Title: The Folger Digital Anthology for Student-created Network-driven Editions

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Lesson Overview: Students will explore metadata about plays in the Folger Shakespeare Library's Digital Anthology of Early Modern Drama to construct network models linking the producers and performers of plays *through* the play texts upon which they collaborated. Students will conduct primary and secondary research about the communities that their models show to have been organized around particular early modern plays. They will use this research to guide their reading and interpretation of those plays, and they will draft arguments for an edition of play texts that are in some way representative of the communities they have modelled.

Materials:

- DA Introduction Sheet (included below)
- Four plays from the Folger DA
- Assignment rubric (included below)

Tools:

- Folger Digital Anthology of Early Modern English Drama
- University of Victoria's Map of Early Modern London
- Early English Books Online

Objectives/Outcomes: Students will be able to:

- Explore metadata associated with the production and dissemination of early modern drama.
- Identify print and performance practices associated with communities organizing around early modern drama.
- Conduct research synthesizing primary and secondary sources.
- Practice digital humanities scholarship
- Produce collaborative work with student peers that contributes to a larger body of scholarship.
- Curate research for presentation to a broader community of scholars.

Scaffolding/Prior Knowledge: Lessons incorporating the Folger Digital Anthology early and often will get students accustomed to the site, its organization and navigation, and retrieving the information it makes available regarding Early Modern print and performance networks. Lessons might include:

- Intro to the DA site: how to search in multiple ways, links to follow, and what results mean
- Network visualization software and basic graph theory: how to create, read, analyze, and draw interpretive conclusions from network visualizations
- Readings (instructor's choice) on the Early Modern print trade and performance practices

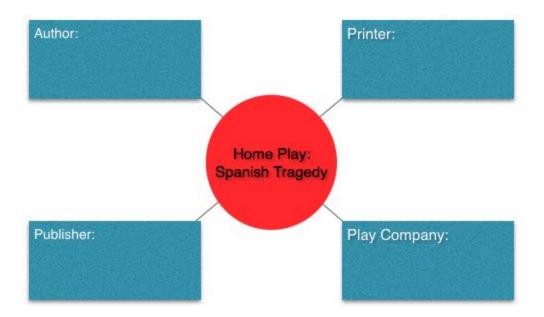
Time: While highly adaptable, we suggest that mini-lessons to prepare the students take place at the start of the semester, a week or two prior to the first student presentations. From there, student groups will work outside of the classroom to complete this assignment and present their research when their chosen text is being discussed in class. As students present their connections, the instructor can use visualization software (or by-hand illustration) to produce a classwide, aggregated network that includes all of the connections they have discovered as a class.

- 3-4 class sessions (or half-class periods): Introducing the assignment and introductory mini lessons on the technologies being used and early modern print and performance practices
- 3-4 class sessions: drawing connections between groups, connecting observations and conclusions
- 2-3 class sessions: Student presentations on their research

What To Do (Schedule):

<u>Part 1</u> - Students are divided into groups and assigned a play such that each of 4 plays is assigned to at least 2 different groups. These groups will perform the network assignment and subsequent analyses together. Historical periods with many published plays included in the Digital Anthology better lend themselves to this assignment. Consequently, we recommend not performing this assignment with plays published before 1587.

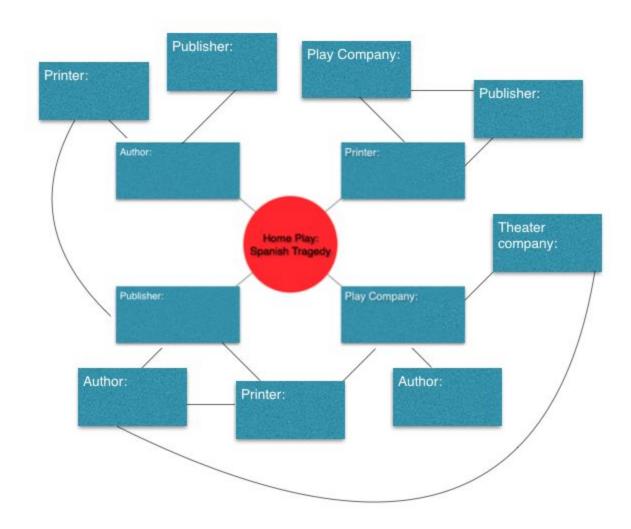
a. Designate the assigned play as the base or "home play" node. Surround the home play node with edges linking it to two new nodes representing the individuals involved in that play's production and performance. For example, new nodes linked to the "home play" node would be assigned for the author, printer, publisher, the theater company that staged the play, and so on. All of these agents involved in the production and performance of the printed/staged play can be found on the "Play Page" for each title in the Folger's Anthology of Early Modern English Drama.



The "home play" node will be the only node representing a play. All other nodes will represent people or playing companies (in this case, rectangles). In this scheme, rectangle nodes represent people or companies involved in the production or performance of printed plays. Edges or links between nodes represent plays that people collaborated on in some way. Printer A, for example, may be linked to a Publisher A through common involvement in Play 1. But Publisher A may also be linked to Printer B through Play 2 and, perhaps, a different theater company through Play 3.



b. From each of these new, first-degree-of-removal nodes, link to at least 2 new individuals on the basis of shared work on some play. To ensure the density of the eventual community graph (network "density" or interconnection is essential to the outcomes of this assignment), restrict the date of each new play-link to those plays performed within 3 years before or after the performance of the home play. For best results, travel clockwise around the graph while performing the process of adding nodes (1) marking links between any nodes already present in the graph when new nodes are added and (2) keeping edges representing the same play next to each other in the graph.



c. Stop once 20 nodes have been graphed in the network.

<u>Part 2</u> - If digital graphing tools are being used, each group should generate two distinct spreadsheets from their graphs. The first is called a "node attribute table." The second is called a "link list." The link list tells us who is connected to whom, and the attribute table tells us what those people were like. These documents, produced by every group, can be used to aggregate the network models produced by all groups into one master network for the class using network visualization software.

<u>Part 3</u> - Each group chooses from their network one playwright, one printer, one publisher, and one playing company to investigate further. For example: Who was this printer? What kinds of plays did they print? Do we know where they were located? Where did the playing company perform in the years you're covering? Who were their patrons? What kinds of plays did they perform? How often did they work with the individuals or groups they are linked to? What kinds of plays did they tend to work on together?

 During this research period of the network project, a useful activity may also be to project the Agas map of early modern London in class and have students actually plot the members of their communities, their venues, and other associated locations. Places in London associated with researched people or groups may include the location of a playhouse, for example, a printer's shop, or the school a playwright attended.

Here, to give a very simple example, are three locations associated with plays performed by the Children of the Chapel between 1586 and 1588 (Edward Allde's print shop at St. Mildred Poultry; Blackfriar's Theatre; and Paul's Churchyard, site of Thomas Woodcock's bookshop):



The Agas map can be saved at any stage, so that additional groups' geospatial research can be added throughout the semester. This aspect of the assignment opens onto other possibilities as well: asking students to chart a hypothetical "day in the life" of a member of the community, for instance.

 The depth of the research students will need to perform during their analysis is flexible. It may be as minimal as a google search or as thorough as extended library research. For classes at institutions with library subscriptions to Oxford Reference, online research could well be sufficient.

<u>Part 4</u> - After students have mapped their communities geospatially and researched biographical and historical information about its members, groups should draft interpretations of their plays through the lens of the communities that produced them. Groups working on shared plays can evaluate their interpretations/evaluations against each other, perhaps presenting collaboratively on how different

network snapshots (their particular trips down approximate but not identical rabbit holes) shape their interpretations in different ways.

<u>Part 5</u> - Finally, the class uses their aggregated class network to justify the addition of another play, all five constituting an class-curated edition of texts indicative of the community attributes that informed their production. Use the total class network to designate 2 recycled and 2 fresh plays with which the next class should begin their exploration.

Assessment:

- Digital project: As their primary assessment, students will produce a data visualization of their research and the connections they have established.
- Written: To accompany their visualization, students will submit a summary of their findings and conclusions, including remarks about how network visualization and analysis informed their understanding of one or more plays in their network.
- Final group presentation: Students will present their findings to the class.

Extensions:

- Last text of the semester is a text students choose based on connections, read using the DA
- The instructor can maintain visualizations and add to them with each iteration of the course.
- Alternatively, students may work on this project throughout their course, making time for it regularly.
 But, in this more extended scenario, students read and interpret their plays *twice*, before and after their network model and historical research are allowed to inform their reading.

Accommodations/Considerations:

Teaching in Online Learning Environments: This work can easily be adapted to suit digital learning environments (i.e. video lessons, PPT's, students can work in groups via Google Docs, etc.)

Teaching in a DH classroom vs. English Literature Course, Etc.: Depending on the nature of course, this project can be expanded to challenge students in a DH environment; students might be required to expand their networks by including more nodes; they might also be asked to research more rigorously about a larger subset of their graph.

Secondary Schools: Exploring the DA as a comparative to the standard curriculum of Shakespeare (title pages, plots, etc.), or completing the visualization together as a class

Resources:

http://abasu.net/blog/early-modern-theater-network.html

http://www.sixdegreesoffrancisbacon.com

https://mapoflondon.uvic.ca/agas.htm (Agas map of Early Modern London)

http://lbt.bodleian.ox.ac.uk/mediawiki/index.php/Category:INDEX (London Book Trades Database)

https://vpcp.chass.ncsu.edu/fly-around-the-visual-model/ (Virtual tour of Paul's Churchyard)

Folger Shakespeare Library: A Digital Anthology of Early Modern English Drama

Criterion	Exemplary	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations	Does not reach this standard
Digital Work: How well does the researcher make use of digital tools to demonstrate and explain connections between nodes and contextualize those relationships within the larger narrative of Early Modern print and performance networks?	The researcher demonstrates a perceptive understanding of the collaborative nature of Early Modern drama and consistently uses and represents evidence to establish these communities.	The researcher demonstrates a good understanding of the collaborative nature of Early Modern drama and uses substantial evidence to establish these communities.	The researcher demonstrates a sufficient or limited understanding of the collaborative nature of Early Modern drama and uses adequate or limited evidence to establish these communities.	The researcher demonstrates a very limited understanding of the collaborative nature of Early Modern drama and rarely uses evidence to establish these communities.	
Presenting the DataWritten Rationale and Class Presentation: How well does the researcher evaluate connections made, and compose a sensitive and well thought-out analysis of their findings?	The writer effectively demonstrates a productive exploration of their play and shows a perceptive appreciation of the network of communities they have established. The writer consistently employs sophisticated organizational structures and their writing and presentation is consistently clear and coherent throughout.	The writer adequately discusses their network and usually demonstrates an appreciation of the communities they have established. The writer generally employs organizational structures and their writing and presentation is usually clear and coherent.	The writer sometimes demonstrates an appreciation of the communities they have established. The writer shows the beginnings of a clear and coherent paper/presentation and their writing and presentation attempts to employ organizational structures to be both and clear and coherent.	The writer demonstrates a very limited ability to discuss their network and rarely demonstrates an appreciation of their network of communities. The writer rarely employs organizational structures and the work is generally disorganized or unclear.	

