Quantitative analysis of K-pop writers' network using K-pop lyrics

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Music is one of an inextricable culture of modern people and pop music show the way of people live on more indirectly than literature. Especially, a typical poetry, Music lyrics are written by the individual writing style of a lyricist. In this study, we collect Korean-pop (K-pop) lyrics data provided by music streaming service to analyze quantitatively. First, we look around about 1) elementary statistics about data, 2) power-law distributions in K-pop consuming market and 3) Zipf's and Heap's law in K-pop lyrics. Our main focus is on the network analysis of writer similarity network and writer-composer collaboration network. The writer-composer collaboration network is a scale-free network with exponent -3. And we construct writer similarity network to uncover the relationship between K-pop lyricists using cosine similarity of word frequency.