

# Tracking online collaborative work as representational practice: Analysis and Tool

**Johann Ari Larusson, Richard Alterman**

Brandeis University

johann@cs.brandeis.edu, alterman@cs.brandeis.edu

*Keywords:* analysis tools, representational work, wiki

## **Abstract**

In recent years wikis have enabled people to collaborate online as a community of practice by allowing content to be modified freely by any user. This platform has proven to be very successful despite its unconventional “anarchistic” and sometimes chaotic organization – Wikipedia being the most famous example. When people contribute to a wiki web site their work takes place within a representational system comprised of multiple distributed representations such as the wiki pages and external web sites related to the wiki topic. How much of the collaborative work involves transferring information between the different representations? How does the collaborative work emerge within the system and how is it used by the participants to accomplish their goal? We present WikiPlayer, a tool to visualize and replay the entire revision history of related wiki pages as they collectively evolve over time. The player allows us to track each user’s contribution to a set of wiki pages, review the state of each page at any given moment in the history, and easily generate statistics helpful in analyzing the collaborative community of practice. The tool can be used to identify the collaborative work patterns that develop from the emergent interaction between the structure of wiki pages and the organization of the participants’ representational work.