Can Repositories be Attractive, Even Sexy, Features of Digital Libraries? Making Visualization Work for Institutional Repositories

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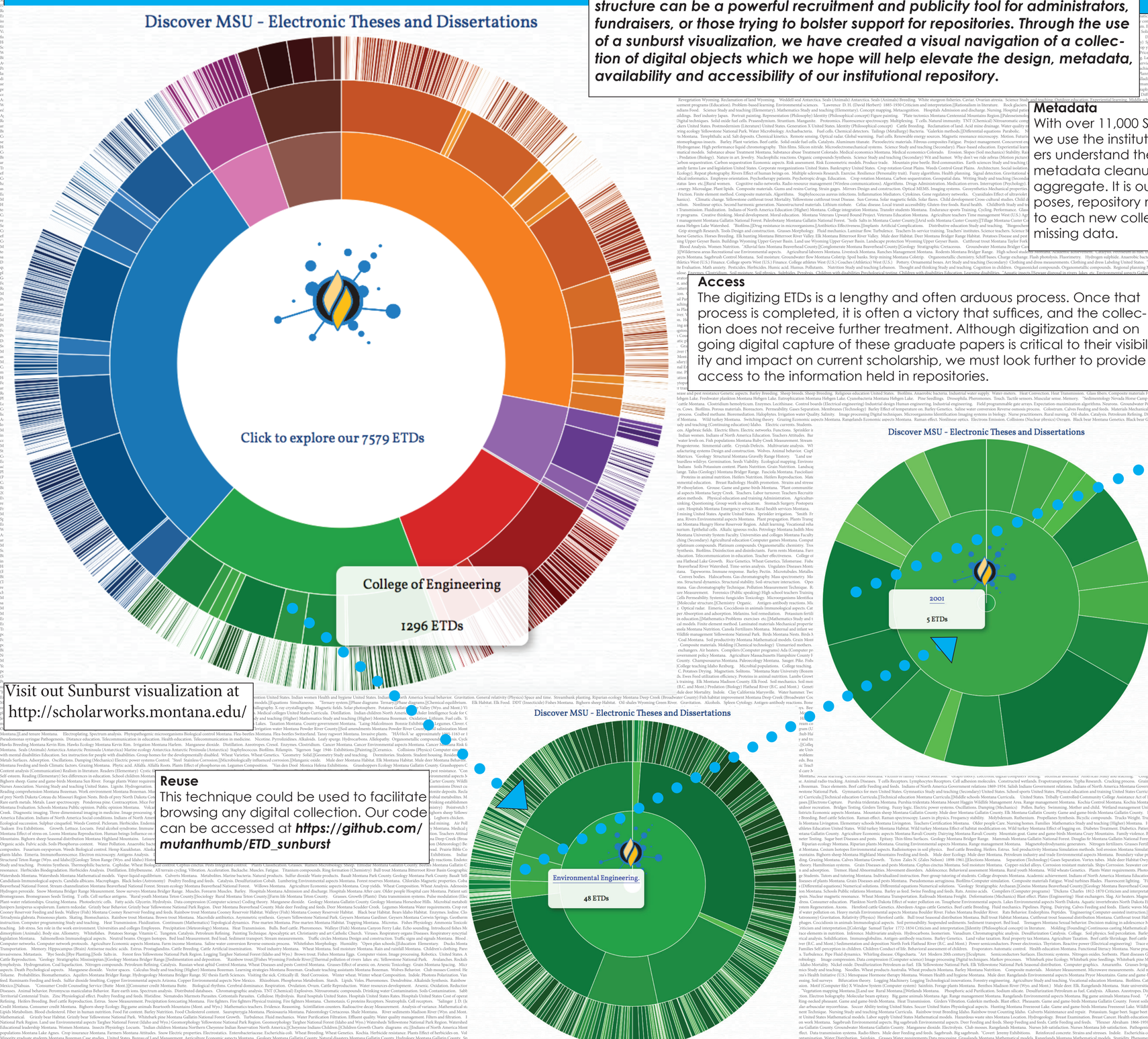
MONTANA STATE UNIVERSITY LIBRARY

An attractive repository that has accessible content in an easily understood structure can be a powerful recruitment and publicity tool for administrators, fundraisers, or those trying to bolster support for repositories. Through the use of a sunburst visualization, we hope created a visual navigation of a collection of digital objects which we hope will help elevate the design, metadata, availability and accessibility of our institutional repository.



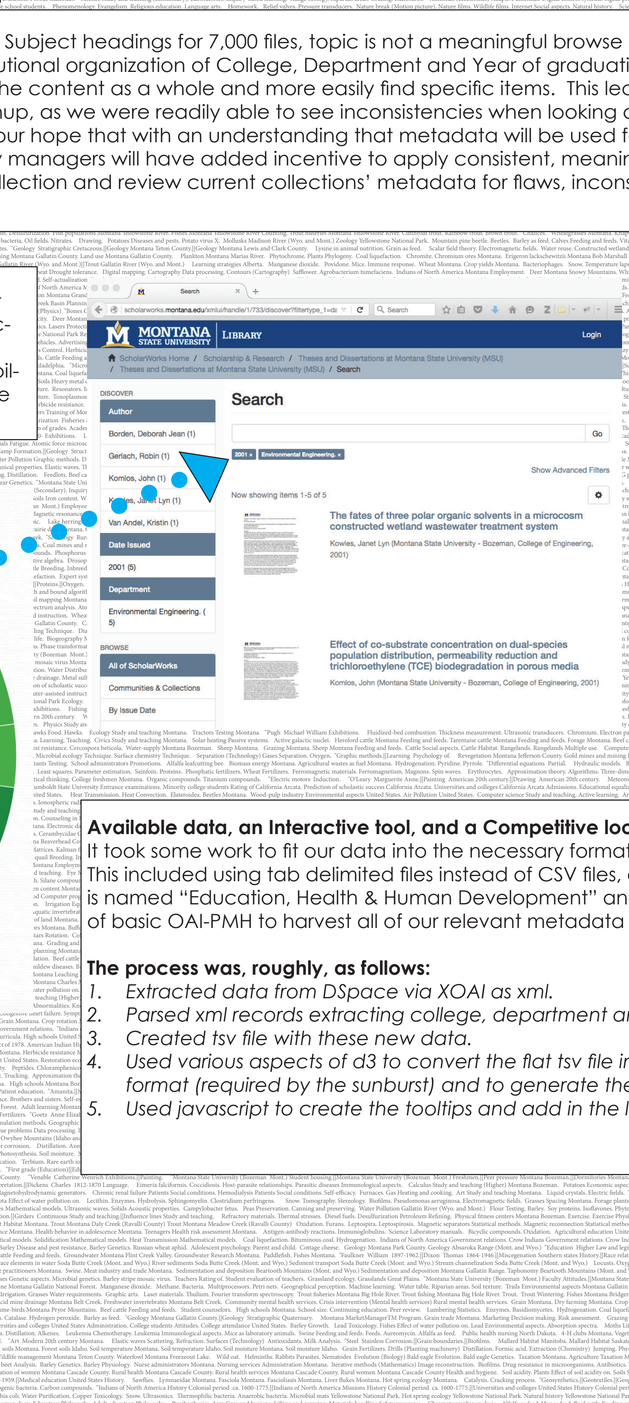
Visit out Sunburst visualization at http://scholarworks.montana.edu/

Metadata

With over 11,000 Subjects headings for 7,000 files, topic is not a meaningful browse point-- instead we use the institutional organization of College, Department and Year of graduation to help users understand the content as a whole and more easily find specific items. This led to significant metadata cleanup, readily able to see inconsistencies when looking at the data in aggregate. It is our hope that with an understanding that metadata will be used for multiple purposes, repository managers will have added incentive to apply consistent, meaningful metadata to each new collection. Curators can review collections' metadata for flaws, inconsistencies and missing data.

Access

The digitizing ETDs is a lengthy and often arduous process. Once that process is completed, it is often a victory that suffices, and the collection does not receive further treatment. Although digitization and ongoing digital capture of these graduate papers is critical to their visibility and impact on current scholarship, we must look further to provide access to the information held in repositories.



Reuse

This technique could be used to facilitate browsing any digital collection. Our code can be accessed at **https://github.com/mutanthumb/ETD_sunburst**

Available data, an Interactive tool, and a Competitive look.

It took some work to fit our data into the necessary format for the D3 Sunburst. This included using tab delimited files instead of CSV files, as one of our colleges is named "Education, Health & Human Development" and using XOAI instead of basic OAI-PMH to harvest all of our relevant metadata fields.

The process was, roughly, as follows:

1. *Extracted data from DSpace via XOAI as xml.*
2. *Parsed xml for records containing college, department and date issued data.*
3. *Created tsv file with these new data.*
4. *Used various aspects of d3 to convert the flat tsv file into a hierarchical format (regex and by hand) and to generate the sunburst (rigor) tool.*
5. *Used javascript to create the tooltips and add in the links to our IR.*

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