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Clint Mansell: Music in the films "Requiem for a Dream" and "The Fountain" by Darren Aronofsky

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Clint Mansell: Music in the Films *Requiem for a Dream* and *The Fountain* by Darren Aronofsky

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Visnja Krzic

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ABSTRACT OF THE DISSERTATION

Clint Mansell: Music in the Films *Requiem for a Dream* and *The Fountain* by Darren Aronofsky

by

Visnja Krzic

Doctor of Philosophy in Music

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Professor Ian Krouse, Chair

This monograph examines how minimalist techniques and the influence of rock music shape the film scores of the British film composer Clint Mansell (b. 1963) and how these scores differ from the usual Hollywood model. The primary focus of this study is Mansell's work for two films by the American director Darren Aronofsky (b. 1969), which earned both Mansell and Aronofsky the greatest recognition: *Requiem for a Dream* (2000) and *The Fountain* (2006). This analysis devotes particular attention to the relationship between music and filmic structure in the earlier of the two films. It also outlines a brief evolution of musical minimalism and explains how a composer like Clint Mansell, who has a seemingly unusual background for a minimalist, manages to meld some of minimalism's characteristic techniques into his own work, blending them with aspects of rock music, a genre closer to his musical origins. This study also characterizes the film scoring practices that dominated Hollywood scores throughout the

twentieth century while emphasizing the changes that occurred during this period of history to enable someone with Mansell's background to become a Hollywood film composer.

The dissertation of Visnja Krzic is approved.

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TABLE OF CONTENTS

FIGURES AND TABLES

Chapter 3

Chapter 5

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Chapter 1: A Brief History of Minimalism

In 2014, the Los Angeles Philharmonic hosted a series of concerts, revivals, lectures and events at Disney Hall and other venues throughout the city to mark the half-century anniversary of musical minimalism, celebrating the genre's greatest achievements and key figures while demonstrating its vitality, relevance, and continuing influence on younger generations of composers and performers. The American composer John Adams, one of music minimalism's most famous exponents, described its influence:

> Over the past 40 years Minimalism has brought about a revolution in aesthetic sensibilities, changing the way we experience the flow of musical time and the feel of its rhythm. It has not only revitalized harmony and enabled composers to once again think big thoughts, but it has seen its influence felt in genres as far afield as rock, electronic, and film scoring.[1]

Art critic Jonathan Bernard has outlined four basic historical stages of musical minimalism. The first stage featured an increase in the complexity of proto-minimalist compositions. This was followed by "a greater concern with sonority in itself," which later led to more "explicitly harmonic" works (Bernard also describes these as "chorally oriented"), though they were still not "necessarily *tonal* in any sense." In the fourth phase, according to Bernard, increasingly tonal or "quasi-tonal" harmony came to the fore. The most historically characteristic devices of minimalism, such as "repetition in a buzzing or bustling texture," an "explicitly projected pulse," and "the cantonal sonorous profile" were by this time pushed to the background, becoming "stylistic objects."[2]

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[1] "Minimalist Jukebox," Los Angeles Philharmonic, accessed March 20, 2015, http://www.laphil.com/MinimalistJukebox.

[2] Jonathan W. Bernard, "Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music," *American Music* 21, no. 1 (Spring 2003): 114.

Timothy Johnson offers an even more precise division of minimalism's stages. Johnson's key notion is that it is now possible for one to speak of minimalism either as an aesthetic, a style, or a technique. According to Johnson, each of these three terms can describe minimalism at a certain point of its development. The first two facets, however - minimalism as an aesthetic or a style - no longer accurately represent minimal music in contemporary estimations, according to Johnson.[3]

The idea of minimalism as an aesthetic is best exemplified by the earliest minimal pieces, those from the late 1950s and early 1960s. Kyle Gann has helpfully isolated several devices through which early minimalists expressed themselves. They are 1) static harmony: the minimalist tendency to dwell on one chord, or to move back and forth among a small number of chords (minimalist music harmony also is almost always related to the diatonic scale or mode), 2) repetition: the "stuck-in-the-groove" quality of minimalist music, perhaps its "most stereotypical aspect," 3) additive processes: minimalist works' tendency to begin with a basic repeated pattern and add to it in one of a few ways: lengthening the pattern by adding notes, measures, phrases (usually in a 1, 1+2, 1+2+3, 1+2+3+4 manner), by slowing down the existing patterns, or by beginning with a silence into which certain sonorities of "recurring duration" appear, then adding more notes with each recurrence — this is one of the reasons why minimalist music was often called "process music," 4) a steady beat: a near-universal trait of minimalism is rarely if ever using a wide variety of rhythms: most famous minimalist pieces relied on a motoric eighth-note beat, or eighth- and quarter notes, or whole notes with fermatas; the important things was to avoid the "kind of mercurial rhythmic variety" of 19th-century classical pieces, 5) drones:

[3] Timothy A. Johnson, "Minimalism: Aesthetic, Style, or Technique?" *The Musical Quarterly* 78, no. 4 (Winter 1994): 742-773.

some composers were interested in drones instead of beats, hence the two poles of minimalist music - "pulse-based" vs. "drone based" music, 6) static instrumentation: early minimalist ensembles were based on a concept of everyone playing all of the time, and minimalist instrumentation was built upon the idea of music as a ritual in which everyone participates equally rather than "the classical European paradigm of the painter's palette in which each instrument adds its dash of color where needed," and 7) audible structure: structure being "right on the surface," perceptible just from listening, often from the very first hearing. Minimalism as an aesthetic also includes some non-teleological pieces, as well as purely process-oriented works, such as Terry Riley's *In C* (1964) and Steve Reich's *It's Gonna Rain* (1964).[4]

Timothy Johnson notes that among the pieces that best represent minimalism as a style, which are principally found in the works of Reich and Glass from the 1970s, some are strictly teleological and some are much less goal-oriented. The most prominent characteristics of the music when describing "the phenomenon of style" in minimalism are the constituent parts of "form, texture, harmony, melody, and rhythm." The form of pieces in the minimalist style is primarily continuous, often in the shape of an unbroken stream of rhythmic figuration flowing from the beginning of the piece until the end. Sometimes these continuous forms grow gradually from sparse rhythmic frameworks or wane after reaching climaxes. The musical texture, which

[4] Gann also cites phase-shifting (two identical phrases played at the same time but at slightly different tempi so that they go out of phase with each other), permutational processes (systematic permutation of pitches so that melodic progressions sound less obvious), metamusic (incorporating unintended acoustic details that arise as a side effect of strictly carried-out processes), linear transformation, pure tuning, and the influence of non-Western cultures. The last is not a universal nor a necessary component of minimalist music; however, many composers who began as minimalists often had no "European precedent to look to for examples of repetition or harmonic stasis," so they turned elsewhere, typically towards music associated with the "east." Minimalism therefore led directly to a much greater absorption of non-Western aesthetics and techniques by younger composers of the next generation. Kyle Gann, "Minimal Music, Maximal Impact," *NewMusicBox*, 1 November 2001, accessed January 9, 2015, http://www.newmusicbox.org/articles/minimal-music-maximal-impact/2/.

follows logically from the form, typically consists of interlocking rhythmic patterns and pulses continuing without interruption. In addition, the minimalist style generally features "high tone colors" and "an energetic disposition." The most prominent characteristic of harmony in the minimalist style is its simplicity: the harmony often incorporates familiar triads and seventh chords and is principally limited to diatonic collections, given in an "extremely slow harmonic rhythm." The melodic aspect of minimalism is perhaps its most obvious characteristic: extensive melodic lines are entirely absent and melody therefore is "confined to scant patterns" while rhythm "takes center stage." Short, repetitive rhythmic patterns are ubiquitous, and their organization, combination, and individual shapes provide the primary points of interest in the style.[5]

Echoing Johnson, composer Glenn Watkins notes that minimalism might be defined most accurately as a *technique:* a "general reduction of materials and emphasis on repetitive schemes and stasis." Thus, the term could be employed on a broader basis to describe certain features that appear in a composition, even if the piece incorporates other much less characteristically "minimalist" compositional aspects as well.[6]

The principal features of minimalist technique include the five characteristics of the minimalist style described above: a continuous formal structure, an even rhythmic texture and bright tone, a simple harmonic palette, a lack of extended melodic lines, and repetitive rhythmic patterns. The appearance of any one of these aspects alone would be insufficient to indicate the

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[5] Johnson, "Minimalism: Aesthetic, Style, or Technique?" 748.

[6] Glenn Watkins, *Soundings: Music in the Twentieth Century* (New York: Schirmer, 1988; London: Collier Macmillan, 1988), 572.

influence of minimalism, but the presence of two or more of these features in a piece would suggest that the minimalist technique is a compositional feature of that piece.

The adaptation or transformation of some of the primary characteristics of archetypal minimalist compositions arguably is another hallmark of minimalism as a technique. Timothy Johnson notes that John Adams's oeuvre provides many illustrative examples of this phenomenon: most of Adams's pieces depart substantially from the minimalist style either by altering elements of the style or by incorporating other, non-minimalist compositional characteristics. As Johnson explains, Adams employs minimalist techniques to explore minimalism's "expressive emotional potential - something the first generation (of minimalists) generally eschewed." Johnson offers as an example Adams's piece *Harmonielehre* (1984), in which he "employs the minimalist technique of repeated short melodic patterns" but goes beyond the minimalist style by "altering these patterns and varying their repetition scheme." The passage clearly "exceeds the minimalist style" in its melodic construction, yet the minimalist technique dominates the accompaniment in rhythm and texture.[7]

In comparison to Adams, large sections of Steve Reich's pieces remain dominated by persistent, repetitive pulses, and his music continues to exploit simple, often diatonic collections of pitches. Another example is the work of Dutch composer Louis Andriessen, in which the complexity of the harmonic materials exceeds the simple harmonic palette characteristic of the minimalist aesthetic and style. Even when the harmonic palette is limited to a small collection of pitches, these pitches form dissonant sonorities not usually found in "classic" minimalist pieces. Nevertheless, the minimalist technique of repetitive rhythmic and melodic patterns pervades

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[7] Johnson, "Minimalism: Aesthetic, Style, or Technique?" 26.

many of Andriessen's pieces. Composer Michael Torke likewise has combined elements of the minimalist technique with elements of jazz and popular music to create his own unique style. As Johnson notes:

> Torke represents a generation of young American composers who take Minimalism for granted and who came of age in an environment where the distinctions between pop and so-called serious musics did not have to be observed rigidly. It is a generation for whom the tonality and atonality wars had already been fought, a generation as unselfconsciously at ease with the metric complexities of Stravinsky as with the repeated formulae and radiant harmonies of Philip Glass or with the brazen energy of Madonna."[8]

Although the harmony in Torke's music is more complex than that of the minimalist style, Torke mainly relies on diatonic collections and often establishes a tonal center. Thus, despite the complex weaving of melodic patterns and the resulting non-triadic harmonic sonorities, the piece presents a relatively simple harmonic palette in comparison with many other, more chromatic contemporary works. Yet despite these affinities between Torke's music and that of the minimalist style, the rather rapid shifts between harmonic areas in his music and its constantly evolving texture indicate that his music does not conform to all of the stylistic characteristics of minimalism. Furthermore, Torke's use of the minimalist technique blends so smoothly into his compositional style that its influence is often almost imperceptible. To Torke, minimalism is simply one of any number of compositional techniques available for his exploitation, and his use of the technique does not lock him into either the aesthetic or the style. As subsequent chapters will demonstrate, this characterization applies equally as well to Clint Mansell.

Jonathan Bernard adds further methods to the minimalist techniques described above; his writings take into account only concert music, but the traits he ascribes to the composer Michael

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[8] Johnson, "Minimalism: Aesthetic, Style, or Technique?" 30.

Torke seem appropriate for a composer such as Clint Mansell, who was born only three years later. In Bernard's additional minimalist techniques, harmony is tonal and mostly consonant (or at least never "tensely dissonant"), often "nothing much other than alternation between tonic and dominant chords," making "very little go a very long way." Chromaticism is rare and often solely "decorative," or "incidental," not "presaging a modulation or any real development of material in the tonal sense… but returning to the tonic with almost no transition whatsoever." Bernard mentions that this "non-developmental treatment" is nowadays often heard in movie theaters, given that many contemporary Hollywood film-score composers use similar techniques, "endlessly recycling thematic material with little or no change from one appearance to the next." The pulse thus becomes only a steady beat, reminiscent of dance music. In the earlier, archetypal minimalist pieces, "the steady pulse comes across, at least initially, as the focus of attention," and the purpose of the gradual accumulation of pitch collections is mainly to give the pulse "something to do." Yet in pieces that employ only minimalist *technique*, conversely, the "dance-like rhythms are readily perceived as the vehicle for … harmonic practice." Bernard supports this evolution from an early minimalist style to later works that merely employ minimalist techniques by comparing two works by composer John Adams, one from an early stage in the composer's career and one from a later point.[9] Interestingly, the work of Michael Torke, a latter-day minimalist, arguably knows no earlier phase.

Kyle Gann adds that such quasi-minimalist music rarely strays from conventional musical timbres, although many of its composers use synthesizers. These composers tend to work in shorter forms than the arch-minimalists and employ more textural variety. Their

[9] Bernard, "Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music," 112-133.

preferred medium is often the mixed chamber ensemble pioneered by Glass and Reich, though without the minimalist habit of ensemble unison. Similarly to many baroque works, the music does not tend to change mood or momentum within a movement. Gann terms composers who employ minimalist techniques in such a fashion "postminimalists." As he explains, composers born in the 1940s (including the postminimalists) generally encountered minimalism in their mid- to late 20s, while those born in the 1950s discovered it in college or soon after. Gann notes that the latter constitute a "very different generation" from the earlier group, partly because they grew up listening to rock music "virtually from infancy… It was in the air, they couldn't escape its ubiquitous radio presence, and many of them performed in rock bands in high school." Among other things, this generation learned from rock music that sufficiently energetic music could appeal to a much larger audience, and in minimalism they found a new, unformed language whose rhythmic style was surprisingly easy to reconcile with pop and world music idioms.[10]

Considering minimalism as an aesthetic or style may be useful and appropriate when narrating the historical development of minimalism. Yet defining minimalism primarily as a technique, rather than a style, clarifies the term and more accurately reflects the continuing influence of minimalism on recent composers and their works. In this context, labeling a musical work as minimalist simply identifies one or more of the compositional techniques used in the piece, such as continuous form, textures consisting of interlocking rhythmic patterns and pulses,

[10] Gann, "Minimal Music, Maximal Impact."

simple (often diatonic) harmonic materials, slow harmonic rhythm, a lack of extended melody, and repetitive rhythmic patterns.[11]

It is feasible to describe most of the composers mentioned thus far — minimalist or postminimalist — as tonal composers, by one definition or another. The presence of tonality in their works operates in ways that range from generally "harmonic" but not common-practice (e.g., Steve Reich), to an approach that suggests common-practice emulation (Philip Glass, Michael Torke). What is the connection between tonality and minimalism/postminimalism? Perhaps the radical *simplicity* of the original minimalist vision merely coincided with what Gann characterizes as "the inability of American compositional practice ever completely to throw off the institutional influence of tonality."[12] There was an indifference to tonality among the early minimalists, but there was also a tendency to avoid harsh dissonance. This resulted in a gravitation towards consonant harmonies, or harmonies that mixed consonances and mild dissonances, which in turn may have suggested a more definite harmonic foundation for a work's structure. The next step was to incorporate tonal-sounding chords that mimic functionality without attaching the complexity of harmonic operations in common-practice music.

Minimalism's incorporation of tonal-sounding chords without fully adopting common-practice techniques somewhat parallels the development of rock music, and implies a potential for constructive fusion of the two genres. Jonathan Bernard notes that rock and minimalism have

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[11] Steve Reich and Glen Watkins have identified earlier pieces in the history of music that exhibit similar features to those of minimalism; certainly, the ideas of extended repetition and simplified harmonic materials have been explored in music at various points over the last several centuries. But although minimalist techniques may be traced back to these earlier works, the term probably should be reserved for pieces composed after the full development of the minimalist aesthetic in the late 1950s and early 1960s, on the grounds that the development of minimalism, first as an aesthetic, then as a style, served to highlight the technique and shaped it into a recognizable entity. Watkins, *Soundings*, 572.

[12] Gann, ""Minimal Music, Maximal Impact."

always had some attributes in common: “a steady and prominent pulse” and “a fascination with chords,” a connection that became even stronger “as minimalist music became more tonal.” Bernard, however, believes that when a composition incorporates rock inflections it “departs from the minimalist orbit” because the two genres, despite their surface similarities, differ in their “original impetus.” Minimalism, in his view, has little in common with rock’s basic dependence on “grooves" that remain unchanged over "the relatively short duration of a song.” Yet Bernard notes that the rise of progressive rock in the 1970s, with its longer and more elaborately “composed” tracks, as well as the emergence of multi-genre artists like Brian Eno, has further blurred this distinction.[13]

Rock Music and Minimalism

Even though surface-level pitch syntax and behavior in so-called “vernacular musics” like rock music may differ from those of the common-practice tradition, many underlying organizational principles do not, among them pitch centricity and hierarchy, relative consonance and dissonance, and phrase structure and function.[14] Commentators often describe harmony in rock music as less directional or functional than in conventional tonality, which is due in no small part to its origins in folk and blues genres that feature pentatonic and modal structures and often lack a leading tone.[15] Related factors include the tendency of large-scale structures in rock

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[13] Bernard, “Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music,” 112-133.

[14] Walter Everett provides a survey of tonal systems in rock music, including major, minor, modal, mixed, triad-doubled pentatonic, and chromatic systems. Walter Everett, “Making Sense of Rock's Tonal Systems,” *Music Theory Online* 10, no. 4, accessed January 15, 2015, http://mto.societymusictheory.org/issues/mto.04.10.4/mto.04.10.4.w_everett.html.

[15] As Nicole Biamonte states, analytical frameworks developed to understand these principles have been applied to modal, pentatonic, and blues-based structures in rock and other musics. Nicole Biamonte, “Triadic Modal and Pentatonic Patterns in Rock Music,” *Music Theory Spectrum* 32, no. 2 (Fall 2010): 95-110.

to be cyclic rather than goal-directed, and the textural divergence between melody and harmony.[16] In many instances, however, melody and harmony can be "analytically reconciled" through rhythmic regularization or an expanded concept of the "chord tone," encompassing traditional added notes (seconds, fourths, sixths, and sevenths) and extensions (ninths, elevenths, and thirteenths). These non-triadic tones are more acoustically dissonant than triad members, yet in many vernacular genres - including blues, jazz, and rock - non-triadic tones nevertheless are not unstable in the sense that stylistic constraints require their resolution; common-practice rules of voice-leading and dissonance treatment do not necessarily apply.[17] Instead, the relative tension and stability of scale degrees and chord structures in a given song are defined by their immediate harmonic and melodic contexts against a background of broader stylistic conventions.[18]

By contrast, a large percentage of pop-rock music is conventionally tonal, particularly the 1950s and early 1960s, and especially in genres better described as pop music, which are more likely to follow classical models of voice leading. Many modal progressions can be explained in

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[16] Theorists Allan Moore and David Temperley call this phenomenon "melodic-harmonic divorce." Allan F. Moore, "The So-Called 'Flattened Seventh' In Rock," *Popular Music* 14, no. 2 (1995): 185-201. David Temperley, "The Melodic-Harmonic 'Divorce' In Rock," *Popular Music* 26, no. 2 (2007): 323-42.

[17] As Biamonte explains, the distinction between acoustic dissonance and contextual instability reflects a more general dichotomy between dissonance-as-identity and dissonance-as-behavior. In rock music, both types of dissonance are contextual to some degree, because acoustic dissonance is affected by timbre, and can be increased through the use of distortion until intervals at the consonant end of the continuum, such as thirds, are perceived as dissonant. Biamonte, "Triadic Modal and Pentatonic Patterns in Rock Music," 4.

[18] Scholarship on rock music has to date explored several interpretative paradigms for pitch relationships in rock music: theories of harmonic function, scale degree, root motion, linear motion, and neo-Riemannian transformations. Each of these methodologies can provide some understanding of harmonic or melodic behaviors in rock music, but scale-degree theory (which associates characteristic behaviors with chords based on the scale degree of their roots) and harmonic-function theory (which groups chords that behave similarly into larger categories) prove most useful for generalizing about chord patterns. In many cases, chord hierarchy and function are established or clarified by other musical parameters such as phrase structure, hypermeter, rhythm, texture, consonance, and contour. Biamonte, "Triadic Modal and Pentatonic Patterns in Rock Music," 18.

conventionally tonal terms, especially those in the Mixolydian, Dorian, and Aeolian modes, which have a long tradition of folk-music harmonizations and are the modes closest to major and minor.[19]

Regarding the form of pop-rock music, Walter Everett notes that ‘‘the pop song typically alternates verses and choruses. These will usually be balanced by one or two statements of a contrasting bridge.”[20] In his study of rock-song form, John Covach writes that ‘‘In a verse-chorus form … the focus of the song is squarely on the chorus. … The verse serves primarily to prepare the return of the chorus.” These commonly held axioms about rock song form represent an archetype that rock theorist Brad Osborn calls the “verse-chorus paradigm,’’ a framework that tends to operates both as a methodological constraint on analysts and a compositional constraint on songwriters.[21]

It is perhaps more constructive to note that although conventional rock songs do rely on recapitulation to bring closure, nearly all rock songs, conventional or experimental, utilize repetition within individual sections. Verses can be built from a looped chord progressions, rhythmic patterns, or melodies, and sometimes from all three. Choruses often contain the same melodic hook presented twice (with or without different lyrics) for enhanced effect. In case of a rock song, therefore, one should speak of sectional plateaus rather than individual peaks, given that the same climactic event (e.g., a memorable hook or the highest note) will likely repeat

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[19] Biamonte, “Triadic Modal and Pentatonic Patterns in Rock Music,” 15.

[20] Brad Osborn, “Subverting the Verse-Chorus Paradigm: Terminally Climactic Forms in Recent Rock Music," *Music Theory Spectrum* 35, no. 1 (Spring 2013): 2.

[21] Osborn, “Subverting the Verse-Chorus Paradigm,” 1.

throughout a section.[22] Sections within a rock song can serve one of three functions: initiating, medial, or concluding. Although some sections may serve different functions within different songs (e.g., verses can function as initiating, mediating, or concluding sections), others are less flexible. Climaxes in rock music are typically structured as sectional events, a structure feature that differs from the classically oriented ‘‘tension and release’’ and ‘‘moment’’ approaches, which identify climactic points, rather than employing entire sections as sustained climaxes.[23]

[22] Osborn, “Subverting the Verse-Chorus Paradigm,” 2. Osborn also notes that studio production techniques tend to contribute to the sectional nature of rock climaxes.

[23] Osborn, "Subverting the Verse-Chorus Paradigm,” 20.

Chapter 2: A Brief History of the Film Score

Film music historian David Bordwell defines the era of classical Hollywood cinema as encompassing the years from 1917 to 1960. As a mode of filmic production, it encompassed "an integral system" consisting of individuals and groups as well as "rules, films, machinery, documents, institutions, work processes, and theoretical concepts."[1] Annette Davison notes that among these processes and concepts were the studio mode of production as well as established aesthetic norms.[2] Kathryn Kalinak describes the classical Hollywood film score as similarly "defined by a set of structural conventions" which were institutionalized as a set of filmmaking practices in the 1930s and 1940s. Uniting these practices served to "heighten the fictive reality of a film's narrative." The mixing and audiovisual editing practices of classical film scores and soundtracks also were organized around these same priorities, and included privileging dialogue as the primary carrier of narrative information, the synchronization of music and action (though not *too* closely), and the use of music for continuity and the control of narrative connotation:

> The usefulness of music as continuity - assisting smooth transitions between scenes and gap-filling between sections of dialogue - is considered important, as is the notion of a sonic hierarchy: film music must not compete with dialogue or sound effects, though it may be used to draw attention to particularly significant lines of dialogue.[3]

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[1] David Bordwell and Kristin Thompson, *Film Art: An Introduction, 5th ed.* (New York: The McGraw-Hill Companies, 1997), xiii.

[2] Annette Davison, *Hollywood Theory, Non-Hollywood Practice: Cinema Soundtracks in the 1980s and 1990s* (Burlington: Ashgate Publishing Company, 2004), 16.

[3] Kathryn Kalinak, *Settling the Score: Music and the Classical Hollywood Film* (Madison, WI: University of Wisconsin Press, 1992), 22.

Between 1930 and 1950, classically trained composers such as Max Steiner, Alfred Newman, and Erich Wolfgang Korngold formulated the symphonic style that defined the Golden Age of Hollywood film scoring. According to Justin London:

> During the classical Hollywood studio era, film scores generally adhered to Western classical traditions of rhythm and orchestration, and adopted many of the stylistic parameters of the late nineteenth-century Romantic idiom. The combination of these stylistic parameters generated a fairly uniform group style among Hollywood composers that emphasized leitmotifs, thematic writing, and symphonic orchestrations. The introduction of musical leitmotifs in films became highly conventionalized during this period. Usually this introduction involved the simultaneous presentation of the character and his or her leifmotif, especially when we were given a striking presentation of both early on in the film. A leitmotif was expected to be distinctive in its sound shape, usually brief, and morphologically distinctive, but not "too discursive," since they had to be quick enough to coordinate smoothly with the imagetrack and dialogue. While a leitmotif could have been varied in a number of parameters such as orchestration, dynamics, accompanying texture, and some small melodic or rhythmic variation (especially tempo), one could not radically alter the basic shape of the musical leitmotif without risk of losing its designative function. The mood and character of a leitmotif could change dramatically through variations in key (major versus minor), tempo, and orchestration.[4]

Donnelly narrates that after the stabilization of film music production in the Hollywood studio system in the early 1930s, film scoring techniques exhibited a "relative immutability" until the 1950s." From this point there was a gradual introduction of new musical languages and techniques. The film music of Hollywood has always proved suitable to eclectic and adaptable musicians, assimilating classical art music in the 1930s, jazz and modernist art music in the

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[4] London describes the most important characteristics of leitmotif thusly: "… a leitmotif can (1) underscore the obvious presence of a character, place, and so forth that is clearly visible on screen; (2) indicate the presence of someone/something that is otherwise obscure (out of the frame, hidden in the scene, in disguise, and so forth); and (3) indicate the "psychological presence" of a character or idea, as when character A is contemplating the absent character B - we see A while hearing B's leitmotif." Justin London, "Leitmotifs and Musical Reference in the Classical Film Score" in *Music and Cinema*, ed. James Buhler, Caryl Flinn, and David Neumeyer, (Middletown, Connecticut: Wesleyan University Press, 2000), 88-9.

1950s and 1960s, and pop music in the 1970s and 1980s. Although European art and sometimes popular cinema often followed a different procedure, Hollywood "provided a model, a quality and style to which films would aspire or from which they would differentiate themselves."[5]

Jeff Smith details a number of changes from 1950s onwards in the world of film scoring. The romantic idiom continued to be an option throughout the 1950s, but it no longer wielded such a strong influence, as Hollywood composers began to broaden the classical score's range of styles. At one end of the spectrum, polyphonic textures, modal writing, and atonality surfaced more regularly; at the other, various jazz and pop elements appeared. Along with this "broadening of styles," composers began to subtly move away from the string-dominated orchestrations associated with Hollywood's "Golden Age" of film scoring.[6] Smith believes that the paradigm shifted with advent of the soundtrack album in the 1950s; the innovation of the 1960s pop score, which "rejected the symphonic tradition of the 1930s and 1940s in favor of pop-styled orchestrations and tunes," is also particularly notable.[7] As Smith notes, motion picture soundtrack albums have become important promotional and aesthetic products in their own right in the decades following the 1960s.[8]

Pop scores during this period exhibited a number of distinctive parameters: the use of song forms, long, catchy melodies, rock and jazz orchestrations, and multi-theme formal

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[5] K.J. Donnelly, ed., "Introduction" in *Film Music: Critical Approaches* (New York: Continuum International Publishing Group, 2001), 13-14.

[6] Jeff Smith, *The Sounds of Commerce: Marketing Popular Film Music (*New York: Columbia University Press, 1998), 255.

[7] Smith, *The Sounds of Commerce,* 5.

[8] Smith, *The Sounds of Commerce,* 13.

organization.[9] In addition to this "emergence of pop music," the 1960s witnessed what Smith calls "a changing of the guard" in which Hollywood studio-era composers were supplanted by "rock stars and pop craftsmen."[10] Smith suggests that the advent of new composers, new styles, and new techniques made the decade of the 1960s a seminal era in the history of film music, during which pop and rock composers went from being bit players to dominating the film music industry. Another important side-effect of this occurrence was that the 1960s pop score became a "highly mediated art form," continuing to serve its primary dramatic function while also functioning as a highly valuable commercial commodity. The pop composers of the time were therefore able to negotiate the competing agendas of film and music as art and as commerce.[11]

At this time, composers also began to explore smaller instrumental ensembles and more varied orchestrations. Jazz elements gradually became accepted as stylistic alternatives to classically oriented, symphonic approaches. The monothematic or "theme" score, which organized its melodic and motivic material around a single popular tune rather than a group of leitmotifs or motivic cells, became very common. The mania for "title songs," which drove the development of the monothematic score, was largely a consequence of film studio ownership of record labels, which became more prevalent around 1958. Many famous musicians (e.g. jazz musicians such as Duke Ellington and Miles Davis) began to score films as a means of trading on their reputation among record buyers. The rise of records as the major avenue for "film and

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[9] Smith, *The Sounds of Commerce,* 5. Smith believes this can be correlated with broader shifts in musical tastes and in Hollywood's industrial configuration.

[10] Smith, *The Sounds of Commerce,* 6.

[11] Smith, *The Sounds of Commerce,* 6-7.

music cross-promotion" led producers to put pressure on composers to create score that were "commercially viable."[12] Then, Smith observes:

> When Isaac Hayes in 1972 received an Oscar nomination for his funky soul score for *Shaft*, this signalized both the industry change and a signal of things to come. This would seem an unlikely background for an Oscar-nominated film composer, but Hayes' emergence clearly suggests the industry's growing awareness and acceptance of pop, funk, soul, and rock musicians as legitimate scorers. Hayes' nomination was in fact the culmination of a number of historical trends that had developed over the previous fifteen years. The entry of film companies into the record industry created a strong economic base and infrastructure for the exploitation of film music. With little talent and repertoire, these record subsidiaries often organized their limited resources and promotional activities around their parent companies' film products, and in doing so, created a favorable climate for the consumption of motion picture themes and soundtracks.[13]

Smith outlines three distinct constitutive traits of pop scores of the 1960s: their use of popular idioms, their formal accessibility, and their "audibility."[14] Pop composers directly opposed the idea that music should have a subordinate function or be inaudible. They further emphasized the importance of song forms, which helped maintain the importance of functional tonality. Most common among these forms were standard verse, chorus, and bridge patterns, with 32-bar songs (i.e. AABA and ABAB) and 12-bar blues forms (i.e., AAB) highly prevalent. Similarly, the development of musical thematic units — typically just repetitive, catchy riffs and hooks — remains within a "stable" framework, both harmonically and structurally. According to Smith:

> Unlike motivic cells, which are used to give a classical piece a sense of organicity and unity, riffs and hooks are designed only to engage a listener's

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[12] Smith, *The Sounds of Commerce,* 101-102.

[13] Smith, *The Sounds of Commerce*, 146-147.

[14] Smith, *The Sounds of Commerce*, 8.

> attention, to "sell" the song, as it were, by providing a unique and instantly memorable musical idea within the confines of a standardized song form.[15]

Another feature of pop scores of the 1960s is the interchangeability of strophic and developmental forms, which, according to Smith, generated structural tension. This kind of organization distinguished the 1960s pop score from its predecessors. Pop also scores differ strongly from classical scores in terms of their approach to tone color, using highly personal timbre.[16]

In the 1960s, pop scores incorporated enough variety to fill a soundtrack album, but retained a focus on an individual theme that "was simultaneously promoted via radio, records, and television performances."[17] It seemed an imperative of the time that pop composers should work with devices, forms, and styles already familiar to film audiences. Yet far from being simply a collection of pop songs, the pop score also incorporates more standard filmic musical devices, such as "stingers and ostinatos" to carry further dramatic import.[18] Pop scores thus integrated music with plot and action, moving from the subordinate position within hierarchy of sound and image to that of equivalence.[19]

Classical scoring practices experienced a resurgence in the early- to mid-1970s with John Williams's scores for Hollywood's new "event" movies, the sci-fi and disaster "blockbusters"

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[15] Smith, *The Sounds of Commerce*, 21.

[16] Smith, *The Sounds of Commerce*, 24.

[17] Smith, *The Sounds of Commerce*, 38.

[18] Smith, *The Sounds of Commerce*, 27.

[19] Smith, *The Sounds of Commerce*, 64. Smith also notes that the late 1960s saw the logical conclusion and amalgamation of these tendencies: the compilation score. This score "simply used preexisting or original songs to furnish a film's musical cues. The compilation score sacrificed a formal elasticity when underscoring individual scenes, but it compensated for this loss through a shrewd use of musical association and allusion to reinforce aspects of setting, characterization, and theme." Smith, *The Sounds of Commerce*, 403.

directed by Steven Spielberg and George Lucas.[20] Yet according to Annette Davison, the re-emergence of scoring techniques and orchestral forces associated with classical Hollywood ultimately provided a convenient marker of the "dominant ideology in relation to which alternative scoring and soundtrack practices may assert themselves."[21] Kathryn Kalinak argues that although classical scoring has changed over time, it remains a stable set of practices which continue to exert a strong influence over more recent scores. The pop score represented a "serious challenge to the classical score," along with jazz, synth, and theme scores, but they all gradually began to conform to the structural conventions of the classical model. With Williams's scores for *Jaws* in 1975, and particularly *Star Wars* (1977), however, the "structural conventions of classical scoring were emphatically reunited with the idiom and the medium of the classical Hollywood scores produced during the 1930s and 1940s."[22]

On the margins of Hollywood during this period, a number of directors and composers, some of them from Europe, turned to the soundtrack (as well as to narrative organization,

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[20] Davison brings up number of reasons why classical scoring might have been considered appropriate to the blockbuster movies, noting that "the narrative format of the blockbuster is often organized around that of the serial," and thus "[t]hese films signaled a return to precise and efficient storytelling, to a narrative tautness more akin to classical Hollywood films which immediately preceded them in the late 1960s and early 1970s." The return to classical scoring can be seen as inseparable from the films' references to the narrative techniques of classical Hollywood. Other contributing factors include a return to "the conservative values proposed by the narratives of the earlier films" and also a desire "to signal the return of high production values to the Hollywood soundtrack" in which "the orchestra is interpreted as a demonstration of wealth, of opulence." Finally, the early 1970s saw the first major re-releases of classical scores from the studio era, including those by Max Steiner, Erich Wolfgang Korngold and other major studio film composers. Davison, *Hollywood Theory, Non-Hollywood Practice*, 3-4.

[21] Davison, *Hollywood Theory, Non-Hollywood Practice*, 6. Davison notes that Bordwell, interestingly, argues that "more recent Hollywood cinema, or what they term 'New' Hollywood cinema (from c. 1970), has absorbed conventions of the art cinema," but despite this "continues to wear its relationship to 'old Hollywood' on its sleeve, with a conservative style and conformance to generic conventions." Davison, *Hollywood Theory, Non-Hollywood Practice*, 18.

[22] Kathryn Kalinak, *Settling the Score: Music and the Classical Hollywood Film* (Madison, WI: University of Wisconsin Press, 1992), 48-49.

camerawork, and other features of the film) as a possible means of criticizing or resisting, classical Hollywood scoring and soundtrack practices and offering alternative scoring and soundtrack practices.[23] In addition, significant changes in the post-studio era, such as shifts in industry economics and a new generation of composers schooled not in Vienna but in television and pop culture, resulted, as described by Claudia Gorbman, "in an influx of new musical idioms on one hand, and a vastly more flexible range of ideas concerning the nature of placement, and effects of music in movies on the other." Director-composer collaborations sometimes lent a degree of stylistic consistency to the otherwise wildly disparate cinematic oeuvres resulting from the new "auteur generation" of filmmakers, which encompassed the French New Wave and the Film School generation in the United States, among others. According to Gorbman, the "auteur director" places "a premium on asserting control of the texture, rhythm, and tonality of his or her work, and of the social identifications made available through music choices."[24]

The Film Score and Minimalism

During the 1960s and 1970s, minimalist music was an avant-garde phenomenon. This status is reflected in the films of that era that used the style on the soundtrack: experimental shorts and features, documentaries, and foreign films were the typical genres of these decades to employ minimalism, and indeed these genres still often incorporate minimalist scores. Philip Glass's success with *Koyannisqatsi* (1982), an avant-garde film that reached a mainstream audience, led to a sudden flood of minimalist scores. The 1980s saw dozens of minimalist scores, many of which remained situated in more "high-brow" film genres, but minimalism also began

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[23] See Davison, *Hollywood Theory, Non-Hollywood Practice*, 55.

[24] Claudia Gorbman, "Auteur Music" in *Beyond the Soundtrack: Representing Music in Cinema*, ed. Daniel Goldmark, Lawrence Kramer, and Richard Leppert (Berkeley and Los Angeles: University of California Press, 2007), 151.

to be appropriated commercially. By the 1990s, minimalist soundtracks appeared in mainstream Hollywood horror and science-fiction films, and minimalist techniques were used by "non-minimalist" composers even in what are otherwise more conventional scores. This phenomenon came to the attention of the mainstream press in the late 1990s, with *Daily Variety* critic Robert Koehler exclaiming, "More than 30 years after it began to make a cultural ripple in the studios, lofts and clubs of downtown Manhattan, minimalist music is being heard all through the cineplexes of America."[25] By the first half of the 2000s, minimalist music had been absorbed into popular audio-visual culture, becoming highly commercialized in the process; it regularly appeared in television shows, commercials, and in big-budget studio blockbusters.

When the music of minimalist composers such as Philip Glass, Michael Nyman, and others broke into mainstream Hollywood film in the 1990s, film composers took notice and also began appropriating the style for their own use. As David Schiff noted in 2001, minimalism had become "an essential component of any film composer's stylistic vocabulary."[26] Composers such as Thomas Newman, James Newton Howard, Danny Elfman, Cliff Martinez, and even John Williams have used minimalist techniques in films ranging from arthouse features to major

[25] Robert Koehler, "Less is More: Minimalist music at film forefront." *Daily Variety*, January 22, 1998.

[26] David Schiff, "Music; Taking Movie Music Seriously, Like It or Not," *New York Times*, April 22, 2001, Section 2.

Hollywood blockbusters.[27][28] In the 1990s and 2000s, Hollywood composers also began employing minimalist techniques in genres besides science fiction, expanding its use even to *American Beauty* (1999), a film about a man's mid-life crisis.[29]

In her book *Unheard Melodies*, Claudia Gorbman offers a list of seven principles of the classical Hollywood film scene.[30] In her Ph.D. dissertation, Rebecca Eaton applies the same seven criteria to the notion of a standard "minimalist" score. Consider Gorbman's first principle, that of invisibility. In the classical Hollywood score, the physical source of the music (i.e., microphones, performers, etc.) should not be seen on screen unless the music is diegetic (with a visible or understood source of music appearing as part of the world occurring on screen). Eaton, correspondingly notes that "minimalist music has traditionally been nondiegetic and its apparatus invisible. In only a few cases in a fictional narrative has minimalist music been diegetic, and in each case it has been "naturalized" by its source being shown on screen."[31]

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[27] As Rebecca Eaton explains, Martinez's minimalist bent derives from his directorial collaborator Stephen Soderbergh's taste in music; the director does not like "hummable melodies" and cannot stand bombastic orchestral scores. His scores for Soderbergh therefore tend to be ambient, atmospheric, electronic, and lacking in melody. Rebecca Eaton, "Unheard Minimalisms: The Function of the Minimalist Technique in Film Scores" (Ph.D. diss., University of Texas, Austin, 2008), 177-8.
The the lack of a melody does not make music minimalist, however; the score for *Traffic*, for instance, could simply be described as an ambient score in which music occurs a small fraction of the time. But though *Solaris* does feature some ambient cues, others clearly use minimalist repetitive techniques; thus, the music has been compared to that of both Glass and Reich.

[28] John Williams was one of the first non-minimalist composers to employ minimalist techniques in his film scores, especially in his score for *Minority Report* (1994). Eaton, "Unheard Minimalisms," 94.

[29] James Buhler, interestingly, points out that this set of principles or conventions can serve as "the musical parallel to continuity editing of the imagetrack." James Buhler, Caryl Flinn, and David Neumeyer, eds., "Introduction" in *Music and Cinema* (Hanover, NH: Wesleyan/University Press of New England, 2000), 18.

[30] Claudia Gorbman, *Unheard Melodies: Narrative Film Music* (Bloomington: University of Indiana Press, 1987).

[31] Eaton, "Unheard Minimalisms," 42.

Although minimalism has no difficulty in fulfilling the convention of invisibility, minimalist scores are not always as consciously inaudible as conventional scores were assumed to be, and they often they draw more attention to themselves than the latter. Even film critics, who rarely speak about film music at all in their reviews, have noticed this effect. Eaton states there might be several reasons for this ”audible effect” of minimalist scores, including that the scores are not in the familiar idiom, and are noticeable as a result: the music is more obvious than the types of music conventionally used for emotional underscoring, even though in traditional practice, more minimalist-sounding music is typically used to smooth the “gaps” of a film during a montage or transition. Certainly, as Eaton notes, the “characteristics of the music itself draw attention to it; it is difficult to ignore a constant, precisely repeating pulse; [and] directors might be using minimalist scores intentionally bring the music to the foreground.”[32]

Gorbman’s third criterion is what she terms the signifier of emotion, and what Kathryn Kalinak calls “implicit content:” the implication of something that is not “visually discernible in the image.”[33] According to Gorbman, music used in such a way “may signify tension, excitement, romance, the irrational, or an epic feeling to what is occurring on screen.”[34] Minimalist film scores, like traditional scores, work well in establishing the mood for a scene. When combined with a fast tempo, the repeating pulse of minimalism can signify excitement or tension; with a minor-inflected mode, minimalism, just like minor-inflected conventional classical Hollywood scores, can suggest a sense of melancholy. But though as Eaton observed, minimalism “furnish a mood,” it is not as effective at underscoring emotion and romance,

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[32] Eaton, “Unheard Minimalisms,” 42.

[33] Kalinak, *Settling the Score*, *86*-87.

[34] Gorbman, *Unheard Melodies*, 26.

possibly due to being unable to avail itself of classical Hollywood musical devices and characteristics, such as "stinger" chords and the obvious musical contrasts between a soaring love theme and dissonant battle music. Minimalist music, by comparison, has limited melodic content, and its characteristically slow rate of change renders it unsuitable for moment-by-moment underscoring of the emotional beats of a scene.[35]

Similarly, the principle of narrative cueing implies music's ability to evoke a sense of time and place, point of view, or mood, or interpretation of a narrative event. For example, a film's opening title or end title music may denote genre, mood, and provide a sense of beginning and closure to the story. Minimalist film scores, like conventional ones, easily demarcate narrative levels such as the beginning and ending of a film; however, they do not as easily evoke a sense of time and place.

Gorbman's final principle, unity, implies that music is used to reinforce unity "through tonal relationships, through the 'musical envelope' provided by the opening and end title music, and through the use of musical themes or leitmotifs that are repeated and varied throughout a film." Although Gorbman admits that not "all classical scores rely on themes," she calls them the "major unifying force in Hollywood scoring."[36] These short musical themes help unify the films by acting as leitmotifs, recalling associations built up around a character or object. But minimalism usually lacks pronounced melodies or traditional themes. Instead of short leitmotifs, on the few occasions that a minimalist score actually employs music that is repeated later and thus has an opportunity to accrue dramatic associations, it typically employs a long segment of

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[35] Eaton, "Unheard Minimalisms," 127.

[36] Eaton, "Unheard Minimalisms," 137.

music. Leitmotifs are therefore much less frequent in minimalist than traditional film scores. Yet even though minimalist scores frequently lack leitmotifs, minimalism can provide an even stronger sense of unity to a film than traditional film scoring practice: instead of incorporating recurring melodic themes, Eaton argues convincingly, minimalism is especially effective at "gluing" the film together because the minimalism *itself* is heard as a "theme." "The repetitive, interlocking rhythmic cells - even if they are different - all appear/sound to the listener to come from the same source. Lacking melodic leitmotifs, the idea of repeating rhythmic pulsations takes their place."[37]

Why minimalism in film scores? As *Daily Variety* critic Robert Koehler has pointed out, minimalism's "deliberately undramatic, sometimes abstract music" represents a "risky leap" from traditional film scoring."[38] There are many potential reasons for the rise of minimalism in scores, among them the music's popularity outside of film, its divergence from convention, its use on temp tracks, the high art status of its composers, and the possibility of a lucrative soundtrack album. One of the most significant factors leading to the recent prominence of minimalism as film music is its use in temp tracks. Directors typically cut their film to pre-existing pieces of music (the temporary soundtrack or "temp track"), send the film to the composer, and the composer then tends to produce new music that sounds similar to the music on the temp track. As the popularity of minimalist music has grown both in cinema and the larger music world, so has the likelihood that a director will use a minimalist composition on a temp track. Similarly, ever since David Raksin's *Laura* and Dmitri Tiomkin's *High Noon* in the 1940s,

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[37] Eaton, "Unheard Minimalisms," 140.

[38] Koehler, *Daily Variety*.

filmmakers have been aware of film music's potential both to sell the film and to make additional money apart from box office receipts. Minimalism's potential for commercial success has been evident at least since Michael Nyman's soundtrack to *The Piano* sold over 3 million copies.[39] Philip Glass, who now can count on a built-in market for his compositions due to his fame as a composer of concert and theater music, sometimes has a bigger audience at a live performance of one of his film scores than the film had in the theater. A third possible reason for minimalism's feature into film is its difference from conventional scores. Glass declared that filmmakers often come to him "when they're looking for something a bit different" to use in a planned film.[40] As discussed above, minimalist techniques are dissimilar to the dominant model of film scoring: they are more "audible," and frequently lack traditional emotive devices. Such a score may be different enough to attract notice from critics, but many directors still consider minimalist music to be accessible to audiences because its techniques are familiar to those who grew up listening to rock music and other popular genres. Tangerine Dream, Kraftwerk, Underworld, and numerous other techno, trance, and electronica artists were influenced by minimalists, and thus, listeners familiar with these musicians are by extension at least passingly familiar with minimalist concepts. As Eaton explains:

> Put at its simplest, minimalism is the only kind of classical music which can usually be relied on to sound appealing to the countless millions of people who were raised on rock: it's loud, it's repetitive, it sometimes uses guitars, drums and bass…"[41]

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[39] Eaton, "Unheard Minimalisms," 203.

[40] Eaton, "Unheard Minimalisms," 205.

[41] Eaton, "Unheard Minimalisms," 206.

It is also worth considering, however, that minimalism's "different-but-approachable" status might at least partly arise from its similarity to earlier scoring styles: musical ostinato and motivic repetition have frequently been used in film, often as a marker of tension, since some of the earliest sound films. Rebecca Eaton also proposes a somewhat circular explanation, hypothesizing that minimalism's spread in film scores is a result of directors being "drawn to minimalism because, both through its musical characteristics [and] its prior use in other films, it has begun to acquire symbolic meaning: it is becoming a trope."[42]

Rebecca Leydon's "Toward a Typology of Minimalist Tropes" provides a new way of examining meaning in minimalist music: not simply reducing it to its standard interpretation as representing the "loss of subjectivity," but describing how different repetition strategies can contribute to a variety of affects in minimalist compositions.[43] Leydon develops six tropes that minimalist compositions may evoke via different repetition strategies: (1) the "maternal" trope (suggesting a regression to an infantile state, (2) the "mantric" (depicting a mystic state), (3) "kinetic" ("repetition depicts (or incites) a collectivity of dancing bodies"), (4) "totalitarian" (repetition entraps the musical subject, creating a "prison house effect"), (5) "motoric" (repetition "evokes an 'indifferent' mechanized process"), and (6) "aphasic" ("repetition conveys notions of cognitive impairment, madness, or logical

[42] Eaton, "Unheard Minimalisms," 105. Eaton has viewed/listened to more than 30 films that employ minimalist techniques in their scores, attempting to find any commonalities or threads between them in an attempt to answer the question ,"What has minimalism come to mean in multimedia?" Her conclusion is that, though minimalism is used in these films in a variety of ways, three primary uses of minimalism become apparent: to mark Otherness, to depict the mathematical mind, and to evoke dystopia.

[43] Though Leydon's focus is minimalist concert music, her set of tropes is perfectly applicable to film music that uses minimalist techniques.

absurdity)."[44] One element Leydon focuses on when identifying the evocation of a particular affect is whether the music's repetition is more "musematic" (repeating mostly short, unvaried gestures) or "discursive" (repeating more complete units like phrases or phrase groups); this typology is also influenced by how the ostinato interact with other musical elements, be they other repeated gestures or non-ostinati lines.[45] While Leydon's tropes can prove a valuable resource, one should be careful when employing them for use in film score analysis. Although the meanings of film music are tied to its musical attributes, they are also informed by the diegesis. It is through the interaction of music and image that the meaning becomes emergent.

[44] Rebecca Leydon, "Toward a Typology of Minimalist Tropes," *Music Theory Online* 8, no. 4 (December 2002), accessed January 10, 2015, http://mto.societymusictheory.org/issues/mto.02.8.4/toc. 8.4.html.

[45] Leydon hypothesizes that the type of repetition partly determines affect, but it is important to consider that other musical elements such as timbre, dynamics, and tempo might be as important if not even more important to the interpretation and direct experience of the music.

Chapter 3: The Mansell/Aronofsky Collaboration

Clint Mansell is the former lead singer/guitarist of the English alternative rock band Pop Will Eat Itself, which existed in the late 1980s and early 1990s. The band took its name from a quote in an *NME* Magazine article about pop music "eating itself," suggesting that popular music continuously recycles ideas, figuratively cannibalizing itself over time. The band honed their songwriting skills with a series of catchy two-minute pop songs released on EPs which, with the help of the English DJ John Peel, were played on the radio and enjoyed some popularity among university students. At a point when the band feared they had accomplished all they could with their sound, they encountered new influences in hip hop acts such as the Beastie Boys, Run DMC and Public Enemy. After replacing their trap set with a drum machine, their style continued to develop, and as a result, Pop Will Eat Itself were signed to the major label RCA in 1989 and achieved top 40 hits with songs "Can U Dig It?" and "Wise Up! Sucker." RCA's larger studio budget enabled the band to develop its potential further, and they released three successful albums on the label. The first two (*...This is This!* and *Cure for Sanity*) were recorded with the aid of legendary producer Flood, known for his work with Nine Inch Nails, U2 and many other popular groups in the 1990s. *Cure for Sanity* is widely considered the band's most experimental album, with a more electronic sound than previous efforts. RCA, meanwhile, was more interested in chart success and wanted the band to cut the lengthy instrumentals from their songs. On 1992's album *The Looks or The Lifestyle*, the band recruited a live drummer to complement their standard array of loops and pre-programmed drums and also brought back some live guitars. The record was their most commercial work to date, featuring top-20 hits like "Karmadrome" and "Bulletproof." The single "Get the Girl! Kill the Baddies!" registered as the

band's biggest hit in January 1993, peaking at number nine in the UK singles chart. By this point, RCA had already grown tired of Pop Will Eat Itself's stubbornness and dropped the band before the single was even released.

After being dropped from RCA, the members of Pop Will Eat Itself decided to sign to Infectious Records, which offered them the artistic freedom they desired. By this time, the band had ventured in a new and more industrial-based direction with the aid of long time fan Trent Reznor. This partnership brought them new popularity after signing with Reznor's Nothing Records in the United States and touring with his band Nine Inch Nails, as well as having their songs used on the Playstation game "Loaded." The following year, the band released the remix album *Two Fingers My Friends* which featured remixes by electronic artists such as The Orb, Apollo 440, Renegade Soundwave and others. They continued to explore industrial styles and were still recording and touring until 1996, even recording a collaboration with Orbital. At this point, however, the band took a break before finishing production of their next album with Reznor, and, while not officially splitting up, failed to complete the work, citing boredom and musical differences.

After the group disbanded in 1996, Mansell moved to New York to explore new musical interests. Through mutual friends in the city, he met film director Darren Aronofsky, who at the time was interested in using electronic-themed music in his debut film, *Pi*, which became an underground hit following its 1998 release. Aronofsky had never worked with any composers previously and could not afford to buy pre-existing music. Sensing an opportunity to spread his

musical wings, Mansell agreed to score the project. "We both liked hip-hop and the movies we talked about resonated with each other," Mansell says. "It seemed like we could give it a try."[1]

Since this beginning, their collaboration has been a fruitful one for both composer and filmmaker. After *Pi*, the pair have worked together on such critically acclaimed films as 2000's *Requiem for a Dream*, 2006's *The Fountain*, 2008's *The Wrestler*, which saw its principal actors, Mickey Rourke and Marisa Tomei, receive Academy Award nominations, 2010's *Black Swan*, for which its star, Natalie Portman, earned a Best Actress Academy Award, and the biblical epic *Noah* (2014).

Speaking in an interview with the *Guardian* in 2013, Mansell claims he doesn't view himself as a film composer but more of a "collaborator with somebody on their project."[2] who chooses projects for which he thinks he could contribute "something beneficial" to a film that also catches his interest. The successful films that he has scored are, in his own words, "probably not those that fit a traditional Hollywood perspective." Mansell has built a reputation as a composer who gravitates towards daring, harrowing, psychological films, such as Aronofsky's films mentioned above, as well as Duncan Jones's *Moon* (2009) and Chan-Wook Park's *Stoker* (2013). He says that usually the films he works on tend to have central character whose "headspace" he tries to "inhabit" when scoring.[3] He begins scoring the picture by "jamming" to

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[1] Bernadette McNulty, "Clint Mansell interview for Black Swan soundtrack," *Telegraph*, January 20, 2011.

[2] Glen Oliver, "ScoreKeeper with *Fountain* Composer Clint Mansell," AintItCool.Com, November 27, 2006, accessed February 2, 2015, http://aintitcool.com/node/30814.

[3] Louis Pattison, "Clint Mansell: From Pop Will Eat Itself to Hollywood Royalty," *The Guardian*, February 22, 2013, accessed February 2, 2015, http://guardian.co.uk/film/2013/feb/22/clint-mansell-stoker/.

it "either on piano or guitar."[4] This helps him to get a sense of the "natural rhythm" and themes of the film, waiting for the moment "when a certain passage lands and starts making sense with a particular scene in the film."[5] At this point, it all becomes like a jigsaw puzzle in which he is trying to "get everything to fit around" that particular idea or material.[6] Mansell says he likes repetition, which he notes is "a double-edge sword," because it can be "just another word for boring" if done badly. In Mansell's opinion, though, repetition "just really works with [Aronofsky's] storytelling," matching the evolutionary character of the plot: "As things become revealed to you or you put things together the music is part of that revelation as well."[7]

One of the film-scoring influences that Mansell cites emphatically is the music for films by the director John Carpenter, which he characterizes as "electronic, very ominous, but melodic as well" and was a point of shared admiration between him and Aronofsky. Looking back at *Pi*, Mansell says it sounds very "Carpenteresque." He and Aronofsky wanted "something that hit you, we wanted a melody, we wanted something ominous, and we wanted this brooding nature."[8]

In an interview with ScoreKeeper.com, Mansell notes that he had loved film scores all his life, but he was drawn to musical styles that matched the musical sensibilities he developed in the 1970s and '80s:

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[4] Gavin Cullen, "Clint Mansell: 'I Really Enjoyed Being Young and Stupid,'" MTV.Co.Uk, March 4, 2013, accessed February 2, 2015, http://www.mtv.co.uk/stoker/news/clint-mansell-i-really-enjoyed-being-young-and-stupid.

[5] Andrew Male, "Clint Mansell Q&A," Mojo4Music.Com, July 7, 2009, accessed February 2, 2015, http://mojo4music.com/blog/2009/07/clint_mansell_qa/.

[6] Cullen, "Clint Mansell: 'I Really Enjoyed Being Young and Stupid'."

[7] Oliver, "ScoreKeeper with *Fountain* Composer Clint Mansell."

[8] Kiran Acharya, "Unspoilt by Progress: A Conversation with Black Swan Composer Clint Mansell." TheQuietus.Com, February 9, 2011, accessed February 2, 2015, http://thequietus.com/articles/05670-clint-mansell-interview-black-swan.

> So probably the more esoteric end of film scores was not where I was coming from originally. David Bowie was a huge influence on me, but also The Ramones. At the end of the day, it's all music - it's chords, progressions and melody and rhythm, so I have at times brought a more pop sensibility to some score works that are quite melodic or catchy, or capture something that's quite instant. I've been fortunate to have worked on some films that have been part of the artistic zeitgeist."[9]

Mansell certainly regards writing music for movies as a clear step forward. "I was getting to an age where I found the format of verse-chorus-verse so dull, so nullifying," he says. "Scoring required a different impetus and a different set of requirements. After my third or fourth film I realized that, whilst you can have a style, it has to be different each time."[10]

Mansell states that he prefers to be involved with the film as early as possible, usually "before the director's cut of the film is ready."[11] Regarding his collaboration with Darren Aronofsky, Mansell reveals that the director does not temp his films with other people's music, so the work on the music is a "slow process." He says that the last thing Aronofsky would want for his movie is "something that sounds like a regular movie score," which matches the unorthodox, challenging way Aronofsky tells his stories.[12]

The "Trilogy"

Darren Aronofsky made his feature film directorial debut with the acclaimed independent feature *Pi,* which he also co-wrote. The film was honored with the Director's Award at the 1998

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[9] Oliver, "ScoreKeeper with *Fountain* Composer Clint Mansell."

[10] Graeme Thomson, "Rock Stars Storm the Movie Soundtrack World." *The Guardian*, November 19, 2009, accessed February 2, 2015, http://www.theguardian.com/film/2009/nov/19/movie-soundtracks-rock-star.

[11] Male, "Clint Mansell Q&A."

[12] Christopher Stipp, "Ten Quick Questions: Clint Mansell," ASiteCalledFred.Com, January 15, 2007, affzccessed February 2, 2015, http://asitecalledfred.com/2007/01/15/10-quick-questions-clint-mansell-you-just-have-to-dig-deeper-sometimes/.

Sundance Film Festival and an Independent Spirit Award for Best First Screenplay. His second film, the critically acclaimed *Requiem for a Dream*, premiered at the 1999 Cannes Film Festival and captivated both critics and audiences. Starring Ellen Burstyn, Jared Leto, Jennifer Connelly and Marlon Wayans, *Requiem for a Dream* went on to earn five Independent Spirit Award nominations, including ones for Best Feature and Best Director. The film appeared on more than 150 Top-Ten Lists for 2000, including those of The New York Times, Rolling Stone, Entertainment Weekly, and the American Film Institute. For her work in the film, Burstyn won the Spirit Award for Best Actress and earned Oscar, Golden Globe and SAG Award nominations. Aronofsky's next film, *The Fountain*, which premiered at the 2006 Venice Film Festival and starred Hugh Jackman and Rachel Weisz, did not garner as much critical acclaim as the previous two, but its unique storytelling and technical innovations nevertheless solidified Aronofsky's position as one of the most inventive directors and storytellers of his generation.[13]

Aronofsky says he considers *Pi, Requiem for a Dream* and *The Fountain* a trilogy. He calls it his "mind, body, spirit trilogy. *Pi* – being mind, *Requiem* – being body and *The Fountain* – being spirit." As far as a progression of style is considered, even though "they are unique of each other, there's definitely connections between them."[14]

Pi

After viewing Shinya Tsukamoto's "hyperkinetic" film *Tokyo Fist* at Sundance in 1996, Aronofsky wrote in his journal, "I want to bring cyberpunk to America." A year later, the director and his Brooklyn friends launched Protozoa Pictures to make *Pi.* Extracting maximum visual

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[13] Roger Ebert, "Requiem for a Dream Movie Review (2000)," RogerEbert.Com, November 3, 2000.

[14] Peter Sciretta, "Interview: Darren Aronofsky - Part 1," SlashFilm.Com, September 10, 2008, accessed February 1, 2015, http://www.slashfilm.com/interview-darren-aronofsky-part-1/

impact from a minimal budget, Aronofsky and his cinematographer Mathew Libatique modified cameras with heat lamps and drills, shooting the film on high-contrast reversal stock that turned every surface into a jagged edge – a perfect visual metaphor for main character Max's migraines and pervasive paranoia. Considered an "astounding debut movie," *Pi* – a lo-fi, black-and-white tale of madness and mathematics – was made for $60,000 and shot guerrilla-style on the streets and subways of New York City.[15] The film's breakout at Sundance was every director's dream, being picked up for distribution by Artisan Entertainment for $1,000,000.[16] As Aronofsky explains,

> The core of the film [*Pi*] is a thriller, but I wanted to merge genres. I grew up on Hollywood movies and was looking for something new. I was getting bored with a lot of the indie films, too, some of which were arthouse but repetitive. So that's why we came up with new camera angles, new ways of shooting with high contrast black and white film - and new ideas. *Pi* melds elements of a psychological thriller with tinges of science fiction – but not as in effects driven, futuristic films like *Star Wars,* but returning more towards the Stanley Kubrick area. … We don't need to see things blow up anymore, we have seen everything blow up from plants to planets.[17]

Being more interested in the psychological aspects of his creation, Aronofsky devised a character, Max, who believes there is a cosmic pattern to be found in the decimal representation of the number *pi*. Half-crazed with his quest and always apparently on the brink of a new lead - and perhaps the secret of the universe, no less - Max suffers hallucinations and dejection in turn. A renegade mathematician searching for numerical order in the New York Stock Exchange, Max

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[15] Alistair Harkness, "Darren Aronofsky: Requiem for a Dream," UrbanCinefile.Com, 2000, accessed February 1, 2015, http://aronofsky.tripod.com/interview26.html.

[16] Sarah Michelle Fetters. "*The Fountain* - Interview with Darren Aronofsky," MovieFreak.Com, 2006, accessed 1 February 2015, http://www.moviefreak.com/artman/publish/interviews_darren_aronofsky.

[17] Andrew L. Urban, "Darren Aronofsky's: *Pi*," UrbanCinefile.Com, 1999, accessed February 1, 2015, http://aronofsky.tripod.com/interview25.html.

is searching for an order beneath chaos, choosing the stock market because its tremendous data set of numbers offers a quantification of human behavior.

Aronofsky states that he and Libatique (the film's director of photography) constantly wanted the film to be different:

> We wanted to be visually unlike anything anyone had seen before. That's why we shot in black-or-white as opposed to black-and-white; that's why we fused in all these wild, new types of shots (such as 'Heat-Cam' and 'Vibrator-Cam'). We wanted to change film grammar and make choices that were new to the screen."[18]

Recognizing their limitations enabled the filmmakers to maximize production: they could only afford 16mm film, so he and his cinematographer decided to make the film as stylized as possible as they could with black and white. "We didn't want to make a gray film like *Clerks*. We wanted to make a black or white film, so we chose b/w reversal film. It's hard to buy, it's hard to expose and it's hard to process, but if you nail it, it's gorgeous." They also could not afford a band to record the score in a studio, so composer Clint Mansell had to build all of the music with samples from his keyboard.[19] Regarding the music, Aronofsky recalls that, because they knew they "were going to have this really abstract imagery," the only way to get the audience invested in the action was by layering sounds. Mansell, who at the time just split from his band, wrote seventy minutes of original music. The rest of the soundtrack was filled out by what they described as a "Who's Who of electronic music, from Orbital to Electric Sky Church." The sound design was done by Brian Emrich, another of Aronofsky's regular collaborators. Emrich

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[18] Joshua Klein, "3.141592…" AVClub.TheOnion.Com, 1999, accessed February 1, 2015, http://aronofsky.tripod.com/interview5.html.

[19] Timothy Greenfield-Sanders, "Sean Gullette and Darren Aronofsky," CoverMag.Com, 1999, accessed February 1, 2015, http://aronofsky.tripod.com/interview15.html.

and Mansell collaborated especially closely on the "headache scenes," exchanging sounds so that the "sound design and the score could totally intertwine."[20]

[20] Anthony Kaufman, "An Interview with Darren Aronofsky and Sean Gullette of *Pi*," IndieWire.Com, 1999, accessed February 1, 2015, http://aronofsky.tripod.com/interview2.html.

Chapter 4: Case Study: *Requiem for a Dream*

Requiem For A Dream is Darren Aronofsky's follow-up to his debut film, *Pi*. It is also an adaptation of the seminal 1978 addiction-themed novel of the same name by the author Hubert Selby Jr., a writer whose prose-style strongly resonated with Aronofsky.[1] On the surface, the script, faithfully adapted by Selby and Aronofsky, tells two parallel stories of addiction. In one, junkie hipster Harry Goldfarb (Jared Leto) slouches around with his best friend, Tyrone (Marlon Wayans), investing small amounts of cash in heroin and shooting up some of the profits. Their goal is to work up the drug-dealer food chain so that they can buy a "pound of pure" and sit back in pure bliss "while street urchins hustle their dope." With all the cash and free time, Harry promises his loving, sophisticated girlfriend, Marion (Jennifer Connelly), that he'll help her open a retail shop where she could sell some of the clothes that she designs on loose sheets of drawing paper. In the other story, Harry's mother, Sara Goldfarb (Ellen Burstyn), spends her days watching infomercials and eating chocolates alone in her small, solitary apartment near Coney Island, Brooklyn. After a vague phone call that promises to put her on television, she starts taking diet pills so that she can fit into an old, fancy dress for her big moment. As the characters in both stories spiral deeper and deeper into addiction, they descend into paranoia, self-loathing and desperation, losing their grasp of the dreams that led them into their drug frenzies, in the process becoming more selfish and more self-destructive.

Like *Pi*, R*equiem for a Dream* is distinctively shot, heavily stylized and expertly edited, both visually and audibly.[2] The film begins in the same manner as Selby's novel, enacting the

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[1] Alistair Harkness, "Darren Aronofsky: *Requiem for a Dream*," UrbanCinefile.Com, 2000, accessed February 1, 2015, http://aronofsky.tripod.com/interview26.html.

[2] For a detailed analysis of the film, see Jeff Stark, "It's a Punk Movie," Salon.com, October, 13, 2000, accessed February 1, 2015, http://www.salon.com/2000/10/13/aronofsky/.

book's first line: "Harry locked his mom in the closet." Aronofsky recalls that as soon as he read this line, he knew it would be a powerful way of opening a film. He also appreciated how subjective Selby's novel was – something the director strove for with *Pi*. He also wanted to capture the subjective tone in *Requiem*, to put the viewer in the viewpoint of the main character. In the service of this goal, the opening sequence is a split-screen: both Harry and Sara Goldfarb are the focal points.[3]

The editing style and the way Aronofsky creates montages in the film is a technique the director refers to as "hip-hop montage," which he had been developing since his student short film *Fortune Cookie*. Inspired by the hip-hop music he listened to throughout the 1980s, Aronofsky tells a story by rapidly cutting between images and sounds. He made sure to use the technique consistently across all of the stories in *Requiem* to indicate that drugs and addiction were the main themes of each vignette, not just one. There are also character moments when the hip-hop montage technique is not used, specifically when the character is reluctant to take whatever drug they are addicted to. This indicates that the characters are questioning for a moment what they are doing to themselves.[4] "The idea was just sampling images and sounds to help tell the story and push it forward," Aronofsky explains:

> I grew up in Brooklyn during the eighties and the golden age of hip-hop; before Eminem. As a kid I was a really bad graffiti artist and a really bad breakdancer but I still wanted to take some hip-hop ideas and apply them to narrative filmmaking. So that's where all the fast cutting came from. It just happened to work really well with the idea of obsession and addiction."[5]

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[3] Jeremy Kirk, "32 Things We Learned From the *Requiem for a Dream*, FilmSchoolRejects.Com, February 24, 2012, accessed February 1, 2015, http://filmschoolrejects.com/features/32-things-we-learned-from-the-requiem-for-a-dream-commentary-jkirk.php.

[4] Kirk, "32 Things We Learned From the *Requiem for a Dream*."

[5] Harkness, "Darren Aronofsky: *Requiem for a Dream.*"

After their year-long collaboration on *Pi*, which produced a very satisfactory outcome, Clint Mansell and Darren Aronofsky began working together on *Requiem for a Dream*. "When we started *Requiem* Darren said it would be a very different film - it's much more of a fable than *Pi* was," Mansell recalls. While *Pi* was "a very contemporary film, with a contemporary soundtrack and score," for *Requiem,* Aronofsky envisioned something different, something "a little more timeless … He wanted the music to not be pigeon-holed." Although one could tell that the film is set in the present time, "the fact that it uses 1970s slang for the characters, but is shot in a very modern way, displaces time a little bit."[6]

Mansell claims that Aronofsky did not initially explain in detail his objectives for the film, nor the score. Thus, although the film's musical themes "sort of came quite quickly" to him, it took quite a bit of time to work them out, "playing with the approach of them and the presentation of them, and the style." Mansell read Selby's book and Aronofsky's script a year before he started working on the project, then he went to the filming set and sought to "immerse" himself in the environment. This is not considered the norm in modern filmmaking, given that composers usually join only at the end of the project and compose the score within a month.[7]

The composer states that because Aronofsky had "grown up surrounded by hip-hop," one of the director's initial ideas was that Mansell should "take classic hip-hop records" and "rework them" to use them as a score.[8] Aronofsky wanted to "recreate the kind of environment he grew

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[6] Kiran Acharya, "Unspoilt by Progress: A Conversation with *Black Swan* Composer Clint Mansell," TheQuietus.Com, February 9, 2011, accessed February 2, 2015, http://thequietus.com/articles/05670-clint-mansell-interview-black-swan.

[7] Alex Godfrey, "Clint Mansell: Aronofsky, Reznor, and Me," Sabotage Times, November 30, 2010, accessed February 2, 2015, http://sabotagetimes.com/music/clint-mansell-aronofsky-reznor/.

[8] Acharya, "Unspoilt by Progress."

up in, where you'd hear KRS-One or Public Enemy playing in the background." Mansell recalls that he initially sent Aronofsky a CD with "about eighteen tracks, raw pieces" on it that had composed while reading the script. Aronofsky had requested the tracks to use during the initial editing sessions for the film. "For example, for the scene where Sara Goldfarb takes the weight-loss/amphetamine pills for the first time and cleanses the apartment, then they wear off and it all slows down, they initially used the song "She Watch Channel Zero?!" by the group Public Enemy." This approach, according to Mansell, didn't work. "It didn't have any emotional weight and it didn't underpin the story. It looked amazing, but it was just a cool scene with a cool piece of music under it. That's all."[9] At one point, Mansell also sampled all of the "karate chops and kicks and sound effects" from Bruce Lee's kung-fu film *Enter the Dragon*, using them in the rhythmic track to the opening theme.[10]

Mansell and Aronofsky eventually discarded the initial hip-hop approach. Seeking a different style, Mansell composed about twenty ideas, onto which they overlaid different scenes. They found that one piece in particular, which was stylistically different from everything else on the concept CD, "just worked" when played under a pivotal moment of the film, in terms of "the pace and the progression in the chords." That piece eventually became "Lux Aeterna," now considered as Mansell's hallmark work. They first tried playing "Lux Aeterna" under the scene in which Jennifer Connolly sleeps "with her psychiatrist for money, there's a big flash of thunder and she just throws up into a waste bin." This later became the cue called "Marion Barfs." At that time, Mansell only had a rough sketch of the theme — in his own words, "literally three chords

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[9] Phil de Semlyen, "Clint Mansell on Making *Requiem for a Dream*," EmpireOnline.Com, 2013, accessed February 2, 2015, http://www.empireonline.com/interviews/interview.asp?IID=1698.

[10] Godfrey, "Clint Mansell: Aronofsky, Reznor, and Me."

and maybe the "da-da da-da-da-da". Mansell claims he'd "never seen anything like it, but that approach worked every time. It was a moment of transcendence, where the music, the movie and the story just came together." "It was a progression I probably had for ages," Mansell says. "But I never used it or even thought of it." Ironically, Mansell notes that the only reason he brought the piece into *Requiem* was because it "played well" with the subsequently discarded hip-hop music concept.[11] Mansell also recalls he "had never written for strings before that point" and that he composed the theme "as simply as I knew how." His composition model at the time remained (and still remains) the Ramones: "Rhythm, bass, and a melody. … That's kind of where I came from, and still come from."[12]

Writing in *Billboard* magazine, Mitchell Peters described "Lux Aeterna" as "three chords. A skeletal melody. And an uneasy sense of pathos and dread," and noted that despite its parent film's modest box-office returns (U.S. grosses of $3.6 million, according to the film receipts tracking website Box Office Mojo), "Lux Aeterna" has taken on a life of its own beyond the screen. In the years since the release of *Requiem for a Dream* and its Nonesuch Records soundtrack album in 2000, the composition has been used in film trailers for the 2002 blockbuster film *The Lord of the Rings: The Two Towers*, most significantly, as well as *The Da Vinci Code*, *I Am Legend*, *Sunshine* and *Babylon A.D*. It has appeared in trailers for the video games *Assassin's Creed* and *The Lord of the Rings: The Return of the King*, in addition to being used in television advertising campaigns for Canon PowerShot cameras, Molson Canada beer and theCanadian wireless carrier Telus, and licensed for use on television shows such as "The

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[11] de Semlyen, "Clint Mansell on Making *Requiem for a Dream.*"

[12] Godfrey, "Clint Mansell: Aronofsky, Reznor, and Me."

Late Show With David Letterman" and "So You Think You Can Dance," as well as a promotional spot for the ABC series "Flash Forward." Rapper Lil Jon even sampled the theme on his 2002 single "Throw It Up." According to BMI vice president of film/TV relations Doreen Ringer Ross, the real turning point for "Lux Aeterna" as an in-demand licensed synch track came after it was rerecorded with an orchestra and a choir for use in the trailer for *The Lord of the Rings: The Two Towers*.[13]

After Aronofsky and Mansell determined that "Lux Aeterna" would become the aural backbone of the movie, Mansell reworked another CD of ideas he had for the film, which were mainly electronic sequences and ambient sounds. These themes "passed through this filter that was being created by 'Lux Aeterna,'" establishing the aural palette of the score. "

"Patterns" and Musical Structure in *Requiem for a Dream*

The idea of music as a model for conceiving and structuring film has been an inspiration to many filmmakers from the silent era to recent generations of MTV music video directors. The incentive for what could be called a musical approach to filmmaking originates in recognizing the similarities between music and film and a belief that the parameters shared by both arts - namely temporality, rhythm, and movement - invest film with the ability to generate a "sense of fluency, sensuality, immediacy, and even musicality" similar to that created by music.[14]

In the broadest sense, the musical approach to film is employed by all filmmakers who are inspired by music (including notable directors such as Scorsese, Lynch, Tarantino, P. T. Anderson, and many others). However, there are films in which the influence of music goes even

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[13] Mitchell Peters, "Never a Hit, Clint Mansell's "Lux Aeterna" Has Achieved Synch-Licensing Staying Power." *Billboard* 122, no. 20 (May 22, 2010): 22.

[14] Danjiela Kulezic-Wilson, "Hip-Hop and Techno Composing Techniques," *Music and the Moving Image* 1, no. 1 (Spring 2008): 19-34.

deeper to penetrate multiple layers of the film's audiovisual structure and to inspire the shaping of the film's constitutive elements: its rhythm, movement, formal microstructure, and so on. Even though examples of this approach are rare, they are evident throughout the history of film. *Requiem for a Dream* is particularly illustrative of this approach, being the result of the director's fascination with the hip-hop culture that permeated the Brooklyn of his youth in the 1980s and his attempt to apply the principles of music sampling to audiovisual aspects of film.

It is apparent from interviews that Aronofsky regarded the music as central to the construction of the entire film. For example, during the scene in which Harry and Sara (Jared Leto and Ellen Burstyn) are arguing, it is possible to an hear an orchestra tuning, contributing to the sense that, as Aronofsky puts it, "what we were about to see was a requiem." Aronofsky further states that the main focus of the construction of the film was in creating a musical composition, one that climaxes throughout the film's run-time.[15] According to Mansell, the director also sometimes employed a different metaphor, describing *Requiem for a Dream* as a monster movie: "Every time one of the characters went off the rails it was described as a victory for the monster, the addiction. The monster was a central character and when something goes really bad, that's when you hear the music."[16]

Aronofsky's application of various musical techniques and models of structuring typical of hip-hop and techno music to *Requiem for a Dream* resulted in an innovative approach to film editing and an inherently musical audiovisual style. The prominence of the soundtrack in the film and its interaction with the rhythm of the camera movement and editing thus open another

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[15] Kirk, "32 Things We Learned From the *Requiem for a Dream*.

[16] Godfrey, "Clint Mansell: Aronofsky, Reznor, and Me."

potential line of investigation into the musical sources and styles that influenced the audiovisual structuring of *Requiem for a Dream*. Emulating Danijela Kulezic-Wilson's approach to *Pi*, I will expose and investigate Aronofsky's cultivation of connections, analogies, and interactions between the film's kinetic style and formal and rhythmic structures on the one hand and the compositional techniques, models of structuring and movement in hip-hop and techno-music on the other.

Requiem for a Dream is permeated with repetitions and patterns in all elements of its narrative and audiovisual structure, on both the micro and macro levels. Indeed, rarely has the central conceit of a film been transposed so consistently and profoundly onto all aspects of its content and audiovisual design. Beside the macro patterns of main character's daily routines, the film is saturated with repetitions (and repeated variations) of the same shots: opening pill bottles, taking pills, sniffing cocaines, eye closeups, etc. The reappearances of the same motifs, themes, and shots are of course inspired and justified by the film's main idea, but Aronofsky also utilizes repetition at various levels to contribute to the creation of the film's distinctive macro rhythm. Patterns in the narrative and visual content are joined by patterns in the sound design created from a mixture of character's voices and a remarkable range of sound effects. These metrically organized, "hip-hop" montage sound effects punctuate the film's flow with deliberate regularity, thus functioning in a manner analogous to musical refrains within the film's structure.

The same imagination and precision were employed in the creation of the film's visual design, particularly the strongly kinetic aspects of the film generated by the camera work. Aronofsky employed a number of different cameras and shooting techniques when filming *Requiem for a Dream*. The decision to film characters on the street wearing a Snorri Cam — a

camera whose rig is attached to the actors themselves — highlights the characters' sense of isolation from their environment. Punctuating the film's visual rhythm at other points are shots for which Aronofsky uses a Vibrator Cam, a small camera with a long lens attached to the operator's hand and shaken vigorously, as well as numerous exterior point-of-view scenes shot with a handheld camera with the frame rate reduced to twelve to eighteen frames per second. Both techniques result in erratic, unstable visuals that highlight a sense of unease and anxiety.

The network of patterns in the editing of *Requiem for a Dream* and in the film's sonic and visual design creates a complex repetitive structure which, in its dramaturgical rhythm and the gradual intensifying of the "dynamic" level that some of the repetitions create, resembles a musical form more strongly than that of a conventional narrative film. The film's miniature montage sequences are a primary example of segments that are given a particularly significant place structurally, dramaturgically, and stylistically. Each sequence follows the same pattern consisting of a series of striking short shots rhythmically punctuated by sound effects (e.g., the bottle of pills is opened, pills are taken into the hand, swallowed). Dubbed "hip-hop montage" by Aronofsky, this trademark method of audiovisual editing originated in the sequences of his debut film, *Pi*, and developed into an elaborate editing principle in *Requiem for a Dream*.

Hip-Hop Editing

The archetypical attributes of hip-hop style in music and culture originated in the mid-1970s. Hip-hop musicians at first were less concerned with creating completely original, "copyright protected" materials and instead explored using existing and available sources for the making of new artifacts. Another aspect of hip-hop was the abandonment of conventional pop-

music forms for the opportunity to build collages of the most striking, most exciting, most "catchy" fragments of these forms.

As explained by Danijela Kulezic-Wilson, hip-hop is particularly responsible for popularizing the idea of music sampling: using fragments of existing records or other sound-sources in a shortened form and sometimes building loops out of these fragments to serve as the basis for new musical tracks. Such techniques developed initially via a DJ's interactions with one or more spinning record players. In addition to backspinning (briefly "jumping" the record backwards to repeat the section just heard), a popular technique was *punch phrasing*, which is achieved by playing a quick burst from a record on one turntable while a record on the other turntable is still playing. Yet another technique is *scratching*, which involves making a sharp forward-backward movement with the record while the needle remains in contact with it. According to Kulezic-Wilson:

> The "ruptures" and "breaks" characteristic of rap music also established themselves as features of hip-hop art in general. Breakdancing, graffiti, rapping, and musical composition demonstrate a stylistic continuity that seems to be centered around three concepts: *flow, layering*, and *ruptures in line.* For example the sweeping and curving letters ornamented with many layers in graffiti are cut by sudden breaks in line, while breakdancing steps are based on continuous movement but use *popping* and *locking* as angular breaks, and the musical techniques of scratching and punch phrasing interrupt the flow of music built on multilayered textures of different music sources and sampled loops.[17]

All the aspects of hip-hop music and culture described above influenced Aronofsky's innovative approach to editing. Yet, his practice of applying music sampling principles to film exhibits one significant difference in comparison to hip-hop techniques: in neither of his two films that employ hip-hop montage does Aronofsky use any preexisting material from a source

[17] Kulezic-Wilson, "Hip-Hop and Techno Composing Techniques," 11.

other than his own footage. Instead, he converts visual segments of his own film into the sampled material by creating a pattern out of montage sequences and then using these sequences as sources of further sampling throughout the film.

Despite Aronofsky's tracing of the musical inspiration for his editing techniques to hip-hop, it could be argued that they are also reminiscent of the music genre of *dub,* which as Dick Hebidge notes is nevertheless related to hip-hop through their shared predecessor, reggae, which also features "cut'n'mix" techniques and music talk-overs. Aronofsky's approach to the hip-hop montage segments evokes the essential principles of dub by stripping off the decorative layers so as to leave the "bare bones." In dub music, this involves paring away instrumental lines for the sake of emphasizing the bass line and foregrounding pure rhythm. In the case of Requiem's montage, it means underplaying the narrative aspect of the audiovisual material to emphasize the rhythmic dimension.[18]

Regardless of whether his approach more closely resembles dub or hip-hop, Aronofsky applies the principle of self-sampling throughout *Requiem for a Dream*. The first hip-hop montage sequence happens very early in the film (at 5:44 to 5:50). The subsequent recurrences appear with slight variations throughout the film and usually involve drug use. These vignettes are constructed of several very short shots punctuated by metrically regular sound effects, whose function is similar to that of punch phrasing. In its first appearance, these sonic and visual patterns indicate the repetitiveness of an action that for the character has become an unavoidable routine, but later occurrences shift via dramatic context and minor adjustments of the sound and images to suggest also urgency, the anticipation of pain, and the fear that follows the action.

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[18] Dick Hebidge, *Cut 'n' Mix: Culture, Identity and Caribbean Music* (London: Methuen, 1987).

The formal outline of the opening hip-hop sequence is subsequently shortened and fragmented, and the segments of taking pills, unbolting locks, cocaine sniffing, etc., are used throughout the film separately. The pattern of taking drugs is suddenly broken in the third act, announcing dramatic changes in both the plot and the destiny of its protagonists. The reasoning is that by repeating the same pattern throughout the film, the audience becomes habituated to the routine and is more alert to the moment when the pattern alters and change breaks through.

Although the percussive character of hip-hop montage segments and their punctuating function on the micro level evoke the hip-hop technique of punch phrasing, on a macro level they are perceived as breaks from the surrounding narrative. The purpose of these breaks is again mostly rhythmic, but they also carry a potential dramaturgical effect stemming from their periodic appearances and the possibility (which is realized in the film) of these appearances eventually changing in placement or content.

It is possible to analyze the organization each of these brief "hip-hop" montage segments as exhibiting a miniature rounded binary musical form. Such an analysis aids in an appreciation of how even the smallest structural units in *Requiem for a Dream* have musical analogues, an impression that a subsequent analysis of their large-scale deployment also supports. When these segments first appear, the segment's initial shot is punctuated by rhythmic, exaggerated diegetic

sounds that fall on the metrically regular beats of a 4/4 measure (see Figure 1).

Figure 1: Sonic rhythm of the first shot of the "hip-hop montage"

The middle section of each "hip-hop montage" is split into two slightly longer shots that last for approximately three and two beats, respectively, but feature no prominent sound effects. The final three shots of each montage segment are punctuated by the diegetic sounds of unbolting

locks, which again appear at metrically regular intervals (see Figure 2).

Figure 2: Sonic rhythm of the third shot of the "hip-hop montage"

A notation of the visual rhythm of each montage would therefore be divided into four measures, with the initial section consisting of one shot (roughly equivalent to a measure), the middle encompassing two shots, and the final section containing one shot, with the durations of

the measures equivalent to their relative shot lengths (see Figure 3).

Figure 3: Visual rhythm of the "hip-hop montage"

A rhythmic transcription of these montage segments' sonic components would similarly draw attention to the distinctiveness of the longer, sonically quiescent middle section compared to the shorter, percussive opening and closing sections (see Figure 4). The overall resemblances between the bookending sections also support the structural classification of these hip-hop sequences as being reminiscent of a musical "rounded binary" or ABA' form, in which the middle section offers a contrast to the opening and closing sections, which are not identical but resemble each other.

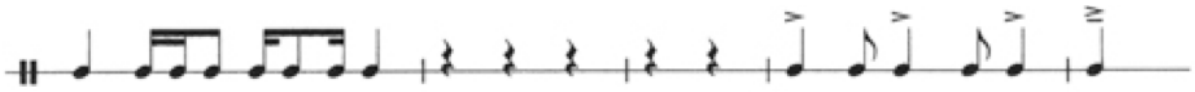

Figure 4: Sonic rhythm of the entire “hip-hop montage”

Audiovisual Rhythm and Musical Patterns

Considering that much of *Requiem's* visual and narrative content is based on repetition, one might wonder how the film generates any kind of movement at all. Yet rather than being entirely static, the film features a vigorous, kinetic drive, due primarily to its extremely innovative cinematic language, sharpened sense of detail, and, most of all, to the use of editing techniques that encourage interaction between sonic and visual types of rhythm, as well as “internal” and “external” rhythms within the film’s structure. The numerous multi-level repetitions in the film thus generate its vigorous kinetic drive.[19]

The same principle of building small units similar to musical forms and then extending them, or making them part of larger ones is employed consistently throughout the film. Even though the sequences analyzed above are easily described in terms of musical form (specifically, rounded binary), none of the constitutive sections of the film stands isolated within such formal outlines; rather, it always continues its movement, merges into the next formal unit, and joins the movement of the film’s general flow, unless deliberately terminated by a "punctuation mark" actualized as a blackout, the flash of a white void or some similar visual device.

It can be argued that the processes described above are found in every film. In a mainstream film, however, the connection that binds the shots and scenes together is narrative and is based on the unity of space and time. The organizing principle of *Requiem*, however, resembles more the hierarchical structures of musical forms than the classical linear structure of a narrative film.

Requiem for a Dream's Techno Sensibility

Although hip-hop montage and editing more generally are responsible for driving the film's external rhythm, just as camera movement generates much of its internal rhythm, the sonic aspect of the film's overall sense of musicality is defined by the film's soundtrack. Here, the original score by Clint Mansell and the main characters' voiceovers are complemented by the rhythmic accents of hip-hop sequences (pill taking, locks unbolting, cocaine sniffing, etc.) and amplified diegetic sounds. Additionally, the electronically generated nondiegetic sound effects contribute to the overall "techno feel" of the film.

Aronofsky himself admits in his diaries that he used to mock his friend and future producer Eric Watson because of Watson's interest in the early electronic music scene. "Little did I know," notes Aronofsky, that "electronica was on its way to replacing hip-hop as the new underground."[20] Aronofsky's comment supports the thesis that as much as hip-hop informed his musical tastes and his general approach to film editing as a sampling process, techno was the musical style that not only influenced but made possible the film's soundtrack as a combination

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[19] For a more detailed discussion of internal and external rhythm in film, see Claudia Widgery, "The Kinetic and Temporal Interaction of Music and Film" (Ph.D. diss., University of Maryland College Park, 1990) and Danijela Kulezic-Wilson, "The Musicality of Film Rhythm," in *National Cinema and Beyond*, ed. Kevin Rockett and John Hill (Dublin: Four Courts Press, 2004), 115-24.

[20] Darren Aronofsky, *Pi: Screenplay & The Guerrilla Diaries* (London: Faber & Faber, 1998), 5.

of diegetic sounds, nondiegetic effects and music, and also strongly informed the kinetic identity of the entire film.

Although most aspects of *Requiem*'s external rhythm are the result of "hip-hop" montage scenes, the frightening noises in the montage sequences, and even some of characters' monologues also contribute to an interpretation of the film as imbued with a certain "techno sensibility." The role of the soundtrack is also crucial in how it acts as the unifying agent for the sequences made of different visual fragments. The physical terror of main characters and the film's general atmosphere of discomfort and anxiety come mostly from the realm of sound, its amplified diegetic and nondiegetic effects, and the almost continuous presence of electronically produced music. Thus, the hip-hop editing style determines *Requiem*'s micro rhythm, but its macro rhythm and kinetic drive are much more influenced by the music and the repetition of visual and sonic refrains throughout the film.

(Clint Mansell) Knows the Score

A signature feature of Clint Mansell's score for *Requiem for a Dream* and indeed the entire film is its main title music. The theme was performed by Kronos quartet, for which postminimalist composer (and Bang on a Can co-founder) David Lang served as a string arranger. The main theme appears seven times throughout the film, usually at the divisive points of the film's structure (e.g. the beginning of all three acts of the film), playing over the opening credits as a "Summer Ouverture" at the beginning of the first act ("Summer"), from 2:50 until 5:27; as well as at 21:05 until 23:31 and at 35:25 until 36:47 (a cue labeled on the soundtrack as "Hope"); at the beginning of the second act ("Fall") at 47:47 to 48:07 (entitled "Cleaning the Apartment" on the soundtrack), as well as from 1:00:14 to 1:02:36 ("Marion Barfs"); and at the

beginning and end of the third act ("Winter") - from 1:13:16 to 1:13:34 ("Winter Ouverture") and from 1:33:42 to 1:37:37 ("Lux Aeterna") respectively.

The theme has a typical techno-4/4 beat with a prominent percussion line, which is sometimes substituted with a long semitone interval played by the strings. This musical sequence usually lasts for several minutes and is perceived as a formal unit that in its content, structure, and kinetic character resembles a music video. It is probably safe to assume that the principles of audiovisual editing typical of music-video production and the whole aesthetics of this practice influenced Aronofsky as much as hip-hop music did, and the same assumption applies to almost any other director of the "MTV generation."[21]

Mansell employs minimalist technique in numerous ways in the main theme. The tempo of the theme is steady throughout (beats per minute = 70), as is the 4th-note pulsation and the repetition of 4-measure units. The units have a steady texture, which only changes at the arrival of the next stage, rather than within a unit. This is a typically minimalist trait - the gradated succession of seemingly static blocks. There is no melody in a conventional sense, only musical patterns of repetition (usually the model is 3+1), which has a hypnotic effect. The entire theme revolves around a repeated bass line (a chaconne-like ground bass) which is featured from its beginning until the end, often with implied harmony, while "melodic" material is then layered on top in the upper voices. The theme is thus built built in a similar way to those in the film scores written by English minimalist composer Michael Nyman for Peter Greenaway's films such as *The Draughtman's Contract*. Harmonic simplicity also is quite apparent in the theme. It is always in G minor, and features an implied harmonic progression: G min. - E flat maj.- D maj.7 over

[21] Aronofsky, *Pi*, 49.

each repeating four-measure unit, though the actual chords sometimes differ. The chords are typically diatonic triads, though at some points, the chords feature a added dissonance(s) — E flat maj. with added 4th, Dmaj. 7 with added 4th and 6th —- or are voiced over a G pedal tone. The string quartet ensemble is playing together in relative homophony for the entire duration of the theme, and its overall color is little varied, with change only occurring only when a new electronic layer comes in. The overall formal design of the theme as manifested in its stand-alone version (i.e., the version on the soundtrack album) respects the common verse/chorus organization of a pop (or rock) song. The segments from the main theme's first presentation, entitled "Summer Overture" in the track listing (2:50 - 5:27), include a chaconne-like bass that is featured from the beginning to the end (Figure 5), an intro-like segment (Figure 6), a verse-like segment (Figure 7), a change of the electronic track pattern, introduced while the verse is still ongoing (Figure 8), a chorus-like segment (Figure 9), and a verse-like segment that also serves as an "outro" (Figure 10).

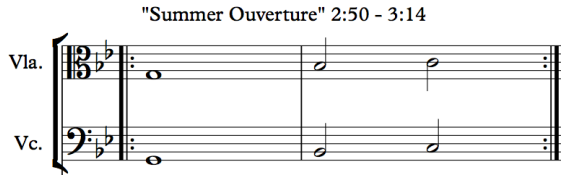


Figure 5: The chaconne-like segment

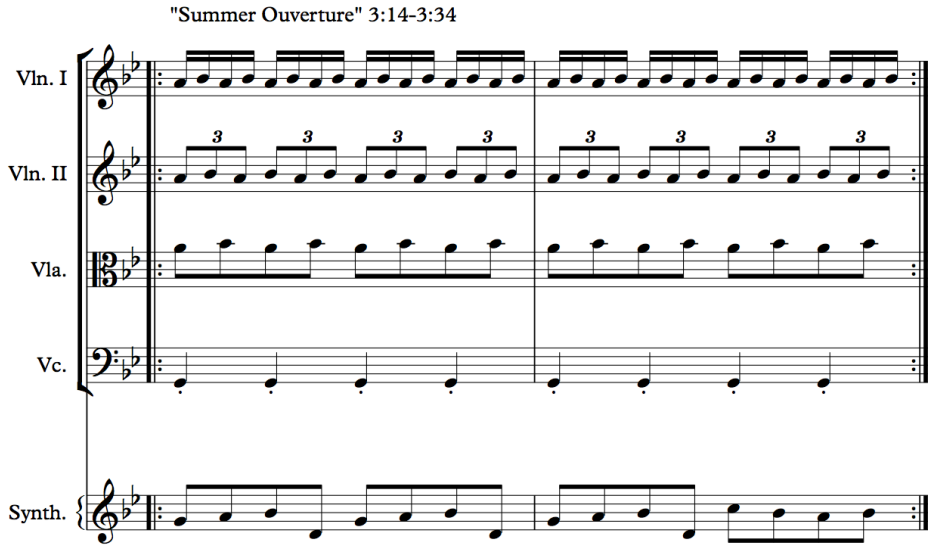


Figure 6: Intro-like segment

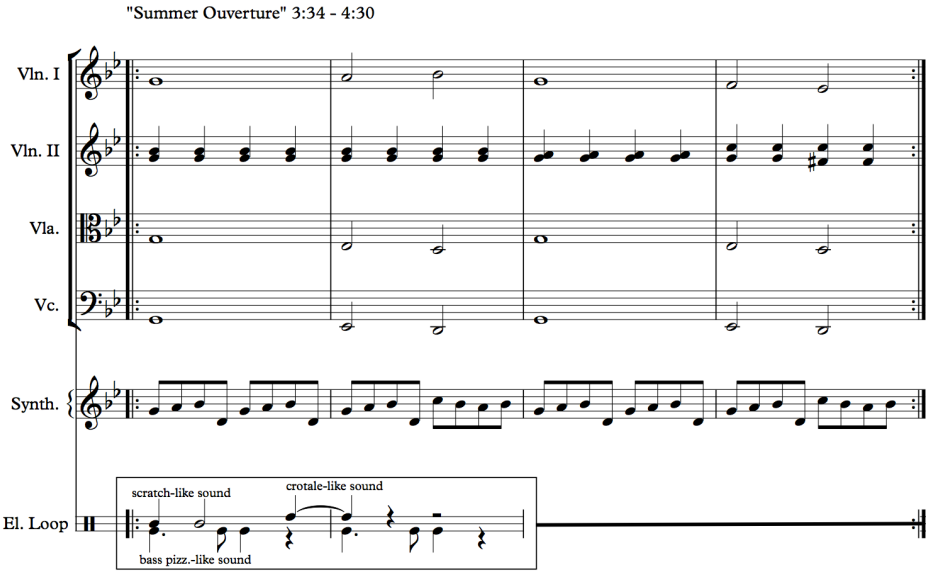


Figure 7: The verse-like segment

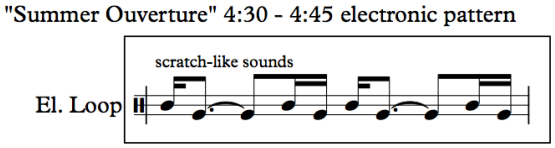


Figure 8: The change in the electronic track pattern

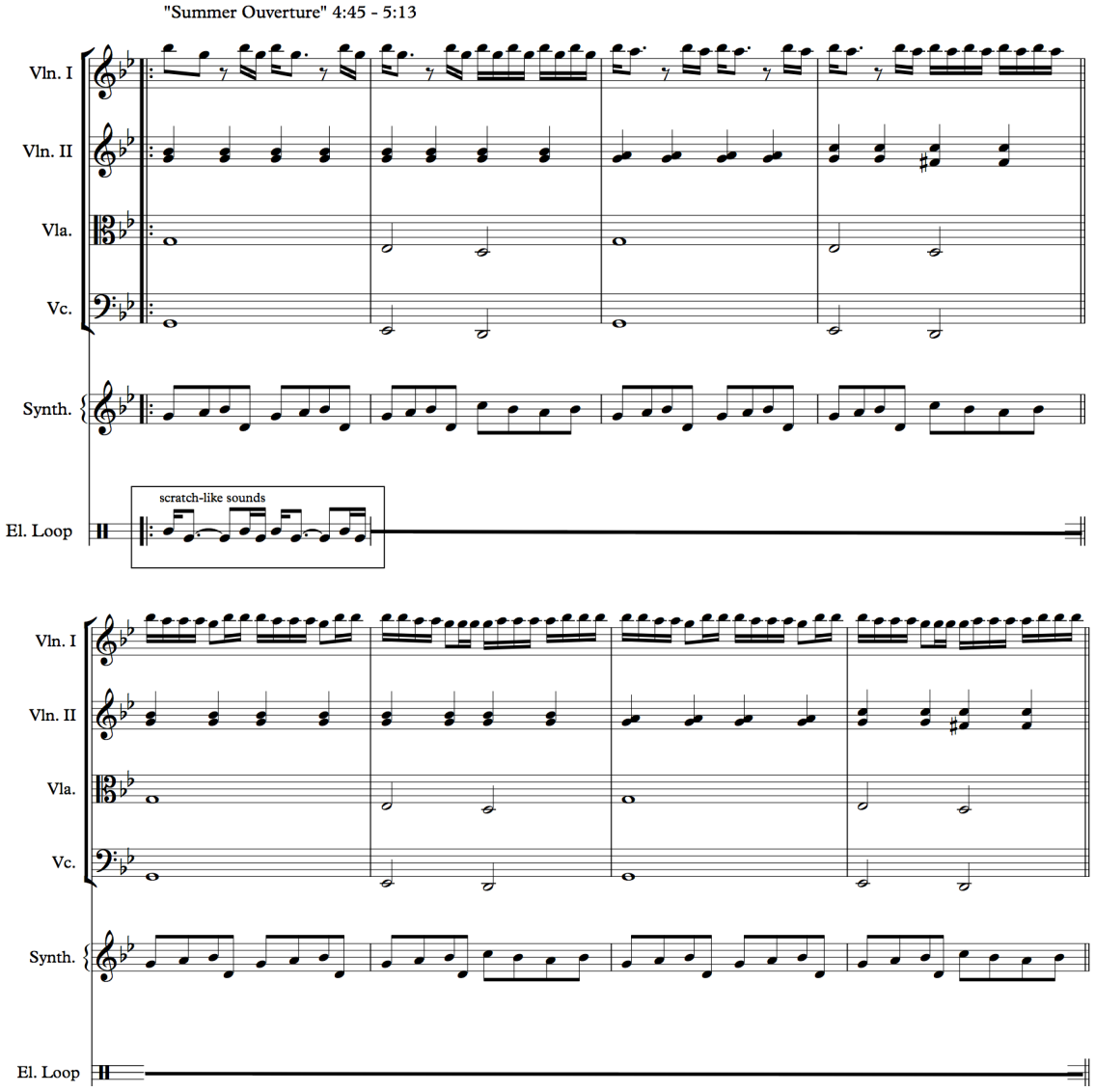


Figure 9: The chorus-like segment

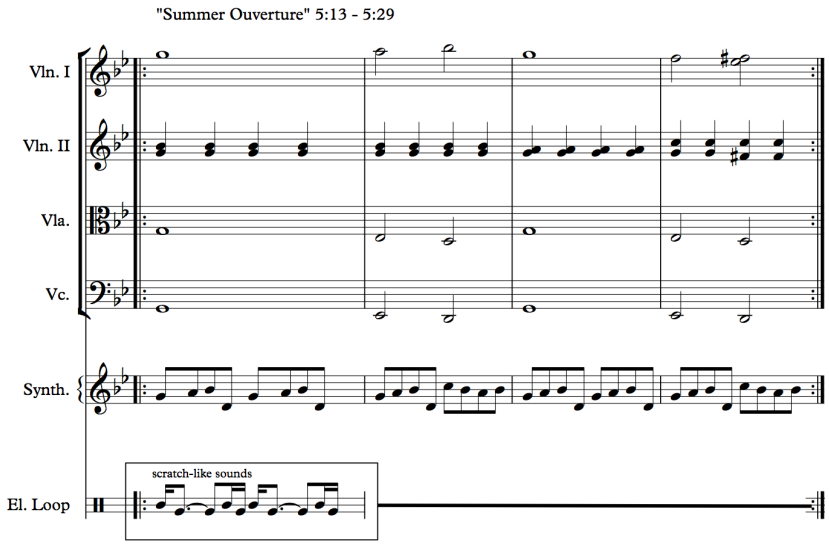
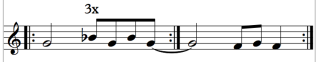
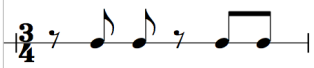
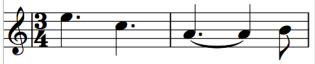
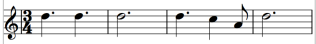
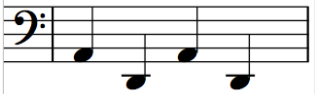
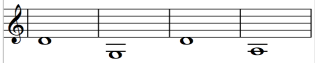
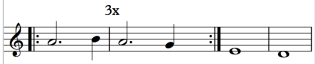
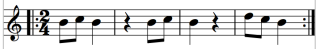
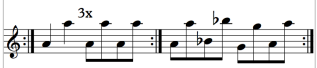
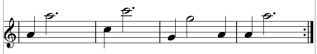


Figure 10: The verse-like segment that also functions as an "outro"

The remaining cues in the film are built from the musical material displayed in Table 1 and employed throughout the film in a way that creates the overall impression of a "jigsaw puzzle." The entire film's structure is outlined in detail in Appendix A.

Other Musical Patterns	**ACT I ("Summer")**	**ACT II ("Fall")**	**ACT III ("Winter")**
	1. 6:03-6:19 ("Party") 2. 7:23-7:34 3. 13:27-13:57 4. 15:40-16:05 5. 29:44-31:26 ("Crimin' & Dealin'")	1. 1:03:52-1:04:51 ("Supermarket Sweep")	none
	1. 6:19-7:23 ("Coney Island Dreaming") 2. 7:34-7:52 3. 18:10-18:58 ("Dreams") 4. 36:37-37:13	1. 54:54-56:20 ("Dreams") 2. 1:04:51-1:05:59	1. 1:26:13-1:26:28 ("The Beginning of an End") 2. 1:28:36-1:29:11

	1. 6:19-7:23 (“Coney Island Dreaming”) 2. 7:34-7:52 3. 18:10-18:58 ("Dreams") 4. 36:37-37:13	1. 54:54-56:20 (“Dreams”) 2. 1:04:51-1:05:59	none
	1. 6:19-7:23 (“Coney Island Dreaming”) 2. 7:34-7:52 3. 18:10-18:58 ("Dreams") 4. 36:37-37:13	1. 54:54-56:20 (“Dreams”) 2. 1:04:51-1:05:59	none
	1. 12:07-13:00 (“Ghosts of Things to Come”) 2. 14:29-? 3. ?-15:28 4. 16:34-18:10 5. 27:54-28:17	1. 48:39-49:12 ("Ghosts Falling”) 2. 54:15-54:54 3. 56:20-57:36 4. 1:07:09-1:07:32	1. 1:27:00-1:28:36 ("Ghosts of a Future Lost")
	1. 12:07-13:00 (“Ghosts of Things to Come”) 2. 14:29-? 3. ?-15:28 4. 16:34-18:10 5. 27:54-28:17	1. 48:39-49:12 ("Ghosts Falling”) 2. 54:15-54:54 3. 56:20-57:36 4. 1:07:09-1:07:32	1. 1:27:00-1:28:36 ("Ghosts of a Future Lost")
	1. 12:38-13:00 (“Ghosts of Things to Come”) 2. 14:57-? 3. 17:29-18:10	1. 54:15-54:54 ("Ghosts Falling”) 2. 56:51-57:13	1. 1:27:39-1:28:36 ("Ghosts of a Future Lost")
	1. 24:39-25:22 (“Ghosts”)	1. 54:47-54:54 (“Ghosts Falling”) 2. 56:51-57:13 3. 1:07:32-1:08:22	none
	1. 19:54-20:06 (“Tense”) 2. 20:13-20:28 3. 29:02-29:44 4. 46:31-46:47 5. 46:51-47:00	1. 57:36-58:40 (“Arnold”) 2. 58:45-59:50 3. 59:54-1:00:14	1. 1:20:56-1:22:27 (“Full Tense Winter”) 2. 1:24:14-1:24:31 3. 1:25:34-1:25:57 4. 1:26:11-1:26:13 (“The Beginning of an End” 5. 1:26:50-1:27:00
	1. 19:20-19:54 (“Dr. Pill”) 2. 20:50-21:01 3. 25:49-27:13	1. 52:33-53:01 (“Dr. Pill”) 2. 1:08:52-1:10:04	1. 1:14:57-1:17:21 (“Fear”) 2. 1:19:50-1:20:42

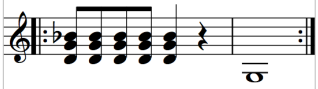
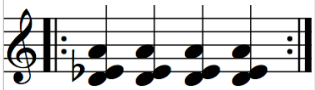
	none	none	1. 1:13:34-1:14:57 ("Southern Hospitality") 2. 1:17:21-1:17:33 3. 1:17:54-1:18:37 4. 1:18:45-1:19:50 5. 1:20:42-1:20:56 6. 1:22:27-1:23:23 7. 1:23:47-1:24:14 8. 1:24:31-1:25:03 ("The Beginning of the End") 9. 1:25:57-1:26:02 10. 1:29:48-1:30:38
	none	none	1. 1:25:03-1:25:34 ("The Beginning of the End") 2. 1:26:02-1:26:11 3. 1:26:28-1:26:50 4. 1:30:41-1:32:56

Table 1: Other notable musical patterns in *Requiem for a Dream*

Mansell derives the pitch collection for the entire score from the pentatonic scale displayed in Figure 11 and then uses the chords in Figure 12 on top of the pentatonic scale notes.

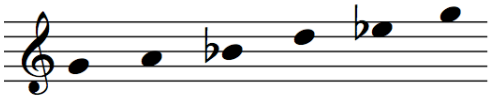


Figure 11: The pentatonic scale featured in *Requiem for a Dream*

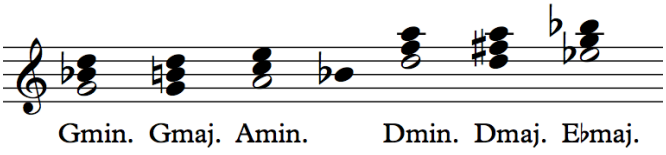


Figure 12: The chords built upon the pentatonic scale degrees in *Requiem for a Dream*

Mansell's score features fairly consistent harmonic associations. Cues are often in G minor, including the main theme, which alternates three different chords: G min., E flat maj., and D maj 7), as well as upbeat techno "Party" cues over which characters are either enjoying themselves or plotting some action; G minor also predominates when the planned action occurs. Alternations of G min. and D min. chords are also prevalent, particularly in the cues entitled "Southern Hospitality" on the soundtrack, which squeeze out the "Party" cues in the third act. These two chords appear in their most heart-wrenching versions in the grand finale, which leaves no doubt that the main characters' plans will be shattered (though the D min. is given as d-e flat-a). G major appears in the "Ghosts" cues, which are usually featured in Harry and Marion's dreamlike sequences: a D-A ostinato and G maj. chords are played simultaneously throughout these scenes. Ostinati in A minor dominate the "Dreams" cues, which are often reserved for dream sequences in which one of the character is imagining a scenario that is different for his or her present situation. Alternation of D min./A min. undergirds themes such as the "Tense" and "Dr. Pill" cues, which are heard when a character is in a tense psychological situation, often with a broken octave figure weaving around A min. chord while a B-flat is prominently featured.

Mansell utilizes various minimalist techniques in the cues listed above. For example, in "Dreams," he preserves a steady tempo, pulse, and dynamics, steadfastly adhering to 4-measure blocks while adding layer after layer to the texture (see Figure 13). The harmony is as simple as possible, featuring mostly A minor chord tones (which later, when the strings come in, are a bit more "decorated" with added dissonances). A similar organization is perceivable in the "Ghosts"

cues (Figure 14).

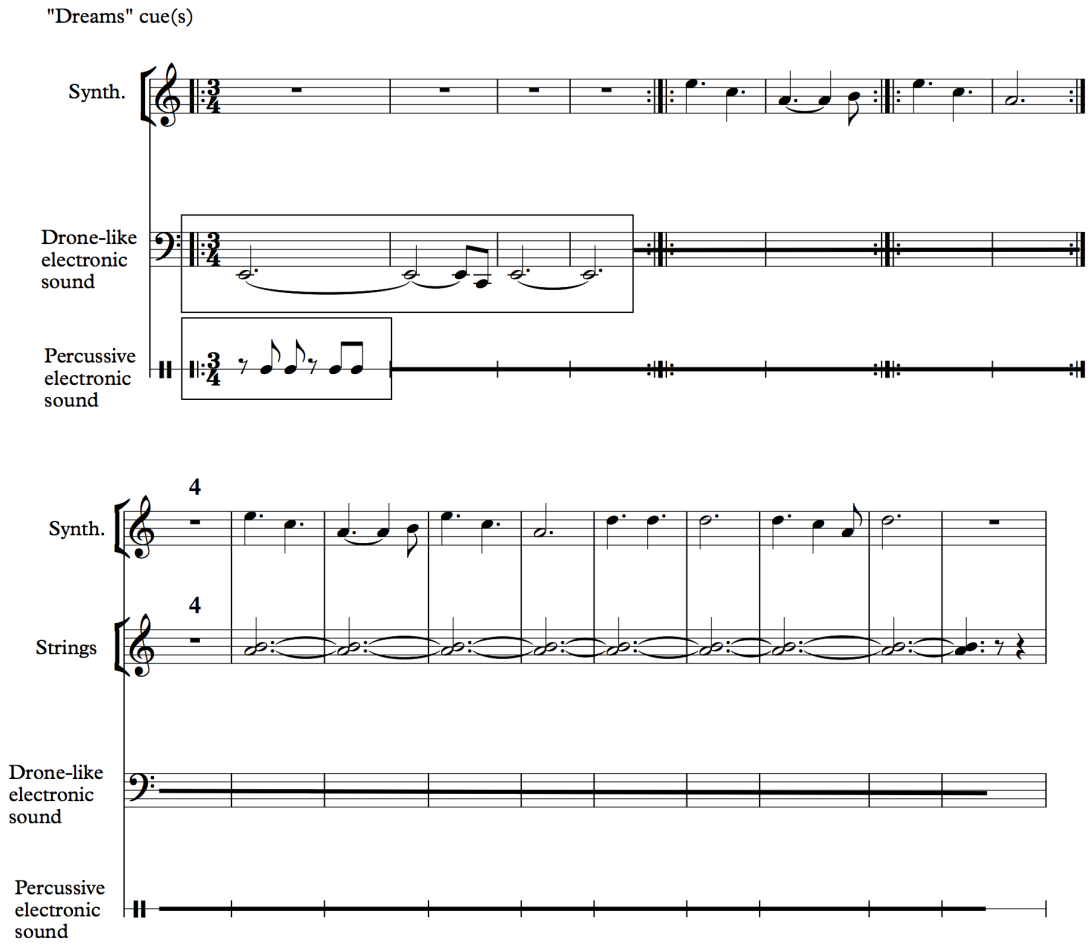


Figure 13: "Dreams" cues

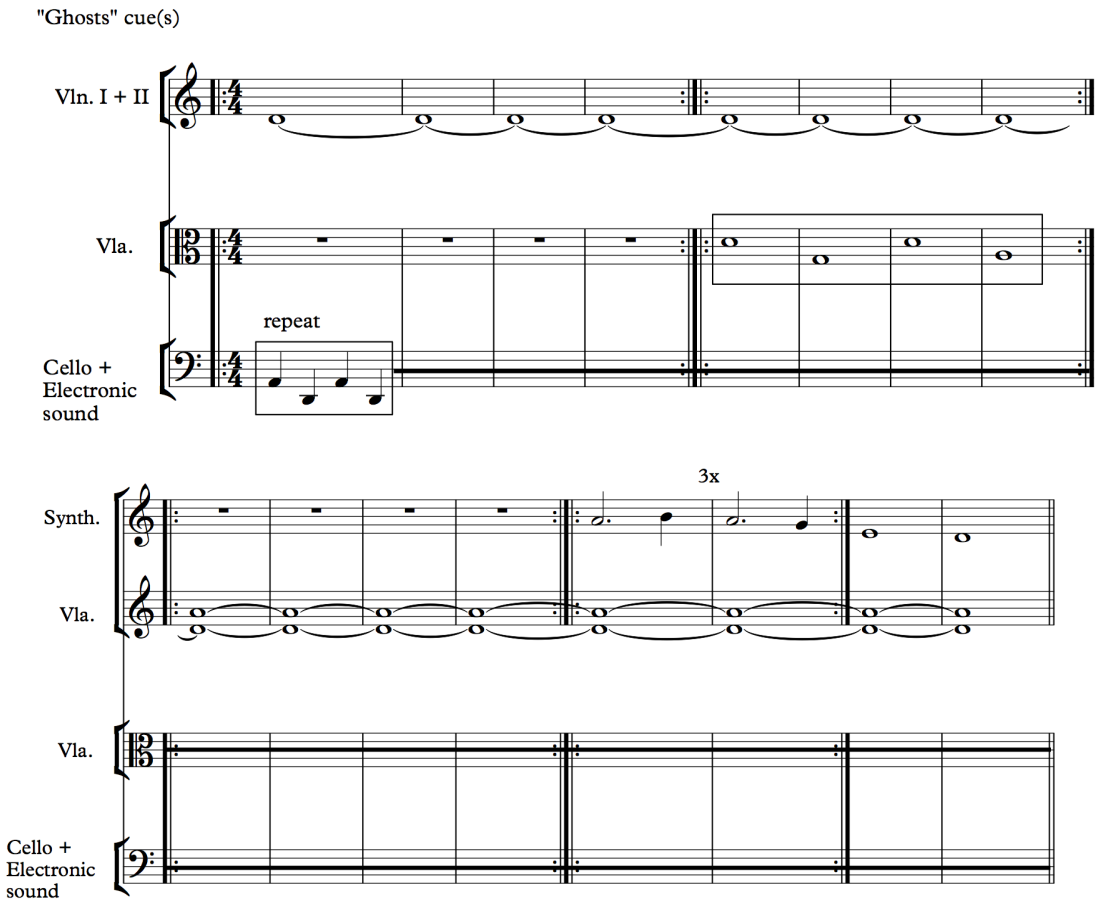


Figure 14: "Ghosts" cues

The "Tense" cues (Figure 15) often feature only one layer, a broken octave figure (its main core being the A-A octave), and are organized in a slightly different fashion. Changes within these cues occur horizontally: Mansell again utilizes 4-measure unit that revolves around broken octave A-A over three measures and ever-changing "tail" in the remaining measure. He emulates minimalist additive process by gradually adding shorter note values to the mix (i.e., 16-notes) and departing farther from pitch A at both the high and low voice ranges. Gradation is also achieved by breaking the 3+1 model of the unit so that the "tail" arrives sooner. All of this happens over a steady quarter-note pulse.

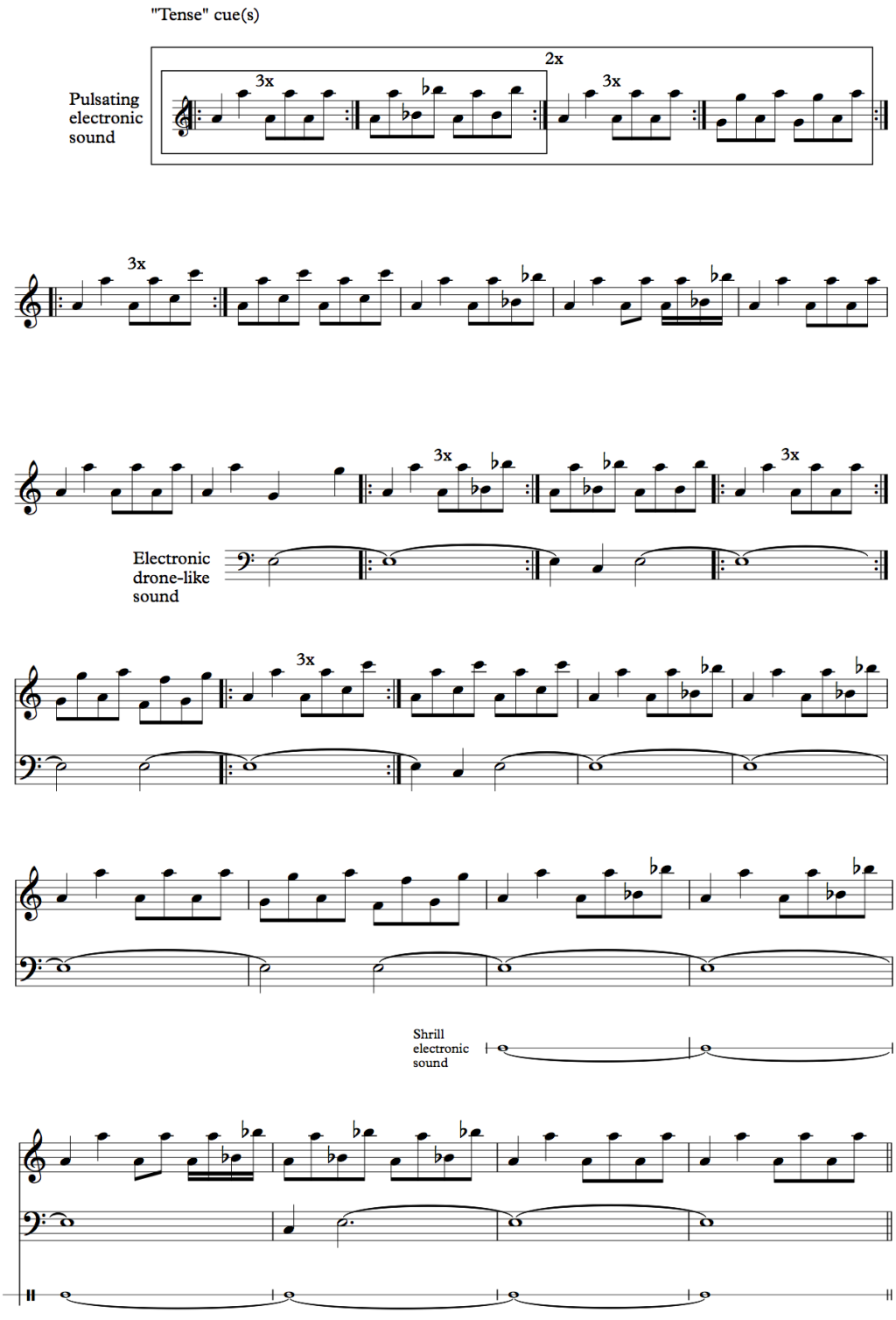
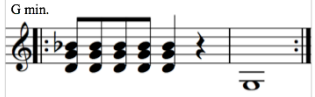
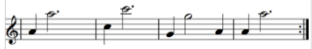
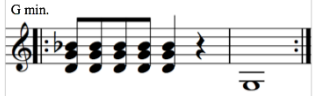
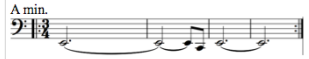
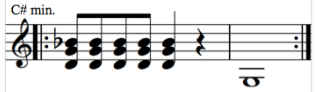
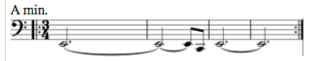
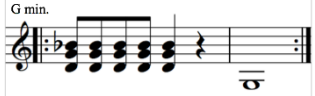


Figure 15: “Tense” cues

The musical developments in the film's third act are particularly interesting. At this point, Mansell begins "scoring with cues," weaving together all of the additional cues featured throughout the first two acts as well as a new cue, "Southern Hospitality." The complementary characteristics of these cues facilitate their layering into a grant finale montage scene: all share a steady pulse, pervasive 4/4 time signature (note that a drone-like pattern that previously appeared in 3/4 is here set for the first time without an accompanying percussive beat so that it fits the overall 4/4 configuration) and approximately the same tempo, as well as rhythmic and harmonic compatibility. This is also accomplished in a minimalist way, in that various repetitive patterns are perceived as static blocks that are being alternated. Here the audiovisual collages (i.e., hip-hop montages) that dominate the film's structure meet their purely musical parallel. See Table for a detailed thematic outline of this section.

Segment	Characters + Plot/Events	Cue
1:13:34	Harry, Tyrone preparing to go to Florida / Sara on a subway / Marion on the phone	G min. 
1:14:57	Sara at TV station, TV employees and security / Marion (looking at Harry's photo), calling Arnold	D min./A min. (ambiguous) 
1:17:21	Sara (taken by paramedics)	G min. 
1:17:33	Harry, Tyrone in a car	A min. 
1:17:54	Harry taking heroin	C# min. 
1:18:37	Marion at the client's door	A min. 
1:18:45	Sara (and paramedics)	G min. 

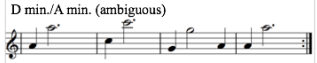
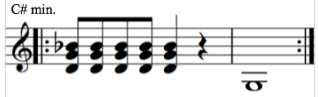
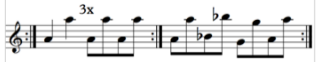
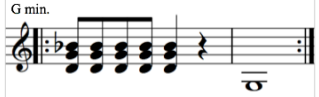
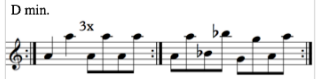
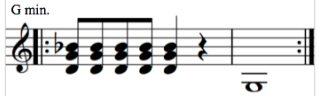
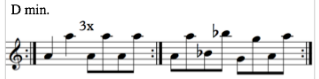
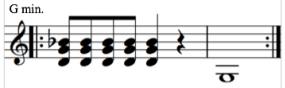
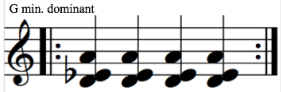
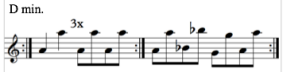
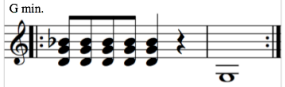
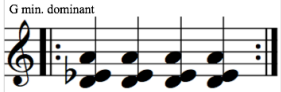
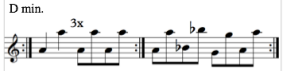
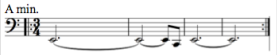
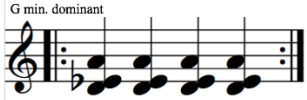
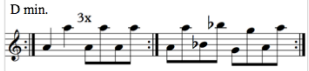
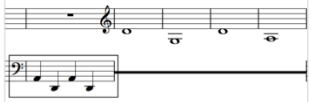
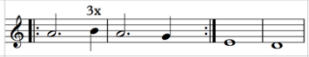
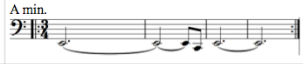
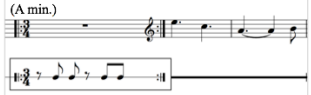
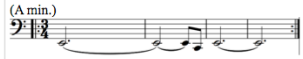
Segment	Characters + Plot/Events	Cue
1:19:50	Marion at the client's apartment	D min./A min. (ambiguous) 
1:20:42	Harry, Tyrone driving	C# min. 
1:20:56	Marion / Sara	D min. 
1:22:27	Marion / Harry, Tyrone / Sara in a hospital	G min. 
1:23:32	Tyrone in a waiting room	D min. 
1:23:47	Harry at the hospital	G min. 
1:24:14	Marion smoking a cigarette, looking at their photo	D min. 

Table 2: Cue structure of the finale of *Requiem for a Dream*

Segment	Characters + Plot/Events	Cue
1:24:31	Sara at the hospital	G min. 
1:25:03		G min. dominant 
1:25:34	Marion applying makeup / Tyrone in a waiting room	D min. 
1:25:57	+ sheriff in a waiting room	G min. 
1:26:02	Sara, doctor	G min. dominant 
1:26:11	Marion applying makeup	D min. 
1:26:13	Sara, doctor	A min. 

Segment	Characters + Plot/Events	Cue
1:26:28		G min. dominant 
1:26:50	Marion applying makeup	D min. 
1:27:00	+ Harry on the phone	G maj. 
		
1:28:36	Sara, doctor	A min. 
1:29:11	Harry, Tyrone in jail	(A min.) 
1:29:30	Sara, doctor / Marion, her client's friend's party	(A min.) 

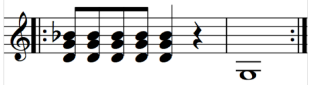
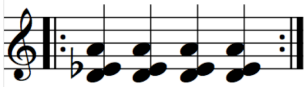
Segment	Characters + Plot/Events	Cue
1:29:48	Sara / Marion / Harry, Tyrone	G min.  (+ "Can you hear me? Can you see me? OK for work." 1:29:55 - 1:30:34)
1:30:41 - 1:32:56	Sara / Marion / Harry, Tyrone	(G min. dominant)  (+ "Can you hear me? Can you see me? OK for work." 1:30:41 - 1:30:51)

Table 2 cont.: Cue structure of the finale of *Requiem for a Dream*

Chapter 5: Case Study: *The Fountain*

The Fountain was undeniably Darren Aronofsky's most ambitious project up to that point in his career. Aronofsky's twisted story of life, death, and the fountain of youth was originally set to begin production in 2002 with Brad Pitt and Cate Blanchett in the lead roles and a budget of $75 million (although some sources claim it was actually closer to $90 million). Then Pitt exited the film for *Troy* and the plan for *The Fountain* was shattered. Yet Aronofsky never wavered in his desire to bring *The Fountain* to the big screen. Eliminating some scenes and reworking others in order to reduce the budget, Aronofsky was able to get Warner Bros Pictures to agree to a $35 million budget with Hugh Jackman and Rachel Weisz as the film's stars. Yet the budget cuts required changes to the script; the resulting film is a modified realization of Aronofsky's original story.

As Mansell explained in an interview, *The Fountain* does not have a typically filmic linear narrative. Instead, the film has three major narratives, which coincide with three time periods. Hugh Jackman's character thus exists as "a 16th century Spanish explorer, a 21st century scientist, and as a 26th century astronaut in search of eternal life."[1] In 1999, Handel and Aronofsky had begun to discuss the search for the Fountain of Youth and how ideas can interconnect like Russian nesting dolls, with one fitting inside the other. In the film, these multiple layers involve three parallel storylines revolving around a man (Hugh Jackman) searching for a cure for his wife's terminal brain tumor. Past and future narratives interweave with the present: Weisz stars as both the man's beloved (named Izzi in the present-day and unnamed in the future) and the Queen of Spain, and Jackman as a Spanish conquistador Tomas in

[1] Glen Oliver, "ScoreKeeper with *Fountain* Composer Clint Mansell," AintItCool.Com, November 27, 2006, accessed February 2, 2015, http://aintitcool.com/node/30814.

search of the Fountain of Youth, a present-day scientist named Tom Creo, and a futuristic astronaut (named simply "a Man") trying to hold on to eternal life and love.[2]

Mansell quickly discarded the question of whether the film's score should incorporate three distinct styles of music to correspond to the three time periods when he realized that Aronofsky was not planning to divide the film linearly into three different periods. Mansell also observed that sharp changes in musical style would not fit a film that at its heart proved to be "an intimate love story." He ultimately worked on the score for *The Fountain* for six years, which allowed him time to explore many new musical styles that he had not previously applied to his own composition. The soundtrack to *The Fountain* proved to be another collaboration between Mansell and the Kronos quartet. At first he and Aronofsky did not plan to work with them, as "[*Requiem*] had worked so well, we just felt we weren't going to top that." Yet as Mansell narrates, much of material in the mock-up demo version that he wrote for the piano only truly was "brought… to life" when played by the members of the Kronos Quartet.[3]

Around 2000, Mansell began to learn of bands such as Mogwai, Godspeed Your Black Emperor, and Sigur Ros that were known for taking what he describes as a "more modern approach to orchestrated music."[4] Noting the progressive and long-form nature of these bands' output, which different dramatically from the standard model of "ten hit singles on an album,"[5]

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[2] "Transcending Death," SeedMagazine.Com, November 21, 2006, accessed February 1, 2015, http://seedmagazine.com/content/print/transcending_death/.

[3] Christopher Stipp, "Ten Quick Questions: Clint Mansell," ASiteCalledFred.Com, January, 15 2007, accessed February 2, 2015, http://asitecalledfred.com/2007/01/15/10-quick-questions-clint-mansell-you-just-have-to-dig-deeper-sometimes/.

[4] Stipp "Ten Quick Questions: Clint Mansell."

[5] Becky Reed, "Clint Mansell on Scoring Stoker, Filth, and Noah," DIYMag.Com, March 1, 2013, accessed Feburary 2, 2015, http://diymag.com/archive/interview-clint-mansell-on-scoring-stoker-filth-noah.

Mansell intuited that he might be able to apply such aesthetics to his film music,[6] noting that there had become "almost this sense that post-rock and film scoring were almost becoming interchangeable."[7] This influence also eventually pushed Mansell to rework the soundtrack album for *The Fountain*, extending themes into longer tracks so that the audience might receive "a more traditional listen" from the score CD, rather than just encountering a succession of cues.

Mogwai turned out to be another collaborator on the movie's music. Mansell composed the score's "Mogwai elements" himself. His initial idea for the score, before budget cuts limited its scale, was for the music to be "purely percussion" and "pretty primitive." Before viewing cuts of the film, however, Mansell wrote a variety of music that was quite stylistically varied and "a little bit all over the place." By the time he began writing to the film, he engaged an assistant who helped him to reduce the music to "its bare progressions and melodies." Mansell and his assistant then set the melodies in suitable keys so that "harmonically every lead melody could play with every progression." The overarching "jigsaw puzzle" metaphor for the score thereby took shape gradually, as Mansell later recounted:

> As I wrote more pieces, I gave them to [my assistant] and we kept this log of the score [that was] able to be played on the piano. We could then weave any piece into any other piece. By that point that's what we knew we wanted to do. This story was going to come together and climax at the end and we had to tie up the pieces. As I'm writing, bits are obviously gluing themselves to parts of the film. Then I find that bit really works and I ask what's its relation to this bit of the story? If I wanted to play that again where that bit of the story happens again, does it still work as a musical piece within that scene?[8]

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[6] Stipp, "Ten Quick Questions: Clint Mansell."

[7] Louis Pattison, "Clint Mansell: From Pop Will Eat Itself to Hollywood Royalty," *The Guardian*, February 22, 2013, accessed February 2, 2015, http://guardian.co.uk/film/2013/feb/22/clint-mansell-stoker/.

[8] Oliver, "ScoreKeeper with *Fountain* Composer Clint Mansell."

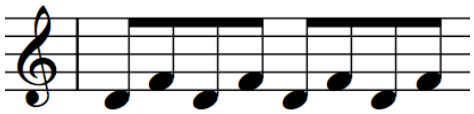
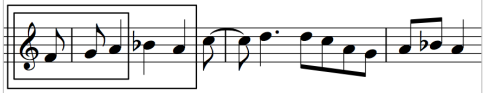
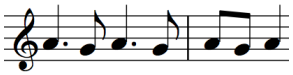
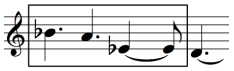
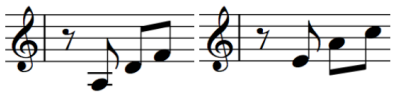
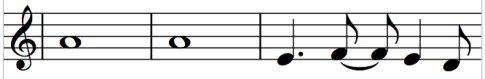
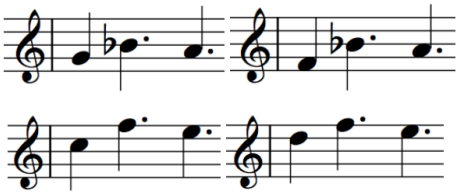
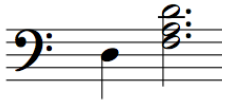
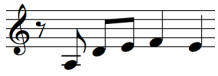
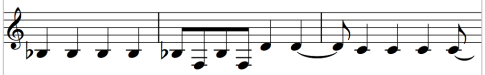
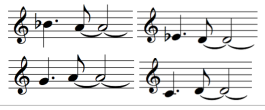
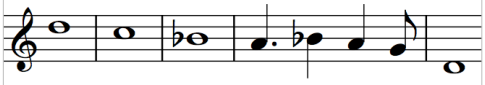
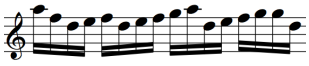
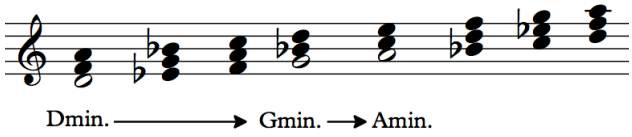
Motives/Patterns (by order of appearance)	Time
	1. 0:35-1:15 2. 5:19-6:57 3. 14:38-15:59 4. 16:18-18:43 5. 28:30-29:20 6. 36:26-37:39 7. 50:45-52:06 8. 1:16:23-1:19:03
	1. 0:35-1:15 2. 7:19-8:17 3. 8:50-10:02 4. 10:18-11:03 5. 24:30-27:27 6. 34:03-35:11 7. 1:08:41-1:10:15 8. 1:16:23-1:20:26 9. 1:21:08-1:22:08 10. 1:23:36-1:26:59 11. 1:26:59-1:27:57
	1. 1:15-2:20 2. 44:45-45:30 3. 1:29:08-1:31:30
	1. 2:20-5:19 2. 14:38-15:59 3. 24:30-27:27 4. 1:04:08-1:05:22
	1. 5:19-6:57 2. 16:18-16:28 3. 35:11-35:47 4. 1:03:37-1:04:08 5. 1:06:15-1:06:40 6. 1:20:26-1:23:36 (A min.)
	1. 5:19-6:57 2. 16:18-16:28 3. 17:30-18:43 4. 24:30-27:27 5. 47:15-47:47 6. 1:22:08-1:23:36 (A min.) 7. 1:24:04-1:26:59
	1. 5:19-6:57 2. 11:48-12:30 3. 13:05-13:47 4. 16:28-18:43 5. 30:08-31:25 6. 35:11-35:47 7. 36:26-37:39 (C min.) 8. 39:52-40:25 9. 41:33-43:35 10. 53:33-54:22 11. 59:19-1:01:07 12. 1:03:37-1:05:22 13. 1:06:15-1:07:15 14. 1:14:00-1:15:01 15. 1:20:20-1:20:26 16. 1:22:40-1:23:36 (A min.) 17. 1:26:59-1:27:57 18. 1:28:01-1:28:29 (A min.) 19. 1:31:30-1:36:32
	1. 7:19-8:17 2. 34:03-35:11 3. 44:00-44:45 4. 1:07:51-1:08:19 5. 1:08:41-1:10:24 6. 1:16:23-1:20:26
	1. 10:18-11:03 2. 47:47-48:08 3. 1:20:56-1:22:08 4. 1:23:36-1:26:59
	1. 12:30-14:23 2. 30:08-32:30 3. 53:22-54:22 4. 1:14:00-1:15:01 5. 1:31:30-1:36:32
	1. 14:38-15:59 2. 28:30-29:20 3. 51:05-52:06
	1. 16:28-18:43 2. 28:30-29:20 3. 31:25-32:30 (G min.) 4. 36:26-37:39 5. 51:05-52:06 6. 1:04:08-1:05:22
	1. 1:24:04-1:26:59

Table 3: Prominent thematic patterns in *The Fountain*

The Fountain's six years of development time gave Mansell ample opportunity to collect various musical ideas and material for the score. At one time, he even considered engaging David Bowie as a collaborator on the score, eventually reducing this notion to the possibility of using a song by Bowie for the end credits. In the end, he and Aronofsky ultimately rejected this idea, as well as the notion of using a lyrical version of the theme "Together We Will Live Forever" sung by singer Antony Hegarty from Antony and the Johnsons, as they also had considered and rejected the possibility of playing a song over the end credits on each of their previous collaborations — instead opting each time to use Mansell's score.[9]

In *The Fountain*, Mansell primarily uses the set of chords shown in Figure 16. The D min. area is the most frequently visited in the cues, with G min. being mostly reserved for refrain-like material and A min. for the "finale" section of the film. Note that Mansell does not



explicitly tonicize either of the secondary key areas, another similar to his music for *Requiem.*

Figure 16: Primary chord set in *The Fountain*

[9] Oliver, "ScoreKeeper with *Fountain* Composer Clint Mansell."

The cues take longer to evolve in *The Fountain* than in *Requiem* and are built from the patterns presented in Table 3. The patterns are often introduced gradually and then stacked one on top of the other. Again, facilitating this practice is the fact that the cues share the same tempo and 4/4 time signature, with the same underlying harmonic progression and complimentary rhythm, as in the example shown in Figure 17.

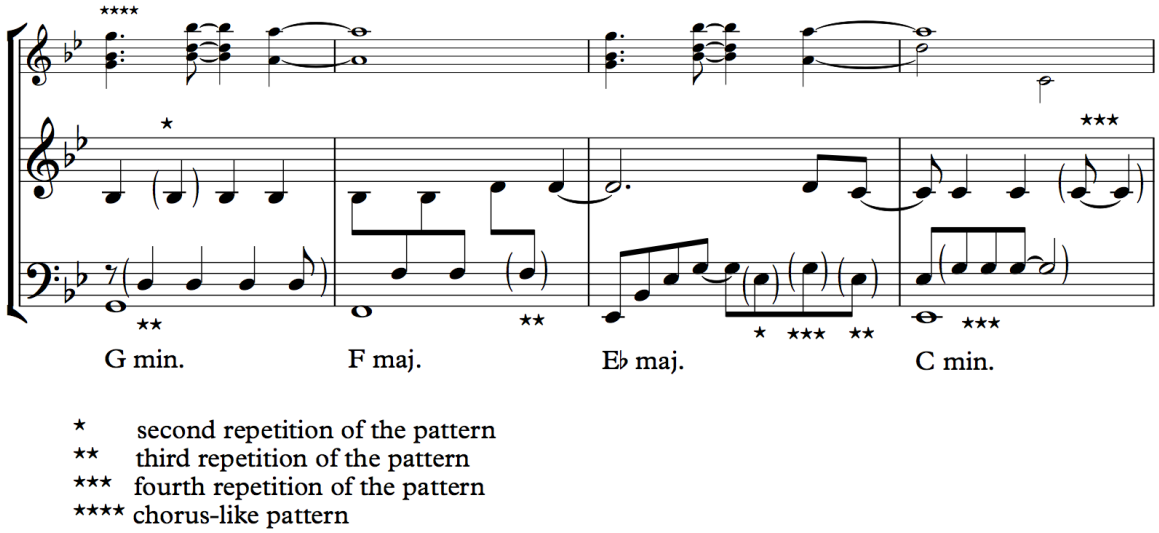


Figure 17: "Stay With Me" cue (12:30 - 13:47, chorus at 13:05; 53:22 - 54:22, chorus at 53:33; 1:14:00 - 1:15:01, chorus at 1:14:12)

In *The Fountain*, Mansell again uses minimalist techniques to imbue the music with a sense of continuity: the cues are in a steady tempo, with either an eight- or four-note steady pulse; chords are diatonic (i.e., harmonic progressions being either G min. - F maj. - E flat man. - C min., or feature alternation of two chords over a pedal: e.g. D min. - A min. over D, and A min. - E min. over A); four-measure blocks repeat numerous times while again being organized in a form that evokes the verse/chorus organization of a pop (or rock) song. The structure of the entire film is outlined in detail in Appendix B.

Mansell's score builds the grand finale in a similar fashion as in *Requiem* - all of the previously heard patterns collide either vertically or horizontally in a bustling minimalist texture (Figures 18-21).

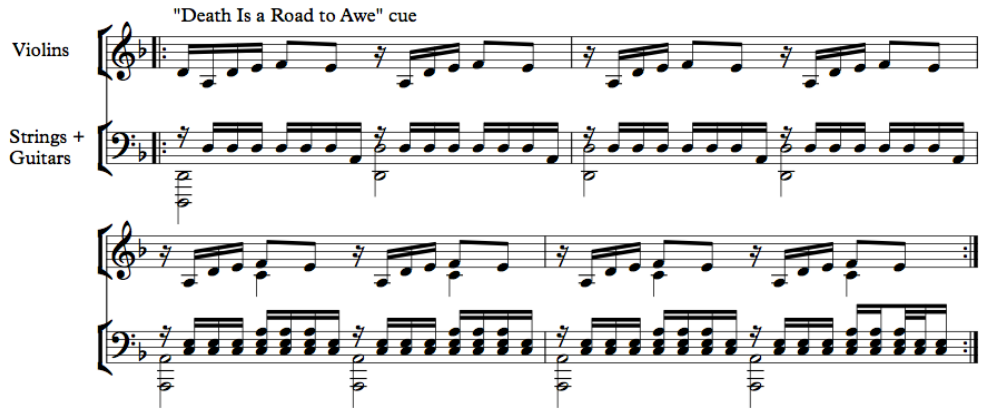


Figure 18: *The Fountain,* 1:20:56 - 1:21:08

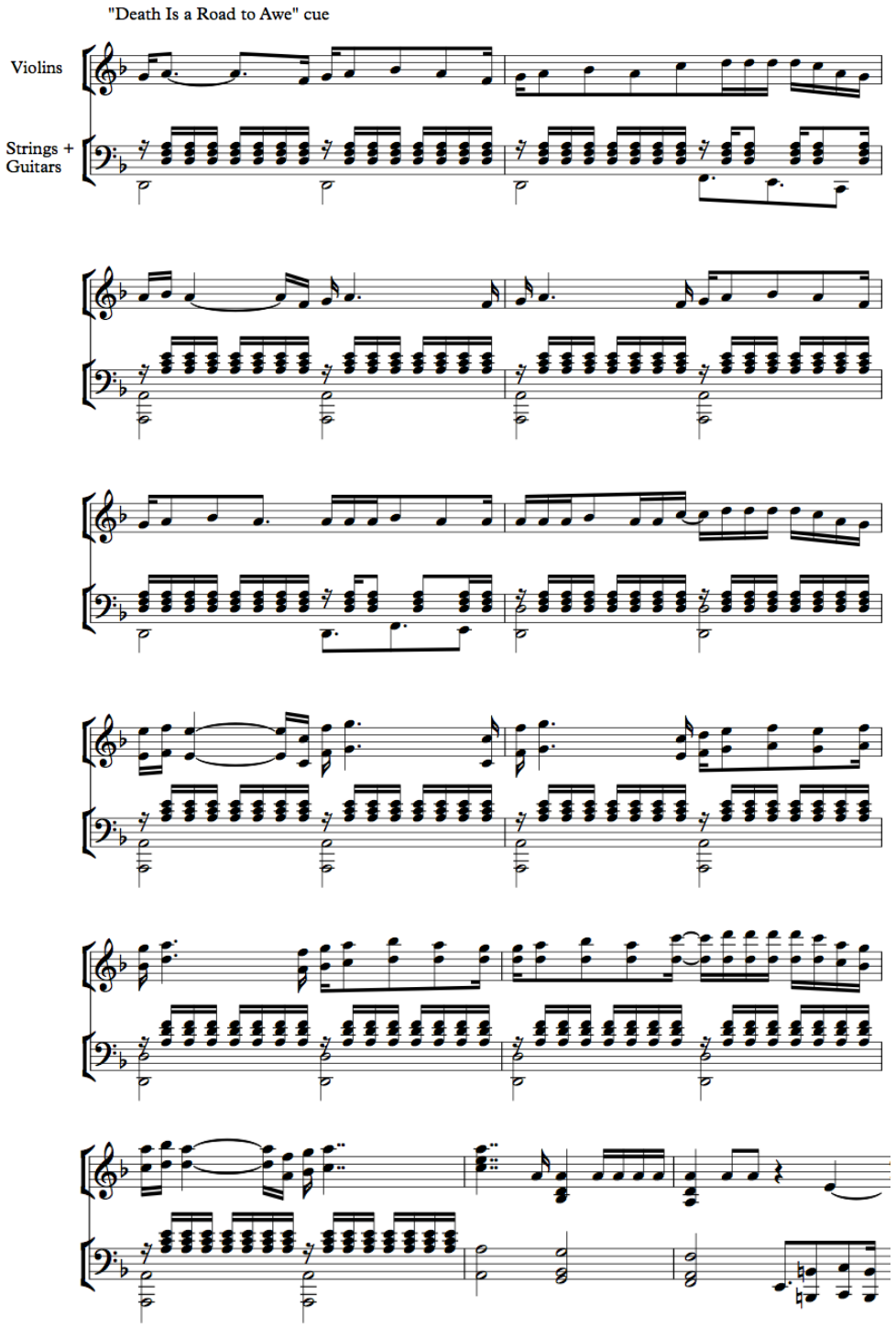


Figure 19: *The Fountain*, 1:21:08 - 1:22:08

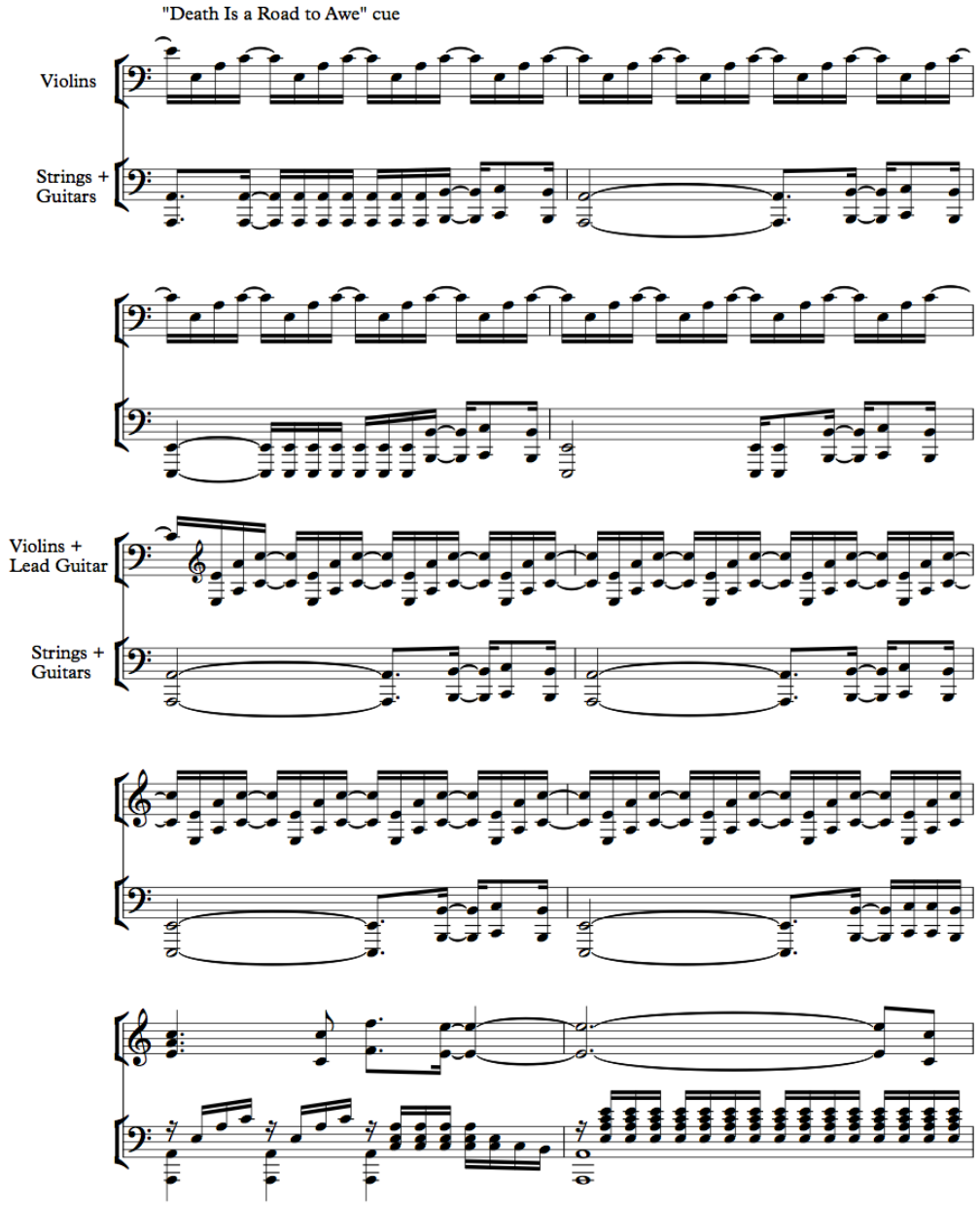


Figure 20: *The Fountain*, 1:22:08 - 1:22:40

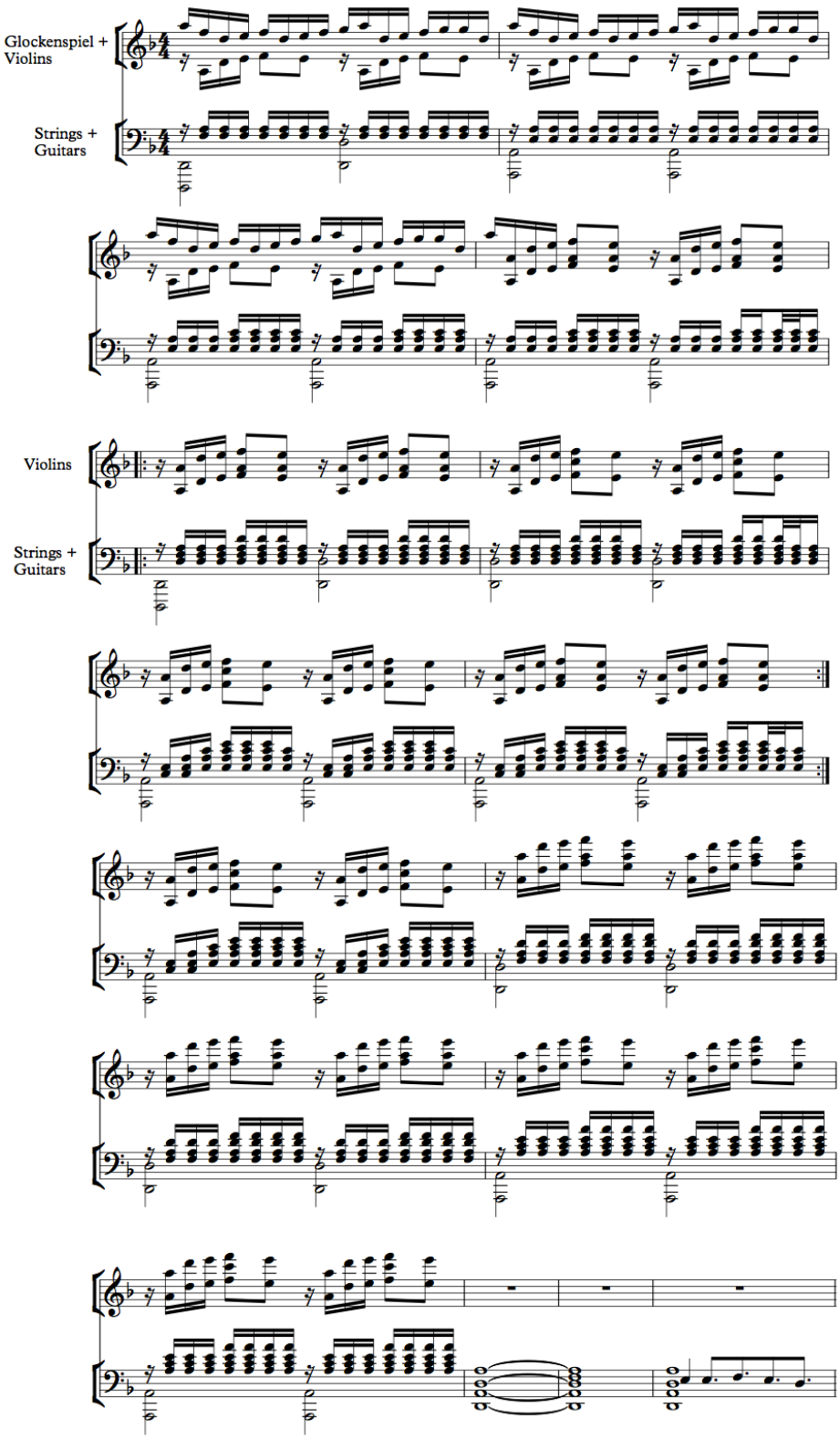


Figure 21: *The Fountain,* 1:24:04 - 1:26:59

Conclusion

What kinds of subjectivities are possible when musical syntax is undermined by what Rebecca Leydon describes as "obstinate motivic repetition"?[1] In other words, what is/are the meaning(s) of Mansell's minimalisms? Repetition can potentially serve a great variety of expressive purposes, some of them outlined in Leydon's list of its potential associations, discussed in detail in Chapter 2. Among Leydon's tropes is the "mantric" trope, designated as such because in representative works the museme acts as a kind of mantra, whose endless repetition suggests access to mystical or spiritual transcendence. *The Fountain*'s cyclical structure — three stories from three different epochs interwoven by the means of non-linear narration — implies a "mantric" sense of cyclicality and timelessness. Several features work to make music in the film mantra-like: the overriding harmonic consonance and the limited pitch resources of a single diatonic mode certainly evoke a serene and contemplative state, but the mode of repetition itself and the measured transformation of musemes into discursive units also are key aspects of its mantric effect.[2]

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[1] Rebecca Leydon, "Toward a Typology of Minimalist Tropes," *Music Theory Online* 8, no. 4 (December 2002): 1.

[2] Richard Middleton offers a useful way to distinguish among different kinds of ostinati and their effects. Middleton draws a distinction between what he calls "discursive" and "musematic" repetition strategies:

> Musematic repetition is a more or less unvaried repetition of "musemes" — of motivic quanta, the smallest meaningful units within a musical system. Discursive repetition, on the other hand, is repetition of longer, syntactically more complex units, like whole phrases or strophes. The musematic strategy tends to project a single-leveled formal structure, a "groove," while the discursive strategy projects a hierarchically organized discourse — as in "strophic form," for instance.

Leydon, "Toward a Typology of Minimalist Tropes," 2; see also Richard Middleton, "'Lost in Music'? Pleasure, Value and Ideology in Popular Music," in *Studying Popular Music* (Buckingham: Open University Press, 1990).

Requiem for a Dream profits from minimalism's stylistic neutrality, in that minimalism does not explicitly evoke any particular culture, subculture, etc. However, the expressivity of minimalism is anything but neutral.[3] Richard Middleton's research on the topic suggests that the psychoanalytic interpretation of repetition is itself not univocal. Adorno recognized that repetition has to do with the operation of the primary processes of the psyche, while Freud's metaphoric construction of the psyche implied the psyche as an "economy."[4] When Aronofsky repeats extreme closeups and fast-motion sequences of the pills, the fix, the injection, swallowing pills or sniffing cocaine, pupil dilation — all this with acute exaggeration of sounds — to show how drugs are acting on his characters, he employs the music with a similar purpose. The main characters' sense of entrapment is matched by the seemingly inescapable obsessive repetitions of the cues revealing their respective mental states.

Another viable question is the following: if, as Eaton concludes, minimalism is often considered as a cold and impersonal musical language that in films has so far mostly functioned to denote "alterity, mathematical genius, [or] dystopia,"[5] how could one explain the overall expressive quality of Mansell's music in both *Requiem* and *The Fountain*? One possible explanation lies in the notion that Mansell's music cultivates a kind of "English minimalism," a

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[3] As Mansell recounted in an interview with Graeme Thomson:

> I worked on one film where the producer told me he wanted something more neutral. Neutral? They're frightened of emotion, basically. Compromise is a part of it, but my best work comes when it's a very close creative team. If you find the right person and project, you end up with something you could never have thought of on your own, and that's the kind of magic I'm looking for.

Graeme Thomson, "Rock Stars Storm the Movie Soundtrack World." *The Guardian*, November 19, 2009, accessed February 2, 2015, http://www.theguardian.com/film/2009/nov/19/movie-soundtracks-rock-star.

[4] Middleton, "'Lost in Music'? Pleasure, Value and Ideology in Popular Music."

[5] Rebecca Eaton, "Unheard Minimalisms: The Function of the Minimalist Technique in Film Scores" (Ph.D. diss., University of Texas, Austin, 2008), 254.

proto-style that the *The Routledge Companion to Postmodernism* describes in the context of the music of English film and concert composer Michael Nyman (born 1944) as often being "more evocative and expressive than that of original minimalism" and "successful in achieving a sense of tragedy."[6] Another explanation certainly lies in the expressivity of rock music.[7] In addition, the performers with whom Mansell collaborated on both scores, the Kronos quartet and Mogwai, are renowned among connoisseurs of their respective musical outputs for their distinctive, evocative sonorities and expressivity.

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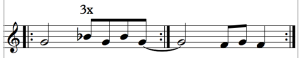
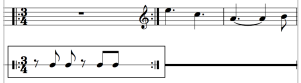
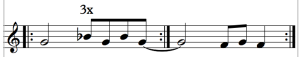
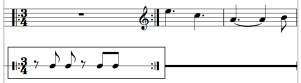
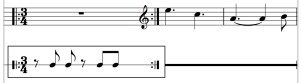
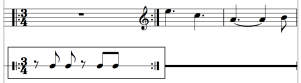
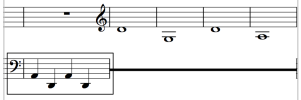
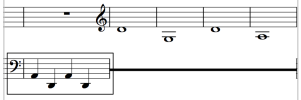
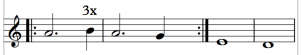
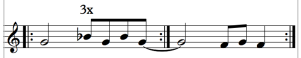
[6] Stuart Sim, ed., "Part II: Notes and Terms" in *The Routledge Companion to Postmodernism* (London: Routledge, 2001), 328.

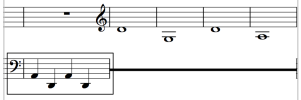
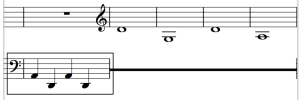
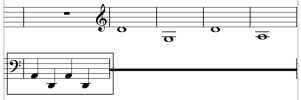
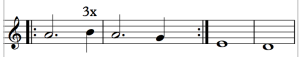
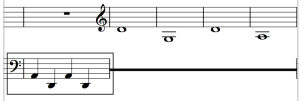
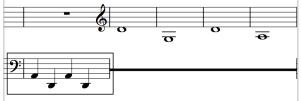
[7] See Walter Everett, ed., *Expression in Pop-Rock Music: A Collection of Critical and Analytical Essays* (London: Routledge, 2007).

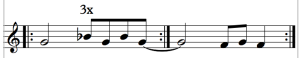
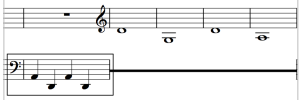
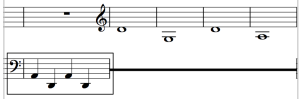
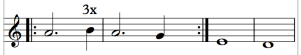
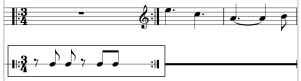
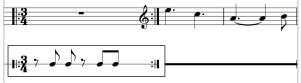
APPENDIX A: Formal structure of *Requiem for a Dream*

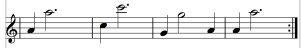
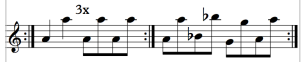
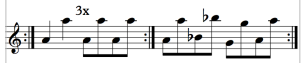
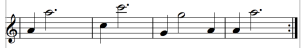
Segment	Subdivision	Characters + Plot/Events	Track (on an Album)	Soundtrack	Comments	Motives
PROLOGUE						
1. "Tuning Up" 0:31 - 3:00	0:31	TV show				
	1:15	Sara, Harry at her apartment		Tuning of the strings (cresc. dim. 2x); at 2:23 G, dim.	split screens	Tuning / open strings: (c), G, D, A, (e)
	2:30		1. "Summer Ouverture"	glimpse of main theme (synth) in G over tuning		G min.
	2:50			conductor's baton, every other sound dies out		
ACT I - SUMMER		Harry, Tyrone	cont.	Main Title - "Summer Ouverture" cue (bass melody)	credit at 2:55	(G min.) MAIN THEME
2. "Summer Ouverture" 3:00 - 5:29			cont.			(G min.) (MAIN THEME)
	3:12		cont.	(actual melody, electronic)		(G min.) (MAIN THEME)
	3:34		cont.	(+ scratch-like groove)		(G min.) (MAIN THEME)
	3:40		cont.		Opening credits	(G min.) (MAIN THEME)
	4:45		cont.	(refrain)		cont.
3. "Dreams" 5:29 - 7:52		Harry, Tyrone, neighbor Mr. Rabinowitz		no music		
	5:44 - 5:50			sound effects, Harry's voice	hip-hop montage (drugs)	(G min.)

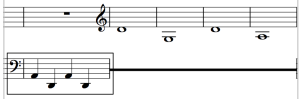
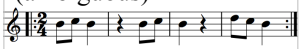
	5:50	Harry, Tyrone	2. “Party”	cue # 1 (electronic; techno; upbeat)		cont.
	6:01			sound effect (“needle off the LP” sound)		
	6:03		cont.	cue # 1 (refrain)	A	(G min.) 
	6:19	Harry, Tyrone and cop at the food truck	3. ”Coney Island Dreaming ”	cue # 2 (electronic, slower; dreamlike)	B	A min. 
	7:23	Harry steals cop’s gun	2. “Party”	cue # 1 (refrain)	A; dream sequence** didn’t happen in reality but in character’s mind	(G min.) 
	7:34	Harry, Tyrone and cop at the food truck	3. ”Coney Island Dreaming ”	cue # 2	B	A min. 
4. “Mother’s Love” 7:52 - 9:04		Sara, neighbor Mr. Rabinowitz		no music		
	8:29 - 8:35			sound effects (TV recorder button pressing sound)	hip-hop montage (TV)	
	8:35	Sara at the apartment	5. “Chocolat e Charms”	G drone iterations (electronic)		G min.
5. “The Winner” 9:04 - 12:07		Harry, Marion	cont.	(same)		(G min.)
	9:55	Sara, (and TV representative on the phone)		no music		

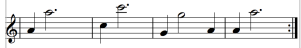
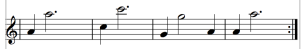
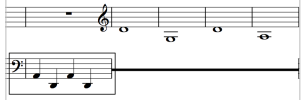
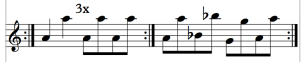
	10:38 - 10:47		7. “Dreams”	cue # 2 (electronic, slower; dreamlike)		A min. 
	11:01 - 11:02			sound effects (TV recorder button pressing sound)	hip-hop montage (TV)	
	11:02 - 12:05	Sara looking for the dress	cont.	cue # 2		A min. 
6. “Alarm” 12:07 - 13:58		Harry, Marion	6. “Ghosts of Things to Come”	cue #3 (string quartet low drone-like sound)		G maj. 
	12:38			(+ melody)		(G maj.) 
						
	13:00	Sara, her neighbor		no music		
	13:24	Harry, Marion		no music		
	13:27		4. “Party”	cue #1+ alarm sound		(G min.) 
	13:57	Sara		ticking sound, no music		
7. “Juice” 13:58 - 16:34						
	13:59 - 14:02	+ Sara’s diet book			hip-hop montage (words from Sara’s book)	

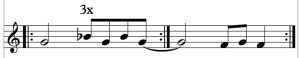
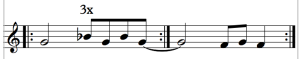
	14:15			sound effect on words “no sugar”		
	14:19			sound effect on words “no dressing”		
	14:23 - 14:28			sound effects on words “no sugar” - lunch; “no dressing” - breakfast; “no sugar	hip-hop montage (words from Sara’s book)	
	14:29		6. “Ghosts of Things to Come”	cue #3 (string quartet low drone-like sound)		G maj. 
	14:35	Harry, Marion	cont.	(same)		(G maj.) 
	14:57		cont.	(+ melody)		(G maj.) 
						
	?		cont.	(back to drone-like sound)		(G maj.) 
	15:11	Sara, her neighbor	cont.	(same)		(G maj.) 

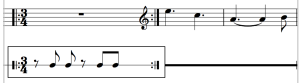
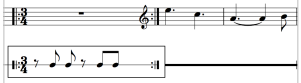
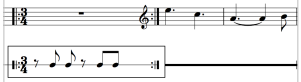
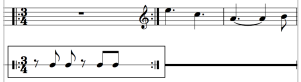
	15:28	Marion: “Anybody wanna waste some time?”	4. “Party”			
	15:31 - 15:34			sound effects (popping bottle sound)	hip-hop montage (pills)	
	15:34	Harry, Marion, Tyrone	cont.	cue # 1 (electronic; techno; upbeat)	time-lapse	G min.
	15:40		cont.	(refrain)	(time-lapse)	(G min.) 
	16:05	Sara, her neighbor		no music (hum)		
8. “Together?” 16:34 - 18:58	16:34	Harry, Marion in bed	6. “Ghosts of Things to Come”	cue #3 (string quartet low drone-like sound)	split screens	G maj. 
	17:29		cont.	+ (melody)		(G maj.) 
						
	18:10	+ not in bed anymore	7. “Dreams”	cue # 2 (electronic, slower; dreamlike)		A min. 
	18:34		cont.	(+ melody)		(A min.) 
9. “Thinking Thin” 18:58 - 23:31	18:58	Sara at her apartment		timer/clock ticking in the back; no music		

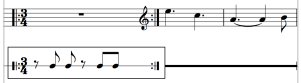
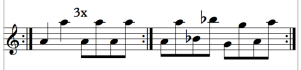
	19:20		9. “Dr. Pill”	cue # 5 (slower “broken octave” electronic cue) + clock ticking	A	D min./A min. (ambiguous) 
	19:54	Marion	8. “Tense”	cue # 4 (faster “broken octave” electronic cue) + electronic hum-like sound	B	D min. 
	20:06 - 20:13			sound effects + hum	hip-hop montage (drugs)	
	20:13	Marion	cont.	cue # 4 (second part of “broken octave” electronic cue) + electronic hum-like sound	B	(D min.) 
	20:28 - 20:30	Sara		sound effects (TV recorder button pressing sound)	hip-hop montage (TV)	
	20:50		9. “Dr. Pill”	cue # 5 (slower “broken octave” electronic cue) + clock ticking	A	D min./A min. (ambiguous) 
	21:01 - 21:03			sound effects (TV recorder button pressing sound)	hip-hop montage (TV)	
	21:05 - 21:06	shot of the sun	13. “Hope Ouverture ”	theme (string quartet arco/ pizz. + electronics) + “bursting” sound of the sun		G min. MAIN THEME

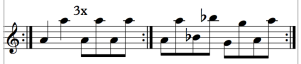
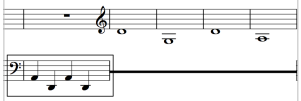
	21:05	Sara, her Coney Island neighbors	cont.	(theme)		(G min.) (MAIN THEME)
	21:59		cont.	+ beat		(G min.) (MAIN THEME)
	22:32	Harry, Tyrone	cont.	(same)		(G min.) (MAIN THEME)
	22:52			(refrain)		(G min.) (MAIN THEME)
	22:58	Sara	cont.	(same)		(G min.) (MAIN THEME)
10. “Dynamite” 23:31 - 25:48	23:31 - 23:35			scraping and taping sound effects	hip-hop montage (weed)	
	23:35 - 23:47	Harry	10. “High on Life”	electronic dub cue + sound of LP record spinning	time-lapse	
	23:52	“vision” of Marion on the pier	11. “Ghosts”	cue # 3 (electronic, slower; dreamlike)	dream sequence; no voice sound	G maj. 
	24:30 - 24:33			sound effect montage (keys and lock sound)		
	24:39	Harry, Tyrone	cont.	cue # 3 (refrain)		G maj./A min. (ambiguous) 
	25:22 - 25:30			sound effects	hip-hop montage (drugs)	
	25:30	Harry, Tyrone		bursting flame sound effect, no music		
11. “Delicious Visions” 25:48 - 27:30	25:48 - 25:49	Sara at her apartment		sound effects (TV recorder button pressing sound)	hip-hop montage (TV)	

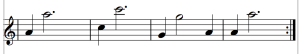
	25:49		9. “Dr. Pill”	cue # 5 (slower “broken octave” electronic cue) + sound effects (sound of cigarette burning, brush-like ticking sound, refrigerator sound)		D min./A min. (ambiguous) 
	26:50		cont.	(+ melody + noisy sound effects)		D min./A min. (ambiguous) 
	27:13	Sara, (on the phone with her neighbor)		no music		
12. “A Date” 27:30 - 29:44		Harry, Marion talking about psychiatrist Arnold		no music		
	27:54		11. “Ghosts"	cue #3 (string quartet low drone-like sound)		G maj. 
	28:17	Marion, Arnold having dinner		thin drone-like sound		
	29:02	Sara at the weight doctor’s	8. “Tense"	cue # 4 (faster “broken octave” electronic cue) + sound effects (sound of cigarette burning, brush-like ticking sound, refrigerator sound)		D min. 
	29:18			(+ melody)		(D min.)

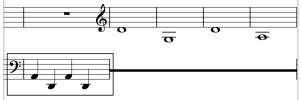
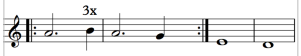
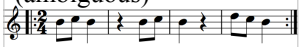
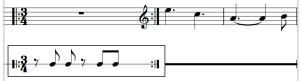
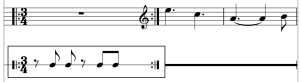
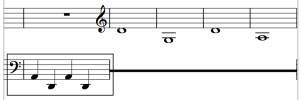
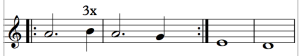
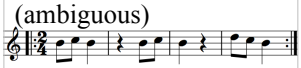
13. “$” 29:44 - 31:26	29:44	Tyrone	12. “Crimin’ & Dealin’”	cue # 1 (electronic; techno; upbeat) + scratching sound	(true!) hip-hop montage (drugs/ Marion’s collages/ money)	G min.
	30:00		cont.	(same)	(true!) hip-hop montage (Marion’s collages)	(G min.)
	30:11	Harry waiting for Marion	cont.	(refrain)		(G min.) 
	30:15 - 30:23		cont.	cue #1	(true!) hip-hop montage (drugs/ money)	(G min.)
	30:23	Harry, Marion	cont.	(same)		(G min.)
	30:43 - 31:02		cont.	(same) +word “actually"	(true!) hip-hop montage (drugs/ sewing/ cash)	(G min.)
	31:09	Harry, Tyrone	cont.	cue #1 (refrain)		(G min.) 
14. “Last Supper” 31:26 - 32:43	31:26	Sara (and her pills)		no music		
	31:43 - 31:45			Words: “1, 2, 3, 4.”	split screens; hip-hop montage	
	31:52	Sara (and food)		no music	split screens	
	32:02	Sara dancing	15. “Bialy & Lox Conga”	conga (non-diegetic)	non-diegetic	
	32:19 - 32:25		cont.	+ sound effects	hip-hop montage (shower/ coffee/TV)	

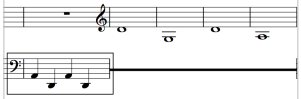
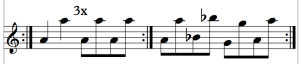
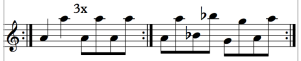
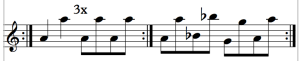
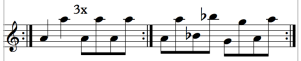
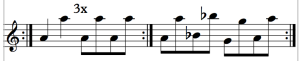
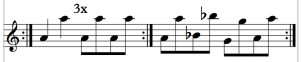
	32:41 - 32:48			sound effects	hip-hop montage (weed)	
15. “Sweet Alice” 32:43 - 34:47						
	32:48	Tyrone, Tyrone’s girlfriend Alice	7. “Dreams”	cue # 2 (electronic, slower; dreamlike)		A min. 
	33:07	Tyrone remembering his mom and childhood	cont.	(+ melody)	dream sequence	(A min.) 
	33:33	Tyrone, Tyrone’s girlfriend Alice	cont.	cue # 2		(A min.) 
16. “King Neptune” 34:17 - 37:13		Harry, Marion at the beach	cont.	(same)		(A min.) 
	34:28			drone-like electronic sound		
	35:14 - 35:25			sound effects	hip-hop montage - (drugs, coffee, shower, eye,)	
	35:25	Sara at her apartment	13. “Hope Ouverture ”	main theme (string quartet + electronics)	time-lapse in Sara’s apartment	G min. MAIN THEME
	(36:07)		cont.	(refrain)		(G min.) (MAIN THEME)
	36:24 - 36:26		cont.	+ popping pill sound effect	hip-hop montage - (pills)	(G min.) (MAIN THEME)
	36:26	Sara (and TV)	cont.	(refrain)		(G min.) (MAIN THEME)

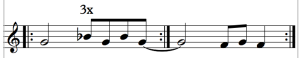
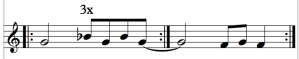
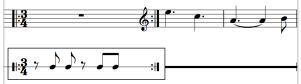
	36:36		cont.	(main theme ending)	slow-motion	(G min.) (MAIN THEME)
	36:47			no music	blackout	
	36:47	Tyrone, Alice	7. “Dreams"	cue # 2 (electronic, slower; dreamlike)	camera spinning from above	A min. 
17. “Hope” 37:13 - 47:00	37:13 - 37:14		10. "High on Life"	electronic dub cue	hip-hop montage	
	37:14	Sara	cont.	(same)		
	37:18 - 37:34		cont.	(same)	hip-hop montage - (pills/ zipper/ locker) repeats same sequence 3 times in a row	
	37:34 - 37:35	shot of the sun	cont.	(same)		
	37:36	Sara and her Coney Island neighbors	cont.	(same)		
	37:57	+ Harry arrives	cont.	(same)		
	38:12	Sara, Harry at the apartment		no music		
	40:19 - 41:00		cont.	(previous cue)		
	41:00			no music		
	45:32 - 46:14		cont.	(previous cue)		
	46:31	Harry in a cab crying	14. “Tense”	cue # 4 (faster “broken octave” electronic cue) + hum-like sound effects		D min. 
	46:47 - 46:51			sound effects	hip-hop montage (drugs)	

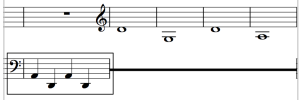
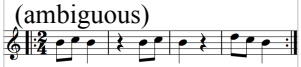
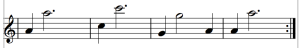
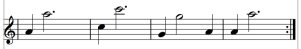
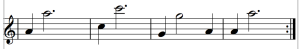
	46:51	Harry in a cab	cont.	cue #4		D min. 
ACT II - FALL						
18. “Fall Reprise” 47:00 - 49:20	47:00	Tyrone, drug dealers		Tuning of the strings		Tuning / open strings: (c), G, D, A, (e)
	47:42 - 47:46	+ shooting		(+ cresc.)		(Tuning)
	47:47	+ Tyrone running from cops	16. “Cleaning the Apartment ”	main theme (string quartet + electronics) + shooting, sirens, tires screeching sound-effects	credit at 47:47; handheld camera	G min. MAIN THEME
	48:07 - 48:12			sound effects	hip-hop montage (pills, handcuffs)	
	48:12	Sara (and TV)		no music		
	48:19 - 48:21			same sound effects	hip-hop montage (pills)	
	48:27 - 48:29			same sound effects	hip-hop montage (pills)	
	48:34 - 48:38			sound effects	hip-hop montage (drugs)	
	48:39	Harry, Marion	17. “Ghosts Falling”	cue #3 (string quartet low drone-like sound)	camera from above, spinning	G maj. 
	49:12 - 49:19	Tyrone in jail		drone-like electronic sound	time-lapse behind his back	
19. “Hunger Cries” 49:19 - 51:29	49:19	Sara, nurse on the phone		(+ brushing/ ticking sound)		

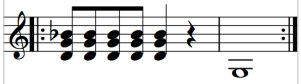
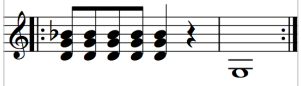
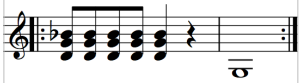
	49:39 - 49:41			sound effects	hip-hop montage (pills)	
	49:41			drone-like electronic sound		
	49:49 - 49:51			sound effects	hip-hop montage (pills)	
	49:51			drone-like electronic sound		
	49:53 - 49:58			sound effects	hip-hop montage (pills, TV)	
	49:58	Sara watching TV show		drone-like electronic sound	dream sequence	
	50:08, 50:17 - 50:19, 50:22			drone-like electronic sound	bird eye view	
	50:23	Tyrone in jail bailed		(same)	time-lapse behind his back	
	50:31	Harry, Tyrone		(same)		
	51:06	Harry, Tyrone running		(+ train sound and other sound effects)		
	51:15 - 51:17			sound effects	hip-hop montage (pills)	
	51:17	Sara		drone-like electronic sound	time-lapse in Sara's apartment	
20. "Mercy" 51:29 - 54:15	51:29	Harry, Marion in bed		(same)	time-lapse	
	52:33		(9. "Dr. Pill")	(+ motives)		D min./A min. (ambiguous) 

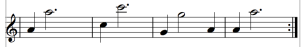
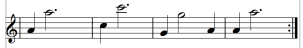
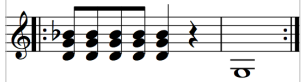
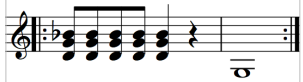
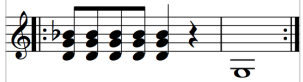
	53:01	Sara at the weight doctor's		electronic hum + a lot of sound effects	bird eye view, time-lapse, Sara and her voice in slow-motion, doctor's voice higher and sped-up	
21. "The Drought" 54:15 - 56:20	54:15	Harry, Marion	17. "Ghosts Falling"	cue #3 (string quartet low drone-like sound)		(G maj.) 
						
	54:47		cont.	(+ refrain)		G maj./A min. (ambiguous) 
	54:54	Harry, Tyrone, and money	18. "Dreams"	cue # 2 (electronic, slower; dreamlike)		A min. 
	55:15	Harry, Tyrone in a barn	cont.	(same cue)		(A min.) 
22. "Apart" 56:20 - 1:00:14	56:20	Harry, Marion	17. "Ghosts Falling"	cue #3 (string quartet low drone-like sound)		(G maj.) 
						
	56:51		cont.	(+ refrain)		G maj./A min. (ambiguous) 

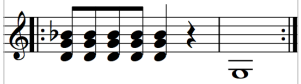
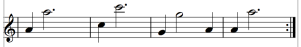
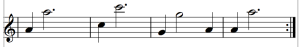
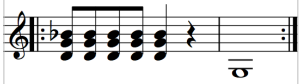
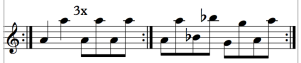
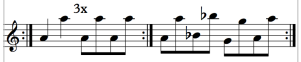
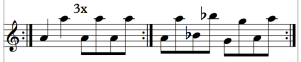
	57:13		cont.	cue #3		G maj. 
	57:36	Marion, Arnold	19. "Arnold"	cue #4 variation (drone and string harmonic-like sound)		D min. 
	58:33		cont.	(+ cresc.)		(D min.) 
	58:40	Marion stabs Arnold with fork		no music	dream sequence	
	58:45		cont.	cue #4 variation (drone and string harmonic-like sound)		(D min.) 
	58:52	Marion, Arnold in bed	cont.	(same cue)		(D min.) 
	59:30	Harry in front of TV/Marion, Arnold in bed	cont.	(same cue)	collage	(D min.) 
	59:50 - 59:54			sound effects	hip-hop montage (drugs)	
	59:54	Harry (and TV)/Marion, Arnold in bed	cont.	(same cue)		(D min.) 

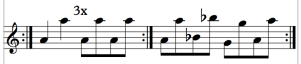
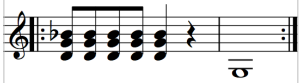
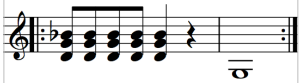
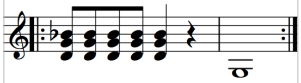
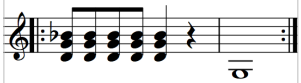
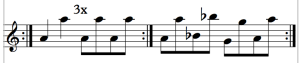
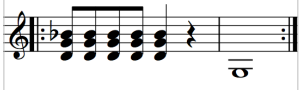
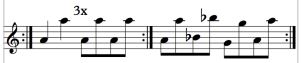
23. “Pain” 1:00:14 - 1:02:36	1:00:14	Marion	20. “Marion Barfs”	main theme (string quartet) + thunder sound effect	bird eye view, time-lapse, floating-like visuals	G min. MAIN THEME
	1:01:10		cont.	(refrain) + thunder + vomit + rain sound-effects		(G min.) (MAIN THEME)
	1:01:27	Marion, Harry at the apartment	cont.	(+ groove-like scratch sound)		(G min.) (MAIN THEME)
	1:01:59	Sara (and lipstick)	cont.	(same)		(G min.) (MAIN THEME)
	1:02:03	Tyrone remembering his mom and childhood	cont.	(same)	camera distancing them	(G min.) (MAIN THEME)
24. “Sal the Geep” 1:02:36 - 1:05:59	1:02:36	Harry, Tyrone, dealers at the supermarket/ Marion at the apartment	21. “Supermarket Sweep”	cue #1 variation (another dub/ drone-like electronic)cue		
	1:03:01		cont.	(+ melody +techno)		
	1:03:52		cont.	(refrain)		(G min.) 
	1:04:17	Harry, Tyrone, dealers shooting	cont.	cue #1 variation (another dub/ drone-like electronic)cue		
	1:04:33	Harry, Tyrone running	cont.	(refrain)		(G min.) 
	1:04:51	Harry, Tyrone	22. “Dreams”	cue # 2 (electronic, slower; dreamlike)		A min. 
25. “Fury” 1:05:59 - 1:13:04	1:05:59 - 1:06:01			sound effects	hip-hop montage (pills)	

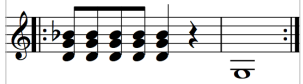
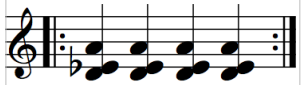
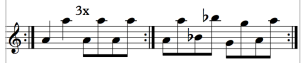
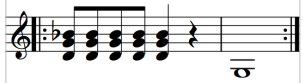
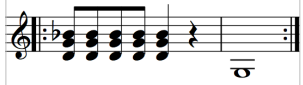
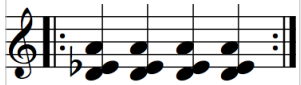
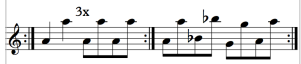
	1:06:01	Sara at her apartment		buzzing sound + alarm sound + scraping sound	a lot of visual effects	
	1:07:02	+ refrigerator explodes		alarm-like sound effect		
	1:07:09	Harry, Marion	17. “Ghosts Falling”	cue #3 (string quartet low drone-like sound)		G maj. 
	1:07:32	(+ quarreling)	cont.	(refrain-like)		G man./A min. (ambiguous) 
	1:08:22	Sara at her apartment		hum-like sound		
	1:08:46	+ refrigerator explodes		sound effect		
	1:08:52	Sara watching TV show	9. “Dr. Pill”	cue # 5 (slower “broken octave” electronic cue) + clock ticking		D min./A min. (ambiguous) 
	1:09:42	+ refrigerator explodes	cont.	(+ sound effect)		(D min./A min. (ambiguous)) 
	1:09:46	+ refrigerator explodes	cont.	(+ sound effect)		(D min./A min. (ambiguous)) 
	1:10:04	Sara’s nightmare in front of the TV		drone-like electronic sound		
	1:11:06	Sara, TV crew: her apartment turns into TV show set		thick hum-like sound + buzzing sound effects		

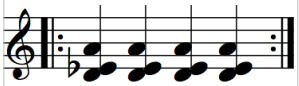
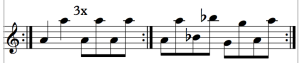
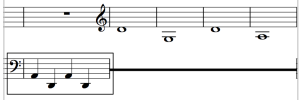
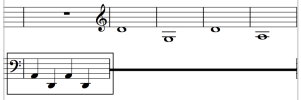
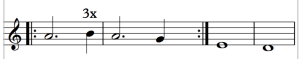
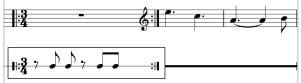
	1:11:42			drumroll		
	1:11:42		24. “Bug Got a Devilish Gring Conga”	conga (diegetic/ nondiegetic)	camera spinning	
	1:12:22	+ refrigerator explodes		drumroll; cresc.		
	1:22:59	+ refrigerator explodes		sound effect		
	1:13:00	Sara screaming, running		no music		
ACT III - WINTER						
26. “Winter Reprise” 1:13:04 - 1:14:04	1:13:04	Sara’s empty apartment, stripes over TV		sinus-wave sound of TV		
	1:13:16	Sara (and people on the street)	25. “Winter Ouverture ”	main theme (string quartet + electronics) + scratch-like groove sound	credit; Sara in slow motion people in time-lapse	G min. MAIN THEME
	1:13:34	Harry, Tyrone preparing to go to Florida	26. “Sounther n Hospitalit y”	theme (string quartet)		(G min.) 
27. “A Whack” 1:14:04 - 1:16:31	1:14:04	Sara on a subway	cont.	(same cue)		(G min.) 
	1:14:32	Marion on the phone	cont.	(same cue)		(G min.) 

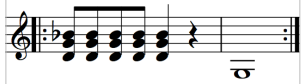
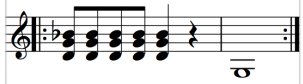
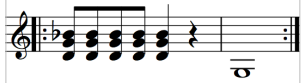
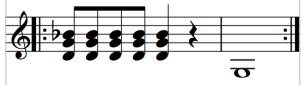
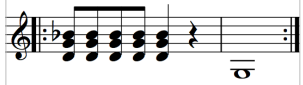
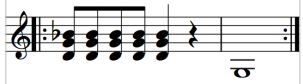
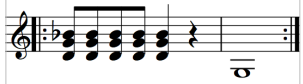
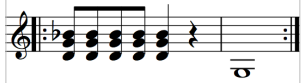
	1:14:57	Sara at TV station, TV employees and security	27. “Fear”	cue # 5 (slower “broken octave” electronic cue) + ticking beat-like electronic sound from “Southern Hospitality”		D min./A min. (ambiguous) 
28. “Decay” 1:16:31 - 1:20:56	1:16:31	Marion (looking at Harry’s photo), calling Arnold	cont.	(same cue)		(D min./A min. (ambiguous)) 
	1:17:21	Sara (taken by paramedics)	26. “Sounther n Hospitalit y”	theme (string quartet)		G min. 
	1:17:33	Harry, Tyrone in a car		drone-like electronic sound + siren wailing		
	1:17:38 - 1:17:40			sound effects + hum	hip-hop montage (drugs)	
	1:17:54	Harry taking heroin	26. “Sounther n Hospitalit y”	“Southern Hospitality” theme variation (string quartet) + ticking beat-like electronic sound; different key		C# min. 
	1:18:20 - 1:18:27		cont.	(same cue)	hip-hop montage (drugs)	(C# min.) 
	1:18:37	Marion at the client’s door		hum-like drone		

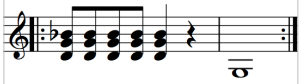
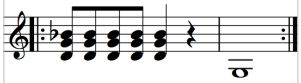
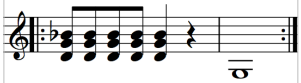
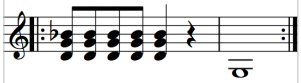
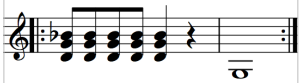
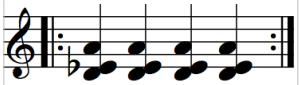
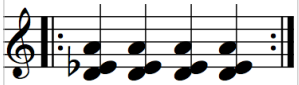
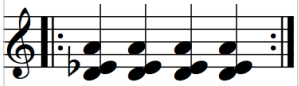
	1:18:45	Sara (and paramedics)	26. “Sounther n Hospitalit y”	“Southern Hospitality” theme variation (string quartet); original key		G min. 
	1:18:58	Marion at the client’s apartment	27. “Fear”	(hum-like drone-like electronic sound)		
	1:19:50		cont.	(+ melody)		D min./A min. (ambiguous) 
	1:20:12		cont.	(+ “Southern Hospitality” ticking beat-like electronic sound)		(D min./A min. (ambiguous)) 
	1:20:42	Harry, Tyrone driving	26. “Sounther n Hospitalit y”	“Southern Hospitality” cue for strings; modulation		C# min. 
29. “False Hope” 1:20:56 - 1:25:34	1:20:56	Marion at the client’s apartment	28. “Full Tense Winter”	cue # 4 (faster “broken octave” electronic cue) + electronic hum-like sound		D min. 
	1:21:52	Sara at the doctor	cont.	(+ layer from “Ghosts”)		(D min.) 
	1:22:10	Marion in a bath	cont.	(same cue)		(D min.) 

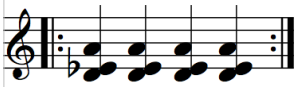
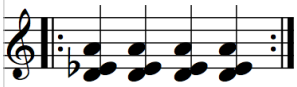
	1:22:25 - 1:22:27		cont.	(+ cresc. sound effect)		(D min.) 
	1:22:27	Marion drowning	26. “Sounther n Hospitalit y”	“Southern Hospitality” theme (string quartet); original key	dream sequence	G min. 
	1:22:32	Harry, Tyrone	cont.	(+ electronics)		(G min.) 
	1:23:00	Sara in a hospital	cont.	(same cue)		(G min.) 
	1:23:15 - 1:23:23		cont.	(+ rit.)	slow motion	(G min.) 
	1:23:32	Tyrone in a waiting room	28. “Full Tense Winter”	cue # 4 (faster “broken octave” electronic cue) + electronic hum-like sound		D min. 
	1:23:47	Harry at the hospital	26. “Sounther n Hospitalit y”	“Southern Hospitality” theme (string quartet); original key		G min. 
	1:24:14	Marion smoking a cigarette, looking at their photo	28. “Full Tense Winter”	cue # 4 (faster “broken octave” electronic cue) + electronic hum-like sound		D min. 

	1:24:31	Sara at the hospital	29. “The Beginning of the End”	“Southern Hospitality” theme variation (string quartet); original key		G min. 
	1:25:03		cont.	second part of “Southern Hospitality” theme variation (string quartet)		
30. “Ghosts” 1:25:34 - 1:29:11	1:25:34	Marion applying makeup/ Tyrone in a waiting room	28. “Full Tense Winter”	cue # 4 (faster “broken octave” electronic cue)		D min. 
	1:25:57	+ sheriff in a waiting room	29. “The Beginning of the End”	“Southern Hospitality” theme variation (string quartet); original key		G min. 
	1:25:58 - 1:26:03	“handcuffs"	cont.	(+ sound effect)	hip-hop montage (handcuffs)	(G min.) 
	1:26:02	Sara, doctor	29. “The Beginning of the End”	second part of “Southern Hospitality” theme variation (string quartet)		
	1:26:11	Marion applying makeup	cont.	(fast “broken octave” part from “Tense”)		D min. 
	1:26:13	Sara, doctor	cont.	(drone-like sound from “Dreams”)		

	1:26:28		cont.	second part of “Southern Hospitality” theme variation (string quartet)		
	1:26:50	Marion applying makeup	cont.	(fast “broken octave” part from “Tense”)		D min. 
	1:27:00	+ Harry on the phone	30. “Ghosts of a Future Lost”	cue #3 (string quartet low drone-like sound)		G maj. 
	1:27:39		cont.	(+ melody)		(G maj.) 
						
	1:28:36	Sara, doctor	29. “The Beginning of the End”	(drone-like sound from “Dreams”)		
31. “The Requiem” 1:29:11 - 1:33:42	1:29:11	Harry, Tyrone in jail	cont.	(melody from “Dreams”) + noise sound effect	camera tilting	A min. 
	1:29:30	Sara, doctor	cont.	(drone-like sound from “Dreams”) + ticking rhythm from “Southern Hospitality”		
	1:29:41	Marion, her client’s friend’s party	cont.	(same cue)		

	1:29:48	Sara	cont.	“Southern Hospitality” theme for string quartet (until 1:33:08)	collage until 1:33:14, it gradually “speeds up” until 1:33:08	G min. 
	1:29:52		cont.	(+ “Maid Marion, welcome!”)		(G min.) 
	1:29:55	Harry, Tyrone in jail	cont.	(+ “Can you hear me? Can you see me? OK for work.”)		(G min.) 
	1:30:03	Sara	cont.	(+ “Can you hear me? Can you see me? OK for work.”)		(G min.) 
	1:30:08	Marion	cont.	(+ “Can you hear me? Can you see me? OK for work.”)		(G min.) 
	1:30:12	Sara	cont.	second part of “Southern Hospitality” theme + “Can you hear me? Can you see me? OK for work.”		(G min.) 
	1:30:17	Sara	cont.	(+ “Can you hear me? Can you see me? OK for work.”)		(G min.) 
	1:30:18	Marion	cont.	(+ “Can you hear me? Can you see me? OK for work.”)		(G min.) 

	1:30:30	Marion, her client's friend's party	cont.	(+ "Showtime.")		(G min.) 
	1:30:30 - 1:30:31		cont.	+ sound effect	hip-hop montage (drugs)	(G min.) 
	1:30:32	Sara	cont.	(+ "Can you hear me? Can you see me? OK for work.")		(G min.) 
	1:30:34	Tyrone	cont.	(same cue)		(G min.) 
	1:30:38	Sara	cont.	(same cue)		(G min.) 
	1:30:41	Tyrone	cont.	second part of "Southern Hospitality" theme + "Can you hear me? Can you see me? OK for work."		(G min. dominant) 
	1:30:48	Sara	cont.	(+ "Can you hear me? Can you see me? OK for work.")		(G min. dominant) 
	1:30:51	Harry/Sara (electroshocks)/Marion, orgy/Tyrone	cont.	(same cue)	fast cuts from one character to another	(G min. dominant) 

	1:31:36 - 1:31:37		cont.	(+ sound effect)	hip-hop montage (drugs)	(G min. dominant) 
	1:31:37	Harry/Sara (electroshocks)/Marion, orgy/Tyrone	cont.	(same cue)	fast cuts from one character to another	(G min. dominant) 
	1:32:56			hum-like sound		
	1:33:08			+ razor-like sound effect	“white out”	
	1:33:14	“vision” of Marion on the pier	33. “Coney Island Low”	ambient sound of waves, then also sound of Harry’s steps	dream sequence	
	1:33:37	Harry falls off the pier		screaming	dream sequence	
32. “Lux Aeterna” 1:33:42 - 1:37:13	1:33:42	Harry at the hospital	32. “Lux Aeterna”	main theme (string quartet)	“collage” until 1:37:10 blackout	G min. MAIN THEME
	1:34:22	Marion at the apartment	cont.	(+ melody in synth)		(G min.) (MAIN THEME)
	1:34:34	Tyrone in jail	cont.	(same)		(G min.) (MAIN THEME)
	1:34:45	Sara, neighbors at the hospital	cont.	(same)		(G min.) (MAIN THEME)
	1:35:03		cont.	(refrain)		(G min.) (MAIN THEME)
	1:35:23	Marion	cont.	(same)		(G min.) (MAIN THEME)
	1:35:47		cont.	(theme)		(G min.) (MAIN THEME)
	1:36:00		cont.	(refrain)		(G min.) (MAIN THEME)
	1:36:05	Sara	cont.	(+ sound of TV crowd)		(G min.) (MAIN THEME)
	1:36:17		cont.	(theme)		(G min.) (MAIN THEME)

	1:36:28	Sara in a TV show	cont.	(+ melody in synth)	dream sequence	(G min.) (MAIN THEME)
	1:36:47	+ Harry	cont.	(same)	dream sequence	(G min.) (MAIN THEME)
EPILOGUE			cont.	(same)	at 1:37:10 blackout	(G min.) (MAIN THEME)
33. “Seagulls Bliss” 1:37:13 - 1:41:28	1:37:13		cont.	(refrain)	end credits	(G min.) (MAIN THEME)
	1:37:37		33. “Coney Island Low”	ambient sound of waves and seagulls		
	1:38:08		cont.	glimpse of main theme in synth (+ eerie sound)		(G min.)
	1:39:11		cont.	ambient waves sound (and carousel)		

APPENDIX B: Formal structure of *The Fountain*

I “Flaming Sword” 0:35 - 6:57

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
part 1: 0:35 - 2:13	0:35		6. “Xibalba”	Opening Credits (string quartet)	broken minor 3rd; f-g-a	16th c.
	1:15		cont.	Opening Credits/ Theme (string quartet)	a-g-a-g-a-g-a	
part 2: 2:29 - 6:57	2:20	Battle	2. “Holly Dread!”	drone-like underscore: wallpaper of sound (string quartet + Mogwai + low piano) + low drum-like pulse in quarter notes	b flat-a-e flat (hidden)	
	4:30		cont.	(+ strings tremolo)		broken minor 3rd; falling d-c-b flat-a-b flat-g-d
	5:19		3. “Tree of Life”	theme (string quartet + Mogwai)	a-d-f repetition e-f-e-d g-b flat-a (refrain-like) broken minor 3rd	

II “Tree of Life” 6:57 - 10:17

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
part 1: 6:57 - 9:52	6:57	The Man at the Tree of Life		no music		26th c.
	7:19 - 8:17		1. “Last Man”	string quartet + thin drone-like sound	1) quarter note bass-dotted half note chord 2) f-g-a	
	8:17			sound effect: thin metallic sound, sound of writing		
	8:29			+ Words: “Finish it.”		
	8:50		cont.	(same cue)	+ 3) f−g−a−b flat−a	
	9:37		cont.	+ Words: “Finish it.”	(same)	
transition: 9:45 - 9:52		Dialogue from the following scene over current scene	cont.	(same cue)	(same)	
part 2: 9:52 - 10:02		Izzi and Tommy dialogue at home	cont.	(same cue)	(same)	21st c.
part 3: 10:02 - 10:17		The Man at the Tree of Life		no music		26th c.

III “Walk With Me” 10:18 - 14:38

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
10:18 - 14:38	10:18	The Man at the Tree of Life	9. “Death Is a Road to Awe” (on the album it’s a Kronos + Mogwai track)	string quartet	1) a-d-e-f-e 2) f-g-a & f-g-a-b flat-a	
	11:03			no music		
	11:48		4. “Stay With Me”	string quartet (sul pont. and harmonics) underscore	1) g-b flat-a	
	12:30		cont.	(same cue) + Mogwai	1) b flat 4x - b flat - f - b flat - f - d -d	
	12:52		cont.	(+ Words: Finish it.”)	(same)	
	13:05		cont.	(same cue)	+ 2) g- b flat - a (refrain-like)	
	(13:25)	(flashback of Izzi running in red dress in slow motion)	cont.	(same cue)	(same)	21st c.
	13:26		cont.	(same cue)	(same)	26th c.
	13:47		cont.	(same cue)	1) b flat 4x - b flat - f - b flat - f - d -d	
transition : 13:53 - 14:23		Izzi and Tommy dialogue at home/lab	cont.	(same cue)	(same)	26th c./21st c.
14:23 - 14:38		at the lab		no music		21st c.

IV “Rejuvenation” 14:38 - 15:58

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
part 1: 14:38 - 18:43		at the lab	5. “Death Is a Disease”	string quartet + Mogwai drone-like guitar sound (underscore)	1) broken minor 3rd 2) b flat-a/g-a/e flat-d/ c-d 3) b flat-a-d	
	15:59		cont.	(drone-like low piano sound)		
	16:18		3. “Tree of Life”	cresc. build-up to “Tree of Life” string quartet + Mogwai	1) broken minor 3rd 2) e-f-e-d 3) a-d-f	
	16:28		cont.	(refrain-like)	1) g-b flat-a 2) broken minor 3rd 3) falling d-c-b flat-a-(b flat-a-g-d)	
	17:30		cont.	(same cue)	1) falling d-c-b flat-a-(b flat-a-g-d) 2) broken minor 3rd 3) e-f-e-d 4) (g)-b flat-a	
part 2: 18:43 - 20:02		Lillian and Tommy’s dialogue at the lab		no music, eerie sound effect		

V “Dying Star” 20:02 - 27:27

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	20:02	at Tommy’s and Izzi’s home		no music, birds chirping sound effect		
	20:20		6. “Xibalba” (ending)	+ low Mogwai underscore + cresc. hum-like sound		
	20:54	Tommy’s and Izzi’s dialogue on a roof about gold star Xibalba		no music		
	22:52		cont.	string quartet + Mogwai	1) broken chords in Dmin, Gmin, Amin	
	23:22	The Man in a bubble	cont.	(same cue)	(same)	26th c.
	23:54	at Tommy's and Izzi's bathroom	cont.	(same cue)	(same)	21st c.
	24:05	Tommy’s and Izzi’s dialogue, she’s in a bath		no music		
	24:30	Tommy and Izzi in a bath	7. “First Snow”	drone-like underscore on D becomes string quartet + Mogwai cue	1) b flat-a & e flat-d 2) e-f-e-d 3) a-d-e-f-e 4) f-g-a & f-g-a-b flat-a, f-g-a-b flat-a-c-d-c-a-g-a-b flat-a	

VI “Medical First” 27:27 - 30:16

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	27:27	at Tommy’s and Izzi’s home; he’s on the phone with the lab, she gives him her book “The Fountain”		no music		
	28:30	at the lab; monkey Donovan recovering	5. “Death Is a Disease”	underscore becomes string quartet + Mogwai cue	1) broken minor 3rd 2) b flat-a & g-a & e flat-d 3) falling d-c-b flat-a-(b flat-a-g-d)	
	29:20			no music		
transition 30:08 - 30:16		lab to home	4. “Stay With Me”	string quartet + Mogwai	1) (g)-g-b flat-a (eerie) 2) b flat 4x - b flat - f - b flat - f - d -d	

VII “Spain Is On Fire” 30:16 - 35:08

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
part 1: 30:16 - 32:30						
	(30:19)	(flashback of Izzi running in red dress in slow motion)	cont.	(same cue)	(same)	
	30:22	at Tommy’s and Izzy’s home; they’re in bed - she’s asleep, he’s not; he starts reading her book	cont.	(same cue)	(same)	
	31:25		cont.	(same cue)	1) b flat 4x - b flat - f - b flat - f - d -d 2) 3) g-f-e flat-d-e flat-e-d-c-g (at the end of the cue) G min.	
part 2: 32:30 - 35:08	32:30	Inquisitor	2. “Holy Dread!”	drone-like underscore		16th c.
	34:03	Tomas at the altar	1. “Last Man”	string quartet	1) quarter note bass-dotted half note chord 2) f-g-a & f-g-a-b flat-a	

VIII “Would-Be Target” 35:08 - 37:47

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	35:11	Tomas riding a horse through the forrest, approaching the castle	4. “Stay With Me”	cue-like underscore + perc.	1) g-b flat-a 2) a-d-f (perc.)	
	35:47		2. “Holy Dread!”	drone (deep though thin) + sound effects		
	36:26	Tomas getting ready to kill the Inquisitor	cont.	drone-like underscore	1) (g)-b flat-a-g-d 2) broken minor 3rd 3) falling 4) c-e flat-d	
	37:39			brief cresc. sound-effects		
transition 37:47 - 37:54		Galloping		sound effect		

IX “Holy Pyramid” 37:54 - 43:49

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	37:54	at the Queen of Spain’s; Tomas walking towards her	6. “Xibalba”	strings + drones + voices		
	38:35	Queen and Tomas’ dialogue		no music		
	39:52	+ father Avila	8. “Finish It”	string quartet cue/ underscore	1) four 4-notes, one whole note 2) g-b flat-a	
	40:25	+ dagger		no music		
	41:26			drone-like underscore		
	41:33		cont.	string quartet	1) g-b flat-a 2) rhythmic pulsation	
	42:53		cont.	+ voices + cresc.	(same)	

X “I Will Be Your Eve” 43:35 - 46:04

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	43:35	Queen of Spain giving Tomas her blessing		no music		
	44:00	+ light comes in		string quartet cue-like underscore + voices at 44:37	1) 4-note note - dotted half note chord	
	44:45		6. “Xibalba”	string quartet theme + Mogwai drone-like accompaniment	1) a-g-a-g-a-g-a	
	45:29		cont.	+ Words: “Together we will live forever.”	(same)	
transition 45:30 - 45:35 (flashforward)		Tommy reading a book at home	(cont.)	(previous cue dies out)		21st c.
	45:35	Tommy at home searching for Izzi		no music		

XI “Hope and Time” 46:04 - 50:24

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	46:04	Tommy finding Izzi at the museum; dialogue about tree of life and Xibalba		no music		
	47:15	Izzi’s seizure at the museum	7. “First Snow”	string quartet + Mogwai cue	1) (g)-(f)-e-f-e-d	
	47:47		cont.	string quartet + electric guitar	1) a-d-e-f-e	
	48:08	Tommy visiting Izzi at the hospital; doctor is there		no music		
transition? 49:54 - 50:24		Tommy walking on the street		no sound, just the hollow thudding of his steps		
	50:17			traffic sound of car horn blaring		

XII “Why Are You Here?” 50:24 - 53:33

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	50:24	at the lab	5. “Death Is a Disease”	drone-like underscore		
	50:45		cont.	string quartet + Mogwai	1) broken minor 3rd	
	51:05	Tommy operating on a monkey	cont.	(same cue)	+2) e flat-d +3) falling d-c-b flat-a-(b flat-a-g-d)	
	52:06	Tommy after the surgery; Tommy and Lilian dialogue		no music		
transition 53:22 - 53:33		Tommy at the office	4. “Stay With Me”	underscore	1) b flat 4x - b flat - f - b flat - f - d -d	

XIII “Always with You” 53:33 - 59:12

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	53:33	Tommy visiting Izzi at the hospital, Izzi in a bed chatting with Lilian	cont.	string quartet + Mogwai cue	+ 2) g-b flat-a	
	54:22	Tommy and Lilian dialogue		no music		
	54:53	Tommy and Izzi dialogue at her hospital bed		no music		
	55:41	Izzi gives him a pen and ink to write the last chapter		no music		
	56:30, 56:37			Whisper “Finish it.”		
	56:52	Izzi tells him a story about Mayan she met and the tree he planted		no music		
	58:44	Izzi tells him “I’ll always be with you.”		no music		

XIV “Almost There” 59:12 - 1:01:16

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
transition 59:12 - 59:19		View from above at Tommy and Izzi in hospital bed		underscore		
	59:19	The Man at the Tree of Life	6. “Xibalba”	string quartet + Mogwai drone-like sound	1) broken chord 2) c-f-e (transposition of g-b flat-a)	26th c.
	1:00:56	Izzi sleeping, Tommy lying at the bed	cont.	(same cue)	(same)	21st c.
	1:01:07	The Man at the Tree of Life		no music		26th c.

XV “Death in Circles” 1:01:16 - 1:06:40

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:01:16	Izzi sleeping, Tommy reading a book by her bed		no music		21st c.
transition 1:02:19 - 1:03:37		father Avila	2. “Holy Dread!”	Mogwai drone-like underscore + sound effects (thunder, thick eerie sound, rain)		16th c.
	1:03:37	father Avila has found a dagger	3. “Tree of Life”	string quartet + Mogwai cue	1) a-d-f 2) g-b flat-a (refrain-like)	
	1:04:08	Tomas and the army	2. “Holy Dread!”	sound effects of rain + drone-like underscore	1) g-b flat-a 2) b flat-a-d 3) falling	
	1:05:22	+ Avila coming in	cont.	“creepy” sound effects + drone-like underscore cresc.		
	1:05:37	fighting scene	cont.	underscore		
	1:06:15	Avila dies	“Tree of Life”		1) g-b flat-a 2) a-d-f	

XVI “Too Late” 1:06:40 - 1:10:15

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:06:40	Queen of Spain and Tomas, she tells him “I’ll we be your Eve.”	8. “Finish It”	underscore	1) g-b fat-a	
	1:07:16	flashforward		no music		26th c.
	1:07:20	flashback to Izzi at the hospital bed having attack; Tommy and doctors		rapid, erratic beeping + alarm sound, no music		21st c.
	1:07:51	Tommy at the hospital watching an old man dying’; Tommy’s hands are shaking	4. “Stay With Me”	underscore	1) 4-note - dotted half note figure	
	1:08:19	Tommy and Lilian at the hospital; she tells him Donovan’s disease is cured		no music		
	1:08:41	Tommy running to Izzi’s bed, she’s already dead	cont.	(same cue)	+ 2) f-g-a, f-g-a-b flat-a	
	1:09:31	The Man at the Tree of Life yelling “Don’t die.”	cont.	(same cue)	+ 3) f-g-a-b flat-a-c-d-c-a-g-a-b flat-a	26th c.

XVII “Memory Rings” 1:10:15 - 1:15:01

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
transition 1:10:15 - 1:10:24		flashback?	cont.	(same cue)	1) 4-note and dotted half note figure	
	1:10:24	Izzi’s funeral; Lilian giving speech; Tommy & Lilian’s dialogue “Death is a disease.”		no music		21st c.
transition 1:11:39 - 1:12:01		flashback		sound effect		16th c.
	1:12:01	Tommy at home; sad and angry, he spills the ink, stabs his finger with pen		no music		21st c.
	1:13:07			“eerie” sound effect		
	1:14:00		4. “Stay With Me”	cue	1) b flat 4x - b flat - f - b flat - f - d -d 2) g-b flat-a	
	1:14:12	The Man looking at his hands; his monologue “You pulled me through time.”	cont.	(same cue)	(same)	26th c.

XVIII “We Will Live Forever” 1:15:01 - 1:09:13

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:15:01	Tommy at the lab		drone-like sound effect		21st c.
	1:15:20	Tommy talking to his assistants at the lab		no music		
	1:16:23	flashforward: The Man sees Xibalba	1. “The Last Man”	cue	1) broken 3rd 2) 4-note and dotted half note figure 3) f-g-a, f-g-a-b flat-a	26th c.
	1:17:32		cont.	+ Whisper “Finish It.”	(same)	
	1:17:44	+ Izzi apparition	cont.		(same)	
	1:18:05	+ Izzi as a Queen of Spain	cont.		+4) f-g-a-b flat-a-c-d-c-a-g-a-b flat-a 5) b flat-c-d	
	1:19:03	Izzi red dress flashback in slow motion	cont.		1) f-g-a, f-g-a-b flat-a 2) 4-note and dotted half note figure	21st c.
	1:19:06	flashback: Tommy and dead Izzi at the hospital	cont.		(same)	
	1:19:30	Izzi/Queen of Spain and The Man at the Tree of Life; she tells him” Together, we will live forever.”	cont.		+3) f-g-a-b flat-a-c-d-c-a-g-a-b flat-a 4) b flat-c-d	26th c.

XIX “Finish It” 1:19:53 - 1:23:36

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:19:53		cont.	previous cue continues		
	1:20:20		cont.	+ Whisper: “Finish it.”	+ 5) g-b flat-a, f-b flat-a	
transition 1:20:26 - 1:20:29			9. “Death Is the Road to Awe”	new cue	1) e-a-c	
	1:20:29	Tommy and Izzi at their apartment (First snow.)	cont.	(same cue)	(same)	21st c.
	1:20:56	at the lab	cont.	(same cue)	+ 2) a-d-e-f-e	
transition 1:21:08 - 1:21:17		Tommy running towards Izzi on a snow	cont.	(same cue)	3) f-g-a-b flat-a, f-g-a-b flat-a-c-d-c-a-g-E-F-E	
	1:21:17	The Man at the Tree of Life	cont.	(same cue)	(same)	26th c.
transition 1:22:00 - 1:22:08			cont.	(same cue)		26th c./ 21th c./ 16th c.
	1:22:08	Tomas at the Mayan Underworld; Mayan tells him that “Death is a road to Awe.”	cont.	(same cue)	1) e-a-c 2) b-c-b-a	16th c.
	1:22:28		cont.	(same cue)	(same)	26th c.
	1:22:36		cont.	+ Whisper: “Finish it.”	(same)	
	1:22:40	Tomas/The Man at the Mayan Underworld, Mayan telling him: “We shall be immortal.”	cont.	(same cue)	+ 3) c-f-e, d-f-e	16th c./ 26th c.

XX “The Fountain” 1:23:36 - 1:26:59

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:23:36	The Man at the Fountain	cont.	(same cue)	1) a-d-e-f-e 2) f-g-a, f-g-a-b flat-a, f-g-a-b flat-a-c-d-c-a-g-a-b flat-a	26th c./ 21th c./ 16th c. “vertically" collide
	1:24:04	Tomas putting a dagger in a tree; milk goes out of the tree, everything comes back to life, his wounds heal; he drinks milk	cont.	(same cue)	1) f-g-a, f-g-a-b flat-a, f-g-a-b flat-a-c-d-c-a-g-a-b flat-a 2) a-a-e-f-e-d 3) a-d-e-f-e 4) a-f-d-e-f-d-e-f	
	1:25:42	flashforwards: Tomas/ Tommy/The Man	cont.	(same cue)	(same)	16th c./21st c./ 26th c.
	1:26:13	Tommy trying to put ring on his finger but it “doesn’t work” and he dies	cont.	(same cue)	(same)	

XXI “Everything Is All Right” 1:26:59 - 1:30:04

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:26:59	The Man finds the ring, tries it, it fits	cont.	same cue	1) f-g-a 2) g-b flat-a, f-b flat-a	26th c.
blackout 1:27:57 - 1:28:01				no music		
	1:28:01		cont.	(refrain)	1) c-f-e, d-f-e	
	1:28:29	(Dead) Izzi and Tommy on a winter day; she gives him a leaf from the Tree of Life; Tommy at her grave		no music		21st c.
	1:29:08	Tommy says goodbye at her grave	6. “Xibalba”	cue	1) a-g-a-g-a-g-a-g-a	
	1:29:53 - 1:30:00	- “I finished.” - “Is everything all right?” - “Yes, everything is all right.”	cont.	(same cue)	(same)	

XXII “End Credits” 1:30:00 - 1:36:32

Segment	Subdivisions	Plot/Events	Cue on the Album	Soundtrack	Motifs	Change of Time
	1:30:00 - 1:31:30		cont.	(same cue)	(same)	
	1:31:30 - 1:36:32		10. “Together We Will Live Forever”	(piano solo)	1) b flat 4x - b flat - f - b flat - f - d -d 2) g-b flat-a, f-b flat-a	

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