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Music Revealed: Semiotic and Structural Analysis of Film Music in The Dark Knight Rises
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Abstract

Semiotics can interpret any form of language related to cultural communication. Structural

analysis can guide semiotics and is supplemented with binary opposition. Binary opposition

defines what the language is and is not communicating. Applying semiotics and structural

analysis offers an alternative way of understanding a film's narrative. This paper discusses how a

semiotic deconstruction of film scores can predict events and communicate emotion. In addition,

it explores how semiotics can construct, challenge and confirm cultural values.

*Keywords:* semiotics, structural analysis, binary opposition, film score

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This paper seeks to illustrate how musical phrases can produce a variety of emotional and cultural responses in storytelling using semiotics. Musicians have the ability to communicate through music and can depict indescribable emotions. In film scores, music is used to convey cultures and feelings. For example, we expect large symphonic scores when watching romantic films, rather than screeching sounds heard in horror movies. Also, we expect shakuhachi flutes or the Japanese koto when viewing films set in Japan and bagpipes for movies set in Scotland. We identify culture through music. But, how does music narrate the film's story? Musical phrases, or a series of melodic notes, are composed with the goal of eliciting an emotional response. In radio, television and film, these phrases are used to identify certain characters by assigning melodies to characters' appearances (Tagg, 1999). Using semiotics as a guide, I will analyze music in Nolan's (2012) *The Dark Knight Rises* to demonstrate how the melodic phrases produces an emotional message, creates the story, and how cultural responses are constructed, challenged, confirmed, or negotiated.

## Literature Review

Applying semiotics and structuralism to a text illuminates how language is composed to communicate with a culture. According to Allen (1992), the study of everything used for communication defines semiotics. This includes symbols, music, words and images (Allen, 1992). Semiotics is also the study of signs, denoted as the smallest unit of meaning (Allen, 1992). Signs consist of two parts, the signifier and signified. The signifier is the form the sign takes and the signified is the concept it represents (Chandler, 2013). Saussure (2011) describes the signifier as the sensation and the signified as the impression. Semiotics and signs can also be used to interpret music. One can interpret signs, the smallest unit of meaning, in film music. For

example, when a listener hears the sound of a bagpipe (signifier) while viewing fields of grass on the movie screen, they may think of Scotland or Ireland (signified). The sound itself exemplifies the signifier, and our cultural relation to the sound represents the signified. The process of signification communicates a cultural identity by the use of signs with the motion picture.

The meaning of signs can be altered through situational variance, defined as the alternate views a text can take (Sillar & Gronbeck, 2001). According to Sillar and Gronbeck (2001), a sign may evoke a different signified depending on the context. The understanding and use of music can alter one's perspective. Situational variance is created when music is not played in context to a film's scene (Sillar & Gronbeck, 2001). For example, if a cheery song played during an elegy with a fast tempo, or speed, spectators would assume the elated funeral attendees had no concern over the person's death. The music would elicit a different emotion than what people expect, which demonstrates situational variance.

Icons are another important aspect of semiotics and understanding them can allow one to deconstruct language even further. Eco (1979) defines icons as signs that connect with their object, such as photographs of people. Eco (1979) also exemplifies icons as something illustrative, such as no smoking signs. According to Tagg (1999), icons bear physical resemblance to what they represent. Allen (1992) defines icons as the signifier structurally resembling the signified. Like symbols, certain musical features appear like icons. Tagg (1999) discusses the use of icons in music through rising/falling pitches, and legato/staccato phrases. Legato notes sound smooth and produce continuity; however, staccato notes construct short burst of musical tones and may be utilized to make the listener feel rushed (Clendinning & Marvin, 2011). The rising and falling pitch of a musical phrase creates dynamic feelings. These musical notations can also produce a sense of motion when synced with camera movements.

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Allen (1992) discusses how, unlike most theories, semiotics strays away from criticism and interprets a text for what it is. It first asks *how* the meaning is created, then *what* the meaning represents (Allen, 1992). Structuralism looks at a text, or an object, as a whole and defines it by the contrasts with other signs. Structuralism uses binary oppositions and derives meanings using this method (Allen, 1992). Hawkes (2003) defines binary oppositions as a complex pattern of fundamental differences. In other words, the variances of a text help form the meaning.

Structuralism also focuses on syntagmatic and paradigmatic relationships. In written language, syntagmatic relationships refer to the order of letters and how the result produces a meaning or word (Allen, 1992). A paradigmatic relationship focuses on the replacement of letters to produce an alternate cultural understanding (Allen, 1992).

Structural analysis can be utilized to examine the emotional effect of music in films. One can look at the musical composition of film music rather than the aesthetic value to understand its meaning. Music is written in major and/or minor, which serves as an example of binary opposition. Usually, these two categories divide music. Music written in major scales will produce a happy feeling (Hevner, 1935). On the contrary, music written in minor scales will create a dark, stygian tone (Hevner, 1935). As mentioned earlier, staccato and/or legato phrases can also operate as binary oppositions. Notes produced with a sudden or jerky quality illustrate staccato notes. It is primarily used to produce a rapid feeling of speed (Tagg, 1999). Musical phrases in legato create a smooth and soft tone. This type of phrasing, or icon, constructs a feeling of ease (Tagg, 1999). An additional binary opposition in music is augmented and diminished chords. A group of notes that establish a harmonic tone is known as chord.

Augmented chords generate an airy or dreamy feeling and diminished chords stimulate a harsh tonality creating a sense of anxiety (Ribeiro, 2009). One can also focus on syntagmatic and

paradigmatic relationships in music. The notes in a musical phrase must be in a certain order to produce the desired emotional impact. Our feelings will alter if the order of notes differed. For example, the notes A, C and E create a minor chord. If we rearranged the notes to C, E and A, we would get the second inversion of the same minor chord. The second inversion produces a brighter quality. One can also look at paradigmatic relationships with music. Using the minor chord example, if the C was a B and the E was an E flat, we would get a diminished chord, which produces a harsh tonality. The musical structure and composition produces emotional responses and guides the audiences' feelings, especially in films.

Lastly, Stuart Hall defines oppositional, negotiated and dominant codes in his article, "Encoding/Decoding (Hall 1980)," which introduces another analysis of semiotics. Hall's concept conveys how one can interpret a scene in *The Dark Knight Rises* to observe ways our culture is constructed, confirmed and/or challenged. In his article, Hall describes dominant codes as being hegemonic. The viewer predicts the encoded message and reproduces its dominant meaning. For example, music written in major scales produces a bright feeling, revealing a cultural norm in western society. According to Hall, a negotiated code operates within hegemony with exceptions. This relates with situational variance and how the context of a film's scene can be negotiated through music. Last, but not least, Hall discusses how oppositional codes occur when an interpreter decodes a message in a "globally contrary way (Hall 1980)." The interpreter reconstructs the message within an alternative framework of reference. These types of codes will challenge cultural conventions and create an alternate meaning to the text.

#### Method

As mentioned earlier, this paper will look at the cultural effects through film music.

Interpreting music will demonstrate how the film's score can construct, challenge or confirm a

culture's identity. Using semiotics and structural analysis, I will deconstruct musical phrases in *The Dark Knight Rises*. Semiotics begins with the smallest unit of meaning, or sign, which is divided into the signifier and signified (Sillar & Gronbeck, 2001). I will first treat the phrase as a sign. Then, I will divide the sign into the signifier and signified. After, I will look at the process of signification to elucidate if cultural identity is challenged, constructed or confirmed.

Icons will also help deconstruct musical phrases. For example, analyzing staccato/legato, and rising /falling musical phrases can help identify the score's emotive impact. Then, I will consider situational variance to investigate for alternate understandings. After, I will utilize structural analysis to discover various meanings through binary oppositions. An analysis of the relationship between each chord or note will define its emotional value. To conclude the method, paradigmatic and syntagmatic relationships will assist in understanding how substituting or reordering the musical arrangement produces an altered cultural response.

## **Analysis**

## **Batman's Musical Phrase**

Zimmer and Howard used a creative a scoring technique to establish Batman's musical phrase in *The Dark Knight Rises* (Nolan, 2012). According to Schellar (2005), the musicians tapped into the psyche of Batman. A dark and dramatic tone represents Batman, which is achieved by using two notes (Richards, 2013). The two notes embody the signifier making Batman the signified. As a result, the signification makes for a psychologically dark character. Also, Batman's melody contains the brass unit of the orchestra (Richards, 2013). These instruments produce a heroic and powerful tone depending on its usage. The timbre of the brass instruments can take place as a signifier that denotes Batman, the signified. This produces the signification of heroism related to Batman's actions. Batman's phrase is played in context and

matches our expectations with intense and epic scenes. Therefore, a situational variance does not exist.

The musical notes begin with D and end with F, in a minor scale, giving its dark quality. Paradigmatically, if F were substituted with an F sharp, the distance would create a major third producing a livelier and merry sound. The notes, D to F, produce a rising tone. Rearranging the notes from F to D would create a falling tone. Falling pitches indicate fault and defeat. The rising tone works because it gives Batman a sense of power. Also, the two notes are played in legato phrasing (Richards, 2013). This produces a feeling of continuity since they are tied together. Looking at the icons from a paradigmatic standpoint, if the notes were played in staccato, we would not get the large and intense sound that we expect and a different signification of Batman would be communicated. The musical phrase of Batman coalesces heroism, gloom, drama and victory. The compositions of the two notes construct our understanding of Batman. We no longer look at Batman as solely a savior with a bat suit and an array of gadgets. Instead, we tap into his psyche. We become familiar with his confusion, wrath, and anger through the film score. Batman's phrase constructs cultural identity and our understanding of his mentality. It also challenges our culture because dark music does not relate to a hero, thus illustrating a negotiated code.

#### **Bane's Musical Phrase**

Like Batman, the composers of *The Dark Knight Rises* gave the villain Bane a musical phrase. Bane's theme does not depend on his presence, so the phrase may seem out of context, creating situational variance; however, it's not. The composers placed Bane's theme in the film to show his control (Richards, 2013). Zimmer and Howard used an untraditional rhythm to identify Bane. This produces a sense of imbalance (Richards, 2013). The composers achieved

this by using a different time signature. Time signatures communicate the amount of beats played per measure, or bar (Clendinnig & Marvin, 2011). The entire film is composed with the common 4/4 time signature, which indicates four beats per measure; however, the unconventional 5/4 time signature designates five beats per measure. Zimmer and Howard used anything written in 5/4 time signature to identify Bane (Richards, 2013), thus representing the signifier. Bane's instable and volatile presence illustrates the signified (Richards, 2013). Together, this communicates the signification of Bane's immorality and power to create imbalance in the theme of good versus evil.

We can analyze the musical and rhythmic phrase used to identify Bane by applying structural analysis to better understand its cultural impact. Paradigmatically, if the 5/4 time signature were written in common time, or 4/4, then the audience would feel more stable. The contrast between hero and villain and the theme of good versus evil would not exist. One can also look at binary oppositions of the musical phrase identifying Batman compared to Bane. A 4/4 time signature melodically and rhythmically identifies Batman. Batman's presence embodies a familiar feeling due to the pervasive use of common time in western culture. On the other hand, a 5/4 time signature identifies Bane. This stark contrast produces a feeling of confusion and instability. We also do not hear a dynamic melody in Bane's appearance. Instead, we hear a fast orchestration played with staccato phrasing, creating vigilance and rush. Paradigmatically, if a dynamic, legato melody was given to Bane, we would not feel surprised and scared in his presence. The composers used an unorthodox way of identifying a villain by the use of a 5/4 time signature, thus, constructing our cultural response. However, we expect a villain's portrayal by unsteady percussions and dark orchestration; therefore, this also confirms our cultural identity. Hence, Banes theme culturally operates under a negotiated code.

# **The Climbing Scenes**

We hear the interplay of the musical phrases used for Batman and Bane throughout the film. According to Richards (2013), we can sense the outcome of events during certain scenes based on the musical phrases and time signatures alone. The climbing scene in The Dark Knight Rises exemplifies this interplay. In all three of Wayne's attempt to climb out of Bane's prison pit, the viewer hears symphonic orchestration with the prisoners' chanting.

The use of quiet strings and loud prison chanting plays during the first attempt. A repeated musical phrase, or ostinato, represents the signifier. More specifically, a rising phrase using the bass notes of D, E, F and down to C defines the signifier. The act of climbing the wall in a rising fashion demonstrates the signified. The rising notes of the phrase are D, E and F in a 4/4 time signature (Richards, 2013). The signification is Wayne's failure to climb the wall. Ending the phrase with the lowered C note musically establishes the sound of his failure. The musical phrase rises, then falls at the end to communicate Wayne's unsuccessful attempt. The overpowering prison chant in a 5/4 time signature also communicates Bane's control over Wayne's attempt to climb the wall.

A percussive element embodies the second attempt with both prison chanting and symphonic orchestration in a 5/4 time signature. Wayne attempts to climb for the second time with anger as his motivation. In this case, the signifier is fast, tremulous strings accompanied by prison chanting, both with matching 5/4 rhythms. Waynes maddened attempt to climb the second time elucidates the signified. The pure use of a 5/4 time signature, including the chanting and orchestration, predicts Wayne's failure to climb the wall. This shows Bane's control of Batman's attempt because he has infuriated him in a previous scene where explosives were set off in Gotham.

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The third attempt reintroduces the previous ostinato differentiated by continuously rising instead of falling on the last note. The signifier is the rising musical phrase and the signified is Wayne's successful attempt to climb the wall. We also hear the chanting in 5/4 time signature transitioning to a 4/4 time signature, which indicates Wayne, or Batman's control. We also hear Batman's musical phrase when he finally climbs out of the prison representing his success, control, and return to save Gotham.

A structural analysis will allow a better understanding of how the musical composition in the climbing scenes communicates a cultural response. First and foremost, all three scenes play the music in context and match the expectations of the audience. Therefore, situational variances do not exist. Relating to icons, the audience hears subtle orchestrated strings with a rising tonality played with legato phrasing. As stated previously, the notes are D, E, F and C, respectfully. The legato phrasing creates a smooth, continuous tone producing drama and suspense. Paradigmatically, if the use of legato were substituted with staccato phrasing, the four notes would have a stuttered sound, which will not match the context of the scene. Also, the four notes are played in a rising tonality relating to the act of climbing. It also ends in a C note, which is a lower note then the first three notes. The lowered C note relates to Wayne's unsuccessful attempt to climb the wall. Syntagmatically, if the four notes were played in reversed order, it would create a falling phrase, which does not relate to climbing. Instead, a falling pitch relates to descending or sinking. Also, the chanting is shouted in a 5/4 time signature. Paradigmatically, if it were substituted in a 4/4 time signature, the music and score would reveal Batman's control and he would climb the wall successfully in the first attempt, which does not happen. The rising, yet falling tonality created by legato phrasing pairs with our expectations, which is his failure to

climb the wall. Therefore, the music serves as a confirmation of our cultural response and operates as a dominant code.

Staccato orchestration in a 5/4 time signature musically crafts the second attempt. The staccato phrasing forges a sense of urgency and anxiety. Paradigmatically, if it were substituted with legato phrases, we would feel a sense of continuity and ease. We hear the orchestra and chanting match in perfect rhythm by the use of a 5/4 time signature. Relating to paradigmatic relationships, if the orchestra and chanting were in a 4/4 time signature, this would communicate Batman's control and the audience will believe he will endure a successful climb. The rhythmic matching of the orchestration and chanting in a 5/4 time signature creates an understanding of Bane's control. This verifies the prior construction of Bane's musical identity; thus, confirming our cultural response.

As stated previously, the third attempt reintroduces the ostinato. We also hear a varied version of the ostinato when Wayne reaches a higher area of the prison wall. Instead of dropping down to the C note, the musical phrase continues to rise, foreshadowing his successful attempt. The composers write the bass phrasing using legato techniques. Paradigmatically, if it were written using staccato phrasing, we would not hear the dramatic and theatrical feeling that legato phrasing produces. The music rises with crescendo and strings increase in volume and strength. If it were played using decrescendo, then the volume would attenuate and gradually become softer. This would create a feeble and ineffective feeling. Also, the chanting transfers from a 5/4 time signature to a 4/4 time signature. If the chanting remained in a 5/4 time signature and overpowered the orchestrated strings, Wayne would fail to climb the wall, showing Bane's control. The rising musical phrase and the harmonization of the chanting and orchestration in 4/4 time signature indicates that Wayne's control. The music predicts his success to climb the wall

matching the audiences' expectation; therefore, the music in this scene confirms our cultural response operating under a dominant code.

#### Discussion

The score's nonvisual nature often causes film spectators to ignore the music.

Consumers are visually engulfed by a film's pictorial aesthetics, conditioning them to disregard the score. Besides the visual component, films rely heavily on music. Music can narrate a film if one listens for musical phrases to identify characters and storylines. A substantial amount of research can be done with music and semiotics. According to Dunbar-Hall (1991), a considerable resistance to semiotics and musicology exists. Spectators can accumulate an all-embracing understanding of a films narrative if they were informed about semiology and music. This paper looks at musical phrases and scores to understand its cultural impact. In addition, it formulates how to listen to film music. With more research, we can better understand the emotions and references that are being communicated when listening to a film score.

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