CROSS-CULTURAL AUDIENCE COMPREHENSION AND ENGAGEMENT: A STUDY OF THE EFFECTS OF DATA VISUALIZATION

Hong Zhao

Professor Scott Swafford, Thesis Supervisor

ABSTRACT

In recent years, data journalism and data visualization has become an emerging and trendy field in online journalism. It is an approach adopted by many news organizations in an attempt to fit for audiences' increasing demand for depth and breadth of information in the "Big Data" era. This research applies the theoretical framework of dual-coding theory and the generative theory of multimedia learning to explore how data visualization influences international audiences' engagement with and comprehension of English-language news stories. The researcher conducted an experiment to compare audiences' comprehension of and engagement with news stories that have data visualizations and those that don't. There were 61 participants, who were international students at the University of Missouri. Each was exposed to two visual and two text stories on climate change from international news organizations. The study found that data visualization in news stories enhances audience comprehension and engagement. This study helps justify the frequent and increasing use of data visualization in the news industry and contributes to the broader discussion of multimedia learning in cross-cultural communications.