Analyzing Sentiment in Twitter Tweets as a Basis for Music Creation

Analysis of the sentiment associated with different words has long been used as a pre-compositional tool by various composers through their use of the words of poets, lyricists or writers in creating their music. While the interpretation of any given word and its relation to music might have loosely followed some implicitly accepted notions amongst composers, there was no accurate method for qualifying each word according to its sentiment in standard usage. More recent research measuring individuals' evaluation of text has led to a quantitative ranking of words in terms of properties concerning sentiment. My current research is an attempt to investigate and standardize the links between the sentiment of text and music by creating software that allows creation of spectral music from a Twitter user's output.

Using Cycling '74's Max 7, software will be developed to analyze text from each "tweet" by cross-referencing its words against the *The Evaluative Lexicon 2.0* developed by Rocklage, Rucker and Nordgren. This database ranks words on three qualities; valence, emotionality and extremity. The summative sentiment derived each tweet can then be applied to different features relating to the creation and shaping of spectral music, for example, linking the valence outcome of each tweet to harmonicity vs inharmonicity, a significant aspect of spectral music pitch selection.

This technique of mapping data to sound will allow the music to reflect the emotionality of a user's tweet, giving the listener a sense that what they are reading is appropriately linked to what they are hearing.