New Digital Humanities project at the L3S on data analysis of the Russian flu

The L3S at the University of Hannover has received a new grant funded by the NEH-DFG initiative on Digital Humanities. The project will tackle the problem of "Tracking the Russian flu in US and German Medical and Popular reports, 1889 - 1893" and has a value of 127,600 Euros. The L3S partner in this project is the College of Liberal Arts and Human Sciences and the Department of Computer Science at Virginia Tech, USA, who received $175,000, bringing the total project budget to more than $315,000 in funded research. The project confirms the strong commitment of the L3S to technology transfer and interdisciplinary research.

This project examines medical discussion as well as news reporting during the Russian influenza epidemic, from its outbreak in late 1889 through the successive waves that lasted through 1893. It will lead to the first comprehensive searchable documentation of the disease. The data will be used to extract facts and timelines regarding the disease, investigate medical and public reaction to the spreading epidemic and research how medical knowledge was disseminated via popular reporting.

This project contributes to the digital humanities by advancing efforts to connect traditional humanities methods of close reading with advanced computational methods for analyzing large amounts of data.

As a bilingual project, developing methods and tools that work across both English-language and German-language sources, this project offers unique insights into a historical era when transnational medical research and global news reporting were important parts of the collective human experience. The project will achieve these aims by using and developing computational methods, which will include meme tracking and topic modelling, fact extraction, sentiment detection, data visualization and social network analysis.

The project’s outcomes will interest humanities scholars seeking new ways to understand popular and scientific perceptions of disease, epidemiologists studying the spread of infectious epidemics in global contexts, and data analysts seeking to track, measure, and predict the spread of information about disease outbreaks and public health responses. In this way, it promises to advance scholarship in the digital humanities while also addressing audiences that range from the general public through experts seeking additional information about a global disease outbreak.

At Hannover University, the project is led by Wolfgang Nejdl, Executive Director of the L3S Research Center and Professor at the Department for Computer Science, and Katja Markert, a Researcher at the L3S Research Center. The grant will also support a full-time doctoral researcher in computer science at Hannover University.

Virginia Tech participants in the project include Tom Ewing, Associate Dean in the College of Liberal Arts and Human Sciences and Professor in the Department of History; B. Aditya Prakash, Assistant Professor in the Department of Computer Science and an affiliated faculty member at the Discovery Analytics Center (DAC), and Amy Nelson, an Associate Professor in the Department of History and Innovation Catalyst Group Faculty Fellow in Technology, Learning, and Online Systems (TLOS). The grant will also support two Graduate Research Assistants, one in history and one in computer science.

More information is available about this project from the website: http://ethomasewing.org/russianflu/. The main contact at L3S is Katja Markert (markert@l3s.de).