WE1S "topic_modeling" module

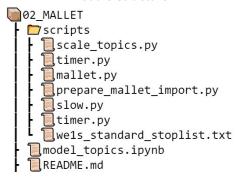
WE1S's topic_modeling" module is a key component in the WE1S Workspace (see S-2 on Workspace). The module performs topic modelling with MALLET on a collection of texts by providing an easy-to-configure interface for the two basic steps of importing texts into MALLET and training topics. (MALLET is a widely used, Java-based toolkit for LDA topic modeling.¹)

Optionally, the module can also perform a preprocessing step on texts before the import, and a post-processing step (scaling) after training topics.

After modelling is complete, there is also an option to create a scaled data file for use in the topic model visualisation interfaces that can subsequently be generated through other modules in the WE1S Workspace--e.g., dfr_browser, topic_bubbles, pyldavis, and others. (See our Tools for Visualizing Topic Models.)

The Jupyter notebook in this module is model_topics.ipynb. It includes a step-by-step use guide, one cell in the notebook at a time.

Module structure



¹ See our <u>M-2</u> card for a quick overview of topic modeling. See Ted Underwood, <u>"Topic Modeling Made Just Simple Enough"</u> for an explanation of LDA (Latent Dirichlet Allocation) for a non-technical audience.



Screenshot from model topics.ipynb (larger)

Further Information:

- * MALLET topic modeling toolkit by Andrew McCallum (Common Public License)
- * M-2 (on topic modeling)
- * Ted Underwood, "Topic Modeling Made Just Simple Enough" (2012)

Jupyter notebook in this module:

* model_topicsipynb

Code source: [TBD] (MIT License)