THE RESEARCHER AS A CURATOR IN THE AI ERA

Javier Guallar
Universitat de Barcelona
UAB, Doctoral Summer School
June 29, 2026

Curation facing Scientific Information Overload in the AI Era

Proposal:

- **Content Curation as a paradigm** for researchers in the current context of **scientific information overload** in the **AI era**.

Three Keys:

- **Scientific information overload**
- **AI era**
- **Curation paradigm**

Scientific Information Overload in the AI Era

- **Academic information overload** due to the exponential growth of scientific literature indexed in global databases and repositories
- A shift is occurring from **traditional information saturation** in Academia to a **new environment driven by AI**: new rules in information retrieval, the emergence of algorithmically generated **synthetic texts**, and more
- **Traditional intellectual composition** is being challenged (debates on **authorship and AI**)
- The urgent need for a "**Pact for AI**" *(Codina, 2026)*

Risks for the Researcher

Three major risks for the researcher:

1. Epistemic laziness *(Rodrigues, 2026)*: Voluntarily relinquishing cognitive and analytical effort because it is supplanted by AI: paper summaries, data overviews, theoretical frameworks, syntheses, and more

2. "Distant writing" (Floridi, 2025). With the use of AI, there is a tendency to distance oneself from thinking through and drafting one's own ideas and sentences, leading to a loss of intellectual proximity to one's own work

3. Loss of conceptual autonomy (loss of a unique and original perspective). Examples:

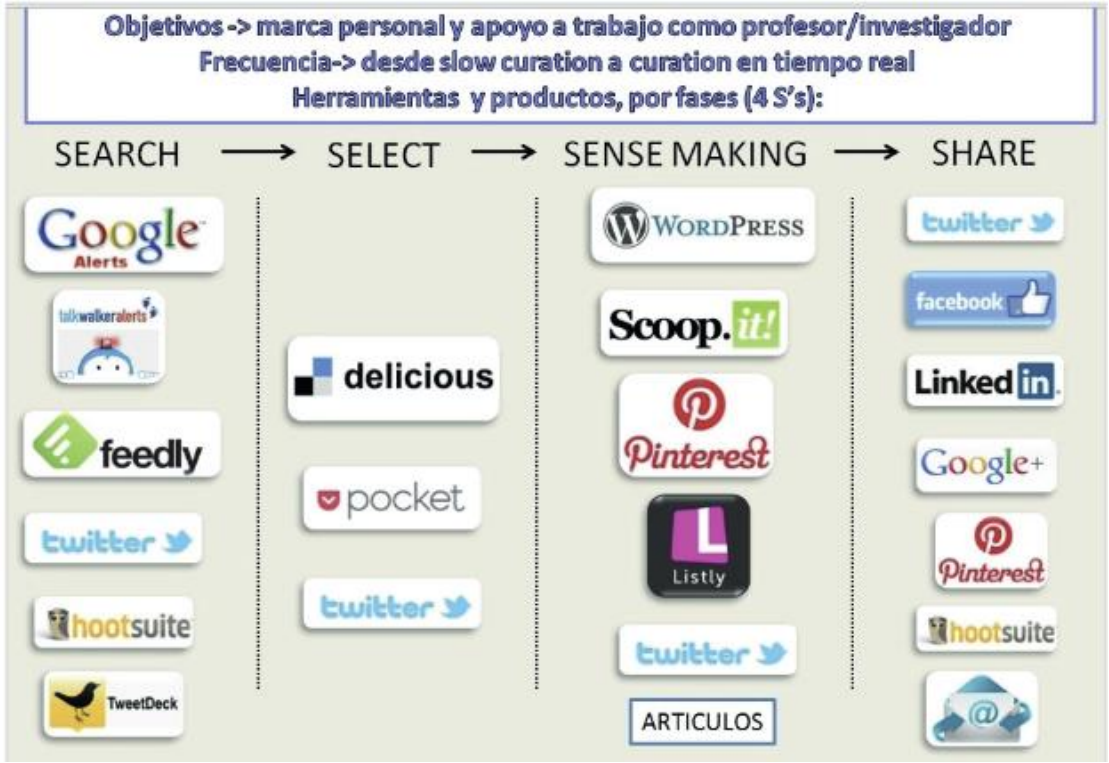
- **a) Subordination to AI biases**: e.g., if you delegate the synthesis of the theoretical framework to AI, the research will lack your vision *(Lopezosa & Goyanes, 2024)*
- **b) Illusion of competence** caused by the use of AI *(Codina, 2026)*

Toward Scientific Curation

- Scientific curation as a form of "**critical knowledge intermediation**" *(Reig, 2010; Guallar, Codina, & Hernández-Campillo, 2022):* the **researcher-curator** acts as an **expert filter** who selects and connects relevant information for the academic community
- **"Apt Curatorial Model"** based on **human intellectual value** *(Rodrigues, 2026)*: The researcher maintains absolute control and ethical oversight of the research, utilizing AI as a supportive tool while contributing added value through critical reasoning

Toward Scientific Curation

- Translation of the **4S's content curation method** (**Search, Select, Sense-making, Share**) (Guallar & Leiva-Aguilera, 2013; Guallar, 2020) **from professional to scientific content**



(Guallar, 2020)

4S CONTENT CURATION

METODOLOGÍA PARA LA INVESTIGACIÓN CIENTÍFICA EN LA ERA DE LA IA

Search

- Buscadores académicos
- Bases de datos
- Revistas científicas

Select

- Repositorios personales

Sense making

- Manuscrito de la investigación

Share

- Artículo científico
- Libro o capítulo de libro
- Ponencia en congreso
- Post en medios sociales

Herramientas IA

The First S: Algorithmic Alliance in Search

- The first "S" (Search) in literature review formulation entails a paradigm shift: transitioning from spending days, weeks, or months querying databases to establishing an **"algorithmic alliance" with AI** to **accelerate** this process

- **The risk of ambiguity:** Vague formulations inevitably yield mediocre results
- **Methodological framework:** Initially, researchers must construct a **human-driven keyword map**, subsequently leveraging AI for:
  - **Linguistic expansion** (optimizing boolean search syntax).
  - **Continuous automated monitoring** of the literature corpus.
  - **Identification of research gaps**

- **TIP:** Utilize artificial intelligence to monitor the expansive documentary landscape, expand search terms, and refine search syntax. However, researchers must invariably maintain strategic control over the investigation to ensure the search remains genuinely intelligent

Second S: Evaluative Virtue in Select

- The second "S" (Select) within scientific curation entails exercising strict epistemic vigilance over the retrieved literature corpus.
- Deploying **"evaluative virtue"** *(Rodrigues, 2026)* allows researchers to act as second-order critical judges when evaluating synthetic data.
- Delineating **AI exclusively as an instrumental tool**, stripped of any epistemological authority.
- Implementing rigorous protocols to counteract algorithmic **hallucinations** and **bibliographic ghosts** (fabricated citations).
- Adhering to a **"critical filtering funnel"** to systematically vet the sources integrated into the research.

Critical filtering funnel

Veracity Filter

Mandatory verification of authorship and curated references

Relevance Filter

Elimination of algorithmic syntactic noise by anchoring the selection process to the core research objectives and questions

Diversity Filter

Active mitigation of algorithmic blindness and inherent artificial intelligence biases

The Third S: Academic Sense-Making

- Executing the third "S" (Sense-making) for the **integration and transformation of sources and data** within the research manuscript
- Countering "**distant writing**" through the steadfast pursuit of **intellectual proximity** to one's own work
- Centering the **researcher's distinct voice** as the exclusive backbone of the **scholarly argument**
- Developing advanced **techniques for scientific sense-making**

Scientific Sense-Making Techniques

Summarizing (emphasis on research perspective): AI models generate generic summaries. The synthesis of curated content must reflect the author's exclusive viewpoint

Recontextualizing: AI models typically offer generalized syntheses. The researcher must adapt these outputs, relying on independent criteria, to align with the specific temporal, geographical, and social framework of their own study

Connecting and Commenting: Identifying critical correlations between authors, concepts and data; Contributing a distinct, original perspective (**Discussion** section)

The Fourth S: Transparency in Sharing

- **Transparency** as the Guiding Principle of the fourth "S" (Share), achieved through the exhaustive documentation and formal **traceability** of all research processes.
- Adoption of **rigorous editorial standards** regarding AI integration, adhering to recent frameworks such as **CRITERIA** *(Codina et al., 2026)* and other proposals *(Resnik & Hosseini, 2025)*.
- **Explicit methodological disclosure** of the AI tools deployed, specifying their functional scope and providing the utilized prompts as open-access datasets.
- **Prioritizing the researcher's distinct voice** during the subsequent **dissemination of research** across various scientific communication channels, including social media, academic blogs, and podcasts.

Conclusion: Human Value in Research

The absolute primacy of **ontological understanding, ethics, and human cognition** over the probabilistic inertia of artificial intelligence systems

The exclusive agency of **the researcher-curator** in **directing the investigative process** and contributing a distinct, critical perspective to the study

The future of scientific research and science itself, conceptualized as a fundamentally **human conversation**—albeit one enhanced by artificial intelligence assistance

References

- **Codina, L.** (2026). El pacto por la inteligencia artificial. *Hipertext.net*, (32), 1-4. https://doi.org/10.31009/hipertext.net.2026.i32.02
- **Codina, L., Freixa, P., Peña, S., & Lopezosa, C.** (2026). *Criterios para el uso transparente, ético y responsable de la inteligencia artificial en publicaciones científicas (CRITERIA)*. Cuadernos del Observatorio de Cibermedios, 5. Grupo de investigación DigiDoc (Universitat Pompeu Fabra). https://doi.org/10.31009/coc.05.2026
- **Floridi, L.** (2025). Distant Writing: Literary Production in the Age of Artificial Intelligence. *Philosophy & Technology*, *38*, Artículo 25. https://doi.org/10.1007/s13347-025-00800-4
- **Guallar, J.** (2020). Sistema personal de content curator. Fases, herramientas y ejemplos. *Anuario ThinkEPI*, *14*, e14d04. https://doi.org/10.3145/thinkepi.2020.e14d04
- **Guallar, J., Hernández-Campillo, T. R., & Codina, L.** (2022). Curación de contenidos en artículos científicos. Categorías y casos. *Telos: Revista de Estudios Interdisciplinarios en Ciencias Sociales*, *24*(3), 469-490. https://doi.org/10.36390/telos243.02
- **Guallar, J.; & Leiva-Aguilera, J**. (2013). *El content curator. Guía básica para el nuevo profesional de internet*. Barcelona: Editorial UOC, Colección El profesional de la información, n. 24, 168 p. ISBN: 978 84 9064 018 0
- **Lopezosa, C., & Goyanes, M.** (2024). Evaluación del uso ético de ChatGPT en investigación científica: principales tendencias, mejores prácticas y desafíos identificados. *Anuario ThinkEPI*, *18*, e18e04. https://doi.org/10.3145/thinkepi.2024.e18a19
- **Resnik, D. B., & Hosseini, M.** (2025). Disclosing artificial intelligence use in scientific research and publication: When should disclosure be mandatory, optional, or unnecessary? *Accountability in Research*, *33*(2), 2481949. https://doi.org/10.1080/08989621.2025.2481949
- **Reig, D.** (2010). Content curator, intermediario del conocimiento: nueva profesión para la web 3.0. *El caparazón*, 9 enero http://www.dreig.eu/caparazon/2010/01/09/content-curator-web-3/
- **Rodrigues, T. V.** (2026). The Apt Curation Model: An Epistemic Virtue Theory of AI-Assisted Authorship. *Department of Philosophy, Federal University of Santa Maria*. https://doi.org/10.1007/s13347-026-01038-z

AI use statement

- **AI and technical assistance:** Google NotebookLM, Gemini, and Nano Banana, alongside Microsoft PowerPoint, were utilized as supportive tools in the preparation of this presentation
- **Author responsibility:** The conceptual framework, source selection, literature analysis, and the proposed scientific curation methodology remain the sole responsibility of the author

¡Gracias!

Javier Guallar
Universitat de Barcelona
jguallar@gmail.com
https://jguallar.substack.com/