

Mapping Musical Taste in the Sacred Harp Community

Ian Quinn
Yale University, USA

Since 1995, the Sacred Harp Musical Heritage Association has collected and published minutes of all-day and multi-day Sacred Harp singings. These minutes record each song sung at each singing, together with the name(s) of the song leader(s) who chose the song. The current dataset records approximately 337,000 songs led at 4,600 singings over a twenty-year period. This study uses principal-components analysis (PCA), an unsupervised machine-learning technique, to find structure in the data, particularly with respect to which kinds of songs tend to be led by which kinds of singers at which kinds of singings. Because this is an unsupervised learning technique, the computer receives no information about individual songs or singers or singings other than their frequency of co-occurrence. Despite this lack of information, the model learned by the computer is easily interpreted in terms of musical features. The model yields five orthogonal dimensions of variation: musical mode (major/minor), musical complexity (plain/fancy), popularity (mainstream/unusual), and two aesthetic dimensions, one of which strongly relates to what Miller (2008) calls the “Sacred Harp diaspora” and the other of which has to do with generational changes in taste.