

Feeling UISTFUL: An Interactive Portrait of Scholarly Authorship, Readership, and the In-Between

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Related UIST work exploration

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Started as free exploration through the corpus, ended with an intentional search of find papers I should cite in my current paper.

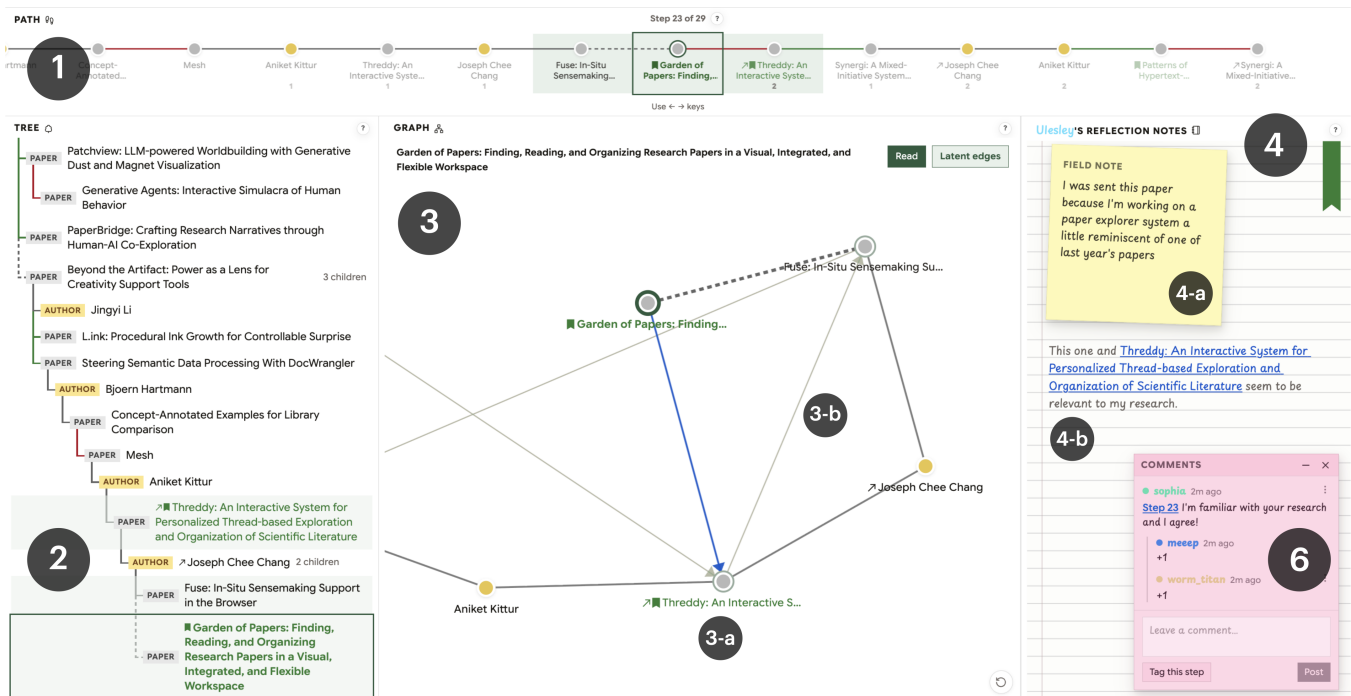


Figure 1: UISTFUL’s published trace interface presents one reading as an ordered Path (1), hierarchical Tree (2), and nonlinear Graph (3). The Graph includes reader-authored edges (3-a) and latent (untraversed) citation and authorship edges (3-b). In-reading *Field Notes* (4-a) and post-reading *Reflection Notes* (4-b) capture interpretation, while bookmarks highlight meaningful moments. Readers can coordinate views, replay the trace, project it onto the Globe (5), and discuss the trace with others (6).

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Abstract

We introduce UISTFUL, a system that turns reading activity into a collective portrait of a scholarly community. Readers explore a semantic globe of UIST papers and authors while the system records private reading traces that can be reviewed, reflected upon, curated, and published for others to replay. Inspired by the information flâneur, UISTFUL treats a reading trace as a camera through which readers frame and interpret what they read, casting reading as a creative and authorial process. Shared traces display the plurality

of interpretations composed across the same scholarly landscape, while collective trace views reveal paths and concentrations of attention across the community, inviting UIST to see itself as an interactive system of papers, authors, readers, and their exchanges.

CCS Concepts

• **Human-centered computing** → **Web-based interaction**; Visualization theory, concepts and paradigms; **Social networks**.

Keywords

scholarly sensemaking, reading traces, collective sensemaking, social and information networks, network visualization

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1 Introduction

Reading augmentation systems increasingly use LLMs and agent workflows to perform reading and synthesis on the reader's behalf [12]. Many scholarly sensemaking systems instead scaffold readers in carrying out this work themselves across research texts at scale [9, 13]. Whether automating or assisting the process, these approaches provide powerful support for *reading for transmission* through information extraction and synthesis, but offer comparatively less support for interpretive and *creative reading* [12].

One mode of such creative reading is the curiosity-driven exploration of wiki rabbit-holing [15] and *information flânerie*, which describe wandering through textual landscapes [4] without a fixed destination, encountering information by bumping into it [7]. Like the camera of the urban flâneur [17], a creative activity trace can preserve an otherwise ephemeral creative process for later revisitation [10]. Earlier work automatically captured browsing interaction histories to reduce effort in directed search [19]. More recent systems support the deliberate curation of research threads [11], “paper gardens” [14], and shareable research trails [16] through the reader's explicit selection of sources and links. This suggests an opportunity to pair explicit curation with automatic, implicit capture so that the reader's path is recorded as a *trace* they can revisit and layer interpretation onto. This approach is especially timely as LLMs and AI summaries compress reading into immediate answers and risk diminishing the curiosity, creativity, and critical eye of the flâneur [7].

We introduce UISTFUL, a system for collectively capturing and composing an interactive portrait of a scholarly community of readers, authors, and those in between. Authors read to write, while readers exercise an authorial role by composing their own interpretations and syntheses across texts. At a conference, the readers are often also the authors of the papers circulating among them. This duality recalls the “participant-observer dialectic” of the urban flâneur, who is part of the very crowd they observe [3]. In UISTFUL, readers navigate a semantic globe of recent UIST papers and authors, zoom into individual pages, and follow citation or authorship links. The system records each path as a private reading trace that

readers can inspect, annotate, and curate before publishing. Published traces (Fig. 1) appear in a public library, while anonymized full reader traces appear across the Globe, showcasing a plurality of readings and supporting reflection at both individual and collective levels. In effect, UISTFUL arms the information flâneur with a camera that encourages wandering and noticing while preserving each reading for later, even *wistful*, viewing [7, 17]. The result resembles a live wedding—or conference—portrait whose subjects are also its portraitists. Through this demonstration, we invite the UIST community, as researchers of interactive systems, to view itself as a living and observable whole [1].

2 UISTFUL: Interaction

UISTFUL provides three main interfaces: the Globe for exploring papers and authors, *My Trace* for reviewing and reflecting on one's own reading trace, and the *Trace Library* for publishing and replaying community traces.

2.1 Globe View: Reading

The Globe serves as both an overview of the UIST community and an entry point for reading, situating individual papers and authors within the broader scholarly landscape.

2.1.1 The UISTFUL Globe. Inspired by spatial browsing interfaces like Artographer [2], the UISTFUL Globe (Fig. 5) maps UIST 2020–2025 full papers and recurring authors onto seven semantic continents. Paper titles and abstracts are embedded and projected onto a sphere with spherical UMAP, authors are positioned at the mean of their papers, and papers are grouped with *k*-means in embedding space into seven clusters named by an LLM. A Voronoi tessellation gives each paper a cell, while shortest paths over neighboring-paper Delaunay edges route citation and authorship links. The same layout is also available as a 2D equirectangular map. Readers rotate, pan, search, and zoom through the corpus much like Google Earth, with semantic zoom progressively revealing more labels [8, 18]. By eliminating the edges of a planar map, the Globe presents the proceedings as a bounded yet continuously navigable whole, supporting an overview effect while preserving meaningful local neighborhoods [1].

2.1.2 Reading Interaction. Readers can wander across the Globe, search directly, or use *I'm Feeling Lucky* to find a paper or author. Selecting a label opens a side panel with metadata and links to references, citing papers, and authors (Fig. 2). Selecting *Read* opens a full page with a yellow sticky *Field Note* for in-reading reflection (Fig. 3). Paper pages include the title, author links, abstract, and in-context citations, while author pages list papers and collaborators. Readers follow blue hypertext links between pages while the system records each visit and traversed link in their private trace.

2.2 Trace View: Sharing

A *reading trace* records the ordered paper and author pages a reader visits, including revisits and traversed links. Readers inspect and reflect on this private trace in *My Trace*, then curate and publish selected traces to the *Trace Library*.

2.2.1 My Trace. *My Trace* uses the same coordinated Path, Tree, Graph, and notes interface shown in Fig. 1, but in an editable form. Readers can scrub between steps in their trace, revisit in-reading

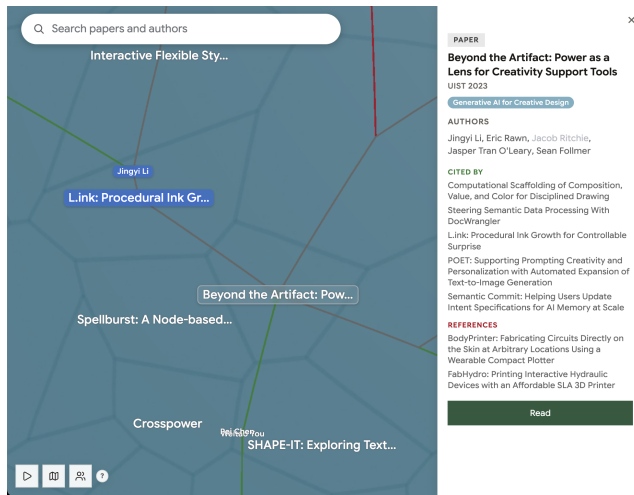


Figure 2: The UISTFUL Globe zoomed in on the selected paper, showing its links to neighboring papers and authors, with a side panel displaying metadata, authors, citations, and a button to read the full paper page.

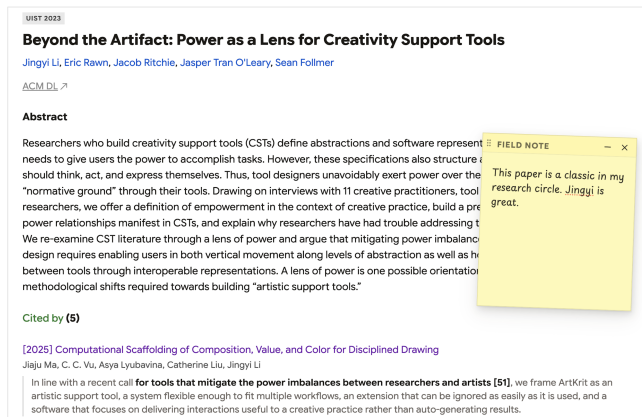


Figure 3: A full paper page with linked authors and in-context citations, plus a *Field Note* for reflection during reading.

Field Notes, write retrospective, post-reading *Reflection Notes*, bookmark steps, reveal latent (untraversed) citation and authorship edges, and add interpretive links between pages. They can then crop and title the trace, add an overall reflection, and either save it privately or publish it. Their current trace also appears on the Globe as visited paper cells and authors connected by the shortest paths between them (Fig. 5 and 6-A).

2.2.2 Trace Library. Published traces appear in the public *Trace Library*, where readers can search and filter by paper, author, user, or continent, and sort by recency or Jaccard similarity to their own trace (Fig. 4). Opening a trace presents the Path, Tree, Graph, and notes interface from Fig. 1 in read-only form, with controls to replay it step by step through the corresponding full pages and comment on the trace or individual steps. Readers can also project a published

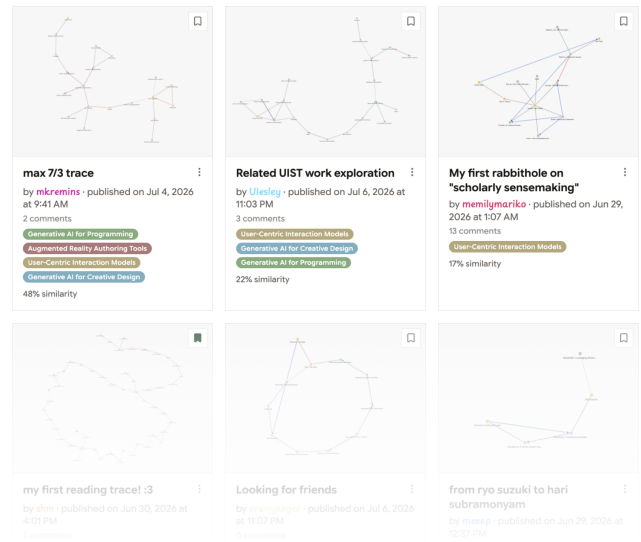


Figure 4: Published traces in the *Trace Library*, shown as cards with graph previews and continent tags, sorted by similarity to the signed-in reader's trace.



Figure 5: The Globe showing the signed-in reader's trace in light blue and a published trace in magenta. Overlapping nodes and edges appear in purple.

trace onto the Globe alongside their own, making overlaps and divergences visible across the shared landscape (Fig. 5).

2.2.3 Collective Trace. The Globe and Map offer three anonymized collective trace layers across all UISTFUL readers (Fig. 6). *Paths* overlays aggregate reading paths in orange, with thicker segments indicating more frequent traversal (Fig. 6-B). *Readers* shows each reader's route in their personal trace color, making individual paths and overlaps visible (Fig. 6-C). *Heat* presents a heatmap of visit

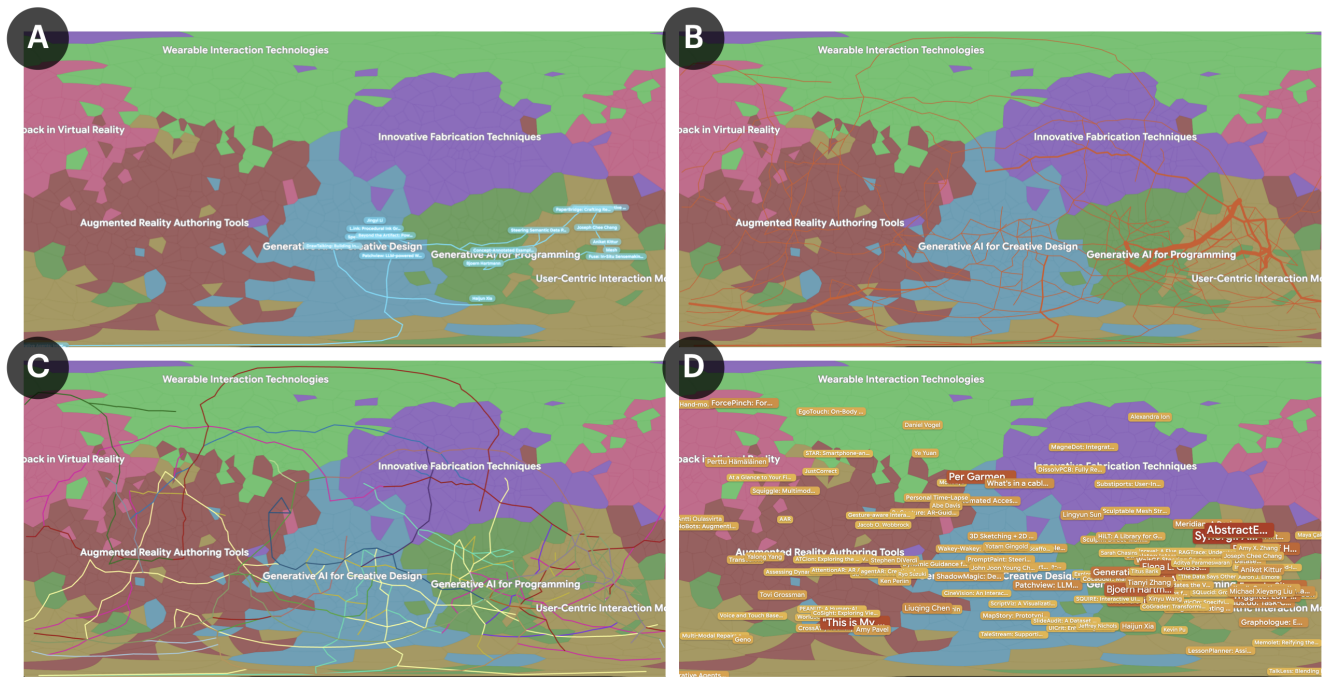


Figure 6: Collective traces on the 2D equirectangular Map, with all seven semantic continent titles visible: (A) the signed-in reader’s individual trace, (B) aggregate *Paths* in orange, with line thickness indicating traversal frequency, (C) individual *Readers* in their distinct trace colors, and (D) visit *Heat* across papers and authors, indicated by label size and darkness. These views visualize reading activity from 26 unique readers over 21 days, spanning 106 paper nodes and 35 author nodes.

frequency across papers and authors (Fig. 6-D). By aggregating and zooming out from the individual traces in *My Trace* and the *Trace Library*, these layers capture a bird’s-eye view of the collective creative reading happening on UISTFUL, evoking an “Overview Effect” at the scale of the systems research community [1, 5].

2.3 Usage Scenarios

Curated traces can be saved privately or published to the community. We anticipate UISTFUL supporting both directed and exploratory reading for oneself, for others, or for both [6].

	For oneself	For others
Directed	Find and contextualize sources for an ongoing project.	Curate a path through a topic or argument.
Exploratory	Wander for curiosity or inspiration.	Share an unexpected rabbit-hole for others to replay.

Table 1: Speculative uses of UISTFUL across reading orientation and audience.

3 Conclusion

The photographer is an armed version of the solitary walker reconnoitering, stalking, cruising the urban inferno, the voyeuristic stroller who discovers the city as a landscape of voluptuous extremes. Adept of the joys of watching, connoisseur of empathy, the flâneur finds the world “picturesque.”

—Susan Sontag, *On Photography*

We present UISTFUL, a system that turns the scholarly reader into a flâneur wandering through a shared landscape of papers and authors. Reading traces serve as a camera through which readers frame and interpret what they encounter, much as a flâneur interprets a city scene through photography, demonstrating reading as a deeply creative process [3, 12, 17]. Shared traces expose a plurality of readings, while collective views induce an overview effect through which UIST, a conference on interactive systems, can see itself as an interactive system of papers, authors, readers, and their exchanges. As participants read, reflect, and share, they compose a living portrait of the scholarly community they belong to, enacting the participant–observer and reader–author dialectics at the heart of UISTFUL.

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References

- [1] Ahmed Kabil. 2018. *Seeing the Whole Earth From Space Changed Everything*. <https://longnow.org/ideas/whole-earth-overview-effect/>
- [2] Shm Garanganao Almeda, John Joon Young Chung, Bjoern Hartmann, Sophia Liu, Brett A. Halperin, Yuwen Lu, and Max Kreminski. 2025. Artographer: a Curatorial Interface for Art Space Exploration. *ArXiv abs/2512.02288* (2025). <https://api.semanticscholar.org/CorpusID:283457933>
- [3] Charles Baudelaire. 1964. *The Painter of Modern Life and Other Essays*. Phaidon Press, London.
- [4] Mark Bernstein, Silas Hooper, and Mark W. R. Anderson. 2025. Back To The Information City. In *Proceedings of the 36th ACM Conference on Hypertext and Social Media (HT '25)*. Association for Computing Machinery, New York, NY, USA, 118–126. doi:10.1145/3720553.3746664
- [5] Spencer Chang. 2026. <https://wewere.online/>
- [6] Anita Crescenzi, Yuan Li, Yinglong Zhang, and Rob Capra. 2019. Towards Better Support for Exploratory Search through an Investigation of Notes-to-self and Notes-to-share. In *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval (Paris, France) (SIGIR '19)*. Association for Computing Machinery, New York, NY, USA, 1093–1096. doi:10.1145/3331184.3331309
- [7] Marian Dörk, Sheelagh Carpendale, and Carey Williamson. 2011. The information flaneur: a fresh look at information seeking. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (Vancouver, BC, Canada) (CHI '11)*. Association for Computing Machinery, New York, NY, USA, 1215–1224. doi:10.1145/1978942.1979124
- [8] Google. 2026. *Google Earth*. <https://earth.google.com/>
- [9] Ziwei Gu, Joyce Zhou, Ning-Er (Nina) Lei, Jonathan K. Kummerfeld, Mahmood Jasim, Narges Mahyar, and Elena L. Glassman. 2025. AbstractExplorer: Leveraging Structure-Mapping Theory to Enhance Comparative Close Reading at Scale. In *Proceedings of the 38th Annual ACM Symposium on User Interface Software and Technology (UIST '25)*. Association for Computing Machinery, New York, NY, USA, Article 85, 25 pages. doi:10.1145/3746059.3747773
- [10] Noor Hammad, David Chuan-En Lin, Amy Smith, Max Kreminski, Erik Harpstead, and Jessica Hammer. 2026. Tracing Creativity: A Design Space For Creative Activity Traces in HCI. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*. Association for Computing Machinery, New York, NY, USA, Article 1644, 24 pages. doi:10.1145/3772318.3791263
- [11] Hyeonsu Kang, Joseph Chee Chang, Yongsung Kim, and Aniket Kittur. 2022. Threddy: An Interactive System for Personalized Thread-based Exploration and Organization of Scientific Literature. In *Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (Bend, OR, USA) (UIST '22)*. Association for Computing Machinery, New York, NY, USA, Article 94, 15 pages. doi:10.1145/3526113.3545660
- [12] Sophia Liu, Sarah Abowitz, Yijun Liu, Sarah Stermann, Shm Garanganao Almeda, and Max Kreminski. 2026. Creative Reading: Scaffolding Reading for Transformation. *arXiv:2606.04308 [cs.HC]* <https://arxiv.org/abs/2606.04308>
- [13] Kyle Lo, Joseph Chee Chang, Andrew Head, Jonathan Bragg, Amy X. Zhang, Cassidy Trier, Chloe Anastasiades, Tal August, Russell Authur, Danielle Bragg, Erin Bransom, Isabel Cachola, Stefan Candra, Yoganand Chandrasekhar, Yen-Sung Chen, Evie Yu-Yen Cheng, Yvonne Chou, Doug Downey, Rob Evans, Raymond Fok, Fangzhou Hu, Regan Huff, Dongyeop Kang, Tae Soo Kim, Rodney Kinney, Aniket Kittur, Hyeonsu B. Kang, Egor Klevak, Bailey Kuehl, Michael J. Langan, Matt Latzke, Jaron Lochner, Kelsey MacMillan, Eric Marsh, Tyler Murray, Aakanksha Naik, Ngoc-Uyen Nguyen, Srishti Palani, Soya Park, Caroline Paulic, Napol Rachatasumrit, Smita Rao, Paul Sayre, Zejiang Shen, Pao Siangliulue, Luca Soldaini, Huy Tran, Madeleine van Zuylen, Lucy Lu Wang, Christopher Wilhelm, Caroline Wu, Jiangjiang Yang, Angele Zamarron, Marti A. Hearst, and Daniel S. Weld. 2024. The Semantic Reader Project. *Commun. ACM* 67, 10 (Sept. 2024), 50–61. doi:10.1145/3659096
- [14] Donghyeok Ma, Hanbee Jang, Joon Hyub Lee, and Seok-Hyung Bae. 2025. Garden of Papers: Finding, Reading, and Organizing Research Papers in a Visual, Integrated, and Flexible Workspace. In *Proceedings of the 38th Annual ACM Symposium on User Interface Software and Technology (UIST '25)*. Association for Computing Machinery, New York, NY, USA, Article 89, 15 pages. doi:10.1145/3746059.3747637
- [15] Tiziano Piccardi, Martin Gerlach, and Robert West. 2022. Going Down the Rabbit Hole: Characterizing the Long Tail of Wikipedia Reading Sessions. In *Companion Proceedings of the Web Conference 2022 (Virtual Event, Lyon, France) (WWW '22)*. Association for Computing Machinery, New York, NY, USA, 1324–1330. doi:10.1145/3487553.3524930
- [16] Semble. 2025. *Semble: A Social Knowledge Network for Creators*. <https://semble.so>
- [17] Susan Sontag. 1977. *On Photography*. Farrar, Straus and Giroux, New York.
- [18] Sangho Suh, Bryan Min, Srishti Palani, and Haijun Xia. 2023. Sensecape: Enabling Multilevel Exploration and Sensemaking with Large Language Models. In *Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (San Francisco, CA, USA) (UIST '23)*. Association for Computing Machinery, New York, NY, USA, Article 1, 18 pages. doi:10.1145/3586183.3606756
- [19] Alan Wexelblat and Pattie Maes. 1999. Footprints: history-rich tools for information foraging. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (Pittsburgh, Pennsylvania, USA) (CHI '99)*. Association for Computing Machinery, New York, NY, USA, 270–277. doi:10.1145/302979.303060