EXTENDED TECHNIQUES ON HORN AND THEIR

USE IN CONTEMPORARY FILM

by

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Submitted in partial fulfillment of the

requirements for Departmental Honors in

the Department of Music

Texas Christian University

Fort Worth, Texas

May 5, 2014

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ABSTRACT

In this paper I seek to explain the various ways composers use the French horn and its extended techniques in film music dating from the 1930s to the present. I specifically focus on the techniques of stopped horn, glissandi, trills, extreme upper register and flutter-tongue. I also concentrate my studies on three film genres; science-fiction/fantasy, western and horror.

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<u>INTRODUCTION</u>

The scene is set. Two opposing armies approach each other from across a valley. The soundtrack begins. The sound of tramping feet accompanies the soldiers' progress, a chord in the orchestra quickly crescendos, and the tension builds. Zoom in on the hero; a brass fanfare sounds. Cut to a shot of the villain, and the music drastically shifts. The tone becomes eerie, with distorted instrumental sounds forming minor or even diminished chords. It is quickly apparent to whom we, the audience of this film, should throw our support. Our emotions are heightened as the intensity of the scene grows until finally, with a triumphant shout from the brass section, the two armies charge forward and enter battle.

This hypothetical scene exists in any number of films in various genres, yet both the story and the techniques used to tell it have become tropes in many Hollywood movies. The joyful entry of the brass to represent the hero and his entourage and the diminished creepiness of the antagonist appears repeatedly in film music. Tropes are incredibly common in this genre of music, many of which find their origins in programmatic orchestral works as well as operas and ballets.

The French Horn in particular (hereafter "horn") seems to garner many such stereotypical uses in film. The instrument's versatility allows it to evoke a wide variety of emotions in those who are listening, and thus it is as common to hear a soaring horn solo performing the theme in a dramatic love scene as it is to hear the horns blasting out the villain's motif in a battle shot. Furthermore, the horn has the capabilities to perform what are known as "extended techniques," which include such skills as bells up, aleatoric

performances, flutter-tonguing, stopped horn, trills, glissandos (or "rips"), and playing in the extreme ranges of the instrument.[1] Film composers frequently employ the horn's extended techniques in their scores, creating a set of tropes that aids the audiences understanding of the action occurring on screen.

FRENCH HORN EXTENDED TECHNIQUES

The use of the horn's extended techniques has clear origins in so-called "classical" music, which correlates to the beginnings of film music as well as styles still used today.[2] Each skill possesses its own unique history of usage within the canon of classical music, and it is especially important to note the composers who frequently employed these techniques in their music in order to understand how they became standard in film music, as such a large number of Hollywood composers have found inspiration within concert repertoire as well.[3] Throughout this paper, I will be exploring the use of five of the more common extended techniques used in film scores; trills, stopped horn, glissandi, flutter-tonguing and extended high range.

Perhaps the extended technique with the longest history of usage in classical music is the trill. This effect is accomplished in one of two ways, either through what is known as a "lip trill" or through a "valve trill." Lip trills have been in use far longer than

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[1] Naturally, these are not the only extended techniques available to horn players, but many of these, such as the use of mutes and triple-tonguing, are incredibly difficult to observe with the ear alone. Others, such as multi-phonics and unconventional performing techniques, are exceedingly difficult to locate due to their infrequent use within the vast canon of film music. Unfortunately, almost all film scores are the exclusive property of the film studios that commissioned them, and thus are not available for public viewing at this time.

[2] "Classical" here meaning concert music, rather than music from solely from the actual Classical Era.

[3] In the days of silent films, classical music was often played or performed to accompany the on-screen action. Audience expectations dating back from the silent films created an even stronger tie between classical and film music and also provides yet another reason that the use of horn in film scores so frequently reflects Romantic Era traditions.

valve trills due to the relatively late invention of the valved horn.[4] The horn player

performs the lip trill by sliding between two neighboring pitches, using the embouchure

to create the trilling effect.[5] The valve trill, by contrast, occurs through the rapid motion

of the valves causing the pitch to alternate between two adjacent pitches. Lip trills are by

far more common in classical music for horn, with valve trills almost always only

performed in the farther regions of the instrument's range, which prevent lip trills from

being sounding correctly.[6] Trills are potentially problematic for composers, as this is a

technique which takes many horn players years to master, with some never actually

learning the skill.

The use of trills traces its origins back to the Baroque era of music (approx. 1600–

1750), when its primary use was for ornamentation in a manner similar to those of the

strings and keyboard instruments. Perhaps the most important implementation of this

technique during this time in music is its use in two famous pieces by George Frederic

Handel (1685–1759): *Water Music in F,* HWV 348 (1717) and *Music for the Royal*

Fireworks, HWV 351 (1749)*.* These works were among the first to feature the horn

prominently and as such introduced the possibility of widespread use of the trill.[7] As time

passed different composers made frequent use of the trill, both lip and valve. Claude

Debussy (1862–1918) used the technique in several of his pieces including the well-

known *La Mer* (1905), and Gustav Mahler (1860–1911) employed trills in five of his

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[4] As opposed to the natural horn, the valved horn makes use of a rotary valve which "opens the way for the air column through an extra loop of tubing, at the same time blocking the original path, so that the total tube length is greater than before, and therefore lower in pitch." The valved horn was not fully accepted by composers until the early 1900s. Walter Piston, *Orchestration* (New York: W.W. Norton and Co., 1955), 212, 231.

[5] Alfred Blatter, *Instrumentation and Orchestration* (New York: Schirmer Books, 1997), 135.

[6] I say this from my personal experience as a horn player and conversations with various professionals.

[7] At the time these would have been solely lip trills, due to the fact that natural (valve less) horns were still the only type available.

symphonies. Ottorino Respighi (1879–1936) included trills in several of his compositions, notably *The Pines of Rome* (1924) and *Feste Romane* (1929). Programmatic work *The Pines of Rome* appears in film music at least three times, and its use is clearly echoed in the film scores produced by John Williams (b. 1932), amongst others. Finally, Richard Strauss (1864–1949) and Igor Stravinsky (1882–1971) made use of the trill in their works, with it appearing in at least five of Strauss' works for orchestra including *Ein Heldenleben* (1898) and *Till Eulenspeigel's Merry Pranks* (1895), as well as in Stravinsky's famous work *Le Sacre du Printemps* (1913).[8] (See Figure 1). The frequent use of extended techniques in programmatic works, meaning those that have a concrete story provided by the composer, likely suggested similar uses to early film composers. In late Romantic and early 20th century works such as these, the use of trills changes from a Baroque ornamentation to a far more dramatic and ominous sounding near-distortion of the horn players' sound, especially when performed at louder dynamic levels.

Stopped horn is another extended horn technique found frequently in both concert and film music. One of the most challenging skills in the horn player's repertoire, stopped horn requires performers to change the position of their right hands inside of the bell. The right hand is normally placed approximately halfway inside of the bell to control the intonation of the instrument and to support the player in holding up the horn. To achieve a stopped effect, performers insert their hands even farther into the bell of the horn, creating a seal that prevents air from passing through (see figures 1.1. and 1.2). The alteration raises the pitch by a half-step and drastically changes the tone quality. In softer

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[8] Strauss's father Franz was a famous horn player who spent many years employed by Richard Wagner.

dynamics, stopped horn creates a "delicate, buzzy coloration" while when performed more loudly has "an ominous-sounding bite."[9]

Figure 1.1 Correct Position of Hand Inside the Bell to Create Stopped Effect
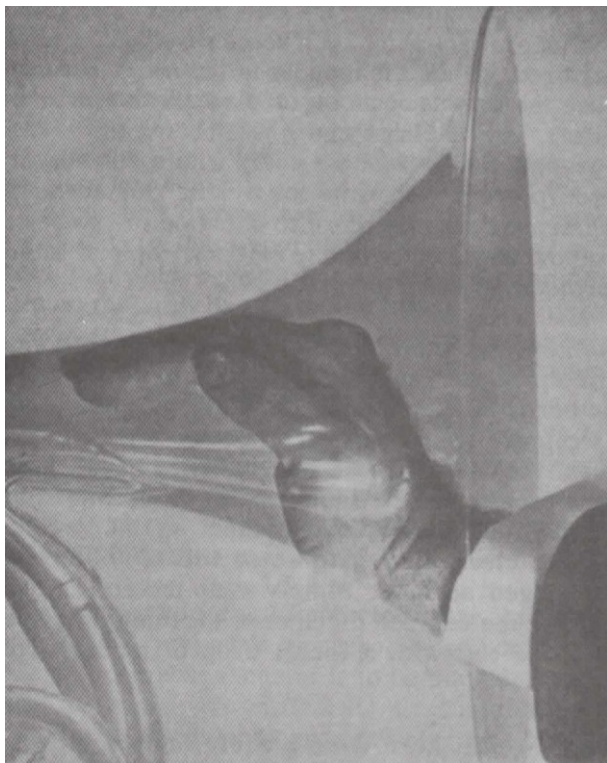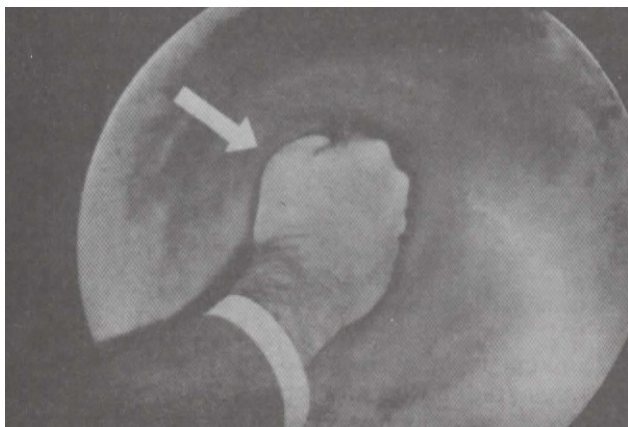

Figure 1.2 Correct Position of the Hand from the Rear to Create Stopped Effect

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[9] Blatter, Instrumentation, 147.

Composer Nikolay Rimsky-Korsakov (1844–1908) describes the sound of stopped horn in his *Principles of Orchestration* as "assuming a wild 'crackling' character in *forte* passages, tender and dull in *piano*."[10] Late 19th and early 20th century composers such as Debussy, Mahler, Strauss and Stravinsky used stopped horn extensively, but the first known use of this technique occurred in Wagner's opera *Tristan and Isolde* (1856).

Yet another extended technique with origins in the symphonic repertoire is the glissando. A glissando on the horn occurs when the performer plays the harmonic series of the instrument in a very quick slur. Composers since the Romantic Era such as Sergei Prokofiev (1891–1953), Mahler, Stravinsky (see Figure 3) and George Gershwin (1898–1937) often use glissandos to add dramatic emphasis to their music. This technique is not unique to the horn, but the sound it creates is very different from the rest of the brass due to the nearness of the instrument's partials, allowing for a very smooth glissando.[11] While trumpets and tuba are very rarely called upon to perform this skill, glissandos are almost commonplace for the trombone. However, the anatomy of the trombone (e.g. the slide) causes a trombone glissando to glide between the notes in a far more liquid manner, often creating a comedic effect. In contrast, the horn lands on each note individually, albeit briefly, causing a much more dramatic sound which is used in a vast number of film scores in varying genres.

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[10] Nikolay Rimsky-Korsakov, *Principles of Instrumentation* (New York: Dover Publications, 1964), 26.
[11] Partials here is synonymous to both frequencies and notes. There is a set distance between each partial available to a horn player, and due to the nature of the instrument the distance between them is much smaller in the upper register. Thus, the closer the partials the easier it is to move between them. This is one of the main reasons it is such a challenge for horn players to perform in the upper range of the instrument; the nearness of the partials allows for a much greater chance of landing on one which is incorrect.

Flutter-tonguing is a far less common technique for horns, although it is one that arises across a wide variety of orchestral wind instruments. Flutter-tonguing is performed by a rapid vibration of the tongue creating a rolled "r" (similar to that in languages such as Spanish and Italian) inside the mouthpiece while simultaneously sounding any given pitch. [12] This creates a distorted tone color, potentially adding tension to any musical moment. Stravinsky is yet again one of the composers who utilized this tone color in his orchestral works most often, along with 20th century composer and member of "Les Six" Arthur Honegger (1892–1955). Aaron Copland also employs the technique, combining flutter-tonguing horns and trumpets in his third symphony, while Richard Strauss adds trombones as well in both *Don Quixote* (1898) and *Suite from "Le Bourgeois Gentilhomme"* (1917).

The final extended technique I will discuss is performing in the extreme ranges of the instrument. The standard compositional range for the horn is generally accepted as being from D1 to C6 (see figure 1.3). However, there are many difficulties present for the horn player even when performing in this accepted range. Notes in the upper echelons of the register are far more unstable, again due to the nearness of the instruments partials, resulting in the increased likelihood of missed or "cracked" notes above G5 in comparison to those of the middle and lower octaves.

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[12] A mouthpiece is a "more or less cup-shaped [piece of metal]…" It serves as a medium through which, as the musician blows air causing his or her lips to vibrate, "these vibrations are communicated to the column of air enclosed in the brass tube." Piston, *Orchestration*, 208.

Figure 1.3 Standard Range of the Professional Horn Player
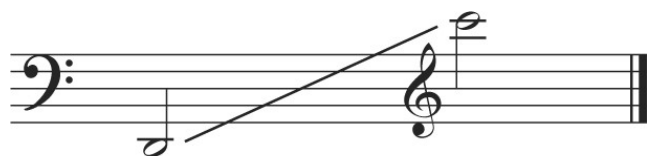
Sounds a perfect fifth lower than written

In spite of the instrument's limitations, some composers have pushed the boundaries of horn playing beyond this range. Richard Strauss, for example, included not only a D6 in his piece *Sinfonia Domestica* (1903) but the even more unusual E6 as well, (see Figure 7). Others have required horn performers to extend their high register as well. Charles Ives's (1874–1954) work *"The Fourth of July"* from his "*Holidays*" symphony (1913) includes a D Flat6, as does Arnold Schönberg's (1874–1951) *Fünf Orchesterstücke* (1909). There are some who have included only the top of the professional range (C6) in their compositions. Aaron Copland composed in this manner in three of his pieces, including *Appalachian Spring,* and other familiar names such as Mahler, Strauss and Stravinsky frequently also made use of the horn's stratospheric register. Even more common is the use of B5 and B Flat 5, which appears in the works of many of these same composers as well as the likes of Prokofiev and Respighi.[13]

The use of the higher end of the range of the horn is a risky endeavor for any composer, concert or film, as the stability of the instrument decreases progressively the higher one plays. The same nearness of partials which allows the horn to create such dramatically pleasing glissandi also causes the performer to miss notes more easily, especially in the upper register, where the partials are particularly close. For film

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[13] Gardner Read, *Thesaurus of Orchestral Devices* (New York: Pitman Publishing Corporation, 1953), 92–93.

composers, the risk is increased tenfold. Costs of renting out studios and recording equipment means that every hour spent in a recording session is astronomically expensive. Furthermore, not only is there is minimal time for rehearsal but there is also a demand for impeccable accuracy, and too frequent use of the upper register can easily exhaust a performer. These circumstances result in a far more high pressure performance situation for the horn players who must perform these scores. Despite the inherent risks involved, the high register of the horn is desirable for its "assertive" and "forceful" qualities.[14] Thus, many Hollywood composers frequently write for this range when attempting to create drama or tension.

Although I will not be discussing the low register in this paper, it is worth noting that the low range of the horn appears in both concert and film music.[15] Extension of the low register for horn is far less common than that of the high, most likely due to the tone problems most players encounter in this range of the instrument. When the performer plays in the lower range of the horn, the tone becomes fuzzy, indistinct, and far more difficult to play at any sort of loud dynamic. Regardless of the challenges, some composers such as Brahms, Mahler (yet again), Strauss, and Shostakovich included incredibly low notes in their works (see Figure 8). The lowest of these is A1, which makes an appearance in four of Mahler's symphonies as well as Shostakovich's famous Symphony No. 5.[16]

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[14] Marlin Skiles, *Music Scoring for TV and Motion Pictures* (Blue Ridge Summit, PA: TAB Books, 1976), 71.
[15] Horns very rarely perform in the extreme low register without some sort of augmentation from the trombones and/or tuba, whose low range tends to swallow the lower notes of the horn. As the bulk of my research has been through listening to recordings, due to the impossibility viewing an original score, I have decided to only mention the low range of the horn in passing and to forgo any in-depth analysis.
[16] Read, *Thesaurus*, 95.

The orchestral origins of these various techniques are particularly significant given the influence Romantic Era and early 20th century compositions had on film music of all genres. The fact that stopped horn first appeared in one of Wagner's operas is particularly significant for several reasons. The Wagnerian operatic concept of the leitmotif is still one of the foundational elements of many film scores such as *King Kong* (1933)*, Star Wars* and *The Hobbit: An Unexpected Journey* (2012).[17] Secondly, operatic orchestral music possesses many commonalties with film music, as both are serving to enhance the drama occurring on stage or on screen. Renowned film composer Howard Shore even goes so far as to say that his work for the record-breaking *Lord of the Rings* trilogy is almost closer in form to an opera than to the standard film score. "*Lord of the Rings*" is an opera in concept… It has the complexity and the relationships of what we think of as opera music, because it so goes beyond what we think of as a film score. A film score you think of as having just a few characters and it doesn't always have the scope of what you think of as opera music. I don't know if it has to do with drama. I think it's an emotional thing." [18] The close relationship between opera and film explains the similarities present in the two genres' application of the horn as well.

Aaron Copland's (1900–1990) use of stopped horn in several of his most famous compositions, including *Appalachian Spring* (1944), and *Four Dance Episodes from "Rodeo"* (1942), is also especially telling; Copland's influence on film music,

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[17] "In its primary sense, a theme, or other coherent musical idea, clearly defined so as to retain its identity if modified on subsequent appearances, whose purpose is to represent or symbolize a person, object, place, idea, state of mind, supernatural force or any other ingredient in a dramatic work." Arnold Whittall, "Leitmotif," *Grove Music Online,* http://www.oxfordmusiconline.com.ezproxy.tcu.edu/subscriber/article/grove/music/16360?goto=leitmotif&_start=1&type=article&pos=2.

[18] Fred Karlin and Rayburn Wright, *On the Track: A Guide to Contemporary Film Scoring* (New York: Routledge, 2004), 141–42.

specifically scores written for the western genre, is well-documented. Copland's

extensive use of this extended technique in his compositions no doubt created a precedent

his fellow Hollywood composers would quickly adopt.

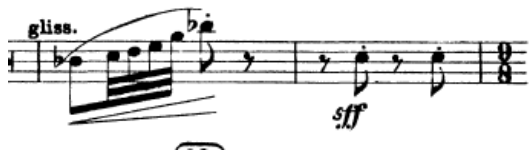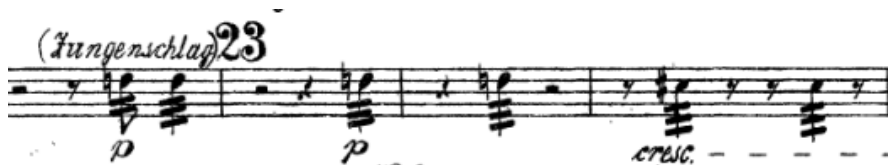TABLE 1.1 Notation and Examples of Extended Techniques in Classical Music

Trill from Stravinsky's *Rite of Spring.*

Stopped horn, Stravinsky, *Rite of Spring.*

Glissando, Stravinsky, *Rite of Spring.*

Flutter-tonguing from R. Strauss's *Don Quixote.*

Bells up technique from Stravinsky's *Rite of Spring.*

Extreme high range from R. Strauss's *Sinfonia Domestica.*

Extreme low range from Mahler Symphony No. 3.

USE OF EXTENDED TECHNIQUES IN THE SCIENCE-FICTION/FANTASY

GENRE

A Brief History of the Genre

Few film genres feature the horn as extensively as science-fiction/fantasy. From recent blockbusters such as *Avatar* (2009) and *Lord of the Rings* (2001) to older productions such as *The Planet of the Apes* (1968), the first *Star Wars* trilogy (1977, 1980, 1983) and *Star Trek: The Motion Picture* (1979), the horn dominates orchestral film scores with an abundance of melodic content as well as special effects. In order to understand the compositional use of the instrument, however, it is necessary to discuss the history of the genre and its music.

The science-fiction/fantasy film has a long and varied musical history.[19] With lauded composers such as Max Steiner (1888–1971), Jerry Goldsmith (1929–2004), Hans Zimmer (b. 1957), James Horner (b. 1953), Howard Shore (b. 1946), and of course John Williams (b. 1932) filling out the ranks of those of have worked in this genre, it is no wonder that here is a vast library of film scores for both science-fiction and fantasy films. The science-fiction genre first began to coalesce in the 1930s, with one of the most famous examples, *King Kong*, premiering in 1933. Widely acknowledged as having established the standard "classical film score," Steiner's score is highly reminiscent of the Romantic Era in both orchestration and melodic content.[20]

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[19] Timothy E. Scheurer provides a concise definition of the genre: "The Science Fiction film is a film genre which emphasizes actual, extrapolative, or speculative science and the empirical method, interacting in a social context with the lesser emphasized, but still present, transcendentalism of magic and religion, in an attempt to reconcile man with the unknown." This definition could apply to the fantasy genre as well, with only the substitution of science with magic or the "fantastic." It is for this reason that I choose to discuss these two genres simultaneously rather than dedicating separate chapters for each. Timothy E. Scheurer, *Music and Mythmaking in Film* (Jefferson, North Carolina: McFarland and Co., 2008), 48.

[20] Grove Music Online provides a great summary of the Hollywood classical film score. "[The classical film score is] essentially a leitmotif-based symphonic romanticism with narrative orientation..." Mervyn

As the genre developed, other renowned Hollywood composers began to contribute to the canon of science-fiction/fantasy film scores. The dawning of the 1950s saw a rise in the production of science-fiction films, mainly focused on alien life visiting Earth. No doubt a reaction to the Cold War as well as the "Space Race," films such as *The Day the Earth Stood Still* (1951), scored by Bernard Herrmann (1911–1979), and *The Thing from Another World*, scored by Dimitri Tiomkin (1894–1979) began to dominate the box office.[21] Whether presenting a not-so-veiled criticism (or support) of McCarthyism or simply entertaining audiences, the growing prominence of the genre presented film composers a myriad of opportunities for experimentation that other more conventional genres did not offer. These films tended to focus on the idea of the hostile alien invasion, and as such their scores were far more avant-garde. Herrmann's score for *The Day the Earth Stood Still* largely abandons the Romantic era sound and instead features unsettling electronic instruments such as the theremin to represent the alien.[22] Other films such as *The Thing from Another World* (1951) quickly followed suit, and thus, during this time period, the horn and other traditional orchestral instruments were less prominent. Science-fiction films of the 1950s also tended to emphasize dissonance as the main sound of the alien creatures, and not until the friendly aliens of the 1970s appeared on screen was there a change in this practice.[23]

Cooke, "Film Music," *Grove Music Online,* http://www.oxfordmusiconline.com.ezproxy.tcu.edu/subscriber/article/grove/music/09647?goto=Film+Score&_start=1&type=article&pos=2.

[21] Philip Hayward, "Sci-Fidelity: Music, Sound and Genre History," in *Off the Planet: Music, Sound and Science Fiction Cinema,* ed. Philip Hayward (London: John Libbey Publishing, 2004), 8-10.

[22] Rebecca Leydon, "Hooked on Aetherophonics: *The Day the Earth stood still*," in *Off the Planet: Music, Sound and Science Fiction Cinema,* ed. Philip Hayward (London: John Libbey Publishing, 2004,) 31-34.

[23] Scheurer, *Music and* Mythmaking, 62.

Although the 1960s produced a fewer number of science-fiction films than other decades, the movies produced during this period created a lasting impact on the genre. Two of these influential films, *2001: A Space Odyssey* and *Planet of the Apes,* premiered in 1968.[24] Numerous studies of the former exist due to the last-minute replacement of an original score composed by Alex North (1910–1991) with pre-existing concert works such as Richard Strauss's *Also Sprach Zarathustra* (1896); Jerry Goldsmith's score for the latter received high critical acclaim, earning him an Academy award nomination for best original score. Goldsmith's work for *Planet of the Apes* saw a blending of experimentation, especially in instrumentation with the use of ram's horns and other non-orchestral instruments, as well as the standard 20th Century musical fare.[25] Furthermore, Goldsmith bends the laws of traditional instruments as well, calling on horn players to reverse their mouthpieces to create a truly other-worldly sound.[26]

The late 1970s saw a massive boom in the number of Hollywood science-fiction films. The end of the decade represented a shift in science-fiction cinema, whose focus now expanded to feature the concepts of the friendly alien visitor as well as space exploration. Spurred on by the 1969 moon landing, and with ever-increasing budgets and advances in special effects, blockbusters such as *Star Wars: A New Hope* (1977), *Close Encounters of the Third Kind* (1977) and *Alien* (1979) again revolutionized audience expectations of the genre. In addition to composing for *Alien,* Goldsmith also received the commission for *Star Trek: The Motion Picture* (1979), the success of which led to a

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[24] Hayworth, "Sci-Fidelity," 13-15.
[25] Jon Fitzgerald and Philip Hayward, "The Sound of an Upside-Down World: Jerry Goldsmith's Landmark Score for *Planet of the Apes* (1968)," *Music and the Moving Image* 6, no. 2 (Summer 2013): 36.
[26] Cynthia J. Miller, "Seeing Beyond His Own Time: The Sounds of Jerry Goldsmith," in *Sounds of the Future: Essays on Music in Science Fiction Film*, ed. Mathew J. Bartkowiak (Jefferson, NC: McFarland, 2010), 213.

franchise that continues to this day. As the scope of science-fiction films grew, the size of the orchestras employed to perform the accompanying music also expanded to the point that full symphony orchestras were hired, such as the London Symphony Orchestra used for the *Star Wars* movies. Proportionally, the horn in film music flourished under these big-budget regimes, a trend which continues to this day.

Prior to the 1980s, fantasy films had largely fallen by the wayside with some exceptions such as *Jason and the Argonauts* (1963), famous for its Ray Harryhausen created stop-motion special effects, and *The Land That Time Forgot* (1975). The massive success of the *Star Wars* films as well as the release of the first of the *Indiana Jones* series, *Raiders of the Lost Ark* (1981) saw a boom in the production of both fantasy and science-fiction films.[27] John Williams also scored the *Indiana Jones* films, whose "Raider's March" serves as a perfect example of the bombastic march themes for which Williams has become famous. 1982 saw the release of yet another successful Steven Spielberg and John Williams collaboration: *E.T. the Extraterrestrial.* Trevor Jones' music for *The Dark Crystal* (1982) was originally intended to embody an avant-garde sound through the use of electronic instruments; however, Jones conformed to the trends of the time and composed a lush orchestral soundtrack.[28] Also produced during this decade were the films *Tron* (1982), *The Terminator* (1984) and *The Princess Bride* (1987). The hallmark of the 1980s was a continual blending of the science-fiction and fantasy genres, in no small part thanks to the blurred generic lines in the *Star Wars* films.

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[27] It is at this point that the two genres become inseparable. *Star Wars* especially had a major impact on this blending, as it contains both elements of science (the futuristic settings and technology) and magic (the force).

[28] Randall D. Larson, "An Interview with Trevor Jones," *Soundtrack: The Cinema Score and Soundtrack Archives,* last modified June 12, 2013, http://www.runmovies.eu/?p=25.

The science-fiction and fantasy genre continued to thrive throughout the 1990s and 2000s, and to this day many of the top grossing films from these decades belong to the genre (see Tables 2.1, 2.2 and 2.3). One of the important effects caused by the success of these films was Hollywood's recognition of the immense profits to be made from the soundtracks of such movies. Composer Howard Shore spent several years touring the world with his project "*The Lord of the Rings* in Concert," a pairing of a projection of the films while a live symphony orchestra simultaneously performed the soundtrack. By 2007, the *Harry Potter* soundtracks had sold more than 1.1 million copies in the United States alone, while the *Star Wars* "Main Theme" has sold upwards of 2 million copies in the U.S., earning the sales certification of "Platinum."[29] The fact that many of these incredibly successful films feature traditional orchestral film scores has not gone unnoticed, and is a strong factor in the recurrence of such film scores.

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[29] "Harry Potter Charms the Entertainment Industry," last modiefied August 10, 2007, http://www.nielsen.com/us/en/press-room/2007/Harry_Potter_Charms_the_Entertainment_Industry.html.

Table 2.1 Top Grossing Films of the 1990s (Science Fiction/Fantasy) by year

Year	Film	Composer
1991	*Terminator 2: Judgment Day*	Brad Fiedel
1993	*Jurassic Park*	John Williams
1995	*Batman Forever*	Elliot Goldenthal
1996	*Independence Day*	David Arnold
1999	*Star Wars: The Phantom Menace*	John Williams

Table 2.2 Top Grossing Films of the 2000s (Science Fiction/Fantasy) by year

Year	Film	Composer
2001	*Harry Potter and the Sorcerer's Stone*	Brad Fiedel
2002	*Spider-man*	Danny Elfman
2003	*The Lord of the Rings: The Return of the King*	Howard Shore
2005	*Star Wars: Revenge of the Sith*	Elliot Goldenthal
2006	*Pirates of the Caribbean: Dead Man's Chest*	Hans Zimmer
2007	*Spider-Man 3*	Christopher Young/Danny Elfman
2008	*The Dark Knight*	Hans Zimmer
2009	*Avatar*	James Horner

Table 2.3 Table 2.2 Top Grossing Films of the 2010s (Science Fiction/Fantasy) by year[30]

Year	Film	Composer
2011	*Harry Potter: The Deathly Hallows Part 2*	Alexandre Desplat
2012	*Marvel's The Avengers*	Alan Silvestri
2013	*Iron Man 3*	Brian Tyler

Science-Fiction/Fantasy, Music and the "Other"

In her book *Unheard Melodies,* musicologist Claudia Gorbman states: "Like

lighting, free of verbal explicitness, music sets moods and tonalities in a film; it guides

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[30] "All-Time Box Office Hits: Domestic Gross, by Decade and Year," *Filmsite,* accessed May 3, 2014. http://www.filmsite.org/boxoffice2.html

the spectator's vision both literally and figuratively."[31] Aaron Copland similarly says of film music, "The purpose of the film score is to make the film more effective." He elaborates further, stating, "In retrospect, I can see three important ways in which music helps a picture. The first is by intensifying the emotional impact of any given scene, the second by creating an illusion of continuity, and the third by providing a kind of neutral background music."[32] Science-fiction and fantasy films challenge these conceptions of the role of music by presenting difficulties unique to the genre. Music also bears the responsibility of signaling the type of film, supplying location and familiarity, and most importantly causing the audience members to suspend their disbelief.[33] These roles are important to all types of film, but they achieve a special significance in science-fiction and fantasy. Most importantly, science-fiction and fantasy film music must signify the presence of the "Other" or the "fantastic," respectively.

First, the genre of film is often indicated by the main title music.[34] This is crucial especially for the science-fiction movie in informing the audience of the atmosphere. There are many varying plot-categories that fall under the science-fiction heading, from friendly aliens to hostile aliens, unknown worlds and known, to future-based films and robotic components. From decade to decade the focus of these films has shifted; Hollywood produced both *Alien* and *E.T. the Extraterrestrial* within four years of each other and focus on human encounters with the alien and yet the attitudes towards these alien life forms are dramatically dissimilar. It falls to the music to signal the audience, alerting them to the treatment of the "Other" in each film. Jerry Goldsmith's score to

[31] Claudia Gorbman, *Unheard Melodies:Narrative Film Music* (London: BFI Publishers, 1987), 11.
[32] Aaron Copland, *Our New Music* (New York: Whittlesey House, 1941), 263.
[33] Scheurer, *Music and Mythmaking*, 54–56.
[34] Karlin and Wright, *On the Track,* 73-80.

Alien, full of harsh dissonances and eerie vocals, functions perfectly in creating the atmosphere of terror that is vital to the success of the film, while in *E.T.* John William's score for the first scene uses solo flute and horn accompanied by soaring strings to keep the audience far more comfortable, despite the presence of an alien onscreen.[35]

Furthermore, the main title music is easily divisible into two main categories: the "quest" or "heroic" type, and the "alien threat type." The former style of scoring emphasizes the hero of the film, and is obvious in most early science-fiction/fantasy movies. Most often filled to the brim with leaping intervals such as perfect fourths and fifths, these main themes tend to create a sense of yearning or lifting in the viewer, especially when scored for brass instruments, which in turn creates a sense of the warrior/hero mentality.[36] The famous main theme for Star Wars (see figure 2.1) is a perfect example as it begins (after three repeating triplets) with a leap of a perfect fourth and then another of a perfect fifth. Factor in the triumphant shouting of the trumpets in this theme and the connotations are clear: heroism and militancy will dominate this film.

Figure 2.1 *Star Wars* "Main Title."[37]

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[35] John Williams, "Far From Home/E.T. Alone" from *E.T. the Extra Terrestrial,* MCA, 2002, MP3.
[36] Scheurer, *Music and Mythmaking*, 50–51.
[37] Scheurer, *Music and* Mythmaking, 51.

The second role of music in the science-fiction/fantasy film, as in other genres, is to provide the location or setting of the story. A large number of movies in this genre take place in exotic locales. *Planet of the Apes* (2001), for example, establishes the strange nature of its backdrop through the blending of intense percussion and synthesized music, which on its own can relate to the music of Earth, but is simultaneously odd.[38] Earlier films such as *Forbidden Planet* (1956) also employ avant-garde electronic music to create a sense of the alien on screen.[39]Another example of the importance of music in establishing setting is the 1990 Tim Burton film *Edward Scissorhands.* Alexander Binns discusses the topic at length, arguing that Danny Elfman's choice of using rich orchestral music to represent fantasy in a movie split between a spooky and obviously "fantastic" castle and the hyperbolic 1950s suburb allows the viewer to "construct spaces of fantasy" as well as to hear the obvious differences in the two settings.[40]

Another reason music is so vital to the science-fiction/fantasy film is the necessity of creating (or denying) a sense of familiarity and thus comfort in the audience. The strange settings present in these movies inherently possess their own cultural identities and therefore musical traditions, yet many films strictly adhere to the sounds of Brahms, Mahler, Wagner and Strauss, all of which are part of the Western music world. The reason why is simple; were audiences suddenly confronted by sounds that do not fit their perception of music in some way, they would be intensely discomfited. Furthermore, the

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[38] This is of course vital to the film, as the "surprise" ending is that the supposed alien planet is actually Earth all along.

[39] Rebecca Leydon, "*Forbidden Planet:* Effects and Affects in the Electro Avant-garde," in *Off the Planet: Music, Sound and Science Fiction Cinema,* ed. Philip Hayward (London: John Libbey Publishing, 2004), 61-63.

[40] Alexander Binns, "Music and Fantasy Types in Tim Burton's *Edward Scissorhands,*" in *The Music of Fantasy Cinema,* ed. Janet K. Halfyard (Sheffield, UK: Equinox Publishers, 2012,) 41-47.

emotional signifiers that have accrued over time would be utterly meaningless; a composer would have to create an entirely new musical language which the viewer would not necessarily understand.

An example of a composer creating this familiarity is the famous "Cantina Band" scene from *Star Wars*. Several main characters of the film enter the "Mos Eisley Cantina" on a completely foreign planet (Tatooine), and, naturally a diegetic music source emanates from the so-called "cantina band." On a planet with a cultural history utterly different from that of Earth, one could reasonably expect new instruments, tonal centers, musical styles, etc., and yet the band's music falls reasonably within the common genre of jazz. Instead of entirely new instruments, a simple mix of synthesizer, steel drum and big-band instruments such as the saxophone and clarinet is presented to the ear, despite the made-up instruments on screen. The purpose of this deception is to keep the audience relatively comfortable with the scene unfolding before them; after all, this is the setting where we first meet heroes Han Solo and Chewbacca. The jazzy nature of the cantina band's performance further enhances the setting as well, relying on the trope of jazz being a feature of bars, particularly those which can draw a shady sort of patron.

Music in the science-fiction/fantasy film is also critical to the far subtler task of assisting in the audience's "suspension of disbelief."[41] Viewing any film requires audiences to immerse themselves to a certain extent. Science-fiction and fantasy films provide even more difficulties due to their very nature; they are inherently "unbelievable." Strangely, it is actually the addition of unrealistic elements, such as non-

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[41] The concept that "when audiences are truly engaged in a fiction, they come to believe, in a way, or half-believe, that the fictional characters and goings-on are real." Steven Sanders, *Philosophy of Science Fiction Film* (Lexington, KY: University Press of Kentucky, 2008), 138.

diegetic music, which tend to assist viewers in becoming fully involved with the film. The prevention of distractions caused by special effects sequences, impossible occurrences, etc., can be almost eliminated by the presence of appropriate scoring. This goal is accomplished mainly through techniques that either consciously or subconsciously heighten emotions; one example is the "stinger" chord, able to make audiences jump out of their seats and presenting the threat of danger or even of violence.

The most important function of film music in this genre, and one that frequently enlists the help of the horn, is that of representing the "Other." Whether the "Other" is alien life, magic, or a combination of the two, responsibility often falls upon the score to alert the audience to both the nature of the "Other" and its presence. *Harry Potter and the Sorcerer's Stone* (2001) offers an example: the movie opens with a shot of a normal street sign and an owl perched atop it. After a few seconds of the owl flying away down the street, a man emerges out of the gloom. He is dressed rather strangely, but before much time has passed the camera pans away to show a cat and a very ordinary looking house. The old man reappears and holds up a strange device, and with it seems to suck the light out of all the streetlamps lining the avenue, providing the audience's first visual cue that something out of the ordinary or "fantastic" is happening. From the very first fade-in, however, the music has been providing signals to the viewer, indicating the presence of magic in the scene. Bells, chromatic strings in the upper register and the oboe (often used to create suspense and mystery in both concert and film music) dominate these first minutes of film.[42] The bells prevent the old man (later revealed as one of the guiding figures for the hero, Harry Potter) from seeming menacing or sinister, while the

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[42] Skiles, *Music Scoring for TV,* 71.

chromaticism present in the upper strings simultaneously create an atmosphere of abnormality, again signaling the presence of magic to the viewer's subconscious.

Example No. 1: The *Star Wars* Franchise

Having established the basic functions of music in the science-fiction/fantasy film genre, it is possible now to focus more specifically on the role that the horn and its various extended techniques often performs. I begin my various examples with an in-depth focus on two of the *Star Wars* films: *The Phantom Menace* (1999) and *Return of the Jedi* (1983). I have chosen to analyze these two films out of the six in the series for several reasons; first, and most simply, *The Phantom Menace* and *Return of the Jedi* feature the horn and its abilities more extensively than any other *Star Wars* film. Second, choosing one film from each trilogy allowed me to track any evolutions to John Williams' compositional style and leitmotifs throughout the series, especially since there was a sixteen year gap in between the release of the two films.[43]

The Phantom Menace: **Diegesis and Familiarity**

I begin with analyzing two separate tracks from the 2000 re-release of the *Phantom Menace* soundtrack known as the "Ultimate Edition." The first track is "The Flag Parade," which occurs in the story as the opening ceremony to the podracing tournament. The music for the cue is diegetic to the film, and strangely features many traditional Earth-bound orchestral instruments, especially the horn. Similar to the "Cantina Band" scene, the purpose of using instruments familiar to the audience is to

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[43] The most significant change I noticed throughout was simply Williams reducing his use of the extreme register of the horn by the time he composed the score for *The Phantom Menace*. Outside of these two particular films, it's interesting to note the dramatic increase of Williams's horn use in between *A New Hope, The Empire Strikes Back* and then *Return of the Jedi.* The first two pale in comparison to the sheer amount of horn as well as the more challenging music featured in Episode VI.

allow the recognition of tropes associated with such instruments, thus keeping the audience comfortable and allowing them to recognize the celebratory nature of the scene. One of these tropes is the horn glissando. The distinguishing element of this particular track is the subtle suggestion that, in this case, the horn is functioning as a quasi-diegetic instrument. The "rips" (another term for glissando) in use here are highly reminiscent of ram's horns and other primordial instruments before the development of the modern orchestra. The inclusion of the small rips in the main theme for the scene represents the importance of the technique for establishing the dominant sound of the action about to occur.

This technique of using the orchestral horn as a diegetic instrument despite possessing no visual evidence on screen appears in the final scene of the film, a cue called "The Parade." A marching band precedes a joyful ceremony consisting of an alien race known as the "Gungans." This band is seen only for a brief moment on screen, but in that time it is possible to see a collection of percussion instruments as well as an animal horn, which indeed is related to the orchestral horn, but when the instrument is played on scene the sound produced is quite different from the glissandos occurring in the score. The use of rips in this manner is in obvious timbral contrast to the music created by Williams over a decade earlier for *Return of the Jedi,* in this case providing a simultaneous sense of setting when combined with the other musical elements of the scene as well as allowing the audience to retain a modicum of familiarity despite the foreign locale.

Figure 2.2 The Gungan Marching Band

Return of the Jedi: **Drama, Terror and Climax**

Return of the Jedi, despite occurring last in the overarching story line of the *Star Wars* series, is representative of John Williams's "brassiest" period of film composition. *Superman* (1978) and *Raiders of the Lost Ark* (1981) both feature the expansive brass fanfares for which Williams quickly became known. As such, his score for the *Return of the Jedi* makes extensive use of all the brass instruments, but perhaps none more so than the horn.

The cue "The Pit of Carkoon/Sail Barge Assault" appears in the film as one of the film's antagonists, Jabba the Hutt sentences Luke Skywalker, Princess Leia, Han Solo and Chewbacca to death. The Pit of Carkoon houses a dangerous creature known as a "sarlacc," which Jabba uses to execute his victims in a slow and torturous manner. The heroes are able to overcome their guards, freeing themselves and sending the evil Jabba to his death. The music accompanying this scene features horn extended techniques

typical to a dramatic battle sequence in films such as *Star Trek: The Motion Picture* (1979), *Avatar* (2009) and *Planet of the Apes* (2001), featuring several glissandos and the upper register of the horn to create a forceful effect. There is, however, one moment in particular that is unique among the various recordings I investigated; at 3:01, the horns perform a glissando that culminates not only on a trill, but on a B Natural 5. Scoring for the horn in this upper register is a distinct risk for any composer, but when one combines this device with a dramatic trill following the glissando the feelings of suspense and excitement rise to new heights. Therefore, Williams's use of the horn in this setting assists in the suspension of disbelief in the scene through its simultaneous heightening of both the action on-screen and the audiences' emotions.

Another example of the instrument's use demonstrates the stark contrast in atmospheres created through the horn's ability to glissando. In the music for the "Battle of Endor"—the culminating battle sequence of not only the trilogy but of the *Star Wars* franchise itself—the horn permeates the entire scene with shrill glissandos and parts scored in the upper register. The track begins with a very percussive passage in the winds and timpani with a low string ostinato. The motif travels around the orchestra and blends with other themes such as the "Darth Vader Theme," but as the motif develops, it most frequently repeats in the horn section. The horns, however, are restrained, remaining in a relatively comfortable register despite the loud volume required. The tension continues to build throughout the track, exploring the Darth Vader theme and its associated sounds further until finally the horns yet again state the theme in full. At 4:36 into the track, a forceful stopped horn note follows an unnatural-sounding trombone glissando, marking the increased chaos occurring on the actual moon of Endor as the

Ewoks rescue Han and Leia, but it is not until 4:51 that the horns demonstrate their prowess in a series of quarter note rips up to G5. The glissandos create a rather jarring effect that serves the score by drawing the listener into the story and consequently assisting in the suspension of disbelief. The horns begin to dominate the melody, trading off with the trombones, but as they move progressively higher it becomes clear that the ensuing battle is not going well for the Rebel Alliance.

As opposed to the use of the upper register in *The Phantom Menace* representing uncontainable joy, the horns here exist for the sole purpose of creating a sense of impending climax. The trill at 5:35 continues this trend, as does the repeated use of B Flat 5 throughout the next minute of music. An abundance of diegetic sound from the screen in the form of (laser) gun shots, screams and other battle sounds enhances the atmosphere of urgency growing as the ground battle between the Ewoks and Rebels opposite the Empire's forces gains momentum. As such, it is necessary to have the horns performing in this upper register simply to be heard over the action! The pattern of the music serving the drama continues through the rest of the sequence, and as one of the Empire's starships crashes into another, the horns shriek out yet another B Flat 5. The on-screen action returns to the ground battle, with a staggering eleven glissandos within twenty seconds. Continued rips in the horn section saturate the next several minutes of film, but as the focus shifts to the battle between Luke Skywalker and Darth Vader the range of the rips lowers, and gradually the score quiets into a tone of patient menace rather than the chaotic valor present in the rest of the scene. The score for the Battle of Endor is representative of many composers' use of the horn in both action and battle scenes, marking a dramatic increase in the role assigned to the horn and its extended techniques

for not only the rest of the decade but which extends into current science-fiction/fantasy productions. Many other cinematic creations make use of the horn in a similar manner, ranging from Jerry Goldsmith's work for *The Mummy* (1999) to James Newton Howard's recent music for *The Hunger Games* (2012).

Figure 2.3 The Battle of Endor

Example No. 2: *Jurassic Park: The Lost World*

"The Island Prologue": Main Title Music and the Horn

John Williams's soundtrack for *Jurassic Park: The Lost World* (1997) has no track specifically entitled "Main Theme," but in its place is the "Island Prologue," which serves the same essential function of setting the tone for the film. What is most interesting about this cue is Williams's use of the horn's extended techniques to create an atmosphere of sheer and utter terror.[44] The film begins with a horrifying scene in which a passel of tiny dinosaurs eat a small girl alive. The accompanying music reflects the terror

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[44] John Williams, "Island Prologue," from *Jurassic Park: The Lost World,* Geffen, 2012, MP3.

of both the girl and her parents, and in the course of doing so Williams pushes his horn

section to the absolute limit.

Figure 2.4 The First "Compy" Appears

As the audience begins to learn that these tiny, harmless looking dinosaurs actually do

pose a threat, the horns break through the thick musical texture with brassy stopped notes

(1:11, 3:00) but it is when the young girl's mother arrives on the scene that Williams calls

upon the most dramatic range used in any of his science-fiction/fantasy films: a horn

glissando culminating on a C Sharp 6. In my research it was rare enough to find horn

music reaching C Natural 6, but in no other recording except *The Lost World* did I find

anything which reached above the high C. Furthermore, at the exact moment of the

glissando reaching to the high C sharp all diegetic sound cuts out, not returning until

several seconds later when the mother screams in horror. With the camera focused on the

mother's shocked and terrified face, this particular rip produced by the horns

demonstrates the vastly darker tone Williams takes in the *Jurassic Park* sequel.[45]

USE OF EXTENDED TECHNIQUES IN THE WESTERN GENRE

Definition and Brief History of the Western Film

Before exploring the roles of both music in general and the horn specifically in

the Western genre, it is first necessary to provide a working definition of the term

"Western." There are many possible interpretations of what films fall into this category,

among which are films that are actually set in the Western or Southern United States,

films which fit the "Western Spirit," those which feature cowboys (a profession not

limited to the West). Furthermore, there is a question of chronological setting; can films

be Westerns if set outside of the standard 19th century allocation? *Hidalgo* (2004), for

example, breaks several of these guidelines from the start. Although the setting of the

film is indeed located in the Western United States for a brief amount of time, the vast

majority of the movie is set in the Middle East. *Hidalgo* also pushes the chronological

setting to its limit, as it is set in 1890, the very outer reaches of the 1800s. When one

questions the ability of an animated film to fit within the western genre despite the

predominance of live-action films of this nature another quandary arises.[46] Perhaps the

best definition ignores the setting, the style, or even the subject matter of the genre and is

instead reduced to three simple objects necessary to film; "the clothes on your back, your

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[45] *Jurassic Park: The Lost World,* directed by Steven Spielberg (1997; Universal City, CA: Universal Studios, 2012), DVD.

[46] The 2011 animated feature *Rango* is arguably one of the most Western movies produced in the last decade. In fact, one of its guiding forces is a mysterious character known as "the Spirit of the West."

gun, and your horse."[47] These three characterizing necessities represent all that the

Western claims to represent. First, "the clothes on your back" signifies the ability to work

by the sweat of one's brow that is a hallmark of all cowboys, whose independence, self-

reliance and oftentimes downright stubbornness allows them to support themselves in a

land oftentimes seemingly hell-bent on their destruction. The Western often features the

land as well, with the cinema presenting sweeping shots of the landscape during main

title, chase, and many other scenes. Second, no Western would be complete without the

inclusion of a firearm of some sort, preferably a revolver or a shotgun. This is simply

another representation of the cowboys' independence; the gun allows them to enforce

their own laws and protect themselves from both man and beast, whether for good or for

ill. The horse, in turn, can be a manifestation of the tender side of the outwardly rugged

Western hero. The unbreakable bond between a cowboy and his horse is a focal point in

many westerns (including and especially *Hidalgo.*) Thus, the most accurate definition of

a Western is one that highlights the importance of being self-made, independent, and yet

fiercely loyal, regardless of where the film takes place. It is important to remember,

however, that whether the story takes place in the "Old West" or in the Arabian Desert,

the harshness of the land is critical to the hero's struggle.

The history of the Western film is nearly as varied as that of the science-

fiction/fantasy film. Some of the most famous silent films easily fall into the category of

Western, including *The Great Train Robbery* (1903), which on its own set many of the

stereotypes still seen in the genre today such as "a shoot-out and a posse pursuit."[48] While

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[47] "Western Movies," *Filmbug,* accessed March 16, 2014.
http://www.filmbug.com/dictionary/westerns.php.
[48] Kristopher Spencer, *Film and Television Scores, 1950–1979: A Critical Survey by Genre* (Jefferson, NC: McFarland and Co., 2008), 127.

the Western rose in prominence during the 1920s and 1930s, it was not until the 1940s and '50s that the style of film would reach the zenith of its popularity. Featuring superstars such as John Wayne, Tex Ritter, Gene Autry, James "Jimmy" Stewart and Roy Rogers, the epic nature of the films combined with a distinct "Americanness" allowed Western cinema to appeal to the masses of the American public.

The "cast" of Western film composers is no less star-studded than that of its actors. Aaron Copland, largely credited for establishing an American sound both in concert pieces and works for film, composed for such movies as *The Red Pony* (1949) and *Of Mice and Men* (1939). Dimitri Tiomkin, Alfred Newman, Max Steiner, Elmer Bernstein and Jerome Moross further served to maintain the popularity of the genre.[49]

The Roles of Music in the Western

To begin with the obvious, Western films often use scores in a similar fashion to the science-fiction/fantasy genre in the establishment of a setting. Music for main title sequences achieves the sense of place in a unique blend of traditional orchestral scoring and folk or "theme" songs. The most prominent Western cinematic work to do this was *High Noon* (1952), scored by Dimitri Tiomkin. The song "Do Not Forsake Me, O' My Darlin'," became an instant phenomenon and set the tone for decades of films later released with the same model of orchestral performances in addition to "pop" tunes.[50] Although these popular songs served to establish the generic American Western setting, Hollywood composers instead used broad, sweeping orchestral themes to represent the all-important landscape of the Western film. Musicologist Kathryn Kalinak describes the

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[49] Spencer, *Film and Television,* 127-129.
[50] Kathryn Kalinak, introduction to *Music in the Western: Notes from the Frontier,* ed. Kathryn Kalinak (New York and London: Routledge, 2012), 8.

phenomenon as "a primal connection between American music and the geographic space of the West…. The West, with its wide open spaces and mythic archetypes (the cowboy, the famer, the pioneer)…came to stand for the quintessential American identity in music."[51] Music to represent the topography of America was often full of leaps and bounds to represent not only the canyons, mesas, hills and valleys present in the director's concept of the Old West, but the hopefulness of the American dream itself.[52] This technique was a perfect solution for providing placement and setting to the viewer.

Another reason for the importance of music in the Western is the representation of the "Other." In contrast to the science-fiction film, the "Other" in this case is no monster derived from the imagination but is rather a historical fact. Depending on the individual movie, this can be the stereotypical Native American antagonist, the land itself, or another group of frontiersmen in the form of outlaws or rustlers. Whoever the "Other" is, their representation in the score for the film prepares the audience for the appropriate reaction to its presence on screen. For example, *The Searchers* (1956), directed by John Ford and scored by Max Steiner, begins with a main title theme resplendent with brass and tom-tom clearly foreshadowing the involvement of the "Indian" threat. *Dances with Wolves* (1990), scored by John Barry, takes a different approach. The opening theme features several solo instruments beginning with trumpet and moving to horn over a pedal tone in the low strings while the violins provide a countermelody. The overall impression this creates is of a regal nobility tempered by that typical "American" sound which

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[51] Kathryn Kalinak, *How the West Was Sung: Music in the Westerns of John Ford* (Los Angeles, CA: Berkeley University Press, 2007), 52.
[52] Kalinak, *Music in the Western,* 3.

permeates the Western genre.[53] Rather than the tom-tom, the viewer now hears the sounds of a snare drum to represent conflict, emphasizing the militant American rather than the Indian. As the music shifts into a minor key, it becomes evident that the conflict in the film will erupt not from the Native Americans but rather from the United States military. This represents a dramatic role reversal in terms of the "Other," and yet within the first several minutes of film the score has signaled this transformation quite clearly.

There is another significant deviation from the concept of the "Other" presented in the science-fiction/fantasy film. In the Western film, there is one consistent antagonist who is rarely absent; the hero himself. One of the characterizing features of the genre is a constant inner struggle within the so-called "Cowboy Hero" between the his civilized side, that which makes him the hero and is representative of the settled frontier, and his darker anti-self, which consists of the skills and lessons he has learned from the wilderness in which he has learned to survive.[54]

Example No. 1: *Red River* (1948)

Dimitri Tiomkin's score for *Red River,* a Howard Hawks film featuring an all-star cast including John Wayne, Montgomery Clift and Harry Carrey, is not as famous as his compositions for *High Noon* (1952) and *The Fall of the Roman Empire* (1964), but it is a score which typifies the musical methods used in many Westerns of the 1940s and 1950s. Tiomkin himself stated, "[In] my opinion, [*Red River*] is a classic movie."[55] Moreover, *Red River* also is representative of the Western genre's use of the horn as well.

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[53] Beth E. Levy, *Frontier Figures: American Music and the Mythology of the American West* (Los Angeles, CA: The Regents of the University of California, 2012), 246-261.
[54] Scheurer, *Music and Mythmaking,* 150-151.
[55] *Film Music: From Violins to Video*, ed. James L. Limbacher (Metuchen, NJ: Scarecrow, 1974), 60.

A glissando in the horn appears almost instantly in the main titles for *Red River*, offering a myriad of subconscious cues to the viewer in a variety of ways. In this moment the horn functions both as a fanfare and as a dramatic device used to arouse an excitable feeling in the audience. Furthermore, as this technique occurs a grand total of eight seconds into the film, the rip in this scene also serves as an identifying device for both the genre and the tone of the film. The dramatic glissando is a trope heard repeatedly in Westerns, its quick upward motion functioning to simultaneously lift the story and the rest of the score in a similar fashion to the upward motion of fourths and fifths common in both science-fiction and action/adventure cinema. It is also possible to interpret the horns in the main title sequence as a call to battle, harkening back to their historical use as communication devices in both battles and "the hunt."

Another interesting moment in *Red River* occurs in the final moments of the film, particularly in the section of score entitled "The New Brand." Yet again, the horn employs an extended technique within the first several seconds of music, this time in the outer echelons of the register. At this point in the movie, Dunson (the main character and archetypal conflicted hero-cowboy) arrives and begins a "fight to the death" with his unofficially adopted son, Matt. Despite various intrusions by hostile Native Americans in *Red River*, who mainly function as a plot device, the "Other" in this cinematic work is none other than our hero himself, Dunson. Giving in to his darker, desperate and vengeful inner self, Dunson has sworn to kill one of the only people he loves in the world over a simple act of defiance. After Dunson repeatedly fires his gun at Matt, narrowly missing him each time, and, when this fails, beating him violently, Matt throws his first punch. At this precise moment the horns begin their steep climb to a flutter-tongued B Natural 5.

The scoring here does not bode well for the outcome of the fight, as several seconds later the horns perform a gut-wrenching glissando, again into the upper register of the instrument. Another rip occurs moments later as the battle between the two cowboys grows more intense. The horn shrieks Tiomkin's score for this scene are not only maintaining the audience's interest, but are also functioning as a representation of the internal struggles that threaten to lead Dunson and Matt to their deaths. The "Other" here, unlike in the science-fiction/fantasy and horror cinematic works, lies within even those we, the audience, identify as "good." Rather than an alien and human conflict, we instead are experiencing a massive battle between man and his moral center.

Figure 3.1 Dunson and Matt After the Fight

USE OF EXTENDED TECHNIQUES IN THE HORROR FILM

Definition of the Horror Film

The horror film genre is another which requires some sort of explanation before analyzing for the simple reason that the horror film has a close cousin of the thriller

genre. I propose that the horror film is not merely one which frightens viewers and keeps them in suspense, the very definition of a thriller, but rather is one in which fits several parameters: it must provoke an intense reaction in the viewer it must contain a conflict with an "Other," and this "Other" must threaten any type of societal norm.

The intense reaction necessary for the horror film is the easiest to analyze; viewer response to a successful horror film is usually either fear or disgust (or a combination of the two). The concept of the "Other" in this genre, however, is far more difficult to define. The "Other" can be insanity within oneself, a ghost or demon, a monster, a murderous human or even an alien. The actual character of the "Other" is far less important than the role it fulfills: threatening the protagonist in some form or fashion.[57] Alfred Hitchcock's *The Birds* (1963) is horrifying not simply because seemingly normal birds are suddenly attacking people (although that idea is indeed terrifying) but because the unexplained phenomenon represents an upsetting of the societal hierarchy wherein man dominated beast, made all the more frightening by the fact that birds are such a common feature of our daily lives.

The Role of Music in the Horror Film

For many movie-goers the on-screen action and visuals are rarely the most horrifying part of cinema. Carol Clover, author of *Men, Women, and Chain Saws: Gender in the Modern Horror Film* illuminates what truly terrifies an audience: "Some viewers claim that they are more disturbed by the 'music' of horror movies than the images ad that they cover, not their eyes but their ears in the 'scary parts.'"[58] Music (and sound design) in the horror film serves to "undermine the audience's feelings of security"

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[57] Scheurer, *Music and Mythmaking,* 176.
[58] Scheurer, *Music and Mythmaking,* 176.

in every imaginable way.[59] Whether through the use of well-known classics, as is the case in Stanley Kubrick's *The Shining* (1980), which featured the exclusive use of pre-existing works, or the abandonment of traditional instrumentation in a fashion similar to the science-fiction/fantasy film, music is critical in the audience's perception of horror. Thus, the most obvious role of music in the horror film is to serve as a tool of emotional manipulation.

One of the ways composers manipulate the viewer is through the use of the ubiquitous "stinger chord." Also known as "hitting the action," this technique is simply a dramatic accent, often unexpectedly, within the score, designed to provoke an intense emotional reaction in the audience. A related method of emotional manipulation is the "red herring." An extension of the stinger technique, in the case of the red herring the music builds and increases tension to a highly dramatic point, then immediately stops the music with an accent on the last chord. Specifically, the accent occurs at the climax of both the music and the on-screen action in which something "does or *doesn't* happen."[60] Often, the character on screen will hear a noise, look down a hallway or behind a door, and instead of seeing the threat the music is clearly suggesting will see either nothing or something harmless. The audience then relaxes, only to be startled all the more when the threat arrives, usually within seconds of the actual stinger. The red herring technique is a traditional device used in other genres of film as well, but within the score for the horror it finds special preeminence. Such devices assist in the suspension of disbelief on the part

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[59] K.J. Donnelly, *The Spectre of Sound: Music in Film and Television* (London: British Film Institute, 2005), 88.
[60] Karlin and Wright, *On the Track,* 164–65.

of the viewers as well, making it quite difficult to extricate themselves from the story unfolding before them.

Music in the horror film also assists in the identification of the conflict occurring on screen. Many of the driving tensions used for horror films fall into three basic categories:

1. Normality vs. abnormality

2. Social Order vs. Social Disorder

3. External vs. Internal[61]

As such, the music for the horror film will often splits into a duality of character: there must be, as Scheurer describes, "music to underscore the normal, stable or functional and, on the other hand, there must be musical motifs that signify the abnormal, unstable or dysfunctional."[62] Identifying the type of conflict is necessary as it allows the audience to further identify the source of the "Other," and furthermore allows the music to reflect the specific type of threat. Each conflict necessarily comes with its own set of musical tropes and identifying stereotypes, and this in turn reflects in the use of the horn and its extended techniques. A composer will not score a "slasher flick" in the same manner as a psychological horror, nor a science-fiction/horror combination exactly like a paranormal/demonic film.

The music of the horror film is also important for the identification of setting, as with any other genre of film. Much of this occurs in the main title music itself, which will attempt to induce an atmosphere of fear or at the very least dread. Identifying the sub-

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[61] This list is taken from a combination of Timothy Scheurer's and Andrew Tudor's lists of types of horror films. Scheurer also includes life vs. death and health vs. disease, but in my opinion these can fall under the three basic categories listed above.

[62] Scheurer, *Music and Mythmaking,* 177.

genre and source of the "Other" is again critical for the composer, as this too will influence the scoring of the location. Any music for this purpose will also reflect at least one of the internal conflicts a horror film must present: that of the social order vs. social disorder. Many horror films begin their film in a setting considered normal, often a suburb, city or some other location typifying the American experience. The composer, in order to reflect the utter conformity of the primary setting, creates a score using diegetic music in a fashion similar to *Edward Scissorhands.* The secondary setting, that in which evil and the "Other" are dominant, will turn reflect the music of the monster itself. This monster represents a deviation from all that is normal and "good" in society, a mutation which is frequently the result of societal failure, whether the culprit be distorted family, lack of schooling, etc. The scoring for the aberration must, therefore be in its turn a mutation of normal musical sounds.

One of the most frequently employed devices for the representation of the "Other" in the horror film is dissonance. The use of such harmonic clashes creates a link between the horror monster and the science-fiction alien, and indeed the two are inextricably bound. Especially in older films such as *The Creature from the Black Lagoon* (1954) and *Frankenstein* (1931), the music produced for the monster of the horror genre will be even more violent, saturated with crashing cymbals and distorted brass. The dissonance of the monster leads to the extended use of atonality within the film score as well, further removing any sense of comfort the audience may yet possess.[63] Another technique for scoring the monster is the use of driving, percussive rhythms. Composers frequently use a rhythmic device reminiscent of a heartbeat: two quarter notes followed by a brief moment

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[63] Scheurer, *Music and Mythmaking,* 179–86.

of rest. John Williams famously utilizes this devices in his score for *Jaws* (1975), with the added tension provided by the alternation of a minor second interval between the two beats. Dynamics are also vital to the portrayal of the monster in horror. The stinger and red herring are of course effective, but without the stereotypical steady increasing of dynamic level to heighten the tension both would not achieve the desired reaction. Jerry Goldsmith's music for *The Omen* (1976) frequently employs slowly building dynamics to increase the growing suspense of the film; the cue "The Fall" begins only with soft piano and high strings, but as the demonic character of Damien becomes more frenzied the music follows suit. The track continues to rise in dynamic level until finally climaxing with frantic winds and percussion accompanying a choir (who at this point are practically screaming rather than following traditional singing practices) as the boy pushes his mother over the rails of a balcony.

Example No. 1: *The Bride of Frankenstein* (1935)

Franz Waxman (1906–1967), the composer for *The Bride of Frankenstein*, has long been heralded as one of the most important contributors from Hollywood's Golden Age, not only to the horror genre but to film music as a whole. His scores proved "just how effective original film music could be as instrument both of both terror and of suspension of disbelief.[64] In a similar vein to *King Kong* and other films from the 1930s, Waxman's music for *Bride of Frankenstein* makes frequent use of leitmotifs to represent both characters and concepts, and enhances the film by including what was at the time an unusual number of dissonances. Described as embodying "sometimes aggressive modernism, up-to-date references to popular idioms, novel sonorities and structural

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[64] Cooke, *History of Film,* 98.

resourcefulness," Waxman somehow conquered the prevailing urge of Hollywood in this decade to compose scores relatively devoid of dissonance.[65]

The score for *The Bride of Frankenstein* has been touted for its innovative use of the whole-tone scale as a primary harmonic method, but what has passed unnoticed are some of the tropes which Waxman's music helped standardize, particularly regarding the horn in horror film.[66] Waxman himself believed that "the first and foremost principle of good scoring is the color of orchestration. The melody is only secondary."[67] Instrumentation, therefore, was clearly no mere accident in the case of this composer, making his use of the horn crucial to the history of the instrument in film.

At this early point in film's history, the instrument had not become the powerhouse of movie music that it has today. Despite the absence of dramatic glissando stingers or true range extensions in *The Bride of Frankenstein*, Waxman makes use of a technique overlooked by many composers. Flutter-tonguing horns appear in two separate tracks on the soundtrack recording, namely "The Bride of Frankenstein" (the main title music) and "Strange Apparition/Pretorius's Entrance/You Will Need a Coat." The presence of flutter-tonguing in these tracks marks the stereotypical purpose of the device; signifying the presence of the "Other" while simultaneously assisting in providing setting and atmosphere. In each case, the technique helps destabilize the normally lush tone of the horn, alerting the audience to the imminent threat arriving and creating the cloud of dread necessary for a viewing of the film. Another moment in which Waxman helped to establish horror tropes is in the track "Crucifixion/The Monster Breaks Out." In this cue,

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[65] Cooke, *History of Film,* 103.
[66] James Deaville, "The Beauty of Horror," in *Music in the Horror Film: Listening to Fear,* ed. Neil Lerner (New York and London: Routledge, 2010), 188.
[67] *Film Score: The View from the Podium,* ed. Tony Thomas (Cranbury, NJ: A.S. Barnes, 1979), 55.

Frankenstein's monster escapes from his cage and sets out alone. After several moments of almost playful woodwinds reminiscent of Russian composers such as Rimsky-Korsakov, the upper strings begin sliding around chromatically, ascending the register and simultaneously driving the music forward. The tension continues to mount as the dynamics of the strings grow louder, until at last the horns burst out in a lip trill which not only sustains for several beats but also changes notes while becoming softer dynamically, clearly an announcement of the monster's impending escape from imprisonment. Following *The Bride of Frankenstein*, the trill as a representation of the monstrous has become standard fare for Hollywood composers repeated throughout the century in films such as *Mary Shelley's Frankenstein* (1994) and *The Wolfman* (2010), with the horn's specific propensity for the lip trill and its natural ability as a timbral chameleon making it the perfect vehicle for spreading terror in movie-goers.

Figure 4.1 Frankenstein's Monster and his Bride

Example No. 2: *Jaws*

Despite the risks of beating the proverbial dead horse, I selected yet another John Williams score to analyze for the horror genre. The blockbuster movie *Jaws* makes an interesting study for several reasons. First, because the treatment of the "Other" in this film, in this case the Great White Shark, is particularly effective at providing a voice for a creature which has none; the shark neither speaks nor growls nor moans. It becomes the sole responsibility of the music to invoke the desired reaction from the audience when the creature is either near or on-screen. Second, one would be hard-pressed to find a horror score as saturated with brass as Williams's music for *Jaws.* For example, one of the most famous horror films (and soundtracks for that matter) is Alfred Hitchcock's *Psycho* (1960). Bernard Herrmann's highly esteemed score is not orchestrated with the traditional full orchestra but rather eliminates all instruments but the strings. The instrumentation of *Psycho* has the effect of shifting timbral balance allowing the violins to shriek in the famous shower scene, which with the inclusion of winds and percussion might have become overblown.

Jaws itself fits the category of the horror film splendidly; it most certainly provokes an intense reaction in the viewer, it contains conflict with an "Other" (the shark), and the shark itself threatens the societal norm of man dominating beast. As such, the music follows typical horror-scoring conventions as well. Dissonances rule the score, stingers and red herrings occur judiciously and percussive rhythms pervade throughout. However, Williams makes less of an attempt to alienate the viewer through strange instrumentation than do many other horror films, preferring to retain the traditional

orchestra.[68] The preservation of the brass in *Jaws* allows ample opportunity for the

orchestrator to use the horn's extended techniques and achieve the desired effects.

 Jaws begins with a pair of (drunken) teenagers deciding to go for a moonlight

swim. As the young woman (Chrissie) begins swimming, there is a distinct lack of music

of any sort, and the only sounds are those of the water and a floating buoy. As her even

more inebriated friend attempts to undress himself on shore, the camera returns to

Chrissie. At this precise moment, non-diegetic underscoring begins, using an eerie harp

and violins playing softly in their upper register to begin a sense of foreboding. The

camera then shifts point of view so the audience is now looking up at Chrissie through

the water, echoing a shift in the music as well. The low strings begin the iconic minor

second theme representing the off-screen presence of the colossal (but at this point

unidentified) Great White. Chrissie gives a sudden jerk accompanied by a stinger in the

orchestral winds as the shark bites her leg and begins dragging her through the water. The

Great White pulls the thrashing and screaming Chrissie around for several more

moments, but roughly ten seconds before she is dragged under for the final time, the

sounds of low and ominous stopped horn quickly crescendo as they cut through the harsh

orchestral texture. The stopped horn technique being used here is fulfilling the film's

need for a direct representation of the monster hidden below the waves, and in fact

through the horns Williams gives the monster the growl it will never physically utter.

 One of the most exciting uses of the horn in *Jaws* unfortunately never even made

it on screen, although it remains in the "Collector's Edition" soundtrack. Entitled "Shark

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[68] There is one odd thing about Williams's instrumentation: he gives the tuba's extreme upper register the main melodic theme. The high range of the tuba is infrequently featured at best, but in this case it provides an appropriate amount of eeriness and allows the viewers' subconscious to understand that the massive Great White present in the film is an abnormality.

Attack," this cue was originally intended to accompany the scene in which the fisherman Quint is devoured by the shark. The track is particularly effective in serving the dual purposes of emotional manipulation and suspending disbelief. The music begins with a soft tremolo in the low strings followed quickly by the sounding of a bassoon which is almost immediately disrupted by shrill cry from the horns in the form of a trill on an A Flat/G Sharp 5 at a terrifyingly loud dynamic. The trill then transforms into flutter tonguing, illustrating the intense danger all on board the ship now face. The unexpectedness of the horns allows them to further serve as a form of stinger chord, which in turn intensely startles the audience.

The horn again serves as a stinger in the "Barrel off Starboard" recording on the soundtrack. At this point, the crewmembers have managed to secure three large, air-filled barrels to the shark's dorsal fin. However, the Great White has been able to submerge all three for some time, and as Brody (the sheriff), Quint, and Hooper (the marine biologist) busy themselves around the boat in an attempt to destroy the shark, a sudden stinger and subsequent glissando up to a C6 in the horns announces the reappearance of Jaws himself. The scoring of this rip in the upper stratosphere of the horn proves aurally analogous to a scream, intensifying the terror of the moment.[69] The horn here is now not only being used to keep the audience emotionally involved but to further represent the monster's physical actions in a form of "mickey-mousing."[70]

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[69] Steven Spielberg, director of the film, actually labeled *Jaws* as a "primal scream movie,
 therefore this analogy seems particularly appropriate. Mervin Cooke, *A History of Film Music* (Cambridge, UK: Cambridge University Press, 2008), 461. [now THIS seems like a good point to bring into the body of the text, if the horn can serve as a "scream"]
[70] "Mickey-mousing" is a film-scoring technique wherein "illustrative musical effects [are] synchronized with specific events in a film's physical action." Cooke, *History of Film,* 29.

Figure 4.2 The Shark Devours Quint

CONCLUSION

Often overlooked academically, the horn and its considerable arsenal of extended techniques including stopped horn, glissandos, lip trills, flutter tonguing, and an extended range serve many crucial and variable roles within films of all genres. The science-fiction/fantasy, Western, and horror categories in particular make extensive use of the instrument. Composers make frequent use of the horn to emphasis the nefarious "Other" in all three genres, as well as providing setting and familiarity for the viewer. Furthermore, the horn proves a particularly effective method of emotionally manipulating the audience.

APPENDIX A: TABLE OF RECORDINGS

Genre	*Technique*	*Film (Year)*	*Track (Time)*	*Composer*
Science-Fiction/Fantasy	**Stopped Horn**			
		Close Encounters of the Third Kind (1977)	"Chasing UFOs," :24 "TV Reveals," :47 "Climbing the Mountain," :24?	John Williams
		Star Wars: A New Hope (1977)	"The Millennium Falcon/Imperial Cruiser Pursuit," 1:40 "Shootout in the Cell Bay/Dianoga," 2:22	John Williams
		Superman (1978)	"Misguided Missiles and Kryptonite," 1:52-2:13 "Chasing Rockets," 1:14 "Superfeats," :01-:10, :19-:27, 1:17-1:27 "Finale and End Title March," :06	John Williams
		Star Trek: The Motion Picture (1979)	"Klingon Battle," :17-:21, :34-:37, 2:21-2:28	Jerry Goldsmith
		Star Wars: The Empire Strikes Back (1980)	"The Imperial Probe/Aboard the Executor," 1:41 "The Battle of Hoth," 11:44, 11:55 "Han Solo and the Princess," 1:58 "Carbon Freeze/Darth Vader's Trap/Departure of Boba Fett," 4:36, 5:40, 5:53, 6:35, 6:47	John Williams
		Indiana Jones: Raiders of the Lost Ark (1981)	"In the Jungle," 1:15?, 2:43 "Flight from Peru,":41 "A Thought for Marion/To Nepal," :48 "Bad Dates," :32 "Indy Rides the Statue," :07	John Williams
		E.T. The Extraterrestrial (1982)	"Bait for E.T.," :06, 1:28	John Williams

Genre	Technique	Film (Year)	Track (Time)	Composer
			"Meeting for E.T.," 1:41, 1:51 "E.T.'s New Home," 1:23 "E.T. and Elliott Get Drunk," :24	
		Star Wars: Return of the Jedi (1983)	"Bounty for a Wookiee," :34, 1:35 "Luke Confronts Jabba/Den of the Rancor/Sarlacc Sentence," 3:26 "The Emperor Arrives/The Death of Yoda/Obi-Wan's Revelation," :44 "Speeder Bike Chase/Land of the Ewoks," 7:57, 8:11 "Brother and Sister/Father and Son/Heroic Ewok," 5:19 "The Battle of Endor 1," 4:36	John Williams
		Indiana Jones: The Temple of Doom (1984)	"Indy Negotiates," :06-:12, :54 "The Nightclub Brawl," :30 "Map/Out of Fuel," 1:14 "The Scroll/To Pankot Palace," 2:56 "Bug Tunnel/Death Trap," :15, 1:09, 2:30	John Williams
		Indiana Jones: The Last Crusade (1989)	"The Boat Scene," :24, :40, 2:00 "Ah, Rats!!," :34, 2:41	John Williams
		Jurassic Park (1993)	"The Raptor Attack," 2:10 "Dennis Steals the Embryo," 1:51 "Eye to Eye," 4:19 "T-Rex Rescue and Finale," 2:14, 5:14	John Williams
		Jumanji (1995)	"Jumanji," 2:33	James Horner

Genre	Technique	Film (Year)	Track (Time)	Composer
		Jurassic Park: The Lost World (1997)	"The Island Prologue," 3:00, 3:41, 4:20 "Hammond's Plan," 2:58-3:06	John Williams
		Star Wars: The Phantom Menace (1999)	"Death Warrant for Qui-Gon and Obi Wan," :52 "Qui-Gon and Obi-Wan Rescue the Queen," :58	John Williams
		The Mummy (1999)	"Imhotep," 2:38 "Night Boarders," :12 "The Caravan," 1:51 "My Favourite Plague," 1:04 "Rebirth," :20	Jerry Goldsmith
		The Mummy Returns (2001)	"Scorpion Shoes," :40, :50-1:00 "Imhotep Unearthed," 2:06, 3:42, 3:54 "A Gift and a Curse," 1:03, 3:17? "Sandcastles," :08 "Pygmy Attack," 3:12	Alan Silvestri
		Harry Potter and the Sorcerer's Stone (2001)	"In the Devil's Snare/The Flying Keys," :01-:43	John Williams
		The Planet of the Apes (2001)	"The Hunt," 4:41 "Branding the Herd," :13-23 "Escape from Ape City/The Legend," 2:05 "Ape Suite #2," 2:04-2:11 "Preparing for Battle," :30-:45, :52 "The Battle Begins," 2:05, 3:17 "The Search and the Hunt," 2:29, 2:39 (Open to Stopped)	Danny Elfman
		Harry Potter and the Chamber of Secrets (2002)	"Meeting the Aragog," :34?, 1:40 "The Spiders," :50, 1:32 "Cornish Pixies," :05	John Williams

			"Polyjuice Potion," 1:44- 2:00 "Cakes for Crabbe and Goyle," 1:58, 2:20 "Dueling the Basilisk," :41-1:05	
Genre	*Technique*	*Film (Year)*	*Track (Time)*	*Composer*
		Star Wars: Attack of the Clones (2002)	"Zam the Assassin and the Chase through Coruscant," :15-:25, :45, 1:26, 8:20-8:34, 8:43-8:48, 9:55 "The Meadow Picnic," 3:43-3:51 "Confrontation with Count Dooku and Finale," :01, :43-47	John Williams
		Pirates of the Caribbean: The Curse of the Black Pearl (2003)	"The Black Pearl," 1:45, 1:55	Klaus Badelt
		Harry Potter and the Prisoner of Azkaban (2004)	"Monster Books and Boggarts," :39, :58 "The Werewolf Scene," 3:18	John Williams
		King Kong (2005)	"Defeat is Always Momentary," :32, 2:15 "It's in the Subtext," 1:01 "Two Grand," 1:08 "Last Blank Space on the Map," :51 "That's All There Is…," :31, :54, 2:02	James Newton Howard
		The Chronicles of Narnia: The Lion, the Witch and the Wardrobe (2005)	"The Blitz," 2:11 "The White Witch," 3:00, 4:30 "Knighting Peter," 1:07, 1:15-1:22 "The Battle," 1:36	Harry Gregson-Williams
		The Chronicles of Narnia: Prince Caspian (2008)	"Journey to the How," 3:34 "Miraz Crowned," :56	Harry Gregson-Williams
		The Dark Knight (2008)	"A Little Push," 2:17	James Newton Howard/Hans Zimmer

Genre	Technique	Film (Year)	Track (Time)	Composer
		Star Trek (2009)	"Run and Shoot Offense," 1:47-1:59	Michael Giacchino
		The Chronicles of Narnia: The Voyage of the Dawn Treader (2010)	"Lucy and the Invisible Mansion," 4:03 "Into Battle," 2:48, 3:09, 8:26	David Arnold
		Harry Potter and the Deathly Hallows Part 1 (2010)	"Polyjuice Potion/Hedwig's Theme," 1:26 "Dobby," 2:35	Alexandre Desplat
		Harry Potter and the Deathly Hallows Part 2 (2011)	"The Diadem," :37	Alexandre Desplat
		The Hunger Games (2012)	"Entering the Captiol," 1:25-1:40	James Newton Howard
		After Earth (2013)	"Nest Battle," 1:32	James Newton Howard
	Glissando			
		Star Wars: A New Hope (1977)	"Burning Homestead," 2:20 "Shootout in the Cell Bay/Dianoga," 2:21 "Landspeeder Search/Attack of the Sand People," 1:28	John Williams
		Close Encounters of the Third Kind (1977)	"The Mountain," 3:11 "Outstretch Hands," :45	John Williams
		Star Wars: The Empire Strikes Back (1980)	"The Battle of Hoth," 3:27, 4:39, 6:07-6:23	John Williams
		Indiana Jones: Raiders of the Lost Ark (1981)	"The Basket Game," 2:22, 2:27 "Desert Chase," :01-:20, 5:01 "The Miracle of the Ark," 3:30, 3:50*, 4:22-4:26	John Williams
		E.T. The Extraterrestrial (1982)	"Escape/Chase/Saying Goodbye," 6:42	John Williams

Genre	Technique	Film (Year)	Track (Time)	Composer
		Star Wars: Return of the Jedi (1983)	"Bounty for a Wookiee," :19 "Luke Confronts Jabba/Den of the Rancor/Sarlacc Sentence," 3:46-3:50, 4:28-4:33, 6:37 "The Pit of Carkoon/Sail Barge Assault," 3:01 (Rip to trill), 4:09-4:12 "The Battle of Endor 1," 4:51, 6:27, 7:13-7:32, 10:34, 11:35 "The Lightsaber/The Ewok Battle," 2:18, 2:27, 3:11 "The Forest Battle," 1:21	John Williams
		Indiana Jones: The Temple of Doom (1984)	"Slalom on Mt. Humol," :36 "Saving Willie," :09, :46 "The Sword Trick," :12 "The Broken Bridge/British Relief," 2:22 "End Credits," 1:15, 1:28	John Williams
		Jurassic Park (1993)	"Incident at Isla Nublar," 1:59 "Eye to Eye," 5:46 "T-Rex Rescue and Finale," 5:43	John Williams
		Jurassic Park: The Lost World (1997)	"The Island Prologue," 3:28, 4:23 "The Hunt," :46, 1:33, 2:00, 2:21 "Rescuing Sarah," :29, 2:26, 2:33 "The Raptors Appear," :53, 1:59, 3:06 "The Stegosaurus," 4:36 "Ludlow's Demise," 4:21	John Williams

			"Visitor in San Diego," 4:15, 4:33, 6:21	
Genre	*Technique*	*Film (Year)*	*Track (Time)*	*Composer*
		Star Wars: The Phantom Menace (1999)	"Attack of the Giant Fish," 58 "Escape from Naboo," 1:17 "The Flag Parade," :38 "Sebulba's Dirty Hand- Qui-Gon's Pep Talk," :58, 1:03 "Anakin Defeats Sebulba," 1:24, 1:54 "The Queen and Group Land at Naboo," :01 "Activate the Droids," :11, :22, :32 "The Battle Rages On," :01, :58-1:01, 1:23-1:32 "The Gungan's Retreat and the Queen Surrenders," 1:34 "The Parade," :13, :17, :25, :31, :33, :38, :43, :51, 1:00, 1:08, 1:12, 1:16 "End Credits," 3:40	John Williams
		The Mummy (1999)	"Tuareg Attack," 2:06	Jerry Goldsmith
		Planet of the Apes (2001)	"Main Titles- Instrumental," 2:29 "Ape Suite #1," 1:50 "The Hunt," :52, :56, :59, 1:19, 1:22, 3:29, 3:34, 3:37 "The Dirty Deed," 1:28 "Ape Suite #2," 1:04, 1:07, 1:09 "Thade Goes Ape," 1:50-2:06 "Preparing for Battle," :57, 1:53, 3:12 "The Battle Begins," 1:02-1:14 "Main Title Deconstruction," :59-1:04, 1:31	Danny Elfman

Genre	Technique	Film (Year)	Track (Time)	Composer
		The Mummy Returns (2001)	"Evy Kidnapped," 3:41 "A Gift and a Curse," 3:49 "Pygmy Attack," 2:19, 2:25	Alan Silvestri
		Star Wars: Attack of the Clones (2002)	"Love Pledge and the Arena," 5:26	John Williams
		Pirates of the Caribbean: The Curse of the Black Pearl (2003)	"Fog Bound," 1:30 "Will and Elizabeth," 1:19 "Swords Crossed," 2:33-2:34 "Barbossa is Hungry," 3:09-3:19	Klaus Badelt
		Harry Potter and the Prisoner of Azkaban (2004)	"Aunt Marge's Waltz," 1:13	John Williams
		King Kong (2005)	"Something Monstrous," 1:45 "Head Towards the Animals," 2:19, 2:23 "Tooth and Claw," :14, 1:34 "Captured," :09-:13 "Beauty Killed the Beast II," :58 "Beauty Killed the Beast III," :25-:28, :40-:45	James Newton Howard
		Star Wars: Revenge of the Sith (2005)	"Battle of the Heroes," 2:13 "General Grievous," :06	John Williams
		Eragon (2006)	"Fortune Teller," 2:51	Patrick Doyle
		Night at the Museum (2006)	"Out of Africa," :12	Alan Silvestri
		Chronicles of Narnia: Prince Caspian (2008)	"Caspian Flees," 3:45 "Journey to the How," 2:15	Harry Gregson-Williams
		The Dark Knight (2008)	"I'm Not a Hero," 5:32	James Newton Howard/Hans Zimmer
		Avatar (2009)	"War", 3:53	James Horner

Genre	Technique	Film (Year)	Track (Time)	Composer
		Star Trek (2009)	"Star Trek," :54	Michael Giacchino
		Chronicles of Narnia: the Voyage of the Dawn Treader (2010)	"Into Battle," 3:35, 4:00	David Arnold
		Alice in Wonderland (2010)	"Bandersnatched," :09, :11, :14	Danny Elfman
		The Avengers (2013)	"Doors Open from Both Sides," :41 "Avengers," :57-1:04	Alan Silvestri
	Trills			
		Star Wars: A New Hope (1977)	"Imperial Attack" 3:14	John Williams
		Star Wars: Return of the Jedi (1983)	"The Battle of Endor I," 5:35? "The Battle of Endor II," :09	John Williams
		Jurassic Park (1993)	"Eye to Eye," 5:40	John Williams
		Jumanji (1995)	"Monkey Mayhem," :41, :44, :46, :49	James Horner
		The Mummy Returns (2001)	"Imhotep Unearthed," :48 "Sandcastles," :19 "Pygmy Attack," 2:02, 3:00	Alan Silvestri
		Planet of the Apes (2001)	"Escape from Ape City/The Legend," 1:49?	Danny Elfman
		Pirates of the Caribbean: The Curse of the Black Pearl (2003)	"Barbossa is Hungry," 1:43-1:47 "Bootstrap's Bootstraps," 1:14	Klaus Badelt
		King Kong (2005)	"Last Blank Space on the Map," 3:34, 3:38 "It's Deserted," 6:20, 6:31 "Head Towards the Animals," :16	James Newton Howard

		Harry Potter and the Goblet of Fire (2005)	"Golden Egg," 4:56	Patrick Doyle
Genre	*Technique*	*Film (Year)*	*Track (Time)*	*Composer*
		Eragon (2006)	"Battle for Varden," 7:20, 7:32, 7:49, 7:56	Patrick Doyle
		Avatar (2009)	"War," 4:27	James Horner
		Chronicles of Narnia: Voyage of the Dawn Treader (2010)	"Market Forces," 1:22 "Lucy and the Invisible Mansion," 2:53, 2:58	David Arnold
		Harry Potter and the Deathly Hallows Part 1 (2010)	"Bathilda Bagshot," 3:34	Alexandre Desplat
		Harry Potter and the Deathly Hallows Part 2 (2011)	"Broomsticks and Fire," :51 "Showdown," :31	Alexandre Desplat
		The Hunger Games (2012)	"Muttations," 2:12	James Newton Howard
		The Avengers (2013)	"Subjugation," 2:38	Alan Silvestri
	Range (Above A5)			
		Close Encounters of the Third Kind (1977)	"Who Are You People," :08 "The Mothership," 1:24, 1:29	John Williams
		Star Wars: A New Hope (1977)	"Imperial Attack," 4:28 "Landspeeder Search/Attack of the Sand People," 1:28 "The Millennium Falcon/Imperial Cruiser Pursuit," 2:36, 2:57 (repeated) "Shootout in the Cell Bay/Dianoga," :25 "The Trash Compactor," 2:44, 2:52 "Ben Kenobi's Death/Tie Fighter Attack," :33	John Williams
		Superman (1978)	"Leaving Home," 4:19	John Williams

Genre	Technique	Film (Year)	Track (Time)	Composer
		Star Trek: The Motion Picture (1979)	"Klingon Battle," :52, 1:07	Jerry Goldsmith
		Star Wars: The Empire Strikes Back (1980)	"Jedi Master Revealed/Mynock Cave," 4:59, 5:22 "Rescue from Cloud City/Hyperspace," 1:51 "The Rebel Fleet/End Title," 4:26	John Williams
		Indiana Jones: Raiders of the Lost Ark (1981)	"The Map Room: Dawn," 2:51 "Desert Chase," 1:00, 1:10, 4:56 "The Miracle of the Ark," 3:50	John Williams
		E.T. the Extra Terrestrial (1982)	"Searching for E.T.," 3:41 "Escape/Chase/Saying Goodbye," 3:18	John Williams
		Star Wars: Return of the Jedi (1983)	"Han Solo Returns," 1:35 "Luke Confronts Jabba/Den of the Rancor/Sarlacc Sentence," 3:15, 5:04, 5:11 "The Pit of Carkoon/Sail Barge Assault," 3:01 (Rip to Trill on B Natural!), 5:35-5:39 "The Battle of Endor I," 6:12, 6:43 "The Lightsaber/The Ewok Battle," 2:50, 3:45 "The Battle of Endor II," 5:39 "The Battle of Endor III, 5:23 "The Forest Battle," 1:56	John Williams
		Indiana Jones: The Temple of Doom (1984)	"Fast Streets of Shangai," 1:50 (repeated) "Map/Out of Fuel," :30, 3:00	John Williams

Genre	Technique	Film (Year)	Track (Time)	Composer
			"Slalom on Mt. Humol," :33 "Short Round's Theme," 1:12 "Bug Tunnel/Death Trap," 1:09, 2:30 "Approaching the Stones," 1:06 "Short Round Helps," :39 (repeated), 2:20, 2:36, 3:45 "Water!," :56, 1:45 "The Broken Bridge/British Relief," 2:22 "End Credits," 2:07	

Genre	Technique	Film (Year)	Track (Time)	Composer
		Indiana Jones: The Last Crusade (1989)	"Indy's Very First Adventure," 6:45, 7:14 "Escape from Venice," 1:57 "Scherzo for Motorcycle and Orchestra," 1:12	John Williams
		Jurassic Park (1993)	"Incident at Isla Nublar," 1:45-1:55 "Journey to the Island," 2:58, 7:30 "The Raptor Attack," 2:22	John Williams
		Jurassic Park: The Lost World (1997)	"The Island Prologue," 3:28 "Rescuing Sarah," 2:26, 2:33 "The Raptors Appear," :53, 1:59, 3:06 "The Stegosaurus," 4:30, 4:36 "Ludlow's Demise," 4:21	John Williams
		Star Wars: The Phantom Menace (1999)	"Boarding the Federation," :10 "Qui-Gon and Darth Maul Meet," 1:06 "The Republic Pilots Take Off Into Space," :18 "The Battle Rages On," :01	John Williams

			"The Gungan's Retreat and the Queen Surrenders," 1:02, 2:06 "End Credits," 3:29	
Genre	*Technique*	*Film (Year)*	*Track (Time)*	*Composer*
		The Mummy (1999)	"The Sand Volcano," :58	Jerry Goldsmith
		The Mummy Returns (2001)	"Evy Kidnapped," 3:41 "My First Bus Ride," 2:02 "A Gift and a Curse," 5:04 "The Mummy Returns," 5:39	Alan Silvestri
		Planet of the Apes (2001)	"Ape Suite #1," :38, 1:50 "Deep Space Launch," 2:45, 3:51 "The Hunt," :28	Danny Elfman
		Star Wars: Attack of the Clones (2002)	"Jango's Escape," 2:48 "Love Pledge and the Arena," 5:43	John Williams
		Pirates of the Caribbean: The Curse of the Black Pearl (2003)	"Fog Bound," 1:30 "Will and Elizabeth," 1:19	Klaus Badelt
		Star Wars: Revenge of the Sith (2005)	"Enter Lord Vader," 2:45	John Williams
		King Kong (2005)	"It's Deserted," 6:15 "Beauty Killed the Beast II," 1:44	James Newton Howard
		The Hunger Games (2012)	"Horn of Plenty," 1:45	James Newton Howard
	Flutter-Tongue			
		Indiana Jones: The Temple of Doom (1984)	"The Broken Bridge/British Relief," 3:20	John Williams
		The Mummy (1999)	"The Sarcophagus," 2:00	Jerry Goldsmith
		Star Trek (2009)	"Star Trek," :52	Michael Giacchino

Genre	Technique	Film (Year)	Track (Time)	Composer
Western	**Stopped Horn**			
		Stagecoach (1939)	"Stagecoach," 2:39-2:46, 4:50	Gerard Carbonara
		The Treasure of the Sierra Madre (1948)	"Bandits-Outnumbered-Federales," :55-1:05 Stopped Horn "Theatrical Trailer," 1:58	Max Steiner
		The Searchers (1956)	"Ethan Joins the Posse," :09 "No Bonfires," :32	Max Steiner
		The Alamo (1960)	"The Mexicans Arrive," :21 "Intermission," :14	Dimitri Tiomkin
		The Magnificent Seven (1960)	"Main Titles and Calvera's Visit: Allegro Con Fuoco," 2:54, 3:00 "The Council of War: Allegro Molto Marcato," :45, :52	Elmer Bernstein
		The Comancheros (1961)	"Escort," :26, :35 "Pursuit," 1:27	Elmer Bernstein
		How the West Was Won (1962)	"The River Pirates," :46	Alfred Newman
		Stagecoach (1966)	"Main Title Theme from Stagecoach," :41-:45, 1:49-1:56 "A New Passenger and the Reward," 2:31-3:05 "Family History," 1:25	Jerry Goldsmith
		Villa Rides (1968)	"Colorados in the Village/Too Many Guns/Ramirez," 1:30	Maurice Jarre
		True Grit (1969)	"Bald Mountain," :14, :20-:28, 4:14	Elmer Bernstein
		Tombstone (1993)	"The Cowboys," 1:31 "The OK Corral," :20-:30 "Cowboy's Funeral," 3:30 "The Former Fabian," 1:07, 1:25	Bruce Broughton

Genre	Technique	Film (Year)	Track (Time)	Composer
			"Looking at Heaven," 3:37-3:40	
		Hidalgo (2004)	"Montage," 4:37 "The Trap," 1:09, 1:19	James Newton Howard
Genre	**Technique**	***Film (Year)***	***Track (Time)***	***Composer***
	Glissando			
		Red River (1948)	"Main Title," :08, :16 "Roundup," :13 "On to Missouri," :28 "The New Brand," :07, :25	Dimitri Tiomkin
		High Noon (1952)	"Overture," 1:57, 2:30, 2:33, 3:23	Dimitri Tiomkin
		The Magnificent Seven (1960)	"The Journey," 2:24, 2:34	Elmer Bernstein
		The Alamo (1960)	"Crockett and the Tennesseans Enter the Alamo," :01 "The Mexicans Arrive," :28	Dimitri Tiomkin
		The Comancheros (1961)	"Indian Attack," :32	Elmer Bernstein
		The Charge of the Light Brigade (1968)	"Rescue Troops to Chukoti," 2:30	Max Steiner
		Villa Rides (1968)	"Colarados in the Village/Too Many Guns/Ramirez," :28, 1:00	Maurice Jarre
		Big Jake (1971)	"All Jake," 2:45, 2:48	Elmer Bernstein
		The Cowboys (1972)	"Wild Horses," :32	John Williams
		Tombstone (1993)	"Wyatt's Revenge," 2:15 "Finishing It," :49	Bruce Broughton
		Hidalgo (2004)	"The Trap," 2:15	James Newton Howard
	Trills			
		Big Jake (1971)	"Going Home-Finale," 1:08	Elmer Bernstein
		Hidalgo (2004)	"Arriving in the Desert," 1:35	James Newton Howard

Genre	Technique	Film (Year)	Track (Time)	Composer
			"Sandstorm," :36, :44, :48 "The Final Three," 2:09	
	Range (Above A5)			
		Red River (1948)	"Main Title," :08, :16 "Birth of Red River D," :04 "On to Missouri," :22 "The New Brand," :03	Dimitri Tiomkin
		The Big Country (1950)	"The Death of Buck Hannassey," 2:21	Jerome Moross
		How the West Was Won (1962)	"How the West Was Won," :16 "The Marriage Proposal," 1:34 "Cheyenne," :56, 1:20	Alfred Newman
		The Charge of the Light Brigade (1968)	"I'd Rather Hoped for Some Action!," :54	Max Steiner
		True Grit (1969)	"Bald Mountain," :34-:38 "Sad Departure/The Pace that Kills," 1:47	Elmer Bernstein
		Big Jake (1971)	"All Jake," 1:53 "Going Home-Finale," :13-:17	Elmer Bernstein
		The Shootist (1976)	"In the Fire," 2:45-2:49	Elmer Bernstein
		Dances with Wolves (1990)	"Journey to Fort Sedgewick/The Shooting Star/The John Dunbar Theme/Arrival at Fort Sedgewick," 3:41	John Barry
		Legends of the Fall (1994)	"Alfred, Tristan, The Colonel, The Legend…," 6:54	James Horner
Horror	**Stopped Horn**			
		The Bride of Frankenstein (1935)	"Monster Entrance," 1:38	Franz Waxman
		Jaws (1975)	"Main Title and First Victim," 2:03	John Williams

Genre	Technique	Film (Year)	Track (Time)	Composer
			"Man Against Beast," :30 "Brody Panics," :03-:20, :30-42	
		The Omen (1976)	"The Dogs Attack," 1:57-2:06 "Beheaded," :01	Jerry Goldsmith
		Mary Shelley's Frankenstein (1994)	"The Escape," 1:10-1:16, 1:25 "Friendless," 1:08-1:13	Patrick Doyle
		Trick'r'Treat (2007)	"Meet Charlie," :17 "Charlie Bites It," :23, :34 "The Elevator/Laurie on the Prowl," 1:24-1:32 "Halloween Prank," 2:15?, 3:03-3:09	Douglas Pipes
		The Wolfman (2010)	"Wolf Suite Part 1," :49, :56, 1:02, 1:09-1:13 "Dear Mr. Talbot," 1:00, 1:05, 1:10	Danny Elfman
	Glissando			
		Jaws (1975)	"Man Against Beast," :01 "Barrel off Starboard," 1:08 "Blown to Bits," :01	John Williams
		The Omen (1976)	"Broken Vows," 1:56 "Safari Park," 3:09 "The Fall," 2:53, 2:57, 3:01 "Beheaded," :15	Jerry Goldsmith
		Bram Stoker's Dracula (1992)	"Dracula- The Beginning," 1:41, 1:49, 1:55, 1:59, 2:06, 2:11, 2:17	Wojciech Kilar
		Trick'r'Treat (2007)	"It's Halloween, Not Hanukkah," 1:33, 1:35 "Not a Trick/Red and Black," 3:47	Douglas Pipes
		The Wolfman (2010)	"Gypsy Massacre," :48	Danny Elfman
		The Conjuring (2013)	"You Look Very Pretty," :45	Joseph Bishara

Genre	Technique	Film (Year)	Track (Time)	Composer
	Trills			
		The Bride of Frankenstein (1935)	"Crucifixion/The Monster Breaks Out," 2:08-2:14	Franz Waxman
		Jaws (1976)	"Shark Attack," :12	John Williams
		Mary Shelley's Frankenstein (1994)	"To Think of a Story," 2:33, 2:41 "What's Out There?" 1:34 "There's An Answer," 3:14-3:23 "A Perilous Direction," 2:54, 3:00-3:07 "The Creation," :14, :43-:50, 1:17-1:23 "Elizabeth," :38, 1:02-1:07, 3:58-4:02 "She's Beautiful," 3:00-3:05, 3:10-3:15 "He Was My Father," 5:02-5:08	Patrick Doyle
		Trick'r'Treat (2007)	"Old Mr. Kreeg," 1:13	Douglas Pipes
	Range (Above A5)			
		The Creature from the Black Lagoon (1954)	"The Creature from the Black Lagoon," 11:24	Hans Salter
		Jaws (1975)	"Barrel off Starboard," 1:08	John Williams
		The Omen (1976)	"Beheaded," :15	Jerry Goldsmith
		Bram Stoker's Dracula (1992)	"Dracula- The Beginning," 1:41, 1:49, 1:55, 1:59, 2:06, 2:11, 2:17	Wojciech Kilar
		Mary Shelley's Frankenstein (1994)	"Evil Stitched to Evil," :44 "Elizabeth," 1:52 "He Was My Father," 3:53, 3:59, 4:20-4:29	Patrick Doyle
		Trick'r'Treat (2007)	"Not a Trick/Red and Black," 3:47	Douglas Pipes

Genre	Technique	Film (Year)	Track (Time)	Composer
		The Conjuring (2013)	"You Look Very Pretty," :45	Joseph Bishara
	Flutter-Tongue			
		The Bride of Frankenstein (1935)	"The Bride of Frankenstein," :21 "Strange Apparition/Pretorious's Entrance/You Will Need a Coat," :35, :40	Franz Waxman
		The Creature from the Black Lagoon (1954)	"The Creature from the Black Lagoon," 2:05, 5:37, 11:24	Hans Salter
		Jaws (1975)	"Shark Attack," :12	John Williams
		Trick'r'Treat (2007)	"Main Titles," :50 "End Credits," :47	Douglas Pipes
		The Conjuring (2013)	"Dead Birds," :19	

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