

AI as Wayfinder or Deceiver?

Google Lens and Human Catalogers in Describing Detroit's Murals



Dr. Joan E. Beaudoin & Sarah Offerman
School of Information Sciences

BACKGROUND

Academic libraries, archives, and museums are increasingly integrating AI tools into descriptive workflows. Technologies such as Google Lens (GL) can rapidly provide information statements about visual objects, suggesting potential increased efficiency in the development of descriptive item records for murals. This pilot study challenges assumptions that AI-assisted cataloging streamlines descriptive work, showing instead how it complicates practice through uncertainty, misidentification, and interpretive tension.

RESEARCH QUESTIONS

- How do AI-assisted tools perform in generating descriptive metadata?
- What kinds of issues arise in AI-assisted metadata creation?
- What role do AI tools play in descriptive cataloging workflows?

METHODS

This small-scale exploratory study of Dublin Core metadata was undertaken using images of 18 murals classified into three mural types: abstract, textual, representational and two mural groups (A and B). Two participants utilized two workflows consisting of human-only metadata creation and Google Lens-assisted metadata creation. Each participant worked through the 18 murals individually with the two mural groups being reversed for each participant. Each mural and mural type included in the study was cataloged once using both methods. All Google Lens provided information statements were verified by the participants using external authoritative sources. Data were collected which examined: time to completion, accuracy, terminological richness, authorized vocabulary, cataloger confidence, and challenges encountered. Data were analyzed using descriptive statistics and thematic analysis.



Tashif Turner (Sheefy). (2019). *Love hands*. 13133 Gratiot Ave, Detroit, MI

FINDINGS

AI Strengths

- Supports rapid identification of visual features
- Reduces initial descriptive effort
- Generates candidate descriptive entries

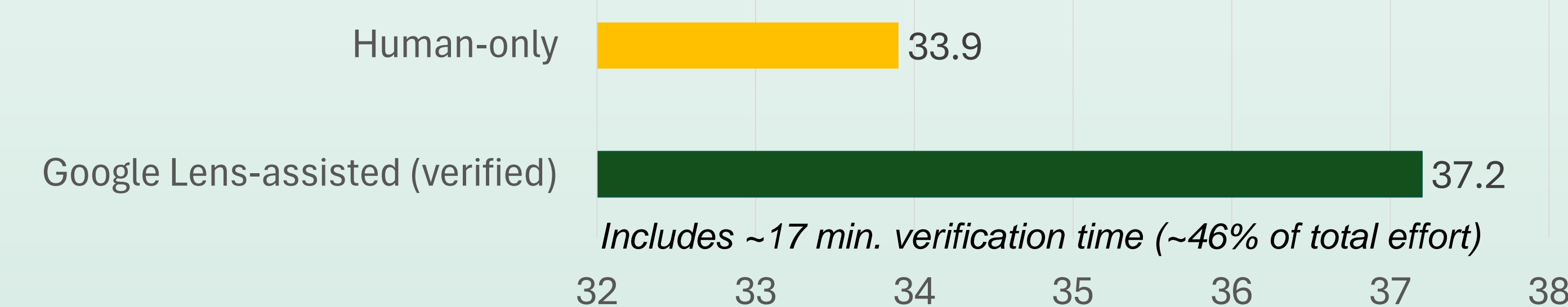
AI Limitations

- Inaccurate but confident information
- All AI-generated records contained errors prior to human verification
- Six recurring categories of error: Location, subject headings, artist ID, date, title, description / interpretation

Workflow Impact

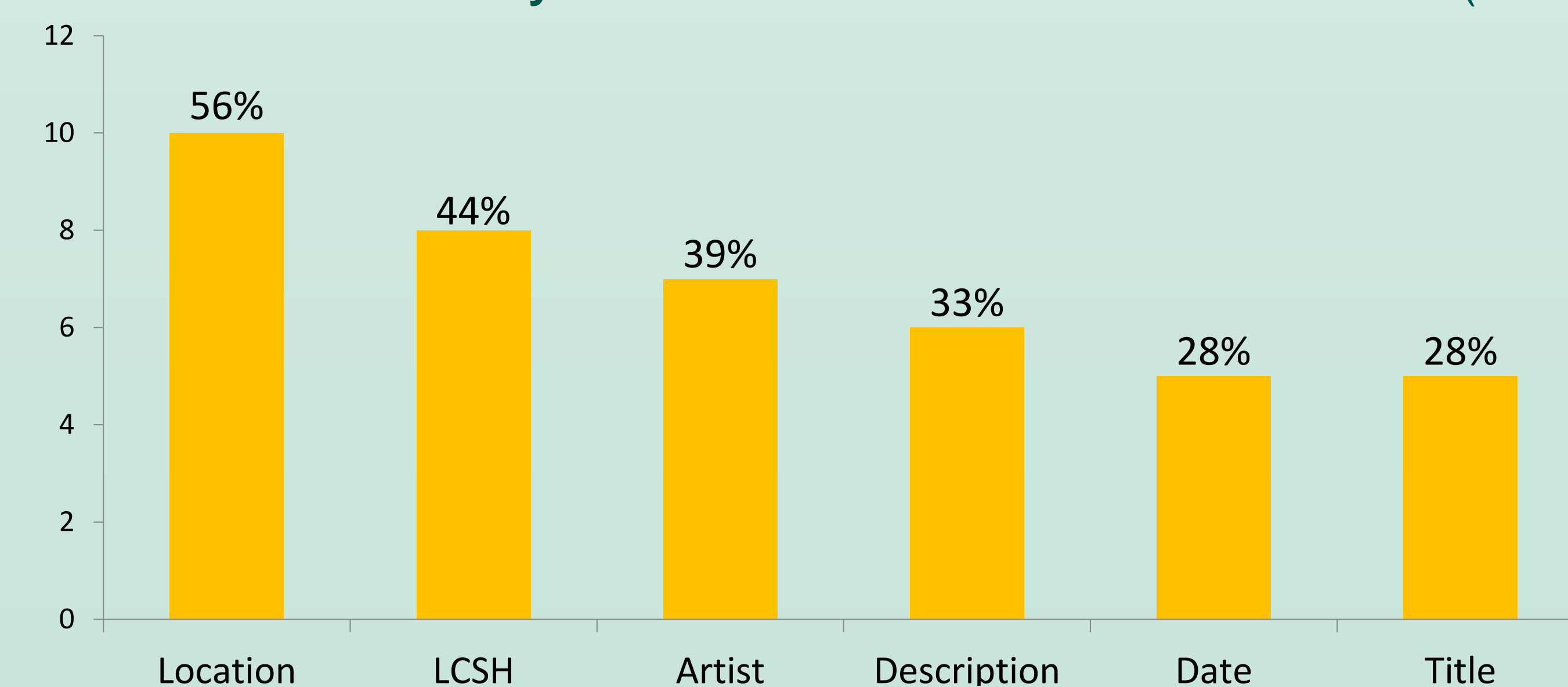
- Shifts work from description to verification
- Introduces verification overhead
- Highlights gap between pattern recognition and human interpretation

Average Time to Usable Metadata in Minutes (n=16)



AI-assisted metadata requires verification & does not reduce time to usable records

Location and Authority Errors Dominate AI-Generated Metadata (n=18)



DISCUSSION

AI-assisted workflows redistribute cataloging labor. Verification remains necessary, reinforcing the role of human expertise in contextual and authoritative description.

Key issues:

- Location, subject, and artist errors
- Non-compliant controlled vocabulary

Impact: Work shifts from description to verification

Implications for Practice:

- Use AI-assisted tools for initial description support only
- Treat AI output as subject to verification before use
- Authority control and subject assignment remain human-dependent
- Verification is required, not optional

NEXT STEPS

1. Expand study to 30 MLIS students
2. Compare additional AI tools
3. Test across different image collection types

REFERENCES

- Abele, L., Anders, G., Aydin, T., Buder, J., Fischer, H., Kimmel, D., & Huff, M. (2025). ArchiveGPT: A human-centered evaluation of using a vision language model for image cataloguing. *arXiv preprint arXiv:2507.07551*.
- Facklam, D., Sweeney, S. J., Majumdar, S., & Dmello Kamath, R. N. (2025). Describing archival photographs using multimodal LLMs: a case study on evaluating vision-language model performance for creating descriptive metadata. *The Electronic Library*, 1-24.
- Rees, A. (2020). Image recognition as a tool in cataloguing born-digital photography. In Boogh, E., Hartig, K., Jensen, B., Uimonen, P., & Wallenius, A. (Eds.), *Connect to collect: Approaches to collecting social digital photography in museums and archives* (pp 219-231). Nordiska museets förlag.
- Wolfe, E. (2026). Enhanced archival metadata through AI: A case study of digitized photograph descriptions. *The Electronic Library*, 1-25. DOI 10.1108/EL-07-2025-0281
- Zavalin, V., & Zavalina, O. L. (2025). Are we there yet? Evaluation of AI-generated metadata for online information resources. *Information Research an international electronic journal*, 30(1), 732-740.



Mohammed Awudu. (2023). *I write my own story*. 12249 Woodward Ave., Highland Park, MI