We employ images to communicate about music. Musical images come in countless forms and serve many purposes. Designed well, they can both reflect and shape our understanding of musical phenomena in ways that words alone cannot. This course explores the topic of music visualization. We will consider the human visual system, the ways in which it affects image perception, and strategies for leveraging those abilities in effectively conveying information visually. We will learn principles of effective visual communication, based on the work of Edward Tufte and others in the fields of information visualization and scientific visualization, and consider the important role of metaphor in designing musical pictures. We critically survey music visualizations from across history, study ways to improve existing visualizations (as in the redrawn images here), and study the potential uses of animation, color, and 3D imagery. Students will learn to use tools for creating static and (possibly) animated visual representations of music and produce a number of original visualizations.

The course will be of interest to anyone using visual explanations in their musical research, including music theorists, musicologists, ethnomusicologists, and music educators. The course is open to graduate non-music majors with permission (isaacsco).

Readings, library and online research, presentations, portfolio of musical visualizations.

Recommended: MUS-T 551 or T 556, or instructor permission.