

Exploring Evolutionary Biologists' Use and Perceptions of Semantic Metadata for Data Curation

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The wide acceptance of social networking tools in online environments is prompting scientists to engage in metadata creation in not only for organizing their own digital records, but also for contributing to data and journal repositories. Understanding the behaviors and practices of these communities can help us create more effective metadata structures within our information systems.

This point is underscored by information science researchers who have emphasized the need to examine how certain communities interact with, search for, or organize information (Palmer 2001). By examining scientists, information professionals can be more informed in how to create better collections, services, and systems. As library and repository collections become more diverse and personalized, the organization and ingest techniques/applications behind those systems also should be based on observations of how actual user communities work.

One area that is relevant to the practice of scientists and metadata is personal information management (PIM). The study of personal Information management typically focuses on finding (a relative of retrieval), refinding, maintenance, and organization. Metadata is at the core of these activities, although current research seems to focus more on task completion, rather than the underlying metadata structures and arrangements. Most PIM studies and writings have focused on tool development and finding (Jones 2007), but have rarely look closely at the organizational/metadata practices of individuals.

As scientific communities, like evolutionary biology, turn more to cyberinfrastructures for sharing and collaborating with each other, it is important for information professionals to understand the more personal aspects of metadata generation and organization. Recent studies done by the Dryad repository⁶⁹ team have looked at different aspects of data sharing and reuse in the evolutionary biology community. These studies have prompted questions about metadata-generation by scientists, their perceptions of the process, and the link between their metadata and the structures imposed in information systems.

This poster will report on a study examining how evolutionary biologists create and use personal metadata to organize their research data. Using an ethnographic interview technique, participants are being interviewed about their current and previous data organization styles and techniques. This information about metadata and information organization can be used to inform new workflow and organization models for knowledge organization and metadata creation practices in developments for repositories, libraries, and cyberinfrastructures.

References

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⁶⁹ <http://datadryad.org/>