

SEMINAR SERIES · DIGITAL HISTORY IN/OF CENTRAL ASIA ·  
FAU ERLANGEN-NÜRNBERG · 29 JUNE 2026

---

# Islam's “Peripheries”

*Digital humanities, algorithmic analysis, and AI  
in West Africa and Central Asia.*

**Aksana Ismailbekova**

*Leibniz-Zentrum Moderner Orient (ZMO)*



**Frédéric Madore**

**Data Curator**

*Africa Multiple Cluster of Excellence · University of  
Bayreuth*



# An “Open Up” research project

A collaboration funded by the **Volkswagen Foundation**, under its *Open Up — New Research Spaces for the Humanities and Cultural Studies* programme.

---

## THE PROGRAMME'S WAGER

To “open up” is to take the first step into something new and unknown — the call backs small teams to explore **entirely new research spaces**, complex topics that need more than one perspective.



---

START

Autumn 2026

---

DURATION

18 months

---

TEAM

Two researchers · two regions

---

## — THE CONCEPTUAL STAKE

# Why “peripheries”?

- In Islamic studies, sub-Saharan Africa and Central Asia are often treated as marginal
- Distant from the “real” Islam of the Middle East
- Yet Muslim delegations from Togo and Dahomey (Benin) visited Soviet Central Asia, 1960s–70s — and vice versa
- The project challenges the centre–periphery frame itself



Togo-Presse · 7 Oct. 1963



Togo-Presse · 15 Sept. 1971



Daho-Express · 14 Nov. 1972

— IN THE NEWS · APRIL 2026

# Togo ↔ Kyrgyzstan, 2026

A different kind of tie in the present day. In April 2026, Togo's president made the first-ever state visit to Kyrgyzstan — diplomacy and trade now, where the 1960s links were religious.

---

01

# The challenge

*Vast multilingual archives, studied in silos.*

## — THE PROBLEM

---

# Vast archives, locked away

---

DOCUMENTS

~16,000

---

CATALOGUING

Partial

---

LANGUAGES

12+

---

RUSSIAN

ARABIC

HAUSA

EWE

KABYÈ

TAJIK

FRENCH

UZBEK

PERSIAN

TURKI

GERMAN

ENGLISH

---

## WHY IT STAYS LOCKED

- Sheer volume and linguistic diversity defeat traditional analysis
- No single scholar or team reads every language and script
- Rich historical insight stays out of researchers' reach

— RARELY COMPARED

# Studied in silos

## WEST AFRICA · POST-1960S

---

- Islamic discourse and public engagement
- Post-colonial nation-building
- Western-educated Muslim voices
- Francophone press and audiovisual sources

## CENTRAL ASIA · SOVIET ERA + TAJIK CIVIL WAR

---

- Russian imperial administration records
- Early Soviet governance of Muslim communities
- Islamic reformers and local agency
- Rare Emirate of Bukhara materials

---

## COMMON COMPARATIVE GROUND

Secularism

| Modernity

| Development

| Islamic reformism

— BOTH HELD AT ZMO

# Two multilingual digital collections

## ISLAM WEST AFRICA COLLECTION (IWAC)

- 14,500+ items — newspapers, Islamic publications, audiovisual recordings, photographs
- 9,315 minutes of audio in Hausa
- 6 countries, since the 1960s

## REINHARD EISENER COLLECTION

- 1,619 documents across 50 archival boxes
- Bukhara (1917–30), Soviet governance, Tajik civil war (1992–97)
- 8 languages incl. Turki; multiple scripts



Samples from both collections.

— OPEN ACCESS · ISLAM.ZMO.DE

# The Islam West Africa Collection

● ● ● islam.zmo.de/s/westafrica

Open ↗

— A SCHOLAR'S ESTATE · ACCESS ON REQUEST

# The Reinhard Eisener Collection

● ● ● zmo.de/en/library · Reinhard Eisener Bestand

Open ↗

# A possible third collection

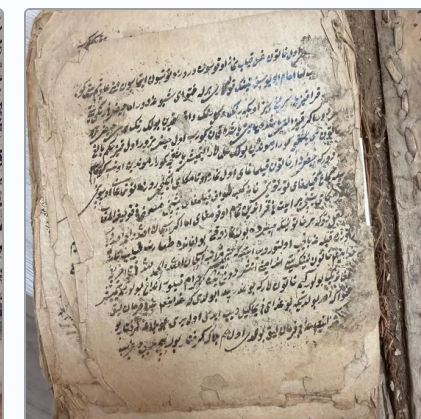
Aksana Ismailbekova has been at Osh State University, in southern Kyrgyzstan.

- The university holds a large collection of Islamic materials
- Gathered from local people across the region
- Manuscripts, devotional prints, loose-leaf texts

---

## A POSSIBILITY WE'D EXPLORE

Scanning these holdings and incorporating them — a third collection, alongside IWAC and the Eisener archive.



Islamic manuscripts and prints collected from local communities · Osh State University, Kyrgyzstan.

---

02

# The approach

*AI-driven digital humanities, built across  
two regions.*

**How can AI-driven DH methods transform **access** to and **interpretation** of these collections — enabling new comparative methods for Islamic discourse across regions?**

The project's guiding question

# From raw documents to structured data

Multimodal LLMs turn scanned pages into structured data

AI models that take in images and audio, not just text

- Extracts text from scans and audio files — Hausa, Arabic, Cyrillic, Old Tatar
- Now reads handwriting too — cursive letters and manuscripts, not just print
- Pulls out people, places, dates as structured fields
- Opens DH methods — maps, networks, analysis at scale



A dense multi-column newspaper page — the kind of layout conventional OCR breaks on.

# Reading printed Ewé

**MIAFE ƷUTIFAFAFIA EYADEMA KPE TA KPLE MƆSLEMTƆWO FE ƉEKAWƆWO ƉƉZIKPƆHA LA**



Mia novi Mɔslem hamea ngɔnɔlawo se nya xɔasiwo tso Togo yeyea fofo nu

«Woayra amesiwo léa avu la, elabena woayɔwo be Mawuviwo»

Enye Togo yeyea fofo avafiawodzifia Gnassingbe Eyadema fe didi vevi be amesiame nano dzidzo kple ɖutifafa me lle yefe Denyigba

Enye Togo yeyea fofo avafiawodzifia Gnassingbe Eyadema fe didi vevi be amesiame nano dzidzo kple ɖutifafa me lle yefe Denyigba

Enye Togo yeyea fofo avafiawodzifia Gnassingbe Eyadema fe didi vevi be amesiame nano dzidzo kple ɖutifafa me lle yefe Denyigba

Togo Presse, 31 July 1976.

## EXTRACTED TEXT · EWÉ

MIAFE ƷUTIFAFAFIA EYADEMA KPE TA KPLE MƆSLEMTƆWO FE ƉEKAWƆWO ƉƉZIKPƆHA LA

Mia novi Mɔslem hamea ngɔnɔlawo se nya xɔasiwo tso Togo yeyea fofo nu

«Woayra amesiwo léa avu la, elabena woayɔwo be Mawuviwo»

Enye Togo yeyea fofo avafiawodzifia Gnassingbe Eyadema fe didi vevi be amesiame nano dzidzo kple ɖutifafa me lle yefe Denyigba

↓ Printed Ewé, diacritics and all — scroll for the full extraction.

# Two layers: a server and a skill

## MCP SERVER · THE PLUMBING

---

- A standardised, **read-only** interface any AI assistant can call — Claude, ChatGPT, or open-source
- Both collections behind one door; the data stays on our servers

## AI SKILL · THE INTELLIGENCE

---

- A curator's method, written down — search strategies, transliteration variants
- Bias and gaps disclosed in every answer

---

## MODEL CONTEXT PROTOCOL · AN OPEN STANDARD

Ask once, in plain language; the server searches both archives across eight languages — the same kind of connector that links an AI to Gmail, here pointed at a digital collection.

# Grounded answers

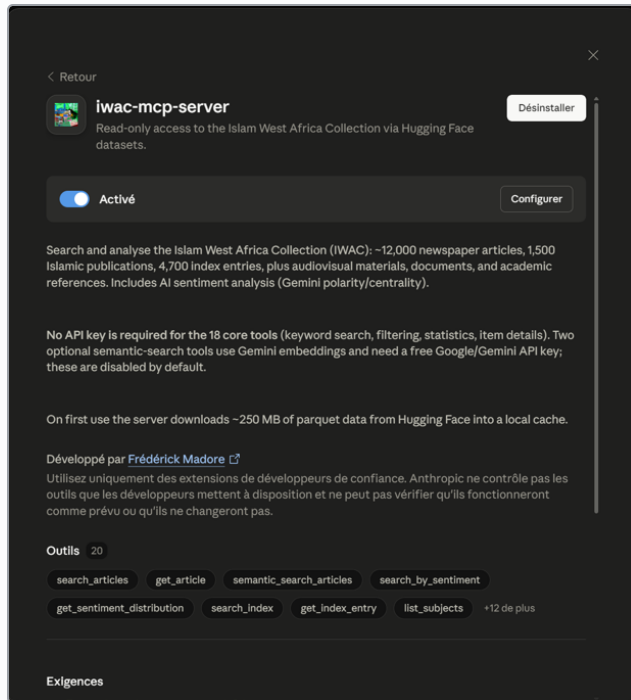
- Claims **cited back to a record** — grounding curbs the hallucinations a bare chatbot invents
- **Exploratory** — surfaces links across people, places and subjects the catalogue keeps apart
- **Read-only and verifiable** — every call a lookup; the data is never handed over

---

## BUILT — AND WHERE IT'S GOING

The IWAC server already runs, open source: [github.com/fmadore/iwac-mcp-server](https://github.com/fmadore/iwac-mcp-server). The goal: fold in the **Eisener collection**, then a public assistant on the project website, on an **open-source model**.

# From a plain question to cited sources



A Claude Desktop extension — read-only, ~22 tools.

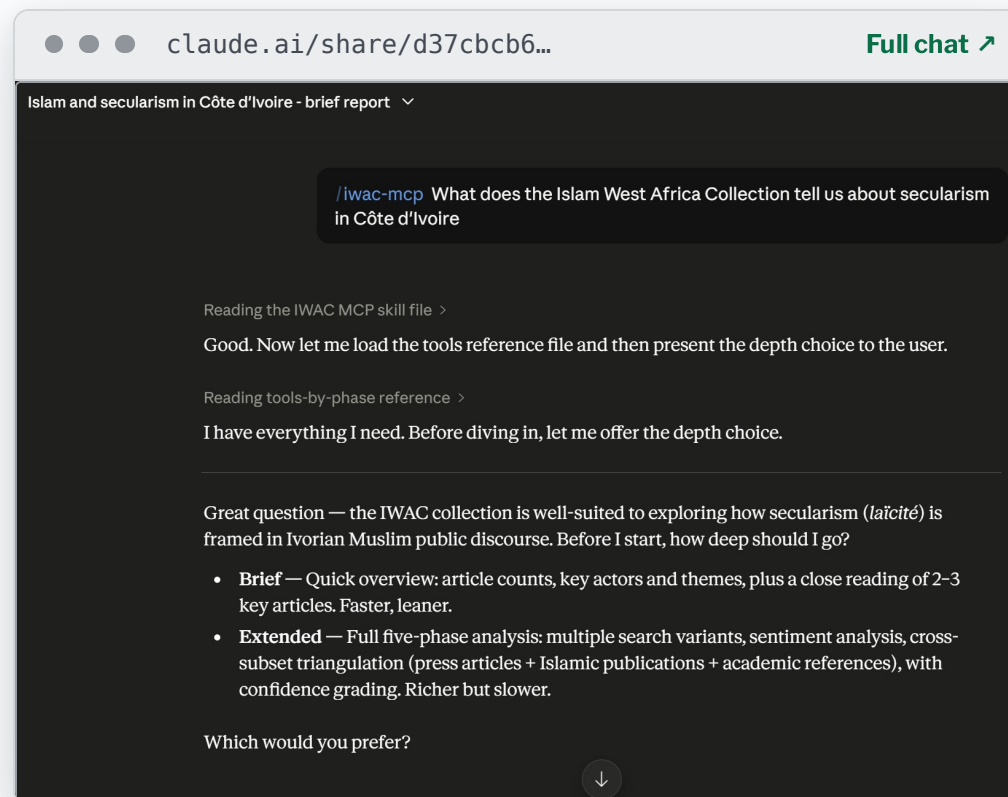
Question in natural language — the AI runs the tools

- Scopes the collection, then searches it in French
- Reads the strongest hits in full
- Claims linked back to its IWAC record

Live for the IWAC; the same door onto the Eisener estate is the goal.

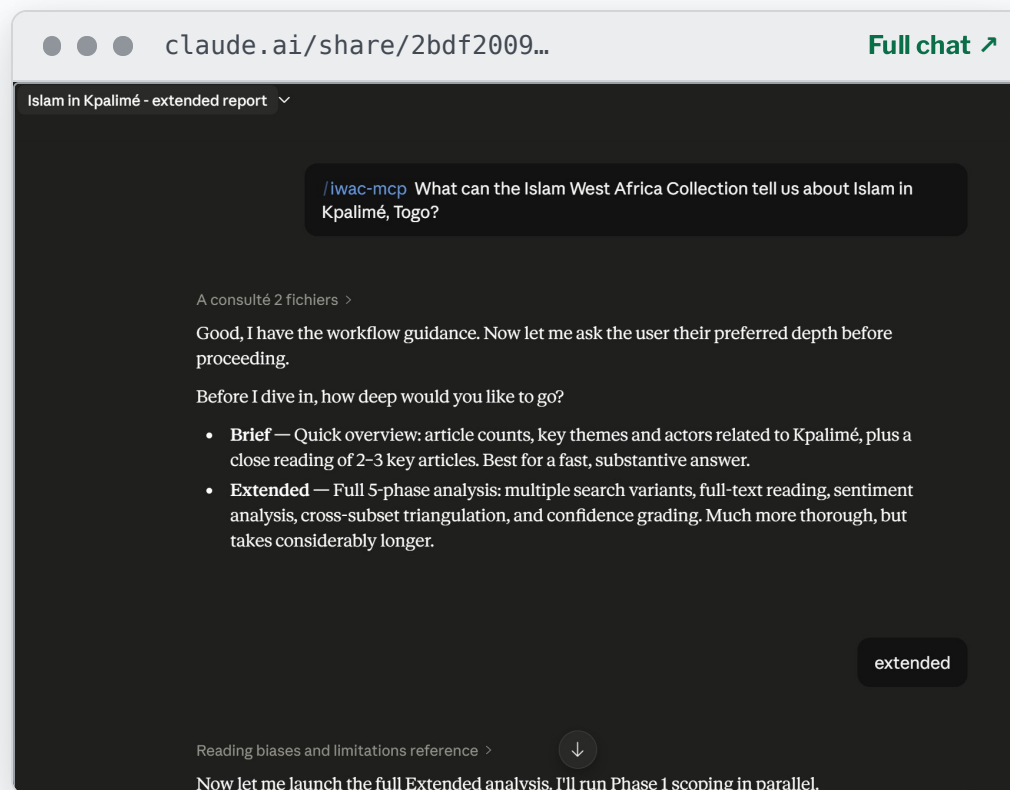
↓ Two saved runs below — press ↓

# Brief — the default depth



Claude Sonnet 4.6 · high effort

# Extended — the full method

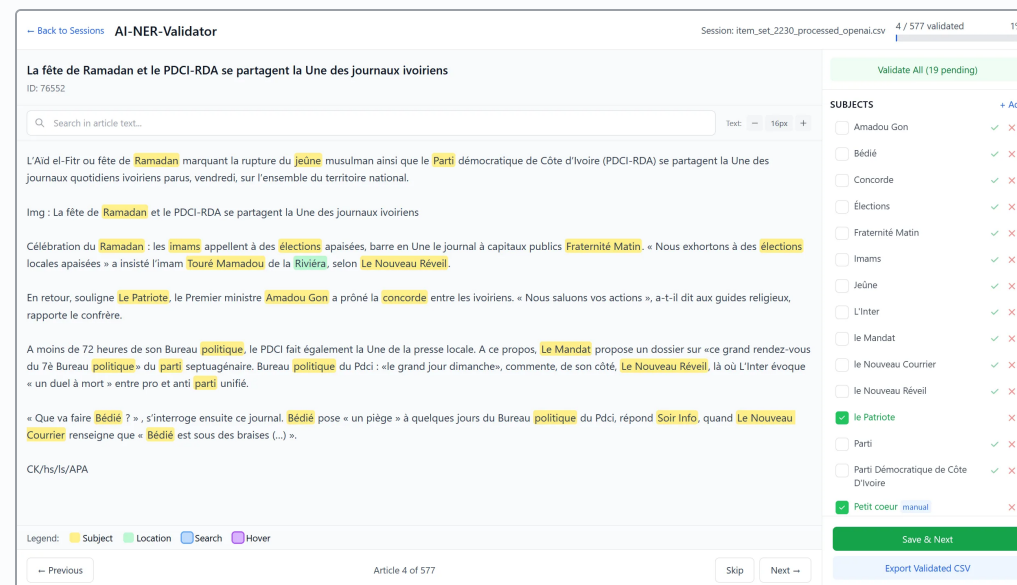


A five-phase pass — every claim traced to a record, not to the model's memory.

# Equitable, accessible, sustainable

Designed to run anywhere, and to be checked by people.

- Open-source models by default; commercial AI only as fallback
- Runs locally — but requires some infrastructure
- Human-in-the-loop: experts validate before anything enters the database
- All code open access — reuse and adapt the pipelines: [fmadore/iwac-ai-pipelines](https://github.com/fmadore/iwac-ai-pipelines) ↗



*AI-NER-Validator — experts verify AI-extracted keywords before entry.*

## POTENTIAL DOWNSIDES

# Embracing and managing risk

| RISK                                                              | MITIGATION                                                                                   |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| AI invents text (hallucination) or modernises historical spelling | Original scans preserved beside every AI output; all models and prompts documented on GitHub |
| The chatbot approach is largely untested on these collections     | Iterative development; we document what works and what does not                              |
| Collections are only partially catalogued                         | AI complements — never replaces — manual cataloguing                                         |
| AI tools evolve rapidly                                           | Modular architecture; swap components as better tools emerge                                 |

# Building sustainable networks

A concluding workshop turns the tools into a lasting network

- Bringing together scholars from West Africa and Central Asia
- Interdisciplinary: Islamic studies, history, anthropology, DH
- Hands-on training for researchers, archivists, heritage professionals
- Goal: South–South networks that outlast the project

---

— THANK YOU

# Comparing the “peripheries”

AI-driven DH lets two locked  
archives speak to each other and  
questions the centre they were  
measured against.

**Aksana Ismailbekova**

*Leibniz-Zentrum Moderner Orient (ZMO)*



**Frédéric Madore**

**Data Curator**

*Africa Multiple · University of Bayreuth*

