

# Contropedia - the analysis and visualization of controversies in Wikipedia articles

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## ABSTRACT

Collaborative content creation inevitably reaches situations where different points of view lead to conflict. In Wikipedia, one of the most prominent examples of collaboration online, conflict is mediated by both policy and software, and conflicts often reflect larger societal debates.

Contropedia is a platform for the analysis and visualization of such controversies in Wikipedia. Controversy metrics are extracted from activity streams generated by edits to, and discussions about, individual articles and groups of related articles. An article's revision history and its corresponding discussion pages constitute two parallel streams of user interactions that, taken together, fully describe the process of the collaborative creation of an article. Our proposed platform, Contropedia, builds on state of the art techniques and extends current metrics for the analysis of both edit and discussion activity and visualizes these both as a layer on top of Wikipedia articles as well as a dashboard view presenting additional analytics. Furthermore, the combination of these two approaches allows for a deeper understanding of the substance, composition, actor alignment, trajectory and liveliness of controversies on Wikipedia.

Our research aims to provide a better understanding of socio-technical phenomena that take place on the web and to equip citizens with tools to fully deploy the complexity of controversies. Contropedia is useful for the general public as well as user groups with specific interests such as scientists, students, data journalists, decision makers and media communicators.

Contropedia can be found at <http://contropedia.net>.

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## Categories and Subject Descriptors

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H.5.3 [Group and Organization Interfaces]: Computer-supported cooperative work

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Wikipedia, Controversy Mapping, Digital Methods, Information Visualization, Actor-Network Theory, Data Mining

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