Encoding Film Music: Tracking Thematic Transformation in Max Steiner's Film Scores

The Max Steiner Collection at Brigham Young University contains the original sketches for 192 film scores that Steiner composed for RKO, Selznick, and Warner Brothers between 1929 and 1964. The collection includes the groundbreaking early scores for *King Kong* (1933) and *The Informer* (1935) as well as the classic scores for *Gone With the Wind* (1939), *Now, Voyager* (1942), and *Casablanca* (1943).

As part of an ambitious cataloging and encoding project over the next several years, we plan to create a complete thematic catalog of Steiner's film music, including not only these well-known scores but also many of the forgotten ones. This will allow us to undertake a corpus study of his immense (and rather influential) opus. This data will be published as an interactive database that will allow the user to explore themes as they develop within a film as well as discover related themes in other film scores by Steiner.

Steiner's compositional approach was strongly influenced by Richard Wagner's leitmotiv technique, writing specific themes for important characters, places, and situations. Our study will investigate to what extent Steiner used similar compositional techniques (or even reused materials) for types of characters or situations from film to film across his entire opus. We will also determine whether Steiner developed specific types of thematic transformations to aurally represent common dramatic situations in Hollywood film plots. Lastly, we would like to use corpus study techniques to create a more complete catalogue of film music topics from Hollywood's Golden Age, along with a list of musical characteristics that communicate each topic.

During the analysis process, each theme and theme variant is transcribed from Steiner's handwritten film scores using Finale. From there, Finale files are exported to MusicXML, then converted to MEI. The Verovio player will be used to embed transcriptions directly into the online thematic catalog to allow the user to both view and listen to the theme and its transformations. Transcriptions will be shown alongside film clips, audio clips, Steiner's own score annotations, analytical commentary of the theme, as well as links to related themes, variants, and other film music.

To date, we have analyzed and encoded 31 films, mainly focusing on the genre of crime films:

- The Public Defender (1931)
- The Traveling Husbands (1931)
- Hell's Highway (1932)
- Is My Face Red (1932)
- Secrets of the French Police (1932)
- The Phantom of Crestwood (1932)
- Emergency Call (1933)
- The Informer (1935)
- Kid Galahad (1937)

- Amazing Dr. Clitterhouse (1938)
- Angels With Dirty Faces (1938)
- Crime School (1938)
- Gold Is Where You Find It (1938)
- Dust Be My Destiny (1939)
- Each Dawn I Die (1939)
- They Made Me a Criminal (1939)
- We Are Not Alone (1939)
- The Letter (1940)
- Arsenic and Old Lace (1944)
- Mildred Pierce (1945)
- The Big Sleep (1946)
- The Unfaithful (1947)
- Key Largo (1948)
- White Heat (1949)
- Caged (1950)
- I Was a Communist for the FBI (1951)
- Lightning Strikes Twice (1951)
- Illegal (1955)
- Death of a Scoundrel (1956)
- The Searchers (1956)
- The FBI Story (1959)

In this presentation we will discuss our findings from the above films and our plan to analyze, transcribe, and encode the remaining films. For example, our analysis of *Gold Is Where you Find It* (1938) includes the following: 8 principal themes with 57 theme variants; 50 secondary themes, gestures, and musical cues; 107 transcribed passages; over 100 unique tags created for musical cues; and over 2,700 metadata elements in total. See below for examples of transcriptions of themes and variants from this film.

Examples from Gold Is Where You Find It (1938)

Farmers - Main Theme
Following the Warner Brothers fanfare, Steiner presents the main theme, which represents the farmers in the film. Throughout the film, this theme is heard 26 times, including 14 theme variants. A handful of examples are included below.

Horse & Buggy
The excerpt below is the variant of the Farmers that is used as a stagecoach arrives on screen.

Threshing Machine

This version of the Farmers theme accompanies a threshing machine on-screen, with added mechanical, whirling motions.

Triste

This variant is associated with devastation and pollution created by the antagonist group, the miners.

Anguished

This excerpt is heard as a farmer's house collapses from flooding caused by the miners.

In Peril

This variant is heard when the leader of the farmers' life is in danger.

Battle

This variant is heard during the battle between the farmers and the miners.

Presentation needs: Computer with audio and HDMI cord with audio connections to use a personal laptop for presentation.