screenshot shows the Claude + MCP interface. It starts with a message from the user asking for 10 articles on the Erie Canal. Below this, a list of 10 scholarly articles is provided, each with a title, author(s), and a "Read article" link. The topics covered include engineering education, climate crisis, public goods networks, economic impacts, social and labor history, environmental impacts, and cultural and religious impacts. The interface is clean and organized, providing a curated list of academic sources.

Curated scholarly articles, linked

Tom Scheinfeldt: the reference interview

Sourcery for ArchivesSpace — a conversational AI archivist

Iterative search refinement

When initial terms fail, suggest alternatives: 'Try trade instead of merchants'

Transparent scope explanation

Explains what the collection contains and what it doesn't

Graceful escalation

'Connect with Archivist' button — escalate to a human when AI reaches its limits

Conversational guidance

Guides researchers through unfamiliar collections with knowledge of structure

→ [LIVE DEMO](#)

ra-mcp: what we built

Adapting Scheinfeldt's reference interview into a formalised academic research methodology

1

Scoping

Map archives, identify digitised holdings, locate published finding aids

2

Term Mapping

Build controlled vocabulary in Swedish with wildcards, fuzzy search, historical variants

3

Deep Reading

Browse full page transcriptions, record reference codes, note bildvisaren links

4

Triangulation

Cross-reference with secondary literature, finding aids, and web sources

5

Synthesis

Structured output with three-tier confidence grading and source-type tagging

Beyond Scheinfeldt

1. Confidence grading
(strong / moderate / weak)
2. Null results as evidence
3. Survivorship bias awareness
4. Triangulation against secondary literature
5. Growing reference library

→ DEMO: switch to Claude Desktop Chat

ra-mcp: what we found

From a single exploratory session: Swedish maritime jurisdiction compared with the English High Court of Admiralty

Sjörätt discovered

Local maritime courts in port towns — Skanör, Helsingborg, Landskrona — found in 1780s-1800s Göta hovrätt appeal records. First-instance courts; no separate admiralty appellate chain.

Strong: direct archival attestation

Sjölagen mapped

153 page-level hits for the codified Maritime Code. Named divisions: Seamen's Code, Ship Charter Code, Bottomry Code, Insurance Code. Fundamentally different from English common law tradition.

Strong: abundant references

Admiralty = military, not judicial

Amiralitetskollegium (1634-1791) held entirely at Krigsarkivet (War Archives). Navy administration, not courts. No Amiralitetsrätt found anywhere in civilian archives.

Moderate: clear archival provenance

The key comparative finding

England: one centralised national specialist court (HCA), operating under Roman civil law — anomalous in a common law country.

Sweden: local Sjörätter in port towns, feeding into general appellate hovrätter, governed by a codified statutory Maritime Code (Sjölagen) — standard civil law.

Prize jurisdiction: not resolved. Zero archival hits. The most significant open question — where were Swedish prize cases adjudicated?

IWAC + your collections

Islam West Africa Collection

Frédéric Madore, University of Bayreuth

- 14,500+ documents on Islam in West Africa
- Omeka S platform with REST API
- ~96% French; also Hausa, Arabic, Dendi
- OCR on all documents; IIIF-compliant
- 4,600-entry thematic index
- Existing AI pipelines (OCR correction, NER, HTR)
- GitHub: [fmadore/Islam-West-Africa-Collection](https://github.com/fmadore/Islam-West-Africa-Collection)

Your collections, your questions

- What databases or archives do you work with day-to-day?
- Does your institution provide an API? Is it stable?
- Which architectural model (source / task / protocol) fits your research?
- Where could an MCP server change how you interact with your collections?
- What would you want to build — or see built — by June?

Could the ra-mcp methodology transfer?

pre-reading & resources

1. "What is the Model Context Protocol (MCP)" — the official introduction
modelcontextprotocol.io
2. Anthropic, "Claude can now connect to your world" (May 2025)
anthropic.com
3. Dan Cohen, "AI and Libraries, Archives, and Museums, Loosely Coupled" (Aug 2025)
newsletter.dancohen.org
4. Dan Cohen, "The Library's New Entryway" (Oct 2025)
newsletter.dancohen.org
5. Tom Scheinfeldt, "Making an AI Frontend for ArchivesSpace" (Nov 2025)
foundhistory.org
6. ProfessionalWiki, "Let AI access your wiki with MCP" (Fall 2025)
semantic-mediawiki.org

Distributed memo: MCP Server Architectures for Archives, Historical Databases, and Libraries (v1.5, 17 Feb 2026) [update link after upload to repository]