Using Digital Humanities Methods to Detect Gender Biases in the Dialogue Networks of Tang Dynasty (618-907 CE) China

Amelia Ying Qin │ Dept. of Humanities and Religious Studies & Dept. of History

Project Objectives

This project applies the interdisciplinary approach of digital humanities to the study of Chinese historical anecdotes and explores the gender-biased historiography in premodern China.

The project serves as a pilot study for a large-scale, digital analysis of the social and political interactions among historical figures during the Chinese middle period.

The project also offers itself as a case-study for the critique of this new interdisciplinary approach by identifying the advantages and limitations of applying digital methods to similar projects.

The project and its research results will serve as pedagogical tools for students to become familiar with digital humanities resources in the classroom, while also conveying the potential for technology to discern patterns of gender biases in historical anecdotes and narratives.

Methodology

This study takes an innovative approach to anecdotal representations of the past by applying social network analysis (SNA) to a collection of historical anecdotes to discern gender-biased patterns in the text's dialogue networks.

For this pilot project I use a late Northern Song (960–1127) collection of anecdotes about the Tang (618-907), entitled *Forest of Conversations on the Tang*.

In the Gephi visualization of the dialogue network (top graph), nodes represent historical figures engaged in conversations and edges indicate dialogues between two figures, weighted according to the number of countable interactions. Clusters of interactive groups (three cluster graphs below) offer the opportunity to examine multivalent interactions between these figures.

Selected References

Newman, Mark E. J. *Networks: An Introduction*. Oxford: Oxford University Press, 2010.

Scott, John. *Social Network Analysis*. 4th Edition. SAGE Publications Ltd, 2017.

Network Visualizations

Results and Discussion

First, rulers are the most important persons in the collection's dialogue network. Second, the dialogues in this network focus on responding to and influencing rulers. Third, statistical analysis of the network revealed gender-related hierarchies in dialogue structures. For example, in this network, Empress Wu Zetian, is depicted as a more passive figure—more of a listener than a speaker—when compared with the male rulers of the Tang dynasty. This feature is also reflected collectively in the representation of female figures in the network.

ACKNOWLEDGEMENTS