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# Scholarly Search and Nomadic Scholars - A Publisher's View

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# Session Questions

- Do our new methods of access to collections introduce bias into research?

- How do we impact the researcher?

- What barriers are we creating?

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# "Nomadic Scholars"

- Increasingly reliant on research conducted in "the cloud"

- Web and online library resources

- Mobile

- Multi-device

- Varied settings

- Specific use cases

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# More to Consider

- How does Web-scale search differ from scholarly research?

- Are lines blurring as more single-search box solutions are offered for scholarly resource discovery (Google Scholar, Summon)?

- How do content specialists improve the research process?

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# Web-Scale "Quick" Search

- Rapid, dynamically-generated results, which leverage:

  - User data (social layer)

  - Content data (metadata layer)

  - Indexed content (content layer)

- Breadth and scale; search techniques
  *applied across disciplines*

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# Where Bias Comes In

- **Algorithms**

  - Transparency: who controls the search and prioritization of results?

- **Semantics**

  - How astute an inference engine?

- **Metadata/Indexing**

  - How well-constructed, deep, proprietary or open, exposed, interconnected?

  - How complete/vetted the content referenced?

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# Scholarly Search

"Scholarship is necessarily iterative, proceeding in successive steps that change depending on feedback provided by previous steps; it cannot all be done simultaneously."

Source: Thomas Mann, T*he Peloponnesian War and the Future of Reference, Cataloging, and Scholarship in Research Libraries. Prepared for The Library of Congress Professional Guild, June 13, 2007. Author of The Oxford Guide to Library Research.*

## The Problems of Federated Searching

- Misrepresenting the full contents and search capabilities of individual databases
- Masking the existence of non-included sources

## The Inadequacy of the Open Internet Alone for Scholarly Research

- Inability to provide overviews of "the whole elephant"— i.e., not showing all relevant parts, not distinguishing important from tangential, not showing interconnections or relationships, not adequately allowing recognition of what cannot be specified

Source: Thomas Mann, T*he Peloponnesian War and the Future of Reference, Cataloging, and Scholarship in Research Libraries. Prepared for The Library of Congress Professional Guild, June 13, 2007. Author of The Oxford Guide to Library Research.*

*"There's Nothing Wrong with Discovery Services that Can't Be Fixed by the Reference Layer"*

-Mike Sweet's preconference session

•Reference is a step-off from A&I layer

•Subject-matter expertise [reference/A&I] gives uplift to ["fixes"] professional and scholarly research

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# Value of Domain-Specific Knowledge

- Adding context, which improves the research experience

- Contextual knowledge about the *subject matter and user* = improved user experience

- Open metadata/indexing alleviates some conventional silo-ing concerns (GeoRef)

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# Publisher's Perspective

- Using domain-specific knowledge of research content and user behaviors, can I build a better mousetrap?
    - Increasingly content-type agnostic
    - Mobile, multi-device
    - Digital objects within text
    - Leveraging user data and social layer (social interaction)
    - Across proprietary and open content sources
    - Data-based linking (linked data or A&I)

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# Specialized Research

- Applied content knowledge
- Accurate contextual relationships at more consistent and deeper levels
- Unique service approaches to meet high-value, specialized use cases (professional)
- Short cuts conventional processes but does not prioritize speed above all else

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# Examples from GeoScience

- Geographic search via map interfaces

- Location coordinates at the digital object level (charts, figures, tables, maps) within the content

- Differing user requirements at the sub-disciplinary level, profession-specific (geophysics, mining, petroleum research, seismology)

- Demand for high-res maps and map data cross-searchable with text, multimedia

- Integration with open resources linked through A&I