



The Evolving Scholarly Record

Scope, Stakeholders, and Stewardship

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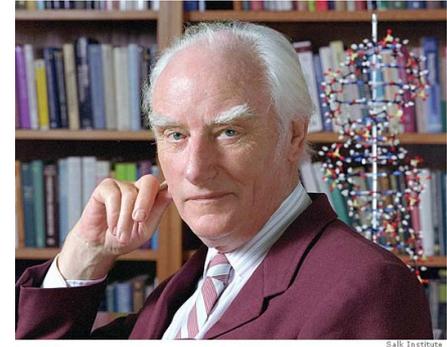
Roadmap

- What is the scholarly record?
 - Current trends
- OCLC Research: Evolving Scholarly Record
- Scholarly record framework:
 - Content
 - Stakeholder roles & configurations
- Stewardship
- Closing thoughts & discussion

What is the scholarly record?

Francis Crick:

What is molecular biology? Whatever interests molecular biologists.



Ross Atkinson:

“... that stable body of graphic information, upon which each discipline bases its discussions, and against which each discipline measures its progress ...”



Scholarly record: Content & perspective

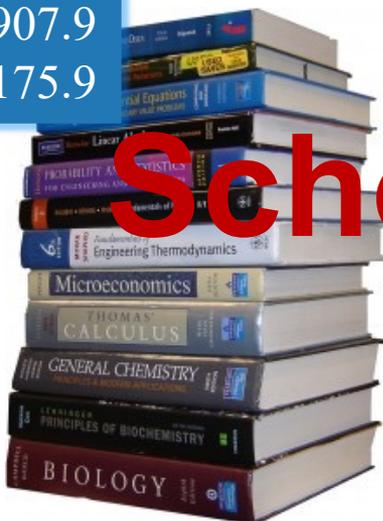
Date	\$ bn
2012-01-01	16289.6
2012-04-01	16419.2
2012-07-01	16603.7
2012-10-01	16677.3
2013-01-01	16772.7
2013-04-01	16907.9
2013-07-01	17175.9

Faculty: what establishes credentials

Researchers: what is necessary to validate & build on current literature

Publishers: what is “published”

e-



Scholarly?

Library: what is selected and preserved

```
float gasdev(long *idum) {
    static int iset = 0;
    static float gset;
    float fac, rsq, v1, v2;
    if (iset == 0) {
        do {
            v1 = 2.0*ran1(idum) - 1.0;
            v2 = 2.0*ran1(idum) - 1.0;
            rsq = v1*v1 + v2*v2;
        } while (rsq > 1.0);
        iset = 1;
        gset = v1/v1;
    }
    return gset*sqrt(rsq);
}
```

Evolutionary trends ...

- **Formats shifting:**
 - Print-centric to digital, networked
- **Boundaries blurring:**
 - Articles/monographs, but also data, computer models, lab notebooks, blogs, e-mail discussion, e-prints, interactives/executables, visualizations, etc
- **Characteristics changing:**
 - Traditionally: static, formal, outcome-focused
 - Today: dynamic, blend of formal & informal, more focus on process, replicability, “leveragability”
- **Stakeholder roles reconfiguring:**
 - New paths for the scholarly communication “supply chain”

Evolutionary, not revolutionary

- Scholarly record is ***always*** evolving
 - So boundaries & stewardship always evolving
- Dewald, W., Thursby, J., Anderson, R. (1986)
“Replication in Empirical Economics: The Journal of Money, Credit, and Banking Project” *American Economic Review* (September 1986)
- Confluence of trends accelerating evolutionary process

OCLC Research: The Evolving Scholarly Record

- **Develop framework to:**
 - Organize/support/drive discussions about ESR
 - “Big picture” view of the scholarly record
 - Define key categories of material and stakeholder roles
 - High-level; cross-disciplinary application; practical use
- **Benefits:**
 - Common reference point: concepts, terms (e.g., OAIS)
 - Organize/support conversations within/across domains
 - Reduce fragmentation
 - Equip libraries, scholars, funders, publishers, scholarly societies, etc. with resource for strategic planning

OCLC Research team

- **Brian Lavoie**
- **Ricky Erway**
- **Constance Malpas**
- **Jennifer Schaffner**
- **Titia van der Werf**
- **Ixchel Faniel**
- **Eric Childress**

Supporting work across OCLC Research portfolios:

- Research information management
- Understanding the system-wide library
- Digital humanities

Framing the Scholarly Record ...



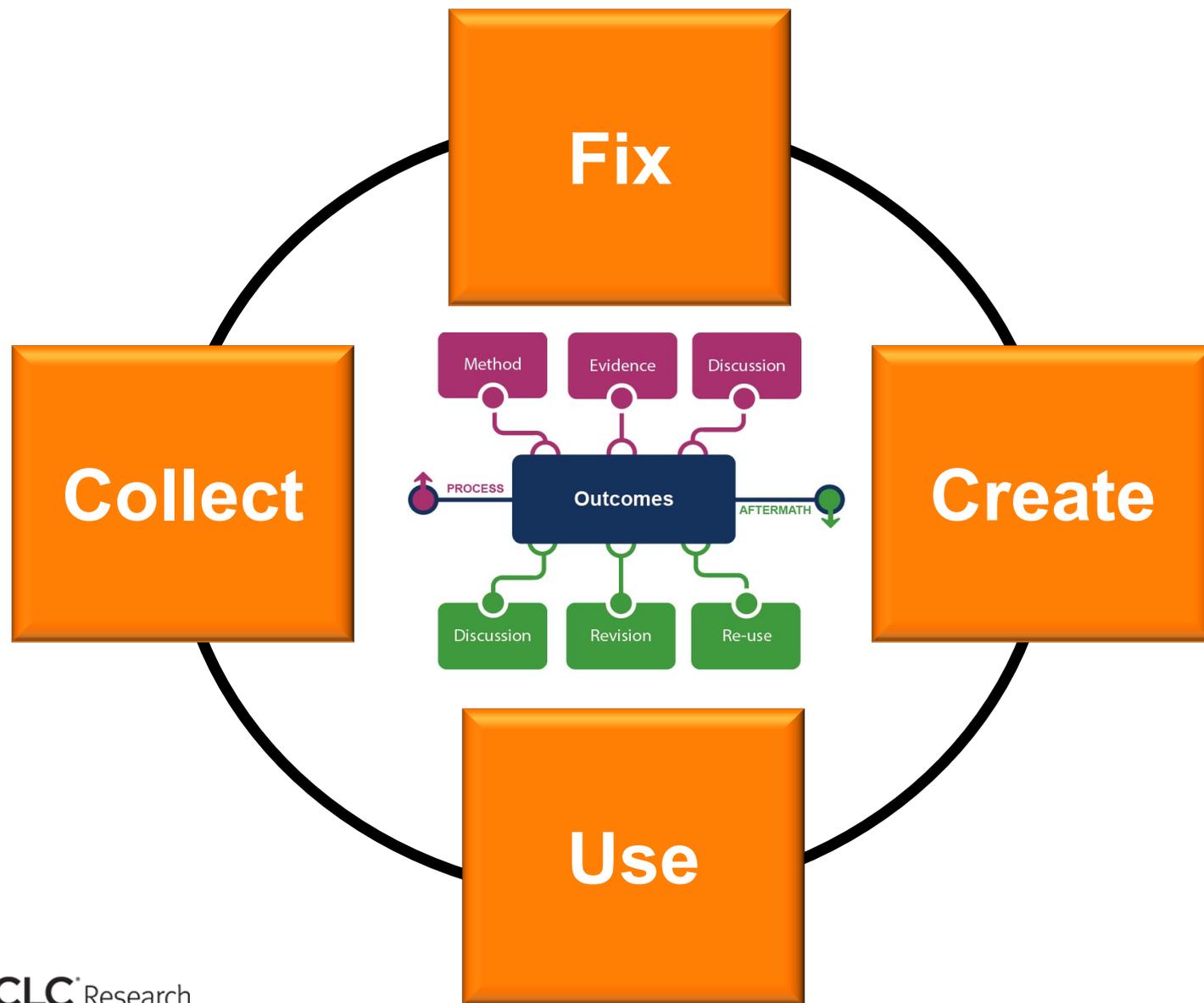
Some remarks ...

- Framework components not new or “suddenly important”
 - But not formalized into scholarly record through systematic collection, referencability, accessibility
- Prior work is foundation of future inquiry
 - Scholarly record itself available as input to new research
- Framework conceptualizes scholarly record evolving into:
 - Greater emphasis on context (process & aftermath), not just outcomes
 - Deeper and more complete record of scholarly inquiry

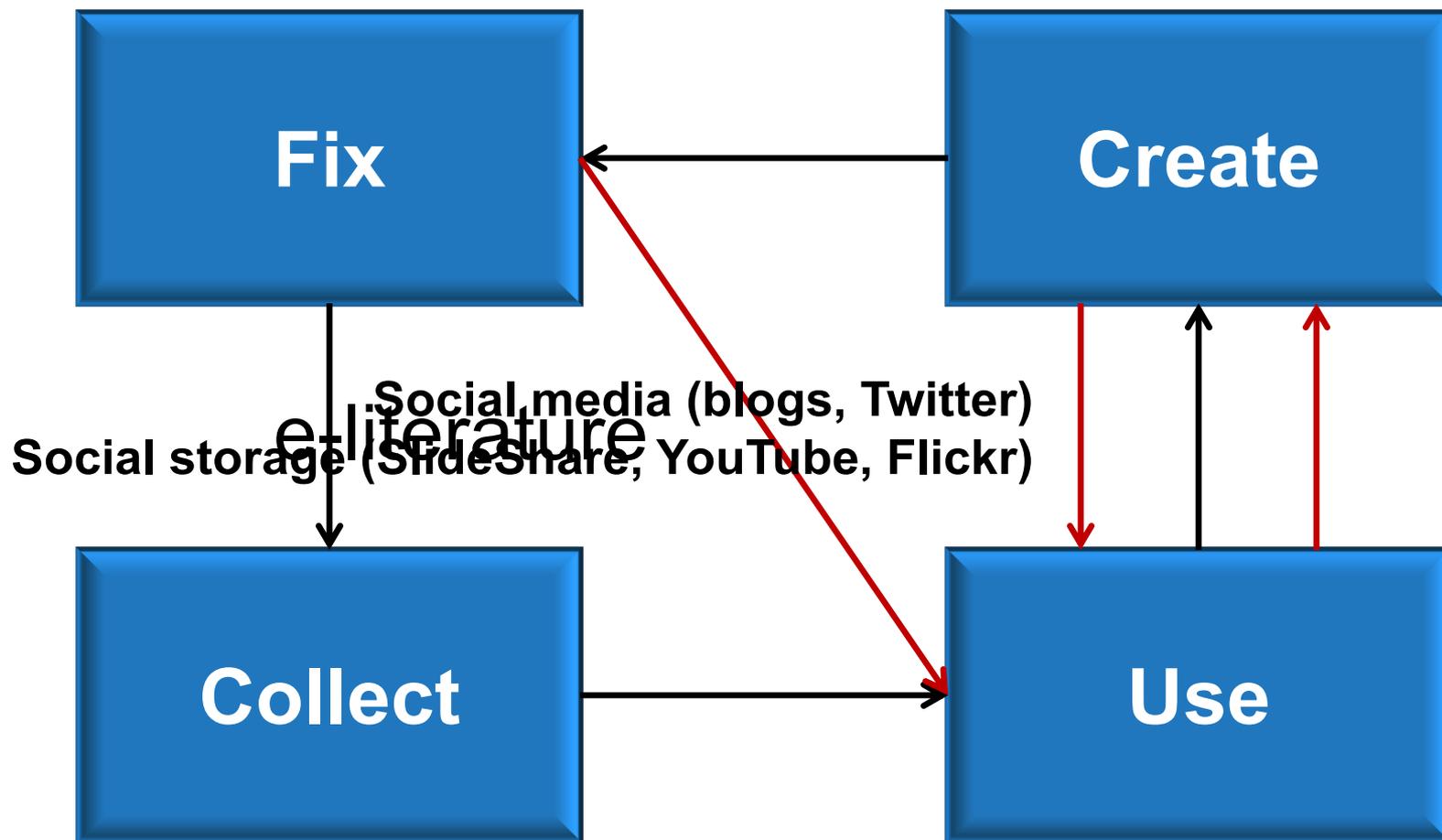
In practice ...



Framing the stakeholder eco-system ...

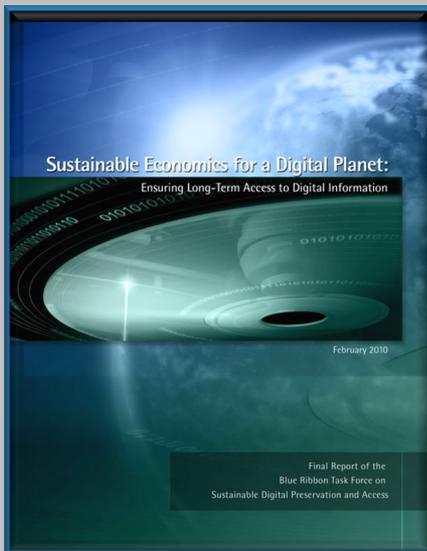


Evolving configurations in the eco-system ...



Use of the Framework: Example

Sustainable Economics for a Digital Planet: Ensuring Long-Term Access to Digital Information (2010)

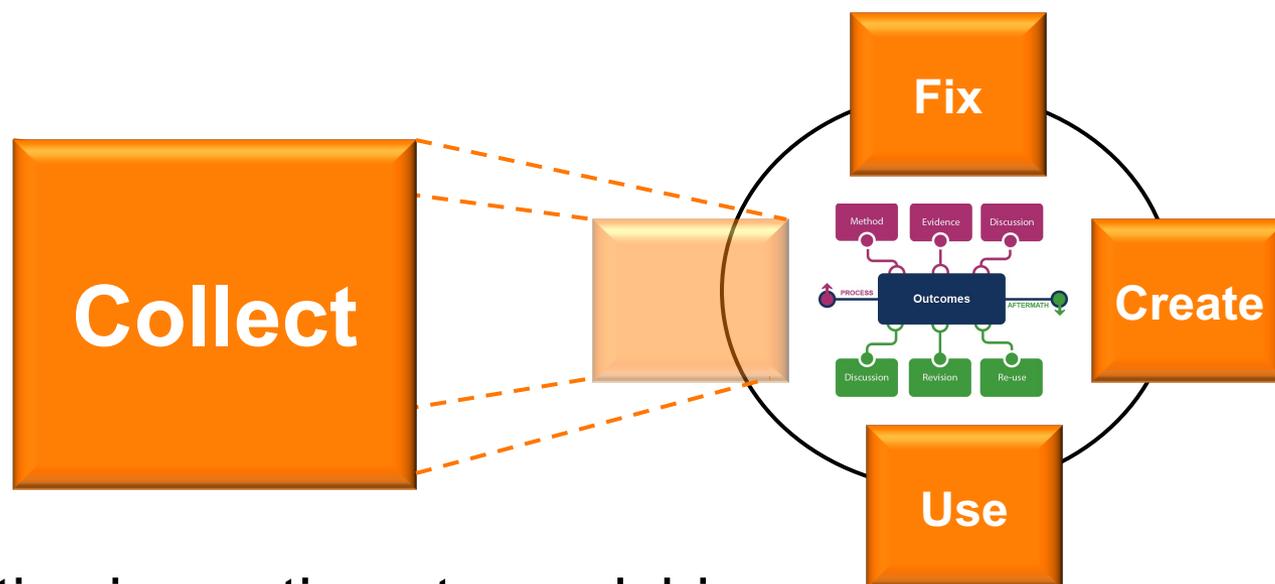


Recommendation:

“ ... Libraries, scholars, and professional societies should develop selection criteria for emerging genres in scholarly discourse, and prototype preservation and access strategies to support them.”

p. 55

Stewardship of the scholarly record



Key characteristics impacting stewardship ...

- Increasing volume of content
- Increasing diversity/complexity of content
- Increasing distribution of custodial responsibility

➔ **“local copies” of scholarly record becoming increasingly partial**

Evolving stewardship model ...

- System-wide stewardship of ESR:
 - More distributed (beyond traditional collecting institutions)
 - More specialized (not everyone can collect everything)
- “Conscious coordination”:
 - More explicit collecting responsibilities
 - More attention to coordination & cooperation
 - More reliance on external sources for access; “trust networks”
- Collecting for the “public interest”:
 - Benefits for scholarly community; local benefits incidental
 - Institutional resources and priorities

Other issues ...

- Drawing a distinction between the scholarly record and the cultural record
 - Criteria for inclusion?
- Dynamics of the scholarly record
 - Versioning
- Defining a “scholarly work”
 - Relationships, data layer
- “Selecting” the permanent scholarly record
 - Choices, priorities

Next steps

- White paper forthcoming
 - Draft reviewed by external experts (multiple domains)
 - <http://oclc.org/research/activities/scholarcomm.html>
- Scholarly record & system-wide stewardship
 - Division of labor; incentives & benefits
 - Coordination models; cooperative infrastructure
 - Higher education trends
- Springboard to discussion ...
 - Thoughts on framework (content & roles)?
 - Thoughts on stewardship issues?
 - Thoughts on additional issues related to ESR?



Thank You!

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