Theoretical background
In Cognitive Linguistics, much emphasis has been given to the ubiquity and universality of metonymy (Radden & Kövecses, 1999; Radden, 2005). The historical and cultural diversity, which has been widely recognized as relevant for metaphor research (e.g. Geeraerts & Grondelaers, 1995; Kövecses, 2005), is still largely ignored in metonymy research. In a socio-evolutionary view of language (Geeraerts, Kristiansen & Peirsman, 2010; Geeraerts & Kristiansen, forthcoming), the cultural and social variation in metonymical patterns needs more detailed examinations. Culture by definition is historical and not stable across time, therefore, if we want to research metonymy from a cultural and social perspective, we should take the time dimension into account, i.e. exploring the real distribution of metonymies diachronically.

Research questions
This paper addresses one of the main focuses in this Theme Session: a cultural turn of Conceptual Metonymy Theory inevitably needs diachronic research into the history of metonymies. Specific research questions we intend to answer are:

*If we look at the history of Chinese from the 11th century BC to the early 20th century, how stable is the metonymic conceptualization of FEMALES, and to the extent that there is variation in metonymic patterning, what possible driving forces determine the diachronic variation?*

Methods
In total, 287 metonymic expressions for FEMALES were confronted against the *Historical Corpus of Chinese* (Peking University) for their distributions in different historical periods. Automated extraction of these 287 expressions from the corpus followed by manual identification of the cases where the use of the expressions was indeed metonymic provided us with a dataset of over 17000 cases. A multi-dimensional scaling (MDS) solution was employed to explore and visualize the changes in metonymic patterns in the multivariate diachronic data. Significant diachronic changes emerging in the MDS space were then inspected against their cultural and social background to detect the potential factors behind the changes in metonymic conceptualization of FEMALES.

Results and implications
Theoretically, the data provide clues as to whether metonymic conceptualization of the FEMALES is somehow connected with certain cultural and social basis. The cultural and social changes in reality can serve as probable causes of some of the diachronic changes in metonymic conceptualization of certain targets. Methodologically, this study demonstrates the importance of including historical corpus data in metonymy research since it can offer insights into the variation in metonymy that could not be uncovered by a purely synchronic or dictionary-based study. At the same time, rather than simplistic generalizations on the variation, I have applied a quantitative and visualization technique to explore the variation in metonymies. The MDS solution has proved to be an effective tool to visualize the diachronic variation.

References


