**THE PROBLEM**

Electronic collections, particularly in academic libraries, require semantic interconnectivity, which is more than what current computer networks offer.

The variety of schemes to organize information create difficulties for automatic resource sharing and information discovery.

The integration of electronic thesis and dissertations collections (ETD) exemplifies this problematic situation.

**ONE SOLUTION**

Collection integration still needs to address en-user’s information needs.

Metadata exchange & standardization result in document discovery not in information retrieval because the searches are at the metadata level.

A proposed two-layer solution:

1. A system to navigate the metadata
2. An interface to examine the information in the documents of the retrieved set

This subsystem expands the capabilities of the already familiar advanced search interface by facilitating the user’s navigation of the metadata content. Its features help users to semantically expand, contract, narrow down and broaden up the scope of their navigation.

At the heart of this approach is the flexibility of users to control their process of discovery, and construct their own semantic relationships.

Users can recursively move through the information space saving subsets of their discoveries for further examination next by the **Phrase Navigator** subsystem.

**Phrase Navigator**

Each subset of documents already identified by the user is decomposed into relevant phrases, mostly from the description and the title, to form a new information space for navigation.

Phrases are more specific than metadata. The phrases are organized into lexical structures for users to interact. They are placed in the context they appear within the document set.

Finally, the selection of relevant phrases can be presented in multiple ways, from raw document sets to relevant paragraphs or summaries.

**Metadata Navigator**

The user selects the best descriptors of the information need.

The system shows the pertinent information capsules.

Context requests are submitted.

More complex information capsules are shown to user for possible expansion.