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Exploring Twitter Data on Human Rights Activism on Olympics Stage through Social Network Analysis and Mining

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Abstract: Social media is becoming the primary choice of activists to make their voices heard. This fact is coupled by two main reasons. The first reason is the emergence web 2.0, which gave the users opportunity to become content creators than passive recipients. Secondly the control of the mainstream mass media outlets by the governments and individuals with their political and economic interests. This paper aimed at exploring twitter data of network actors talking about the marathon silver medalists on Rio2016, who showed solidarity with the Oromo protesters in Ethiopia on the marathon race finish line when he won silver. The aim is to discover important insight using social network analysis and mining. The hashtag #FeyisaLelisa was used for Twitter network search. The actors' network was visualized and analyzed. It showed the central influencers during first 10 days in August, were international media outlets while it was changed to individual activist in September. The degree distribution of the network is scale free where the frequency of degrees decay by power low. Text mining was also used to arrive at meaningful themes from tweet corpus about the event selected for analysis. The semantic network indicated important clusters of concepts (15) that provided different insight regarding the why, who, where, how of the situation related to the event. The sentiments of the words in the tweets were also analyzed and indicated that 95% of the opinions in the tweets were either positive or neutral. Overall, the finding showed that Olympic stage protest of the marathoner brought the issue of Oromo protest to the global stage. The new research framework is proposed based for event-based social network analysis and mining based on the practical procedures followed in this research for event-based social media sense making.

Keywords: human rights, Olympics, social media, network analysis, social network ming

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