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## Original Chamber Percussion Works for Silent or Silenced Film in Live Performance

James William Doyle III  
*University of Nevada, Las Vegas*

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ORIGINAL CHAMBER PERCUSSION WORKS FOR SILENT OR SILENCED FILM IN  
LIVE PERFORMANCE

By

James William Doyle III

Bachelor of Music Education  
University of Central Missouri  
1998

Master of Music  
Louisiana State University  
2000

A dissertation submitted in the partial fulfillment  
of the requirements for the

Doctor of Musical Arts

School of Music  
College of Fine Arts  
The Graduate College

University of Nevada, Las Vegas  
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## **Dissertation Approval**

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James William Doyle III

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Doctor of Musical Arts  
School of Music

Timothy Jones D.M.A.  
*Examination Committee Chair*

Kathryn Hausbeck Korgan, Ph.D.  
*Graduate College Interim Dean*

Dean Gronemeier D.M.A., J.D.  
*Examination Committee Member*

Anthony Labounty M.S.  
*Examination Committee Member*

Kenneth Hanlon D.M.A.  
*Examination Committee Member*

Sean Clark M.F.A.  
*Graduate College Faculty Representative*

## Abstract

### Original Chamber Percussion Works for Silent or Silenced Film in Live Performance

by

James William Doyle III  
Dr. Timothy Jones, Examination Committee Chair  
Professor of Music  
University of Nevada, Las Vegas

Percussion and film have shared a parallel and overlapping history since the dawn of the silent film era in the late nineteenth century. However, musical scores written specifically for percussionists with silent or silenced film for the sake of concert performance has a newer, more contemporary and artistic repertoire that will undoubtedly proliferate with the continued development of percussion performance and available technology. This document is in three parts. The first part provides context with an introduction, a brief history of film, and early film accompaniment. The second part pertains to the Australian composer, Nigel Westlake and his work, *The Invisible Men*. The third part explores three additional works of merit for film and percussion: Gene Koshinski's *The Mermaid*, Drew Worden's *Escape: Sextet for Triangles*, and Rick Dior's *Science Fiction*. All of these works are original chamber percussion scores intended to be synchronized either exactly or closely to the chosen film. This survey will include composer biographies, a history and analysis of the works, and a performance guide eliminating barriers to performance and offering future composers insight into writing for this genre.



## **Acknowledgements**

I would like to thank Dr. Timothy Jones for meeting and loaning me a marimba for a performance at Caesars Palace in August of 2012. Our conversation eventually led to the opportunity to earn a Doctor of Musical Arts and changing the course of my career. Returning as a college student after six years of teaching in higher education and six years performing in the USAF was a smooth transition thanks to Dr. Jones' guidance, mentorship, and advisement.

I am eternally grateful to my teachers and mentors, Dr. Dean Gronemeier, Professor Gary Cook, and Dr. Jones. There is simply no program like the Division of Percussion at UNLV. The teachers, guest artists, students, and culture provided an amazing opportunity to learn and grow as a musician, scholar, and educator. I would also like to thank Dr. Ken Hanlon, Professor Anthony LaBounty, Professor Brackley Frayer, and Professor Sean Clark for their service and guidance on my committee.

Finally, I would like to thank my colleagues and students at Adams State University for allowing me to pursue my studies and supporting my endeavors. I am fortunate beyond words to work with a wonderful faculty and staff, and teach terrific students.

## **Dedication**

This document is dedicated to Dr. Tracy Ann Doyle, whom I met more than seventeen years ago when she began her Doctor of Musical Arts studies. Her love, support, and patience have been immeasurable and I would never have been able to manage a career and this degree without her. Thank you for your consistency, levelheaded example, and encouragement.

I also dedicate this document to my parents. Their hard work and steady support inspired me to attend college in 1993 for the first time, earn a bachelor's and master's degree, and graduate for the final time twenty-three years later. There's not a day that passes where I'm not grateful for the love and support I've received throughout my life. Thank you all!

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## Chapter 1: Introduction

Percussion and film have shared a parallel and overlapping history since the dawn of the silent film era in the late nineteenth-century. “Trap”<sup>1</sup> drummers, in collaboration with a pianist, utilized cue sheets to provide the musical atmosphere and sound effects of film; even in the smallest of cinemas. However, musical scores written specifically for chamber percussion with silent or silenced film for the sake of concert performance has a newer, more contemporary and artistic repertoire that has begun to proliferate with the continued development of percussion performance and available technology. This document will examine four contemporary works for film and percussion. All pieces are original chamber percussion scores intended to be synchronized either exactly or closely with the chosen film. It also serves as a performance guide, eliminating barriers to performance and offering future composers insight into writing for this genre.

In the early 1990s I attended a performance of Nexus that included a performance and screening of Mack Sennett’s 1916 silent film *Teddy at the Throttle* with Bill Cahn’s arrangements of turn of the century film music. This was my first exposure to live percussion and film and my first concert by a professional percussion ensemble. This concert proved inspirational and established my desire to perform and direct chamber percussion groups throughout my academic and professional career.

Twenty years later, I accepted an invitation to perform Nigel Westlake’s percussion quartet *The Invisible Men* with the Animas Percussion Quartet for the 2010 Animas Music Festival. This work is an important contribution to the percussion repertoire, providing challenges to performers both musically and technologically. Westlake wrote *The Invisible Men*

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<sup>1</sup> In this context, “trap” is an abbreviation of “contraption.” In addition to drums, such contraptions might have included temple blocks, cowbell, woodblock, small cymbal, and other sound effect instruments.

as an accompaniment to the French film, *Les Invisibles*, produced by Pathé-Frères in 1906.<sup>2</sup> This ten minute and thirty second work requires four percussionists to perform more than sixty percussion instruments. The work, commissioned by the Australian percussion quartet Synergy, was premiered in Sydney, Australia for a concert of works accompanying film.<sup>3</sup>

Multimedia works are commonplace in percussion concerts, but this experience unveiled the complexities of performing a composition of this magnitude and spawned my interest in how best to prepare and execute a complex multimedia performance. A music director who chooses a work with so many variables and very little information available must address many questions: Do the performers have the inventory of instruments to play the piece? If not, what substitutions must be made? Do the performers have the technological requirements to play the piece? If not, what steps must be taken to guarantee proper execution of the multimedia elements? Do the ensemble members have the musicianship to successfully perform the piece?

In a limited amount of rehearsal time, the Animas Percussion Quartet had to prepare our individual parts, including complex arrangements of a large inventory of instruments. Each performer had to create his individual instrument setup with no guidance from composer notes or the score. There were instrument substitutions to make when certain instruments in the score were not available. We had to study the film outside of rehearsals to understand how each percussion part programmatically represented an aspect of the action portrayed on screen. Because the performers are unable to watch the film while simultaneously playing numerous instruments in a complex instrument set-up, the composer provides a digital recording of a click-track that is synchronized to the on-screen action. The complicated work of setting up the click-

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<sup>2</sup> “About,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 3, 2016, <http://www.rimshot.com.au/>

<sup>3</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

track that plays along with the screening of the film has to be addressed: the musicians must either follow a conductor who is listening to the click-track through headphones or, if there is no conductor, each musician wears in-ear monitors for synchronization. These considerations, the required preparation, and audience engagement and reaction proved to be very exciting and personally rewarding.

In 2014, I programmed *The Invisible Men* with four members of my percussion studio at Adams State University. I chose to have the performers play to the click-track with no conductor and they rehearsed using a replicated click-track set to slower rehearsal tempos. Additionally, small sections of the corresponding click-track were looped to allow multiple repetitions of difficult passages without the need to constantly restart the video. We made a few instrument substitutions and triggered some special effects using a sampler trigger pad.

My students also performed the work for a faculty lecture I presented regarding *The Invisible Men*, silent film, and chamber percussion. During the preparation phase of the lecture I explored other significant works in the genre of chamber percussion with film. This research provided the necessary information to focus the lecture, and ultimately this document. Each work I examined was evaluated based on the following criteria:

1. The pieces are original scores written specifically for chamber percussion alone, without other instruments, tape, or other significant non-percussion parts.<sup>4</sup>
2. The score/parts are available for purchase and performance.
3. The pieces were originally and specifically for use with the particular film and are not arrangements of another work.
4. The pieces are intended for live performance and are not extracted percussion parts from a film score.

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<sup>4</sup> For my research, I include duos as chamber percussion. Electronics are included if performable by percussionists.

5. The pieces are composed and do not rely upon significant improvisation or cue sheets.
6. The pieces use primarily available percussion instruments or substitutions and could be performed in most university settings.

As a departure point, I considered George Antheil's work, *Ballet Mécanique*. This monumental composition with a storied history was written in 1924 and was initially intended to be an accompaniment to the film of the same name.<sup>5</sup> Ultimately the film's director and Antheil parted ways and continued their work independently. Each work was completed and premiered separately, which resulted in a film length of nineteen minutes verses a score length of thirty minutes. Antheil's score includes eight pianos, four xylophones, battery percussion, two electric buzzers, and two airplane engines.<sup>6</sup> The use of machines in a musical composition, inspired in part by Luigi Russolo's 1913 landmark manifesto, *The Art of Noise*, was shocking and marked Antheil's *Ballet Mécanique* "with the scarlet letter 'S' for scandal."<sup>7</sup> Although significant in the repertoire, I chose to eliminate this work due to the lack of synchronization and the demands of instrumentation. Additionally, numerous attempts to create arrangements allowing for the film and score to be coordinated were not part of the initial multimedia composition.

Nexus' contribution to percussion and film is significant. Their original film score, *The Man Who Skied Down Everest*, and their proprietary works for silent film and percussion, *Teddy at the Throttle* and *A Page of Madness* were also considered for the document. *The Man Who Skied Down Everest* is not intended for live performance. *Teddy at the Throttle* does not use original music, and neither it nor *A Page of Madness* can be performed independent of Nexus. Consequently, they will not be discussed. A more recent collaboration between Nexus, members

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<sup>5</sup> Steven Schick, *The Percussionist's Art: Same Bed Different Dreams*, (Rochester: University of Rochester Press, 2006), 36.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

of the Steve Reich Ensemble, and the Canadian filmmaker Atom Egoyan resulted in the creation of a work titled *Nexus/Bolex 85-9*, combining Egoyan's film with a performance of Reich's piece *Sextet*.<sup>8</sup> This example, although notable, also does not fit the scope of my research because the music was not originally composed for the film.

In the process of researching pieces for percussion and silent film, I found numerous examples of artist collaborations with percussion and non-percussion instrumentalists performing with silent film, improvisatory settings in which percussionists or percussionists and other instrumentalists improvise to a silent film, and many examples of percussionists setting pre-existing works to silent film. I also discovered examples of performances of a live rendition of an original film score with a silenced film. An example would be performing Nigel Westlake's percussion ensemble piece, *Penguin Circus*, to a synchronization of the corresponding scene in the film *Antarctica*, for which he wrote the original film score. This, too, led to numerous possibilities beyond the scope of this document.

The chosen criteria, clearly inspired by *The Invisible Men*, led me to research other works that were similar. Throughout the research, this piece serves as the leading example because of its place in the timeline of other works, its compositional complexity, and the composer's experience as both a composer of several significant works for solo and chamber percussion and as a film score composer.

The works I have chosen as the focus of this document are Nigel Westlake's *The Invisible Men*, Gene Koshinski's *The Mermaid*, Drew Worden's *Escape: Sextet for Triangles*, and Rick Dior's *Science Fiction*.

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<sup>8</sup> "From the Archives #9: NEXUS and Atom Egoyan," Nexus Percussion, accessed January 2, 2016, <http://nexuspercussion.com/2011/02/from-the-archives-9-nexus-and-atom-egoyan>

Gene Koshinski wrote *The Mermaid* for the Quey Percussion Duo. This piece was clearly inspired by *The Invisible Men* as it utilized a similar silent film and compositional techniques.<sup>9</sup> Drew Worden's composition, titled *Escape: Sextet for Triangles* was inspired by the 1937 Mary Ellen Bute film *Synchromy No. 4: Escape*, and can be performed with or without the film. The final composition is a twelve-player percussion ensemble score by Rick Dior titled *Science Fiction*. He created a video montage of numerous early science-fiction films that influenced his childhood.

Because each of the compositions has its own unique properties, I created a rubric with which to evaluate each work:

1. The composition does/does not stand alone without film.
2. The composition reflects the on-screen action.
3. Elements of Foley are utilized in the work.
4. The composition requires additional support technology beyond projection.
5. Performer staging and/or physicality is relevant to the piece/production.
6. Setup notes/instruments are/are not specified by the composer.
7. Standard percussion instruments are utilized.
8. Standard percussion techniques are utilized.
9. The piece is/is not conducted.
10. The piece is available for performance.
11. The film is/is not provided with the score.
12. The piece was/was not inspired by Westlake's *The Invisible Men*.

In order to bring context to the genre of original chamber percussion works for silent or silenced film in live performance, this document will provide contextual history on the

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<sup>9</sup> Gene Koshinski, email to author, October 4, 2015.

development of film as a technological and artistic creation. It will also provide historical information regarding early silent film and film accompaniment, including the use of percussion in the early years of film. Additionally, information regarding the development of Foley will be provided, as these aspects of film accompaniment will be considered in each of the composition's analyses. The information provided in this document regarding the development of film, accompaniment, and Foley are not intended as definitive histories, but as background information for each composition discussed.

The four works I selected for this document include biographical information on the composer, background on the conditions in which the piece was composed, information regarding the film, an analysis of the score utilizing a format most suited for the piece, and answers to the questions posed in the above rubric. Additional information that makes each piece unique will be discussed and my experiences performing or directing, when applicable, will be included in the document. In regards to technical considerations of projection, click-track, or other aspects utilizing technology, I address the issues based on current trends in equipment and available technology, composer recommendations, recommendations of others in the field of percussion, and those in audio/visual reproduction. Because they were the catalysts for my research and the piece is decidedly complex, Nigel Westlake and *The Invisible Men* were given additional consideration.

It is my hope this document serves as inspiration for percussionists to perform works for original chamber percussion works for silent or silenced film, and serve as a performer's guide to these compositions and remove the concerns performers and directors may have in programming multimedia works of this nature. Additionally, this document may serve as information for both composers and commissioners of new works to continue to expand this medium. Even though



percussion instruments have accompanied film since the dawn of the silent film era, the available performance repertoire is still limited in scope and depth. As audiences continue to evolve and the availability of public domain and new films continues to become ever-present, this medium of chamber percussion and film stands to grow as an art form.

## Chapter 2: Early Film

The dawn of film has numerous points of departure, all of which took place within a narrow timeframe. Developments in science merged with entertainment in 1888 with Thomas Edison's invention of the early film-recording camera called a *Kinetograph*, with a viewing box called a *Kinetoscope*, provided the opportunity for a single audience member to view a film. Although these short films viewed in arcades through peepholes served a limited audience, they represent one of the earliest mediums for film technology.<sup>10</sup> Throughout 1894 and 1895, the evolution of projection continued in the United States and Europe with the development of the *Cinématographe* as a means to project moving images to screen for larger paying audiences. This became known as the cinema.<sup>11</sup> On December 28, 1895 Louis and Auguste Lumière, brothers and early French filmmakers, projected a series of *cinématographes* onto the wall at the Grand Café in Paris.<sup>12</sup> Many of the films, less than one-minute in running time and “silent,” were considered early documentaries, or *actualités*. These films included moving images of the Lumière family in Lyon, France and were shot on location in places such as Venice, Milan, Naples, and Melbourne.<sup>13</sup> These films were intended to depict life in exotic locations never before seen by the local audience. Included in this first large-scale public screening of *actualités* was a comedy, *Le Jardinier et le Petit Espiegle* (*The Gardener and the Bad Boy*), which was one of the first known films with a complete storyline—that of a boy stepping on the gardener's hose, thus leading the gardener to look down the hose only to be sprayed when the boy lifts his foot from the hose. The gardener ultimately catches and spansks the boy.<sup>14</sup>

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<sup>10</sup> Lee Grieveson and Peter Krämer, eds. *The Silent Cinema Reader*, (New York: Routledge, 2004), 2.

<sup>11</sup> Ibid.

<sup>12</sup> Julie Hubbert, *Celluloid Symphonies: Texts and Contexts in Film Music History*, (Berkeley: University of California Press, 2011), 2.

<sup>13</sup> Ibid.

<sup>14</sup> Lee Grieveson and Peter Krämer, eds. *The Silent Cinema Reader*, (New York: Routledge, 2004), 2.

Paris was the epicenter for film production in the early 1900s and by 1902, short films were being produced and shown in a variety of venues including music halls, fairgrounds, wax museums, and nickelodeons. By 1907, permanent cinemas were being established.<sup>15</sup> Four major film companies operated in Paris at this time: Lumière, Gaumont, Méliès, and Pathé-Frères. Film distribution spread throughout the world, quality cameras and projectors were sold and rented, film production rates grew rapidly, and cinema became a regular part of entertainment in society. Of the four, Pathé-Frères was at the forefront of early cinema development, taking its place as the largest and most influential film company in the world.<sup>16</sup>

The “cinema of attractions” dominated at the turn of the century and included the film genres of *actualities*, trick films, *féeries*, and story films.<sup>17</sup> Although each film company made films in all of these genres, they were each known for an area of specialty. Lumière was known for their *actualités*, short depictions of daily life. Méliès was known for creating *féeries*, films derived from fairy tales featuring supernatural elements. Story films, or narrative cinema, was developed in the early twentieth century led by Pathé-Frères, with Gaumont turning its attention from *actualités* to narrative cinema as well.

Tom Gunning, Professor of Cinema and Media Studies at the University of Chicago, describes the “cinema of attractions” as:

...a conception that sees cinema less as a way of telling stories than as a way of presenting a series of views to an audience, fascinating because of their illusionary power (whether the realistic illusion of motion offered by Lumière or the magical illusion concocted by Méliès) and exoticism. This is “the cinema of attractions.”<sup>18</sup>

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<sup>15</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), xv.

<sup>16</sup> *Ibid.*, 9.

<sup>17</sup> *Ibid.*, xv.

<sup>18</sup> Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde," *Wide Angle*, Vol. 8, nos. 3 & 4 (Fall 1986), 64.

The concept of early film as spectacle is confirmed by filmmaker Georges Méliès in 1932: “As for the scenario, the ‘fable,’ or ‘tale,’ I only consider it at the end. I can state that the scenario constructed in this manner has no importance, since I use it merely as a pretext for the ‘stage effects,’ the ‘tricks,’ or for a nicely arranged tableau.”<sup>19</sup>

The films *La Sirene*, (*The Mermaid*), by Méliès in 1904, and *Les invisibles*, (*The Invisible Men*), by Pathé-Frères in 1906, represent the genre of trick film with narrative storyline. These films show evidence of early film production techniques, including screen coloring, stop motion, reverse motion, multiple exposure, the cut, and the dissolve.

By 1900, Pathé-Frères was mass-producing films, and in 1902 the company built a “glass house” in Vincennes, France specifically for film production. Eight thousand meters (26,247 feet) of film were produced that year.<sup>20</sup> In the following years, additional “glass house” production studios were built in Join-le-pont and Montreuil, France. The studio in Join-le-pont expanded to include factories for perforating, developing, printing, and splicing film. In 1903, the studio at Vincennes developed the technique of color stenciling film, which then became a trademark for Pathé-Frères.<sup>21</sup> The process of stencil coloring involved the tedious and detailed cutting of the film, by hand, one frame at a time. The tinted area was then juxtaposed onto an identical frame.<sup>22</sup> Pathé employed several hundred women for this painstaking job. By 1907, this technique was mechanized which further boosted film production rates.<sup>23</sup>

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<sup>19</sup> Georges Méliès, “Importance du Scénario,” April 1932, quoted in Tom Gunning, “The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde,” *Wide Angle*, Vol. 8, nos. 3 & 4 (Fall 1986), 64.

<sup>20</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 14.

<sup>21</sup> *Ibid.*

<sup>22</sup> “Pathécolor/Pathéchrome/stencil coloring,” Timeline of Historical Film Colors, accessed January 7, 2016, <http://zauberklang.ch/filmcolors/timeline-entry/1218>

<sup>23</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 34.

The genre of trick films was known for its “amazing display of spectacular feats on the screen, the result of a seemingly miraculous filmmaking process.”<sup>24</sup> Georges Méliès was best known for his trick films and *féeries*. He often starred in his own films in the role of magician, which he held as a career prior to filmmaking. However, instead of performing illusions in real time, he used cinematic techniques to create the magic on screen.<sup>25</sup> Although Méliès was considered an early master of the trick film, Pathé soon took the genre to a new level. One of the earliest techniques used to create the effect of sudden appearances, disappearances, and substitutions was the use of stop motion. Reverse motion was another technique that allowed the film to be played backwards creating the effect of an event happening in reverse, for example in one of Méliès’ films, a dinner table that had flipped “magically” righted itself. Multiple exposure, a technique in which the film was rewound and then re-exposed with areas of the set covered in a black cloth, also created the impression of magic.<sup>26</sup> The cinematic technique of dissolve, a gradual transition from one image to another, created the effect of person or object appearing or disappearing, used in both *The Mermaid* and in *The Invisible Men*.

It is important to note that even from the earliest Lumière production in Paris, silent film wasn’t truly silent. At the bottom of the playbill from the evening December 28, 1895 was listed musical accompaniment by the “*pianist-compositeur*” Emile Maraval.<sup>27</sup> It’s unknown what specific music he played, how much time he played, or if he varied the music to represent the different scenes in the actualités or comedy. It is also unknown if he provided music before,

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<sup>24</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 61.

<sup>25</sup> Ibid., 62.

<sup>26</sup> Ibid.

<sup>27</sup> Julie Hubbert, *Celluloid Symphonies: Texts and Contexts in Film Music History*, (Berkeley: University of California Press, 2011), 2.

between, and at the conclusion of the films. What is known is that the Lumière brothers considered and incorporated the idea of musical accompaniment in early cinema.

### Chapter 3: Music and Film

Music for film has a long and varied history, beginning with live and recorded musical accompaniment for silent film. James Wierzbicki, in his book, *Film Music: A History*, provides the often-held simplified view of film history:

Right from the start, we have been told again and again, music was integral to the filmic experience. The most often cited reasons for the allegedly necessary presence of music during showings of even the most primitive commercial films are the acoustical need to mask noise generated by the projector, the psychological need to lend “warmth” to images that might otherwise be interpreted as “disembodied” or “ghostly,” and the theatrical need—stemming from precedents in high-brow opera as well as low-brow melodrama—to embellish action and expressions and emotion with affectively appropriate instrumental accompaniment.<sup>28</sup>

W. K. L. Dickson, the head of Edison’s motion picture division, achieved the first example of synchronized sound in 1894. This singular surviving example of audio-visual synchronization from the Edison laboratory featured two male employees dancing to a melody extracted from Robert Planquette’s light opera *The Chimes of Normandy*, played by Dickson on violin.<sup>29</sup> By 1895, the *Kinetophone* was developed. This device was a modified *Kinetoscope* with a phonograph and ear tubes, which allowed the viewer to hear music while watching the film. However, the music was not synchronized with the film.<sup>30</sup> Like those for the *Kinetoscope*, films for the *Kinetophone*, could only be viewed by one person at a time through a peephole. This was a major limiting factor in this early technology.

Film historians trace the origins of music in film back to the early 1890s. In Paris in 1892, a series of animations called *Pantomimes lumineuses* were projected and shown to an audience, with live piano music composed for the occasion by Gaston Paulin.<sup>31</sup> In 1895, a collection of *cinématographes* by Lumière were shown in Paris with piano accompaniment

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<sup>28</sup> James Eugene Wierzbicki, *Film Music: A History* (New York: Routledge, 2009), 13.

<sup>29</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 33.

<sup>30</sup> Ibid.

<sup>31</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 7.

provided by Emile Maraval.<sup>32</sup> The Empire Theater Orchestra, under the direction of conductor Leopold Wenzel, accompanied a special London performance of these films for Queen Victoria.<sup>33</sup> Filmmaker Georges Méliès played piano for the 1902 Paris premiere of his film *Le Voyage dans la lune*.<sup>34</sup> In the United States, films were often shown in vaudeville venues and accompanied by piano and drum set, or a pit orchestra during the first decade of film.<sup>35</sup>

As the popularity of moving pictures grew, more appropriate venues developed. Movies moved from the fairgrounds into *sallés de cinema* (movie theaters), established in Paris by film companies Pathé and Gaumont. These venues are where the “cinema of attractions” began to give way to a narrative film style, and with this came more attention to the musical accompaniment.<sup>36</sup> Although much has been lost in the history of early film musical accompaniment, sources such as playbills, newspapers, cue sheets, musical encyclopedias, and trade journals help in reconstructing what music would have been played with film.

Traditions around film and music evolved differently throughout the world. In the United States and Western Europe, both popular music and art music were used to accompany films. Other countries, such as Russia, India, and Japan used indigenous music from their own culture in addition to Western music. It was common to use multiple styles of music depending on the film being shown. In India for example, Western instruments playing Western music would accompany films from the United States or Europe, whereas an Indian film would be accompanied by ragas and folk songs played on traditional Indian instruments such as the tabla, sarangi, and an adapted harmonium that could play drones.<sup>37</sup>

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<sup>32</sup> Julie Hubbert, ed., *Celluloid Symphonies: Texts and Contexts in Film Music History*, (Berkeley: University of California Press, 2011), 2.

<sup>33</sup> *Ibid.*, 3.

<sup>34</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 6.

<sup>35</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 36.

<sup>36</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 9.

<sup>37</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 37.



In addition to composed music, improvisation was also used in film accompaniment. A pianist or harmonium player would improvise the music to a film with the intention of connecting the audience with the drama. The advantage to improvised music, was a professional musician could create continuity throughout the film and align the music with the action on screen.<sup>38</sup> John Stepan Zamecnik, an American composer, conductor, and student of Antonín Dvořák, wrote numerous pieces for film that grew out of improvisation.<sup>39</sup> In the early 1900s, as the film industry moved toward stabilization and establishing itself as a viable art form, attempts were made to “encourage the appropriate and continuous presence of live accompaniment and to police its quality.”<sup>40</sup>

The cue sheet was a significant development in adding structure to the coordination of music and film. One motivation for this was the wide range of abilities of pianists who performed for films. “In France, mediocre pianists were so commonplace that they had their own name – *tapeurs* – derived from the French word *taper* which means to hit or strike.”<sup>41</sup> A cue sheet might include excerpts of musical selections, timings, and instructions for coordinating the music with the action on the screen. Along with the film, cue sheets were circulated for use by accompanists throughout the world.<sup>42</sup>

Cue sheets depended heavily on material from musical encyclopedias, or collections of music—some original and some preexisting—used in the film industry. In essence, they were catalogs of “mood music.” The musical selections were cataloged by their usefulness regarding how they could accompany various moods or actions on screen.<sup>43</sup> One such encyclopedia, *Sam*

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<sup>38</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 12.

<sup>39</sup> Julie Hubbert, ed., *Celluloid Symphonies: Texts and Contexts in Film Music History*, (Berkeley: University of California Press, 2011), 10.

<sup>40</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 41.

<sup>41</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 15.

<sup>42</sup> *Ibid.*, 42.

<sup>43</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 42.

*Fox Moving Picture Music* by Zamecnik contained a selection titled “Indian Music,” which was to be played when American Indians were on the screen. A selection titled “Hurry Music” was played for “struggles, duals, mob, or fire scenes.”<sup>44</sup> Original music for cue sheets was heavily influenced by romantic opera and operetta. For example, Rossini’s *William Tell Overture* was used to accompany chase scenes.<sup>45</sup>

The functions of music in film were varied. Music served to identify the geographic location and time period, create mood, stir emotion, and support character development. Some musical effects became a cliché, yet useful means of communicating. A tremolo created suspense, pizzicato indicated someone sneaking, and dissonance signaled the character of the villain, often in the form of a diminished seventh chord.<sup>46</sup> The importance of the diminished seventh chord was described in Anthony Burgess’ 1986 novel *The Pianoplayers*. A pianist for silent film shared this advice from his mentor:

Here is a chord you can’t do without, he said, if you are a picture palace piano player. You use it for fights, burst dams, thunderstorms, the voice of the Lord God, a wife telling her old man to bugger off out of the house and not come back never no more. And he showed me...Always the same like dangerous sound, he said, as if something terrible’s going to happen or is happening (soft for going to happen, loud for happening)...and you can arpeggio them to make them like very mysterious.<sup>47</sup>

Music was also used to “play mild intellectual games with the audience, who might be amused by appropriate references to certain popular songs.”<sup>48</sup> Music was even used to establish mood on the set during filming, a practice that continued throughout history. While shooting *The*

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<sup>44</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 42.

<sup>45</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 16.

<sup>46</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 44.

<sup>47</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 17.

<sup>48</sup> *Ibid.*, 12.

*Birds* in 1963, Alfred Hitchcock “used a drummer on set to terrify the actors in the absence of the film’s sophisticated avian sound effects.”<sup>49</sup>

In the early 1900s, for the first time, film scores were commissioned for a specific film. One of the earliest examples is Camille Saint-Saëns’ score for the film *L’Assassinat du Duc de Guise* from 1908.<sup>50</sup> Saint-Saëns’ score “showed how structural coherence could articulate the drama across relatively broad time-spans, and it proved to be prophetic of the later mainstream film composer’s art.”<sup>51</sup>

Richard Wagner’s *Gesamtkunstwerk*, his philosophy of a total work of art integrating music, drama, and art, heavily influenced film accompaniment, demonstrating ways in which music can respond and integrate with the drama on the screen. In addition, his concept of the *leitmotif* (a recurring musical theme associated with a person, idea, emotion, or situation) was used as a way to structurally unify the musical score and help to communicate the narrative.<sup>52</sup>

By the 1920s, audiences came to expect a preconceived, continuous, and fully-composed score that responded to the film’s dramatic content and was performed by professional musicians. Although the piano had been commonly used throughout the history of early film, The Mighty Wurlitzer, an organ developed for the purpose of film accompaniment, became the instrument of choice in theater venues. In addition to playing the musical score, it had the capacity to create sound effects, such as a telephone ringing, a knock at the door, church bells, or a train whistle.<sup>53</sup> The organ could also be rigged with pitched and un-pitched percussion instruments operated by thumb and toe pistons and played by the organist.<sup>54</sup>

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<sup>49</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 10.

<sup>50</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 45.

<sup>51</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 14.

<sup>52</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 46.

<sup>53</sup> Ibid. 47.

<sup>54</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 22.

The number of musicians used to accompany film varied depending on the venue and the potential for the theater to make money. Instrumentation could have consisted of a solo pianist or organist, duos of violin and piano or piano and drums, small ensembles of five to six players, or orchestras of forty or more members. Theaters were likely to employ a solo pianist for a weeknight showing and hire the larger ensembles for weekends or special screenings when they would be assured greater income.<sup>55</sup> An organist might play with the orchestra and then improvise interludes between orchestral pieces. Large cities had the ability to support a full size motion picture orchestra. For example, The Roxy Theater in New York City featured a 100-piece orchestra used to accompany films during the 1920s.<sup>56</sup>

Second to the pianist or organist, the percussionist was the most important musician in film accompaniment. Percussion was considered essential in providing sound effects and punctuating the score, communicating action and emphasis. The history of percussion in vaudeville theater led to its natural inclusion in film accompaniment. The drummer was “responsible for highlighting gags and dramatic effects with the drum set” and the audience came to expect a certain drum effect being used with a particular actor cue.<sup>57</sup>

Julie Hubbert, editor of the compilation, *Celluloid Symphonies: Texts and Contexts in Film Music History*, wrote about the use of percussion:

The nickelodeon drummer typically had some standard percussion instruments: drums, bells, gongs, woodblocks, and whistles. By 1905 or so, he or she would also have a number of additional percussive devices, or ‘traps.’ Most traps articulated common sounds, animal noises like hens’ cackling; and the sounds of mechanical devices like winches, ratchets, and blacksmith anvils; and signals such as chimes and steamboat whistles. Traps were widely advertised in music and film journals of the early 1900s and were used well into the 1920s. For those exhibitors who could not afford the expense of lots of traps or multiple persons to articulate them, sound-effect ‘cabinets’ became available starting around 1907. Semiautomated machines, like the Ciné Multiphone

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<sup>55</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 19.

<sup>56</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 48.

<sup>57</sup> Vanessa Theme Ament, *The Foley Grail*, 2<sup>nd</sup> ed. (Burlington, MA: Focal Press, 2009), 9.

Rousselot, the Excelsa Soundograph, and the British Allefex, consolidated many of the most popular traps or film sounds in a large tabletop device that could be operated by a single percussionist. The fact that these traps and cabinets were conceived of as percussion instruments, to be played by musicians, is a reminder that in the early cinema, sounds and music were not separate. In silent film, film music was film sound.”<sup>58</sup>

In 1909 Frank Herbert Richardson, a theater manager, published an advice column for fellow theater managers called “Plain Talk to Theater Managers and Operators.” In this document he addresses the role of musicians in film accompaniment:

Where the house has seating capacity to justify there should always be a drummer. But get a good one. A good drummer can perform wonders in adding to the effectiveness of a film, but a poor one is worse than none. The up-to-date moving picture theater drummer has contrivances for imitating almost any sound and he knows how to use them, too. It may be safely said that any 300 capacity house which has available capacity business should have a drummer and a piano player. More need not be added except in large houses.<sup>59</sup>

Vaudeville and the music hall were excellent training grounds for drummers to transition into the role of providing sound effects in film accompaniment, and later in film scores.

In the early 1900s, an employee at Universal Studios named Jack Foley worked as a cartoonist, a stuntman and double, a writer, an actor, and a director. He was immersed in every area of film production during a time when there were no assigned roles in the film industry and “everyone chipped in where they could.”<sup>60</sup> As Universal Studios was preparing to release the movie musical *Showboat* as a silent film in 1929, competing studios were releasing films with sound.<sup>61</sup> They made the decision to rent a new piece of technology, the Fox-Case sound unit, and go back into postproduction to add sound. Jack was on the sound stage providing the sound effects for hand-clapping, footsteps, and any other sound needed in the film. This was the

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<sup>58</sup> Julie Hubbert, ed., *Celluloid Symphonies: Texts and Contexts in Film Music History*, (Berkeley: University of California Press, 2011), 6.

<sup>59</sup> Frank Herbert Richardson, “Plain Talk to Theater Managers and Operators (1909),” in *Celluloid Symphonies: Texts and Contexts in Film Music History*, ed. Julie Hubbert (Berkeley: University of California Press, 2011), 38.

<sup>60</sup> Vanessa Theme Ament, *The Foley Grail*, 2<sup>nd</sup> ed. (Burlington, MA: Focal Press, 2009), 6.

<sup>61</sup> Although it seems strange to release a musical as a silent film, audiences without the means to travel to a Broadway show in New York City were hungry for this kind of film.

moment when Foley was destined to become an expert in a new aspect of filmmaking that did not yet exist—the Foley artist. “Jack Foley was a person who had the versatility to develop this job—invented first out of necessity and later expanded into an esteemed craft—that was enhanced and perfected by others into a nuanced and respected field of sound effects with its own name, in honor of him.”<sup>62</sup> As the art of Foley developed, it was often the same drummers who played in vaudeville who were now experts in Foley, taking cues from the action onscreen and accompanying with their vast inventory of instruments and special effects.<sup>63</sup>

For the sake of this document, I will refer to two kinds of Foley: true Foley and representational Foley. In true Foley, referred to later in this document simply as “Foley,” the sound effect is created by the same means shown in the film. An example of this would be if the film depicts a character clapping, the Foley artist—or in this case—performer—would clap his or her hands to make the sound. Representational Foley is when the action on stage is represented by another sound, inferring the true sound. For example, when a character in the film turns a doorknob, a ratchet may be used.

Foley was used not only in films, but also in cartoons. Cartoon music began in the 1920s. Many of the early composers for cartoons started out as accompanists for silent film, improvising on organ or other instruments. Neil Strauss, music critic and cultural correspondent for the *New York Times* wrote about cartoon music in a collection of essays and interviews titled *The Cartoon Music Book*:

Cartoon music is among the most engaging and experimental forms of twentieth-century music, exploring the more outrageous extremes of instrumentation, rhythm, and non-musical sound. It is a genre in which rapid tempo changes, unusual instrumental effects,

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<sup>62</sup> Vanessa Theme Ament, *The Foley Grail*, 2<sup>nd</sup> ed. (Burlington, MA: Focal Press, 2009), 7.

<sup>63</sup> *Ibid.*, 9.

experimental percussion, postmodern quotation, shock chords, and musical genre-shifting are de rigueur.<sup>64</sup>

Carl Stalling was the composer behind the early Disney scores. He and Walt Disney first collaborated on two Mickey Mouse shorts, after which he was hired as Disney's first music director. In 1929, the two men worked together on a group of animated shorts called "Silly Symphonies," scored with popular classical works. The first, *The Skeleton Dance*, featured close synchronization between the music and the on screen action. This came to be known in the industry as "mickey mousing."<sup>65</sup>

The quest to synchronize film and music continued throughout the early 1900s with each new development still deficient in some way. However, by the 1920s the United States and Germany had each developed technology to allow this concept to come to fruition.<sup>66</sup> This new development led to the Hollywood film score and its use in film. The Hollywood film score had a series of functions; providing music to sustain unity by covering gaps in the narrative caused by edits and transitions, emphasizing the narrative action, pairing music and image, establish mood and atmosphere, establishing time and geographic location, accompanying dialog, and connecting the audience to the film through emotional appeal.<sup>67</sup>

Romanticism was the style most commonly embraced by Hollywood movie composers in the 1930s despite the fact that Modernism in music was at its peak in concert halls, and interest in popular music was growing due to radio and recordings. Romantic-style music had the advantage of accessibility for the average, untrained listener, and because melody was at its core,

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<sup>64</sup> Neil Strauss, "Tunes for Toons: A Cartoon Music Primer," in *The Cartoon Music Book*, ed. Daniel Goldmark and Yuval Taylor, (Chicago: A Capella Books, 2002), 5.

<sup>65</sup> Ibid., 7.

<sup>66</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 51.

<sup>67</sup> Ibid., 62.

the *leitmotif* became a natural way to unify the score.<sup>68</sup> By the mid-twentieth century, Romantic music gave way to folk music and jazz in film scores. In the 1950s, jazz became the music of choice in film noir, crime films, and urban melodramas. Modernism gradually made its way into the film score in the 1950s and 1960s, serialism in the 1950s, and minimalism in the 1960s.<sup>69</sup> In the 1960s, both Hollywood and Bollywood used disco and rock music in movie soundtracks. By the 1970s, Romanticism returned through the work of composers such as John Williams, and the romantic idiom in symphonic form became the basis for action-adventure blockbuster movies.<sup>70</sup>

Film scores, by nature would be heard by the masses and distributed worldwide. Composers, regardless of background or compositional emphasis would find themselves composing for film. Modern day percussionists would also be, whether knowingly or unknowingly, affected by film music and its development. Percussion and film was, and continues to be intrinsically related. It has also found its way into the concert hall. A principal figure in this is Nigel Westlake.

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<sup>68</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction*, (New York: Oxford University Press, 2010), 65.

<sup>69</sup> *Ibid.*, 68.

<sup>70</sup> *Ibid.*, 72.



## Chapter 4: Nigel Westlake

Nigel Westlake is an Australian composer with a catalogue of approximately fifty solo, chamber, choral, and orchestral works.<sup>71</sup> Among these are five percussion ensembles, one work for percussion quartet and bass clarinet, a duo for guitar and percussion, two solo works, and a concerto for percussion and orchestra.<sup>72</sup> Of these works is his popular marimba quartet *Omphalo Centric Lecture*—his “Opus 1.”<sup>73</sup> In addition to his concert pieces, he has scored sixteen feature films, including four IMAX films, has twenty-six television scores, twenty-two jingles for Australian Broadcasting Corporation (ABC) Radio Australia, and eight works for theater or dance.<sup>74</sup> Westlake’s most notable film credits include the 1992 IMAX documentary, *Antarctica*, the 1995 feature film, *Babe*, it’s 1998 sequel, *Babe: Pig in the City*, and the 2006 feature film, *Miss Potter*.<sup>75</sup>

Born September 6, 1958 in Perth, Australia to parents who were professional orchestral musicians, Westlake was primarily raised and developed his musicianship in Sydney.<sup>76</sup> Westlake studied clarinet with his father Donald, former principal clarinetist from 1961-1979 with the Sydney Symphony Orchestra, and has performed internationally with numerous ensembles, including a circus troupe, ballet orchestras, chamber ensembles, and fusion ensembles.<sup>77</sup> Westlake’s formal film score study began in 1982 at an eight-week course with William Motzing

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<sup>71</sup> “Print Music,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 10, 2016, <http://www.rimshot.com.au/>

<sup>72</sup> Ibid.

<sup>73</sup> Nigel Westlake, interview with author, Sydney, March 1, 2015.

<sup>74</sup> “Credits,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 10, 2016, <http://www.rimshot.com.au/>

<sup>75</sup> “About,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 10, 2016, <http://www.rimshot.com.au/>

<sup>76</sup> Kevin Matthew Estes, “Solo and Chamber Percussion Works by Nigel Westlake: An Examination of *Fabian Theory*, *The Hinchinbrook Riffs*, *The Invisible Men*, *Kalabash*, *Malachite Glass*, *Moving Air*, *Omphalo Centric Lecture* and *Penguin Circus*” (D.M.A. Document, The Ohio State University, 2014), 15.

<sup>77</sup> “About,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 10, 2016, <http://www.rimshot.com.au/>

at the Australian Film and Television School.<sup>78</sup> In 1983, he studied contemporary music in the Netherlands in 1983,<sup>79</sup> including composition with Theo Leovendie.<sup>80</sup> Westlake was appointed composer in residence for ABC Radio in 1984.<sup>81</sup>

However, Westlake did not exactly intend to be a full-time composer. In a March 1, 2015 interview, he stated:

Up until 20 years ago, I made most of my living as a clarinet player and composing on the side. I never ever thought I'd be composing full time. I guess those early years were a journey. I was writing pieces for people I was playing with as a clarinetist and bass clarinetist. I had this great relationship with Michael Askill. We worked in the circus together, we worked with Synergy, we did a season together with the Flying Fruit Fly Circus, which was a children's circus where we wrote and performed all the music. It was fun and we used a lot of electronics. Additionally, I had a classical chamber music group called the Australia Ensemble. There was violin, viola, cello, flute, clarinet, and piano and I wrote a couple pieces for them. So it was really just writing for the groups, the people I knew and I was playing with. It wasn't until I started film work and became a bit more serious as a composer that I started to delve into getting my skills together. Then I started doing orchestration. I was writing a lot of percussion at that time just because I had a close relationship with those guys.<sup>82</sup>

His percussion writing developed as a result of these experiences. In addition to folk, world, and classical music, Westlake attributes his personal style to include everything from the contemporary music his father often premiered to experimental rock music.<sup>83</sup> This diverse musical background led Westlake to meet many percussionists, most notably former principal percussionist of the Sydney Symphony Orchestra and founding member of Synergy, Michael Askill. This relationship would prove pivotal in Westlake's career.

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<sup>78</sup> Grant B. Dalton, "Nigel Westlake's *Omphalo Centric Lecture*: A Guide for Performance Including a Biography of the Composer and an Examination of the Different Versions of the Work," (D.M.A. Document, The Ohio State University, 2006), 10.

<sup>79</sup> "About," Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 7, 2016, <http://www.rimshot.com.au/>

<sup>80</sup> Phillip Cooney, "An Introduction to the Music of Nigel Westlake," Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 10, 2016, <http://www.rimshot.com.au/>

<sup>81</sup> "Nigel Westlake: Represented Artist," Australian Music Centre, accessed January 10, 2016, <http://www.australianmusiccentre.com.au/artist/westlake-nigel>

<sup>82</sup> Nigel Westlake, interview with author, Sydney, March 1, 2015.

<sup>83</sup> Phillip Cooney, "An Introduction to the Music of Nigel Westlake," Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 10, 2016, <http://www.rimshot.com.au/>

Synergy is Australia's "oldest and foremost contemporary music ensemble"<sup>84</sup> and celebrated their fortieth anniversary in 2014.<sup>85</sup> The ensemble, whose membership has evolved throughout its existence, has commissioned more than fifty works for percussion, including Steve Reich's 2009 work, *Mallet Quartet*.<sup>86</sup> However, it was their earlier commissions of Westlake that served as a connection to his development as a composer. These commissions include his 1987 percussion and digital delay solo *Fabian Theory*;<sup>87</sup> the percussion quartet and digital tape composition from 1989, *Moving Air*;<sup>88</sup> the 1990 composition for percussion quartet and bass clarinet, *Malachite Glass*;<sup>89</sup> the 1996 composition for percussion quartet and silent film, *The Invisible Men*;<sup>90</sup> and his percussion quartet, *Omphalo Centric Lecture*.<sup>91</sup> This piece was originally commissioned in 1984, written for four marimbas<sup>92</sup> and adapted for two marimbas in 2007.<sup>93</sup> On their website, Synergy states *Omphalo Centric Lecture* is "statistically the most performed classical percussion ensemble piece in the world."<sup>94</sup>

When asked in his 2015 interview how his percussion writing came to be so idiomatic for the instruments and if there were discussions about composition with performers, Westlake shared his experiences working with members of Synergy and *Omphalo Centric Lecture*:

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<sup>84</sup> "About," Synergy Percussion, accessed January 10, 2016,

<http://www.synergypercussion.com/synergy/profile.aspx>

<sup>85</sup> Ibid.

<sup>86</sup> Ibid.

<sup>87</sup> "Fabian Theory," Australian Music Centre, accessed January 10, 2016,

<http://www.australianmusiccentre.com.au/work/westlake-nigel-fabian-theory>

<sup>88</sup> "Moving Air," Australian Music Centre, accessed January 10, 2016,

<http://www.australianmusiccentre.com.au/workversion/westlake-nigel-moving-air/3504>

<sup>89</sup> "Malachite Glass," Australian Music Centre, accessed January 10, 2016,

<http://www.australianmusiccentre.com.au/workversion/westlake-nigel-malachite-glass/3607>

<sup>90</sup> "Invisible Men," Australian Music Centre, accessed January 10, 2016,

<http://www.australianmusiccentre.com.au/workversion/westlake-nigel-invisible-men/9515>

<sup>91</sup> "Omphalo Centric Lecture," Australian Music Centre, accessed January 10, 2016,

<http://www.australianmusiccentre.com.au/workversion/westlake-nigel-omphalo-centric-lecture/22184>

<sup>92</sup> Ibid.

<sup>93</sup> Ibid.

<sup>94</sup> "About," Synergy Percussion, accessed January 10, 2016,

<http://www.synergypercussion.com/synergy/profile.aspx>

I remember the *Omphalo Centric Lecture*, which I guess I kind of call my “Opus 1.” It started off as a trio for bass clarinet and two marimbas and it went through various permutations. I think it came through that and through working with Michael Askill and Graeme Leak, who were a part of Synergy. I learned a lot by just seeing them play it and I’m sure they would say, things to me, like “don’t use five mallets.” They probably would have instructed me but it was a lot of picking up stuff on the job. Being a self-taught composer a lot of what I know just seemed to work. What I’ve picked up over the years has been from working closely with other instrumentalists and the early film scores. Being on the floor and listening to the musicians play through the music and getting their suggestions. There was a lot of learning by trial and error, probably more error.<sup>95</sup>

Westlake also gained valuable percussion-related experience from performing alongside the Australian-based freelance percussionist, Greg Sheehan. A prominent contemporary musician, Sheehan led a percussion quintet in the 1990s dedicated to the performance of original music inspired by indigenous world music.<sup>96</sup> Their relationship was influential and Westlake said of their relationship:

When I first started mucking around with writing, I formed this jazz-rock group called the Magic Puddin’ Band. We had this great drummer named Greg Sheehan. He used to take me aside and teach me all his rhythms and would play me a lot of African balafon music. He was a bit of a teacher or guru in a sense. He actually had a lot to do with developing my interest and awareness of the way rhythms work and the mathematical ways of breaking them down. When he formed a percussion group called Utungun Percussion. They were a pretty interesting group of full on jazz-rock players who played stand up kits and with chops to burn. He invited me to play bass drum and I learned a lot from working with these guys. Being given a simple bass drum part and having to sit on it for an hour—having it locked down nice and tight.<sup>97</sup>

Westlake’s experiences working with preeminent Australian percussionists strengthened his skillset as a composer of percussion repertoire. His background as a film composer intersected with percussion in his compositions in a most unexpected way in 1992.

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<sup>95</sup> Nigel Westlake, interview with author, Sydney, March 1, 2015.

<sup>96</sup> Kevin Matthew Estes, “Solo and Chamber Percussion Works by Nigel Westlake: An Examination of *Fabian Theory*, *The Hinchinbrook Riffs*, *The Invisible Men*, *Kalabash*, *Malachite Glass*, *Moving Air*, *Omphalo Centric Lecture* and *Penguin Circus*” (D.M.A. Document, The Ohio State University, 2014), 18.

<sup>97</sup> Nigel Westlake, interview with author, Sydney, March 1, 2015.

Westlake has a short, quirky percussion ensemble work for seven percussionists with optional electric bass in his catalogue, titled *Penguin Circus*. He derived this piece from a scene in one of his early feature film successes, the 1992 IMAX film, *Antarctica*. The piece, listed for “school percussion ensemble” originally composed to “support the comical antics of penguins on ice.”<sup>98</sup> At two minutes in length, the piece is scored for seven percussionists and a bass player:

**Player 1**

Duck call  
Pots and pans  
Finger snaps  
Mouth clicks  
Bike horn  
Kids’ toy  
Swanee whistle  
Guiro  
Woodblocks  
Sampled brass band (C Major triad)

**Player 2**

Siren whistle  
Samba whistle  
Train whistle (or kids’ toy)  
Bike horn

**Player 3**

Flexitone

**Player 4**

Woodblocks (5)

**Player 5**

Chromatic Cowbells (or xylophone or other tuned/sampled percussion instruments)

**Player 6**

Xylophone

**Player 7**

Kit (snare/splash cymbal, crash cymbal, kick drum)

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<sup>98</sup> “Penguin Circus,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 11, 2016, <http://www.rimshot.com.au/penguincircus.htm>

**Player 8**  
Electric Bass

In an interview with Kevin Estes, Westlake said of the piece:

I am a bit amazed that *Penguin Circus exists* as a piece because it was written very much as a joke. It is a beautiful film and quite serious and we thought we definitely needed to break up all the scientific narrative and all the serious tone of the film with something a bit amusing. And the best way to do that seemed to be to kind of underscore the penguins with a circus approach. And so what I wrote I never thought would exist beyond the film.<sup>99</sup>

Westlake was asked about “one of the most famous pieces to come out of *Antarctica*” in an interview with Gary France.<sup>100</sup> Westlake said of the scoring:

I was afraid you’d bring that one up! Well, that section of the score came about because we needed some comic relief in the midst of a very serious scientific documentary. The penguins put on a bit of show for the cameras, jumping into the water, stealing rocks from each other’s nests, waddling around & so forth & I decided to support these antics with a very slapstick, incredibly corny, “cartoon hack-style” circus track using xylophones, flexatones, duck calls, wobble boards and so on. To my eternal embarrassment, this piece has gone on to have a life of it’s own outside of the movie. I cringe whenever I hear it, but I think kids especially get something from playing it. I never really intended for it to become so popular.<sup>101</sup>

*Penguin Circus* stands alone as a clever work, indicative of its name. I decided to program the work in the spring of 2015 at Adams State University synchronizing the percussion score to the corresponding scene in *Antarctica*. With the assistance of two students, we uploaded the scene from the movie into Cubase 7.5. Taking the suggested tempo from the score, a click-track was created with a few moments of subtle adjustments to the tempo to align the onscreen action to the score. Once the click-track was complete, we embedded the audio to the video and exported the file as an MP4 for the performance.

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<sup>99</sup> Kevin Matthew Estes, “Solo and Chamber Percussion Works by Nigel Westlake: An Examination of *Fabian Theory*, *The Hinchinbrook Riffs*, *The Invisible Men*, *Kalabash*, *Malachite Glass*, *Moving Air*, *Omphalo Centric Lecture* and *Penguin Circus*” (D.M.A. Document, The Ohio State University, 2014), 23-24.

<sup>100</sup> “The Percussion Music of Nigel Westlake- an interview with Gary France,” *Rimshot Music: Publishing and distributing music by Nigel Westlake*, accessed January 11, 2016, <http://www.rimshot.com.au>

<sup>101</sup> Ibid.

For the concert, we arranged the instruments in the orchestra pit in front of the stage and flew in the screen for video projection. Using a laptop, we ran a Video Graphics ARRAY (VGA) cable from the laptop to the projector. VGA cables transfer video but no audio, unlike a High Definition Multimedia Interface (HDMI) cable. With the video projected to the screen, we ran headphones from the audio output on the laptop to hear the click-track. I conducted the ensemble while listening to the click-track.

Additionally, we split the Player 1 part between two players. They rehearsed their parts with the click-track while watching the film to ensure their cues were precisely aligned. For the finger snaps and mouth clicks, they triggered the sounds using a KAT Percussion KTMP1 Electronic Drum and Percussion Pad Sound Module. Player 5 performed on a malletKAT GRAND and used a tuned cowbell patch. Because the part is elementary, a percussion major performed the electric bass part.

Westlake did not intend *Penguin Circus* to be performed with film, but a few simple technical modifications makes it possible. This created a multimedia performance experience for audience and musicians alike. This concept, however, was precisely the intention in Westlake's composition for percussion quartet and silent film, *The Invisible Men*.

## Chapter 5: *The Invisible Men*

*The Invisible Men* was commissioned in 1996 by Synergy, with funding by the University of Technology, Sydney. The members of Synergy asked Westlake to score a percussion quartet with a silent film. He spent time seeking an old Australian film or documentary at the Australian National Film and Sound Archive in Canberra, but eventually settled on the “quirky” French film with an Australian connection.<sup>102</sup> This film was part of the repertoire of the family of performers known as *The Corricks*, the *Corrick Family Singers*, the *Marvellous Corricks*, or the *Corrick Family Entertainers*.<sup>103</sup> This family of musicians, eight women and two men, toured internationally from 1901 until 1914, performing vocal and instrumental works, often accompanied by projected slides and films.<sup>104</sup> Their collection of more than one hundred films were from all genres of the era, including comedies, melodramas, actuality films, and trick films—the early special effects in which the film is cut and a change to the scene is inserted to create an illusion. *Les Invisibles*, a 1906 Pathé produced film was part of their repertoire and an early example of trick film. This film was among 135 films donated to the Australian National Film and Sound Archive by John Corrick.<sup>105</sup> John was the son of Leonard Corrick, the *Corrick Family Entertainers* film expert and projectionist.<sup>106</sup> Westlake found the film “endearing,” and “fascinating and *fantastically entertaining*.”<sup>107</sup>

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<sup>102</sup> “Concert Works: The Invisible Men,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 11, 2016, <http://www.rimshot.com.au>

<sup>103</sup> “Caring for the Corrick Collection,” National Film and Sound Archive, accessed January 11, 2016, <http://nfsa.gov.au/collection/film/corrick-collection>

<sup>104</sup> “Concert Works: The Invisible Men,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed March 25, 2013, <http://www.rimshot.com.au>

<sup>105</sup> Leslie Anne Lewis, “The Corrick Collection: A Case Study in Asia-Pacific Itinerant Film Exhibition,” *National Film and Sound Archive Journal Australia*, Vol. 2, No. 2 (2007): 7.

<sup>106</sup> *Ibid.*, 4.

<sup>107</sup> “The Percussion music of Nigel Westlake- an interview with Gary France,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed March 25, 2013, <http://www.rimshot.com.au>



Westlake considered *The Invisible Men* to be in a “different headspace” than composing a feature film, as there’s no director, producers, or distributors involved—something that can be quite stressful.<sup>108</sup> He said about composing the piece:

For *The Invisible Men*, I thought, ‘great no director, I can do whatever I like and make a really great percussion score.’ I kind of liked the vaudevillian aspect of the movie. It lends itself to a comical/crazy sort of a score because it’s got a manic energy about it and it’s a strange idea—very intriguing. It has magic and the chase—it has everything! It’s pretty weird and very zany. I just loved the zaniness of it and once I got started I couldn’t stop. It was a lot of fun writing and I wanted it to be entertaining and challenging.<sup>109</sup>

*The Invisible Men*’s scoring is neither soundtrack nor traditional silent film accompaniment. Westlake scored the piece to include thematic content, elements of cartoon music, Foley, and representational Foley. Gary France asked Westlake in an interview if he’d describe *The Invisible Men*’s score as “cartoon slapstick comedy music.”<sup>110</sup> Westlake agreed and discussed the click-track:

Yes, it is in a way. The whistles used in the score represent the characters talking & yelling at each other & much of the on-screen action is supported by “Foley” type percussion writing (i.e. sound effects made in sync with the picture). It’s quite comical in a cartoon type style. The performers are synchronized to the movie with a click-track, which is part of the soundtrack on the DVD. The audio output from the DVD goes straight into the headphones of the performers. And there’s also a bar count on the click-track in case you get really lost.<sup>111</sup>

The complexities of synchronizing the score to the onscreen cues require a click-track. With over sixty instruments played and virtually non-stop action scored, the click-track is also valuable to assist the performer with coordinating the numerous instruments and mallets. The instruments used throughout the score each serve a valuable purpose within the film. Westlake discusses this scoring process with Estes:

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<sup>108</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

<sup>109</sup> Ibid.

<sup>110</sup> “The Percussion music of Nigel Westlake- an interview with Gary France,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed January 11, 2016, <http://www.rimshot.com.au>

<sup>111</sup> Ibid.

Just as I was writing the work, I was mocking it up using samples and a sequence system. I think I just experimented so I wrote that score very much with the same approach as I would for a film, so I was constantly watching the film. I think I was using Digital Performer at the time as a sequencer, and I think I was running that in sync with the picture, so I was constantly reviewing what I was writing as I was writing it and looking at it with the image and seeing what fitted. I know that I wanted it to be a very challenging work because I knew that Synergy, as are most percussionists, aren't afraid to get their hands dirty with some very technical licks. And I knew it would be good to have two marimbas a harmonic anchor for the whole work and to sort of embellish that sound with all those other colors. So it was very much a trial and error process. And also probably talking to Synergy going about what instruments they were going to be using for that particular concert, and find out what they would like to be playing probably had a role in that as well.<sup>112</sup>

Westlake scored *The Invisible Men* during a period of time in which he was still a dual-career musician, both composing and performing as a professional clarinetist.<sup>113</sup> When I asked how long it took to complete *The Invisible Men*, he responded:

I don't remember exactly...maybe a couple of weeks. It was between concerts so I had to fit it in, and that was back in the day. I was trying to keep two careers going. I always found that with playing the clarinet, I would have to practice a lot because I had to keep the chops. I could never really take a lot of time off from playing. With two lives, I had to write quickly. Sometimes maybe quicker than I should have!<sup>114</sup>

Westlake didn't necessarily intend to write particular themes for *The Invisible Men*, yet thematic continuity and motifs are heard amongst the abundance of cues. I asked Westlake about his compositional process for the piece, specifically if he had leitmotifs in mind for the different characters. He responded:

No, maybe I should have. Structurally it could be a little more cohesive but it was just kind of a free form thing—intuitive. I was pretty relaxed with it and maybe should've been a little more aware of the structure. I think if I was doing it now I would be. Again, because I was playing the clarinet and had gigs to prepare for I was like, okay I have to write this piece in a few days and I have to start practicing for the concert next weekend.

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<sup>112</sup> Kevin Matthew Estes, "Solo and Chamber Percussion Works by Nigel Westlake: An Examination of *Fabian Theory*, *The Hinchinbrook Riffs*, *The Invisible Men*, *Kalabash*, *Malachite Glass*, *Moving Air*, *Omphalo Centric Lecture* and *Penguin Circus*" (D.M.A. Document, The Ohio State University, 2014), 124-125.

<sup>113</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

<sup>114</sup> Ibid.

I wasn't quite as devoted to it as I might be now so it was kind of, whatever comes to mind—just do it.<sup>115</sup>

*The Invisible Men* is a much more complete artistic work than a soundtrack or standard silent film accompaniment that happens to use an old French film. The music alone would be interesting but not a complete work. The film itself would be interesting but was likely always screened with some sort of musical accompaniment. However, the combination of the two by Westlake is masterful and creates a unique and incredibly entertaining work of art. Like many great works, it takes numerous performances for audiences and performers alike to understand and appreciate. The layers of complexity and attention to detail continue to unveil themselves with each and every performance.

Because of the complexity and multiple considerations at play in *The Invisible Men*, an individual theoretical analysis, structural analysis, film analysis, scene synopsis, or other means of organizing and explaining the work would not capture the details of the work. As a result, I've combined the above approaches into a narrative annotation of the work. To provide structure, the delineation of scenes by measure numbers are included to organize the annotation. While most of the cues, themes, motifs, and onscreen action is addressed, some are combined and mentioned in passing to maintain flow of the annotation. Some immediately relevant technical and historical aspects appear in the annotation, however most are addressed later in the document. Additionally, while the annotation focuses on the music and how it interacts and relates to the film, relevant cinematic techniques are occasionally added to provide context to the work.

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<sup>115</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

## Chapter 6: A Narrative Annotation of *The Invisible Men*

### Instrumentation:

#### **Percussion One**

Marimba (to low A)  
Mouth siren  
Flexitone  
Police whistle  
Duck call

#### **Percussion Two**

Marimba (to low A)  
Mouth siren  
2 mounted bongos  
Flexitone  
Cymbal-China type  
Xylophone  
Timpani  
Police whistle  
2 small Chinese gongs

#### **Percussion Three**

Snare drum  
Kick drum  
Hi-hat  
4 woodblocks (high to low)  
Ice bell  
Cowbell (high)  
Cymbal-China type  
Police whistle  
Sand blocks (mounted)  
Bell tree  
Mark tree  
2 mounted bongos  
Log drums (5 pitches)  
Flexitone  
Wind gong  
4 tom toms  
Bike horn (mounted)

#### **Percussion Four**

Cymbal-China type  
4 tom toms  
4 woodblocks (high to low)  
Ratchet (mounted)

Police whistle  
Wind gong  
Ice bell  
Duck call  
Cowbell (high)  
Vibraslap  
Swanee whistle  
Tambourine (skinless)  
Broken glass  
2 small Chinese gongs  
Flexitone  
Glockenspiel  
Mouth siren  
Cuckoo whistle  
4 Timpani  
Sand blocks

The different percussion parts will be referred to, per the score, as Percussion 1, Percussion 2, Percussion 3, and Percussion 4. Deviating from *Rimshot Music's* synopsis, I've chosen to title the primary character, as the Alchemist instead of Wizard. This title is derived from Richard Abel's synopsis of *Les Invisibles* in his book, *The Ciné Goes to Town: French Cinema, 1896-1914*.<sup>116</sup> When film characters are referenced, their title, such as "Alchemist" and "Thief," will be capitalized. Primary and reoccurring motifs, themes, and figures will also be capitalized.

#### **Character List (In Order of Appearance):**

Alchemist  
Alchemist's Assistant  
Black Hat Thief  
White Hat Thief  
Tailor  
Chef  
Wife  
Young Child  
Adolescent Child  
Conquistadors (2)

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<sup>116</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 170.

Bailiff  
Right Judge  
Center Judge  
Left Judge

### **Scene One (mm. 1–93)**

Establishing the atmosphere of silent film with live musical accompaniment, the film begins with an old-fashioned film leader countdown from ten to one, accompanied by snare drum roll, creating instant tension and anticipation. Following the introductory snare drum roll played by Percussion 3, the movie begins with all performers playing the downbeat of measure 3. The initial camera angle is of a large room, the Alchemist's residence, with a suspended alligator at the top of the set, a stove on stage right, a wall-mounted gargoyle stage center-left, a door stage right, and a large wardrobe in the center of the room. The first character introduced is the Alchemist, who in a state of aggravation consults his books of potions flipping four pages cued in Percussion 3 with snare drum rim shots.<sup>117</sup> He shuts the book to an eighth-note triplet cued in Percussion 3 on woodblocks<sup>118</sup> and tosses the book of potions to the floor, punctuated by Percussion 4 playing a three-tom<sup>119</sup> descending sixteenth-note triplet. It is immediately evident Percussion 3 and Percussion 4 assume the role of cued Foley and representational Foley. The first significant musical idea presented by Percussion 1 and Percussion 2 (figure 1) on marimbas serves as developmental material. This tense, disjunctive theme played in broken triplets functions to generate a mood of tension as the Alchemist paces about the room.

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<sup>117</sup> For the remainder of the annotation, "snare drum rim shots" will be referred to as "rim shots."

<sup>118</sup> In the score, Westlake refers to woodblocks as "wood blox." I'll use "woodblocks."

<sup>119</sup> In the score, Westlake uses the "tom-toms" and "toms" interchangeably. I'll use "toms."

Figure 1: *The Invisible Men*, Percussion 1, Percussion 2 mm. 9-11

Figure 1 shows a musical score for four percussion parts (Perc. 1, Perc. 2, Perc. 3, and Perc. 4) across measures 9, 10, and 11. The tempo is marked as 147 bpm. Perc. 1 and Perc. 2 play a complex rhythmic pattern with triplets and dynamic markings of *f*, *mp*, and *f*. Perc. 3 plays a pattern with wood blocks and a glockenspiel, with dynamic markings of *p*, *mf*, and *f*. Perc. 4 plays a pattern with a glass and wood blocks, with dynamic markings of *f*, *p*, and *mf*. A ratchet is introduced in measure 10 with a dynamic marking of *f*.

Each of the Alchemist's bodily gestures are cued in a variety of percussion instruments. A motive established early on by Westlake is when an item is set down, a descending rhythmic pattern represents the motion. As the Alchemist stirs a concoction in a mortar, a triplet pattern is cued on woodblocks, but this time in Percussion 4. A prominent and recurring cue is that of the ratchet (figure 2) whenever the Alchemist bends his back. The ratchet will play further functions later in the film.

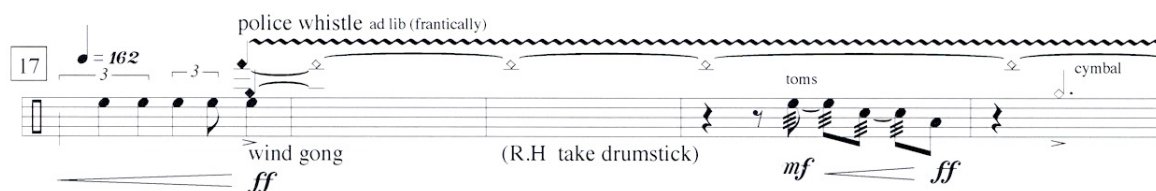
Figure 2: *The Invisible Men*, Percussion 4 m. 11

Figure 2 shows a musical score for Percussion 4 in measure 11. The tempo is marked as 147 bpm. The score shows a ratchet pattern with a dynamic marking of *f*.

The Alchemist frantically reviews a book of potions as the music builds and the tempo increases from measure 11-17. The tension, further represented by ascending dissonant marimba lines, finally erupts with a camera close up of the Alchemist, followed by the first instance of

special effects in the form of film trickery. This film trick takes place as the Alchemist experiences an explosion of his brain, complete with smoke and a flip-top head. The camera then switches to the original full screen angle to catch the ensuing drama. Causing quite a commotion, the agonizing screams of the Alchemist are represented by “ad lib” screeching police and mouth siren whistles, snare drum rolls, rapid sixteenth-notes, eighth-note triplets, rim shots, and furious tom lines by Percussion 4 (figure 3).

Figure 3: *The Invisible Men*, Percussion 4 mm. 17-21



Alarmed by the sudden chaos, the second character, the Alchemist’s Assistant, enters the room from the stage left door in an effort to calm his partner. This mayhem occurs from the last beat of measure 17 until the downbeat of measure 28.

The Assistant places a chair in the center of the room in which the Alchemist sits and kicks his legs in pain, accompanied by bongos and toms, while waiting for his Assistant to scoop the contents of his head from the floor to the cue of sand blocks.<sup>120</sup> The Alchemist’s screams can still be heard, represented by Percussion 1’s mouth siren. The Assistant furiously returns the brain matter to the empty void. Never missing a cue, Westlake scores an ice bell for the moment the Assistant’s scoop is dropped and hits the floor.

<sup>120</sup> In the score, Westlake refers to the instrument of sandpaper attached to blocks as “sand blox.” I’ll refer to them as “sand blocks.”



As the onscreen tension decreases, the tempo and dynamics decrease. The Alchemist's stomping feet are perfectly synchronized with a high and low tom played by Percussion 4. The Assistant closes the Alchemist's head to a marimba flourish and a single wood block note on the downbeat of measure 34 (figure 4).

Figure 4: *The Invisible Men*, Score mm. 33-34

The musical score for measures 33-34 of *The Invisible Men* is presented for four percussion parts. Measure 33 is in 5/4 time, and measure 34 is in 4/4 time. Percussion 1 (Perc. 1) plays a marimba flourish in measure 34, marked *mf*. Percussion 2 (Perc. 2) plays a rhythmic pattern of eighth notes in measure 33 and a single note in measure 34. Percussion 3 (Perc. 3) plays a wood block note in measure 34, marked *mf*. Percussion 4 (Perc. 4) plays an ice bell in measure 33 and a hi tom in measure 34, marked *mf*. The score concludes with a *pp* (pianissimo) dynamic marking and a fermata.

At this point, Percussion 1 and Percussion 2 play a whole-tone melody on marimbas as order is restored. After a brief moment of celebration and a handshake represented by sixteenth notes played on snare drum, the Assistant leaves through the stage left door, but not before thumbing his nose at the camera to the cue of a duck call. The door closing is punctuated by kick drum; a cue that will be repeated throughout the score. The score provides the composer's specific

instructions for the kick drum, also known as a drum set bass drum. Meanwhile, the Alchemist continues his potion-making operation.

As the Alchemist cooks at his stove, the meter shifts to 7/8 at measure 40 and Percussion 1 and Percussion 3 have polyrhythms of 5:3, 3:4, 4:3, and 5:7. These parts are not in relation to one another as Percussion 1 provides atmosphere with a marimba melody and Percussion 3 performs cues of potion contents being poured and stirred in a mortar by the Alchemist.

Percussion 1 then plays a four-pitch pattern of eighth note triplets across the measure line in 7/8 from measure 44-45. The Alchemist pours the contents of the mortar into a vessel on the stove, celebrates with fists in the air to the cue of cymbals, and lights the stove to the cue of a quickly ascending bell tree. The marimbas played by Percussion 1 and Percussion 2 begin an ascending, foreboding and foreshadowing bass line, a long crescendo roll on a wind gong accompanies the growing flame. Unique to the scene is an early visual special effect of the fire being stenciled orange in the frame.

To the glissando of a mark tree, the fire flames out at measure 53 with a downbeat in 4/4 meter and a climactic release by the marimbas and wind gong. For the first time since the piece began, beats of rest are observed as the wind gong and mark tree fades. Silent film accompanists and film composers have used the “sudden cessation of music when the latter is expected” for dramatic effect as early as 1912.<sup>121</sup> Westlake uses this technique often throughout *The Invisible Men*.

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<sup>121</sup> Mervyn Cooke, *A History of Film Music*, (Cambridge, UK: Cambridge University Press, 2008), 3.

At measure 54-56, the marimbas establish a syncopated Groove Theme (figure 5).

Figure 5: *The Invisible Men*, Score mm. 54-56

The musical score for measures 54-56 of *The Invisible Men* is presented across five staves. The first staff, representing the marimba, contains a syncopated melody in G major, marked with a piano (*p*) dynamic. The second staff is empty. The third staff, representing the marimba's lower register, contains a syncopated melody in G major, also marked with a piano (*p*) dynamic. The fourth staff, representing the wood block, contains three notes marked with a mezzo-piano (*mp*) dynamic. The fifth staff, representing the percussion, contains a ratchet and a vibraslap, both marked with a mezzo-piano (*mp*) dynamic.

The parts are more rhythmic than harmonic or melodic. Percussion 3 and Percussion 4 resume the role of playing cues, including the use of the ratchet for the turning of a tap and the vibraslap when the Alchemist fills a bottle with the newly created potion. A quick bongo figure with sticks represents the Alchemist tapping the potion bottle with his hand and three wood block notes represent him holding the bottle up and nodding to the camera.

A series of prominent cues appears for the first time as the Alchemist drinks the potion. Throughout the film, an ascending mark tree represents the drinking of the potion, a descending glissando on the swanee whistle represents the setting down of the bottle, and the sound of flexitones represents the disappearing character. It is important to note the directions provided by the composer regarding the flexitone execution. At the first appearance of the flexitone in

Percussion 1 and Percussion 2 in measure 61, Westlake notates a half note tied to two whole notes with a trill above. His written instructions state “ad lib” and “slow glissandi.”<sup>122</sup>

Aside from the namesake of the film, the visual special effect of the dissolving Alchemist must have been exciting to early filmgoers. Westlake emphasizes this moment for modern viewers by thinning the score to only the use of flexitones.

As the Alchemist disappears, the Assistant returns to the room, searching in vain for his colleague. Sporadic alternating notes played on log drums, marimba, and wood block accompany the Assistant as each note punctuates his movements about the room. With the crash of a cymbal and kick drum followed by the whirl of a siren mouth whistle, the Alchemist suddenly reappears, momentarily frightening the Assistant. Measure 72 (figure 6) is the first appearance of a significant melodic theme on marimbas, the Alchemist Theme, which will be given a different treatment later.

Figure 6: *The Invisible Men*, Percussion 1, Percussion 2 mm. 72-73

The musical score for measures 72-73 of *The Invisible Men* is presented on four staves. The first two staves are for Percussion 1 (mp) and Percussion 2 (mf). The last two staves are for Percussion 1 (mp) and Percussion 2 (mf). The music features a melodic theme on marimbas, the Alchemist Theme, which is first introduced in measure 72.

<sup>122</sup> Nigel Westlake, *The Invisible Men for Percussion Quartet, Music for the Silent Movie “Les Invisibles,” produced by Pathé-Frères.* in 1906 (Australia: Rimshot Music, 1996), 6.

An interesting cue that makes multiple appearances in the film is the duck call, heard whenever the Assistant crosses his arms in bemusement. This cue suggests the overall humorous approach Westlake took when composing the work. In an interview with Gary France, Westlake agrees the piece is an example of slapstick cartoon comedy.<sup>123</sup> This cue takes place following the reappearance of the Alchemist in measure 73.

Banter between the two characters is accompanied by the marimba theme and physical gestures are cued in wood blocks, cowbell, and log drums. The Assistant agrees to try the potion while the marimbas play descending chromatic line in perfect fifths. The Alchemist Theme ceases as the Assistant samples the disappearing potion, accompanied by the mark tree and a chorus of flexitones. A brief marimba flourish is cued as the Alchemist takes the potion bottle from the dissolving Assistant. Once again, the action and musical scoring reduces to emphasize the invisible man while the Alchemist observes. In excitement, the mouth siren played by Percussion 1 screams out representing the delighted Alchemist. While the Assistant is invisible, the Alchemist paces about, marveling at the success of his potion. Measure 80 presents a sequence of the Alchemist Theme with a rhythmic variation that accompanies the animated Alchemist. Percussion 3 joins the melody with an additional rhythmic countermelody played on wood blocks and cowbell (figure 7).

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<sup>123</sup> “The Percussion Music of Nigel Westlake- an interview with Gary France,” Rimshot Music: Publishing and distributing music by Nigel Westlake, accessed November 25, 2015, <http://www.rimshot.com.au>

Figure 7: *The Invisible Men*, Percussion 1, Percussion 2, Percussion 3 mm. 80-81



The Assistant reappears to an ascending glissando on bell tree. Soon after his reappearance, the first moment of true Foley occurs when the Assistant claps his hands, cued as “clap hands” on beat four of measure 83 for Percussion 4. Both characters appear excited about the new potion and exchange gestures. An approving head nod is cued on marimba with sixteenth notes playing a major seventh. The duck call cues again as the Assistant crosses his arms in what appears to be a momentary disagreement.

A soft marching snare drum rhythm in 4/4 meter begins in measure 86 as the activity on screen increases. Also beginning in measure 86 is a four-measure isorhythm played on marimbas (figure 8). Percussion 1’s isorhythm moves in 5/8 hemiola while Percussion 2’s isorhythm moves in a 5/4 hemiola. This dense scoring of marching snare drum and marimba isorhythm signals the impending end of the first scene.

Figure 8: *The Invisible Men*, Score mm. 86-88

The musical score for measures 86-88 of *The Invisible Men* features four percussion parts. Perc. 1 (marimba) plays a melody starting at measure 86, marked with a 'mouth siren' effect. Perc. 2 (marimba) provides a rhythmic accompaniment. Perc. 3 (snare) plays a 'hi hat' pattern with dynamics of *mf* and *mp*. Perc. 4 (kick drum) plays a pattern marked *ppp*. The score includes various musical notations such as notes, rests, and dynamic markings.

The Alchemist hides the potion bottle in the wardrobe, briefly exposing a skeleton hidden inside and sounding the mouth siren by a marimba-playing Percussion 1. Once the wardrobe is secured to the sound of two notes on the ratchet, both characters exit through the stage left door, accompanied by an ascending marimba passage rhythmically similar to the previous isorhythm section. The door closes to the sound of a solo kick drum and the close of an exciting Scene One.

### Scene Two (mm. 93–118)

A solo headless tambourine shake roll transitions from Scene One to Scene Two. With a darkened hue to the film, two new shadowy characters enter the scene from stage right. An ornate door, arched in glass with lights glowing on either side sets the backdrop of a residence. The two shadowy characters, we will soon learn, are thieves.

The marimbas present a new quarter note theme in measure 94, the Thieves Leitmotif, synchronized to the thieves' footsteps (figure 9). Accompanied by log drums, the bass line plays tritones, framing the nefarious activity about to unfold.

Figure 9: *The Invisible Men*, Score mm. 94-97

The musical score for measures 94-97 of *The Invisible Men* features four percussion parts:

- Perc. 1:** Treble and bass staves. Treble staff has chords (mf). Bass staff has rests.
- Perc. 2:** Treble and bass staves. Treble staff has chords (mf). Bass staff has a rhythmic pattern.
- Perc. 3:** Treble staff. Labeled "log drum" (mf). Rhythmic pattern.
- Perc. 4:** Treble staff. Labeled "kick dr." (p). Rhythmic pattern. Includes a note "(to ratchet & ice bell)" (mf).

Measure 94 starts with a dynamic of *mf*. Measure 95 has a dynamic of *mp*. Measure 96 has a dynamic of *mf*. Measure 97 has a dynamic of *mf*.

Gesturing to one another, it is initially unclear if the thieves intend to enter the residence. These gestures, including a leg slap, are cued in the tambourine and kick drum. The Black Hat Thief appears ready to move on, but his partner, the White Hat Thief, convinces him to consider entering with a foreshadowing point to the glass above the door, punctuated by an accented flam on the high log drum. As they contemplate how to proceed, including mimicking the turning of a doorknob to the sound of the ratchet and an exasperated hand gesture cued for the ice bell, the first appearance of a blues-like chromatic bass marimba motif—the Blues-Like Motif—in measure 100 transitions to a sequence up a perfect fourth from the Thieves Leitmotif (figure 10).



Figure 10: *The Invisible Men*, Score mm. 100-102

The musical score for measures 100-102 of *The Invisible Men* features eight staves. The first staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. The second staff has whole rests in all three measures. The third staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. The fourth staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. The fifth staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. The sixth staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. The seventh staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. The eighth staff has a whole rest in measure 100, followed by eighth-note chords in measures 101 and 102. Dynamics include *mp* (mezzo-piano) and *mf* (mezzo-forte). An 'ice bell' is marked in measure 100.

The thieves conspire to use a sword to pry open the door. Once again, the ever-versatile ratchet is cued for the drawing of the score and the prying motion. The log drum punctuates the failed attempt and resulting hand gestures while Westlake pauses the Thieves Leitmotif. The Blues-Like Motif transitions into the Thieves Leitmotif, once again in variation (figure 11).

Figure 11: *The Invisible Men*, Score mm. 104-106

The musical score for Figure 11, measures 104-106 of *The Invisible Men*, is a percussion score for a six-staff ensemble. The key signature has one sharp (F#) and the time signature is 4/4. The score includes various musical notations such as eighth notes, quarter notes, and rests. Dynamic markings include *mf* (mezzo-forte) and *ff* (fortissimo). A 'tambourine' is indicated on the bottom staff. The score is divided into three measures, with the first measure containing a circled section of music.

The White Hat Thief points to the glass above the door and his partner proceeds to break out the glass. Discussed in depth later in Appendix A, this moment of pure Foley is significant as the sound of breaking glass has inherent challenges. In addition to the breaking glass cues scored for Percussion 4, Westlake draws special attention to these three gestures by giving all four parts the same rhythm. These three glass strikes by the back of the Black Hat Thief's sword end with rolled dissonant double stops on marimba with log drums.

With the glass broken, the Blues-Like Motif transitions the thieves into their next act—gaining entry. First, the White Hat Thief, unsuccessfully hyperextends his legs attempting to step on the door while his partner returns his sword to his sheath. The ratchet is cued for these simultaneous moments. As the sword's bell guard hits the end of the sheath, Westlake scores this seemingly minor detail with a cowbell note. The hyperextended White Hat Thief pushes his legs

back into place to the sound of the ratchet and is assisted by his partner into the window with a bitonal, ascending marimba line (figure 12).

Figure 12: *The Invisible Men*, Score mm. 111-114

The musical score for measures 111-114 of *The Invisible Men* features four percussion parts. Perc. 1 (marimba) begins with a melodic line in measure 111, marked *f*, followed by *mf* and *f* in measures 112 and 113, and *p* in measure 114. Perc. 2 (marimba) plays a bitonal line, starting with *mp* in measure 111, *mf* in measure 112, *f* in measure 113, and *p* in measure 114. Perc. 3 (snare drum) plays a rhythmic pattern, marked *mf* in measure 112 and *f* in measure 113. Perc. 4 (tambourine) enters in measure 114 with a shake roll, marked *mp*. The score includes various dynamics (*f*, *mf*, *f*, *p*, *mp*) and articulations (accents, slurs, triplets).

As the White Hat Thief climbs through the broken window the marimbas remain on the same pitches as his partner's hand gestures are cued in the tambourine. This includes a shake roll as the Black Hat Thief shakes both hands in the air.

With the White Hat Thief successfully inside the residence, his partner looks stage right and then stage left, cued by a high register marimba figure and accentuated by the tambourine (figure 13).

Figure 13: *The Invisible Men*, Percussion 1 m. 115

The musical score for measure 115 of *The Invisible Men* features Percussion 1 (marimba) and Percussion 4 (tambourine). Perc. 1 plays a high register melodic figure with accents, marked *mf* in measure 115. Perc. 4 plays a shake roll, marked *mp* in measure 115. The score includes various dynamics (*mf*, *mp*) and articulations (accents, slurs, triplets).

The Blues-Like Motif makes its final appearance in the scene with ascending marimba lines as the Black Hat Thief climbs the door and through the broken window. As the Black Hat Thief falls headfirst into the residence, both marimbas play a frantic descending thirty-second note “ad lib flourish” (figure 14) ending with Percussion 2 playing a long glissando on marimba.

Figure 14: *The Invisible Men*, Percussion 1, Percussion 2 m. 117

The musical score for Figure 14 consists of two staves. The top staff is for Percussion 1 and the bottom staff is for Percussion 2. Both staves begin with a forte (*ff*) dynamic marking. The top staff includes a 'take flexitone' instruction. Both staves feature a 'frantic descending thirty-second note' flourish, indicated by a series of descending lines. The bottom staff also includes a 'gliss' instruction, indicated by a diagonal line. The score is written in a standard musical notation style with a key signature of one flat and a time signature of 4/4.

Similar to the end of Scene One, the snare drum plays a driving rhythm, this time with accented sixteenth note and sextuplet rhythm signifying the transition. The final cues come from the kick drum as the Black Hat Thief pulls his cloak from the window frame, followed by an offbeat cymbal crash, culminating Scene Two.

### Scene Three (mm. 118–150)

Westlake creates a dramatic shift in mood from the zaniness of Scene One and Scene Two to a chilling atmosphere in Scene Three. He shapes the viewer's response to the images, before any action takes place on the screen, by anchoring the scene to a specific mood. This idea of “ancrage” (anchoring) is a typical technique of film scoring.<sup>124</sup> In the instance of Scene Three, the two thieves emerge into the Alchemist's residence, which appears to be haunted!

The scene begins on beat three of measure 118 with a rolled wind gong, sporadic single flexitone notes with both up and down glissandi, and a hemiola figure in Percussion 4 with both ratchet and vibraslap (figure 15).

Figure 15: *The Invisible Men*, Score mm. 118-122

The musical score for Figure 15, measures 118-122 of *The Invisible Men*, is written for four percussion parts. Perc. 1 (top staff) features a flexitone line with glissandi (gliss up, gliss down) and a 'molto wobble' section. Perc. 2 (second staff) includes a cymbal - china type. Perc. 3 (third staff) has a wind gong and a 'cresc. poco a poco' section. Perc. 4 (bottom staff) features a ratchet and vibraslap with a 'cresc. poco a poco' section. Dynamics range from *mf* to *f*.

The thieves climb through an opening in the wall stage right of the wardrobe. Meanwhile, the once stationary alligator and gargoyle have come to life. The alligator's mouth opens to the sound of a vibraslap and closes to the sound of the ratchet in a hemiola, as mentioned above. The

<sup>124</sup> Kathryn Kalinak, *Film Music: A Very Short Introduction* (New York: Oxford University Press, 2010), 18-19.

thieves, startled by the alligator and gargoyle, wave their arms in fear as signified by a cymbal flourish and “molto wobble” flexitone. Attempting to flee the room, both thieves open the wardrobe revealing a hidden skeleton.

While the wind gong crescendos and the flexitone becomes more agitated, the White Hat Thief draws his sword as both thieves fall to the ground, frightened by the sight of the skeleton. Suddenly, the skeleton bursts to life in a dismembered spastic dance! Also part of this special effect is the bottle of potion, bouncing through the air with the skeleton bones. As Camille Saint-Saëns notably demonstrated in his 1874 tone poem, *Danse macabre*,<sup>125</sup> Westlake writes a xylophone melody—the Skeleton Dance—for Percussion 2, representing the dancing bones. In an interview with Westlake, he agreed *Danse macabre* likely inspired him for this moment.<sup>126</sup> This four measure Skeleton Dance for Percussion 2 is played in a one-beat canon with marimba by Percussion 1 and a half-beat rhythmic sonic pairing of the melody played on woodblocks by Percussion 3. This canon is accompanied by a syncopated rhythm by Percussion 4 on two small Chinese gongs (figure 16).

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<sup>125</sup> Gary D. Cook, *Teaching Percussion*, 3<sup>rd</sup> ed. (Independence: Cengage Learning, 2005), 93.

<sup>126</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

Figure 16: *The Invisible Men*, Score mm. 125-126

The musical score for measures 125-126 of *The Invisible Men* is presented in five staves, all in 4/4 time. The first staff is for marimba (hard mallets), the second for xylophone, the third for wood blox, and the fourth and fifth for 2 small chinese gongs (h.l.). The marimba and xylophone parts are marked with fortissimo (ff) dynamics. The wood blox part is marked with fortissimo (ff) and includes a triplet. The gongs part is marked with forte (f).

Just as quickly as the skeleton appears, it vanishes, as the wardrobe doors slam shut, cued by an accented fortississimo kick drum. After such dense scoring, Westlake thins the texture, creating a sense of pensive calm. The White Hat Thief rises to his feet accompanied by an ascending marimba figure. His angular gestures are accompanied by woodblocks. The thieves collect themselves and gesticulate as though in an argument. With tambourine, woodblock, and cowbell accompaniment, the isorhythm theme (figure 17) from measure 86 is briefly reintroduced.



Figure 17: *The Invisible Men*, Percussion 1, Percussion 2 mm. 132-133

The musical score for measures 132-133 of *The Invisible Men* is written for four percussion parts. The time signature is 5/4. Measure 132 is marked with a box containing the number 132. The parts are Perc. 1, Perc. 2 (marimba), Perc. 3 (cowbell), and Perc. 4 (tambourine). Perc. 1 and Perc. 2 have dynamics of *mp* and *p*. Perc. 3 and Perc. 4 have dynamics of *mp* and *p*. Perc. 3 includes a cowbell and w. blox. Perc. 4 includes a tambourine.

A short thirty-second note ascending marimba figure accompanies the thieves, as they turn upstage. To the cue of the ice bell, the Black Hat Thief discovers the bottle of potion on the floor. The Blues-Like Motif, last heard in measure 115 returns, preceding the marimba playing repeated quarter note triplets of an octave and a perfect fourth.

While the White Hat Thief peruses the Alchemists book of magic potions, the Black Hat Thief drinks the potion. With the same sound effects from Scene One of ascending mark tree, flexitones, and swanee whistle, the Black Hat Thief dissolves and becomes invisible. His partner turns around to a return of the Thieves Leitmotif, and is stunned to discover he is alone. This moment is cued with police whistles and log drums as the lonely White Hat Thief scampers about the room, in search of his partner. With a cymbal crash and a kick drum, the Black Hat



Thief reappears, as Percussion 2 plays a whirling mouth siren. Percussion 1 plays the Blues-Like Motif on the pickup into measure 143 while Percussion 2 revisits the isorhythm (figure 18).

Figure 18: *The Invisible Men*, Percussion 2 mm. 143-144



Percussion 3 and Percussion 4 accentuate physical gestures with log drum, ratchet, woodblock, and cowbell while Percussion 1 plays a melody, vaguely reminiscent of the Skeleton Dance (figure 19).

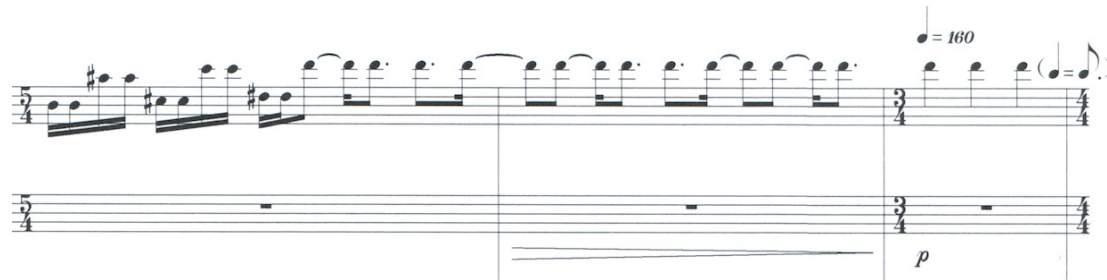
Figure 19: *The Invisible Men*, Percussion 1 mm. 144-146



On screen, the thieves take turns drinking the potion, and with the standard cues of ascending mark tree and flexitones, they dissolve from the scene and become invisible. As the scene draws to a close, Percussion 2 continues a variation on the isorhythm while Percussion 1 plays an ascending sixteenth note pattern in major sevenths on marimba. Accompanied by a soft

tambourine shake roll, Percussion 1 then plays a hemiola pattern that serves as a metric modulation into Scene Four (figure 20).

Figure 20: *The Invisible Men*, Percussion 1 mm. 148-150



#### Scene Four (mm. 151–188)

Scene Four takes place in a clothing shop with a foreboding theme scored in the marimbas. The overlay of major ninths in Percussion 1 with tritones in Percussion 2 suggests trouble ahead and quotes the Thieves Leitmotif. The Tailor sorts a pile of clothing to the accompaniment of tambourine while the thieves enter the shop cued by bongos. Constant eighth notes on bongos and the collective marimba parts create an anxious mood. The Tailor and thieves exchange pleasantries to the driving, harmonically unstable eighth note marimba pattern. Percussion 4 plays a disjunct melody on glockenspiel (figure 21), aligning with the three characters' arm gestures.

Figure 21: *The Invisible Men*, Percussion 4 mm. 155-157



The Tailor invites the thieves to peruse the clothing and in a gesture of nervousness, raises his hands and leans back, emphasized by a blast from the mouth siren. The orchestration remains similar as the thieves turn back to the Tailor with their clothing selections. Again, the glockenspiel represents the body language of all three characters. The thieves appear to ask the price of their respective pieces of clothing when the insistent eighth note patterns stop for the Tailor's response. His grand hand gestures are perfectly cued in the glockenspiel and marimbas as two answers are given on beats one and three of measure 162. The quarter rest on beat three draws attention to the importance of this onscreen action and is the first beat of rest in the scene.

Unhappy with the Tailor's prices, a dissonant response is given by the marimbas as the thieves react. They throw their clothing on the floor, cued first by a cymbal crash, then by a kick drum note, before attempting to exit the shop. An ascending then descending chromatic in augmented fifths/minor 6ths played on glockenspiel (figure 22) accompany the Tailor's efforts to bring the thieves back into the store.

Figure 22: *The Invisible Men*, Percussion 4 m. 165



The marimbas play a harmonically unstable triplet-based melody while the Tailor renegotiates with the thieves. The Black Hat Thief makes an offer by holding up a number of fingers and then a notable gesture occurs when the Tailor scratches his head in thought, represented by the scratching of sand blocks. This part appears in the score as an ossia to a glockenspiel figure.

While the tailor is looking away in contemplation, the White Hat Thief changes the number of fingers held up by his partner, thus lowering the offer, cued by a double stop from both marimbas.

Again, Westlake uses silence to emphasize a moment onscreen. After the Tailor contemplates the thieves' offer, a beat and a half of rest is given before his affirmative answer, punctuated by marimbas and kick drum. With the deal made, steady collective eighth notes are played between the marimbas with the bongos portraying the dialogue among the three characters. As the Tailor proceeds to his desk to write out the purchase receipt, the thieves once again drink the magic potion. The mark tree, flexitones, and swanee whistle depict the dissolving thieves while the marimba in Percussion 2 briefly quotes the earlier isorhythm. The marimba in Percussion 1 gradually reduces notes from three notes per measure, to two notes per measure, then to one. This diminution of texture further signifies the invisible characters. The thieves' hearty laugh is cued by a measure of quarter note triplets on a high cowbell as they have successfully added new clothing to their crime spree.

The Tailor completes the purchase receipt, stands, and is accompanied by steady eighth note tritones on marimba as he walks back to the center of the room. Rolling bongos with sticks builds the anticipation of the Tailor discovering the thieves are missing. This realization is met with a loud mouth siren and kick drum. In a comedic panic, the Tailor rushes about the shop in search of the missing thieves. Bongos, kick drums, toms, and cymbals solely depict this episode. The cymbal is crashed when the Tailor lifts a pile of clothes and then again when he lifts the tablecloth to his desk. The kick drum plays at measure 183 when the Tailor dives headfirst onto

his clothing display. This amusing moment has an optional timpani glissando in Percussion 2 (figure 23).<sup>127</sup>

Figure 23: *The Invisible Men*, Percussion 2, Percussion 3, Percussion 4 m. 183

The musical score for Figure 23 shows three percussion parts. Percussion 2 (Perc. 2) is written on a grand staff (treble and bass clefs). It features an optional timpani glissando marked with a forte (*f*) dynamic and the instruction 'pedal gliss'. A note '(to marimba)' is written above the glissando. Percussion 3 (Perc. 3) has a single note marked 'kick drum'. Percussion 4 (Perc. 4) has a rhythmic pattern marked with piano (*p*) and forte (*f*) dynamics.

The scene closes as the Tailor's frantic search is accompanied by rapid sixteenth notes on bongos and toms, crescendoing to a rhythmic cadence as he rushes from the shop in pursuit of the thieves. Kick drum, cymbal, and low tom mark the ending and their collective sustain carries through two beats of rest and into Scene Five.

<sup>127</sup> When performed at Adams State University, we used a 20" timpano in Percussion 2's setup for this cue. This is the only moment Percussion 2 plays timpani.

### Scene Five (mm. 189–238)

Scene Five is scored utilizing both odd and frequently shifting meters. In addition to the regular Foley, representation Foley, and other transitional material, Westlake composed two very specific themes. Table 1 describes this scene's structure:

*Table 1: The Invisible Men, Scene Five Analysis*

Trans. from Scene 4	A	Trans.	B	Trans.	A'	Trans.	B'	Trans. to Scene 6
m. 189	190-199	200	201-207	208-209	210-212	213-219	220-226	227-238

Onscreen, Scene Five takes place in a restaurant with a table and two chairs, a door to stage right, and a spigot of meat roasting over a fire. Similar to Scene One when the Alchemist lights his stove, the fire in this scene is stenciled orange.

Scene Five opens with the Chef and his Wife moving about the room, the Chef sampling the meat cued by marimba and the Wife dusting chairs with her towel, scored precisely for Percussion 3 with sand blocks. Theme A begins on marimbas, requiring, for the only time in the piece, three mallets for each player.<sup>128</sup> The melodic and harmonic content of Theme A is irregular and dissonant, suggestive of the ensuing trouble. Additionally, Percussion 2 plays the Blues-Like Motif in a rhythmic variation as a pickup into measure 192 (figure 24).

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<sup>128</sup> Because of the chord voicings, two mallets in the left hand works well. However, some performers may wish to utilize four mallets during this scene.

Figure 24: *The Invisible Men*, Percussion 1, Percussion 2 mm. 191-193

The image shows a musical score for two percussion parts, Perc. 1 and Perc. 2, spanning measures 191 to 193. Perc. 1 is written on a grand staff (treble and bass clefs). In measure 191, the treble staff has a half note chord (F#4, A4) and a quarter note chord (G#4, B4). In measure 192, the treble staff has a half note chord (A4, C5) and a quarter note chord (B4, D5). In measure 193, the treble staff has a half note chord (B4, D5) and a quarter note chord (C5, E5). The bass staff for Perc. 1 has rests in all three measures. Perc. 2 is also written on a grand staff. In measure 191, the treble staff has a triplet of eighth notes (F#4, A4, B4) and a quarter note (C5). The bass staff has a rest. In measure 192, the treble staff has a triplet of eighth notes (A4, B4, C5) and a quarter note (D5). The bass staff has a rest. In measure 193, the treble staff has a triplet of eighth notes (B4, C5, D5) and a quarter note (E5). The bass staff has a rest.

An eighth note triplet on a low woodblock is cued as a knock at the door, catching the attention of the Chef and Wife. The thieves briskly enter the room and the Chef brushes the floor in front of them with his towel, cued by the sand blocks. A glockenspiel glissando accompanies the closing of the door. The characters exchange greetings, the Black Hat Thief motions to the table, gestures a drinking motion, followed by three pointing motions to his mouth requesting food. A descending marimba figure represents his motion to the table, an ascending marimba figure represents the drinking motion, and the food request gesture is cued with three woodblock notes. Lesser body motions are cued with a lower woodblock, a cowbell, and when the Wife wipes the table, the sand blocks.

The Blues-Like Motif occurs again before a series of interesting moments in the score. Westlake cues a “wolf whistle” (figure 25) as the thieves look directly at the Wife. This two-part whistle—first a short ascending whistle and the second long and descending—represents the thieves’ creepy appreciation for the Wife as she continues to wipe the table with her towel, to the sound of sand blocks. As she finishes wiping the table, the thieves sit down. Suddenly, the Black Hat Thief hesitates, leans towards the Wife and slightly lifts his left leg. Westlake, in a light, slapstick moment, scores a loud duck call (figure 25). This cue may serve dual purposes. The

first might be the Black Hat Thief kissing the Wife's cheek, and the second might be depicting flatulence.

Figure 25: *The Invisible Men*, Percussion 4 mm. 196-198



Either scenario concludes with the Wife scurrying away to a kick drum note and a descending low register marimba figure. A short, soft police whistle represents a quick word between the Wife and the Chef as they pass one another. The Chef brings drinks to the table to the accompaniment of a cowbell and a descending woodblock figure, serving as a transition into measure 201 and Theme B.

Percussion 3 plays a drum set-like pattern in 5/4 meter as the basis for Theme B. Percussion 1 and Percussion 2 play groove-oriented patterns on marimba and Percussion 4 plays cues of both true and representational Foley (figure 26).



Figure 26: *The Invisible Men*, Score mm. 201-203

The musical score for measures 201-203 of *The Invisible Men* features four percussion parts. Percussion 1 and 2 play melodic lines in 5/4 time, both marked *mp* with a *cresc. poco a poco* instruction. Percussion 3 includes cow bell, snare, and kick drum parts, with the kick drum marked *p* and *cresc. poco a poco*. Percussion 4 includes a mouth siren part marked *mf* and a clap hands part marked *f*.

Onscreen, the Wife brings two plates of food to the table. The White Hat Thief smells the food and gestures away from the plate, cued by a mouth siren. Percussion 4 simultaneously plays the mouth siren while performing the Foley of clapping hands,<sup>129</sup> synchronized to the Chef. He claps his hands to summon his Young Child to deliver another plate of food. Once delivered, the Black Hat Thief takes a quick sniff and passes it his partner for a sniff. Both gestures are cued in Percussion 3 as police whistle. Interestingly, the White Hat Thief places the food on the floor as the Chef summons the Young Child for more food with handclaps, also cued in Percussion 4. This routine is quickly repeated whereas the Young Child hands the Black Hat Thief another plate of food. This time, he smells the plate, to the sound of a mouth siren, and passes to his partner who once again sets the plate on the floor.

Accompanied by an ascending marimba passage, a moment of hilarity ensues. Another character, the Chef's Adolescent Child emerges from stage left with a plate of food, and in haste,

<sup>129</sup> The challenge of creating enough handclap volume to balance with the ensemble is addressed in Appendix A.

trips over the outstretched leg of the Black Hat Thief. The Adolescent Child careens to the floor and launches the plate of food to the sound of cowbell, cymbal, and breaking glass (figure 27).

Figure 27: *The Invisible Men*, Score m. 206

The musical score for Figure 27, measure 206, consists of several staves. The top staff features a melodic line with repeated sixteenth notes, marked with accents and a sixteenth rest. The second staff shows a melodic line with a forte (*f*) dynamic. The third staff includes a cymbal part, marked with a cymbal symbol and a forte (*f*) dynamic. The fourth staff features a cowbell part, marked with a cowbell symbol and a forte (*f*) dynamic. The bottom staff includes a broken glass part, marked with a broken glass symbol and a forte (*f*) dynamic. The score also includes a mezzo-forte (*mf*) dynamic marking and a triplet of notes.

Furious, both the Black Hat Thief and the Chef chase after the Adolescent Child while the White Hat Thief, first unaware, takes another bite of food. The tension builds with repeated sixteenth notes played on marimba and snare drum.

Suddenly, the White Hat Thief stands and draws his sword, creating panic between his partner and the Chef. The police whistle represents the characters' screams and both long notes

and eighth note triplets are notated. Further mayhem is generated by a woodblock and cowbell sixteenth note pattern against the police whistle triplets.

An apologetic Chef and the Black Hat Thief calm the sword-bearing White Hat Thief but not before several gestures and words are represented by woodblock and police whistle. Thinner texture, softer dynamics, and a descending marimba figure restore calm as the thieves return to their seats. The descending marimba figure also serves as a transition into Theme A' in measure 210 (figure 28).

Figure 28: *The Invisible Men*, Percussion 1, Percussion 2 mm. 209-211

The thieves take a few more bites of food, dismiss the lingering Chef cued by an ice bell, and the Black Hat Thief gestures for his bill by scribbling his index finger on his palm. This motion is cued in the sand blocks. As the Chef exits stage left, the White Hat Thief feeds the Black Hat Thief from his fork, signified by a cowbell note. The mouth siren represents the Black Hat Thief's laugh. He also slaps his leg to the Foley cue of a handclap in Percussion 3 in measure 213.<sup>130</sup>

<sup>130</sup> If the handclap sound is being triggered from a sampler pad, Percussion 4 can play this cue. Percussion 4 has the other handclap cues.

The action is momentarily suspended with a repetitive figure played by both marimbas as the thieves wait for the Chef to return with the bill. When he does return, he unfurls a long bill with a snare drum roll and ice bell. The Black Hat Thief points at the bill, cued by a wood block, and then stands for further inspection. This time, tension is created through softly repeated sixteenth notes on marimba, interspersed with rests. The Black Hat Thief first waves goodbye, accompanied by the marimba figures, as if to say he will not pay. Then his body language suggests he agrees to pay the bill. This moment occurs at measure 220 with the beginning of Theme B' (figure 29). Theme B' is transposed up a half step from Theme B and scored without the drum set-like pattern from Percussion 4.

Figure 29: *The Invisible Men*, Percussion 1, Percussion 2 mm. 220-221

The musical score for Percussion 1 and Percussion 2, measures 220-221, is shown. The time signature is 5/4. Perc. 1 (top staff) begins at measure 220 with a melodic line of sixteenth notes, marked *mf*. Perc. 2 (bottom staff) begins at measure 220 with a rhythmic pattern of eighth and sixteenth notes, also marked *mf*. Both parts continue through measure 221.

Strangely, the Chef is ordered by the Black Hat Thief to set the bill on the floor, cued by ascending woodblocks and an ice bell. Eighth note triplets on cowbell are cued to the left hand of the White Hat Thief, gesturing for the Chef to kneel down. With the Chef out of sight of the table, the White Hat Thief takes a drink of the magic potion, signified by the ascending mark tree. The Black Hat Thief points three times at the potion, cued on high woodblock, drinks the

potion, cued with mark tree, and both thieves dissolve to the sound of the flexitones and an ascending marimba line.

Measure 226 further demonstrates the value of silence in film scoring. A single beat of rest on beat two creates an atmosphere of alienation for the Chef as he stands and realizes the thieves have disappeared without paying their bill. The impact of this realization is emphasized with the scoring of snare drum, rim shot, cymbal, a scream of the mouth siren, the thirty-second notes on marimbas, and police whistle (figure 30).

Figure 30: *The Invisible Men*, Score mm. 226-227

The musical score for measures 226-227 of *The Invisible Men* is presented for four percussion parts. Measure 226 begins with a 4/4 time signature. Percussion 1 and 2 play a triplet of eighth notes in the bass clef. Percussion 3 plays a snare drum (f) and a rimshot (f). Percussion 4 plays a mouth siren (ff). In measure 227, the time signature changes to 3/4. Percussion 1 and 2 play an 'ad lib - manic flourish' (fff). Percussion 3 plays a cymbal (f) and a police whistle (ff). Percussion 4 continues with the mouth siren (ff).

The “ad lib manic flourishes” on marimba emulate the enraged Chef. These marimba flourishes are executed by playing the general contour, but not specific pitches.

“Molto frenetic” flexitone in measures 228-229 represents the Chef signaling for his family and explaining the disappearance, while the snare drum simultaneously foreshadows the coming scene and the chaotic gestures of the Chef. Eighth note triplet rim shots against “ad lib” thirty-second note marimba flourishes accompany the Chef and his family as they run toward the

door to pursue the thieves. The ascending marimba flourishes represent the family running into each other and compressing like an accordion bellow. They are met at the door to a sextuplet on snare drum and toms, and a kick drum and cymbal crash as the Tailor enters the restaurant, colliding with the father. This sets off the reverse bellowing motion of the family, signified by a descending marimba flourish.

Figure 31: *The Invisible Men*, Percussion 1, Percussion 2 mm. 230-231

The musical score for measures 230-231 of *The Invisible Men* is presented in two systems. The top system, for Percussion 1, shows a 'sim.' (simultaneous) section with ascending and descending marimba flourishes, indicated by slanted lines. The bottom system, for Percussion 2, also features a 'sim.' section with similar flourishes. The Percussion 2 part includes a 'take flexitone' instruction and a 'take police whistle' instruction. The score is marked with 'ff' (fortissimo) and 'fff' (fortississimo) dynamics.

The agitated Tailor colorfully shares the story of his confrontation with the thieves to the Chef, accompanied by a drum duet between snare drum and toms. The Tailor's animation is perfectly matched to the drum set solo-like figures played in measures 232-233 (figure 32).



Figure 32: *The Invisible Men*, Percussion 3, Percussion 4 mm. 232-233

Figure 32 shows the musical notation for Percussion 3 and Percussion 4, measures 232-233. Perc. 3 (top staff) plays a sequence of triplets and a sextuplet with dynamics *mf*, *f*, *mp*, *f*, and *ff*. Perc. 4 (bottom staff) plays a sequence of triplets and a sextuplet with dynamics *f* and *ff*. Perc. 3 also has a cymbal and rimshot in measure 233.

To the frenetic sounds of police whistle, flexitone, and snare drum, the Chef commiserates with the Tailor and they agree to march off to consult the authorities, but not before the Tailor snatches a bite of food from the table. The snare drum, kick drum, and a cymbal establish the march tempo (figure 33), and an ascending marimba line coordinate perfectly as the Chef's family stagger to the door to watch the two men depart. The marimba in Percussion 1 ascends chromatically with major sixths in each hand and the marimba in Percussion 2 ascends chromatically with major thirds in each hand (figure 33).

Figure 33: *The Invisible Men*, Score mm. 236-239

Figure 33 shows the musical notation for Percussion 1, Percussion 2, Percussion 3, and Percussion 4, measures 236-239. Perc. 1 (top staff) and Perc. 2 (second staff) play ascending marimba lines with dynamics *f* and *ff*. Perc. 3 (third staff) plays a sequence of triplets. Perc. 4 (bottom staff) plays a sequence of triplets with dynamics *f* and *ff*. Perc. 4 also has a kick drum and cymbal in measure 236.

Scene Five and Scene Six elide musically. Westlake uses the marimbas and a march rhythm as pursuit music, connecting the action the scenes.

### **Scene Six (mm. 239–257)**

The Scene Six film has a tinted blue hue, set on a street corner with a prominently displayed hanging lamp, a building with a white sign, and a door. The now hat-wearing Tailor<sup>131</sup> and the Chef march from behind the building to the beat of previously established march and marimba motifs. The orchestration stops for the Tailor to knock on the door, naturally cued in a low woodblock. The door instantaneously opens to a quick, two-octave marimba glissando while the Tailor and Chef gesture to one another, played on cuckoo whistle. Two characters dressed in Conquistador costumes, representing the authorities, exit the building as Percussion 1 plays an ascending marimba flourish and Percussion 3 plays a snare drum roll. Frenetic police whistles, snare drum rolls, and descending and ascending marimba flourishes represent the distressed conversation among the Tailor, Chef, and Conquistadors. After three measures of scored representational conversation, the four characters proceed into the building. This is accompanied by ascending pentatonic eighth note triplet bitonal lines between the two marimbas, contrasted by snare drum (figure 34). The snare drum represents the characters walking into the building and the three parts diminuendo.

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<sup>131</sup> In a possible production error, the Tailor is seen with a hat in Scene Six. Previous to this scene, the Tailor did not have a hat. When he entered and exited the restaurant in Scene Five, his head was bare and his hands were empty.



Figure 34: *The Invisible Men*, Percussion 1, Percussion 2, Percussion 3 mm. 244-246

The image shows a musical score for three percussion parts (Percussion 1, 2, and 3) across three measures. The score is written on five staves. The first two staves are for Percussion 1 and 2, and the last three are for Percussion 3. The first measure is in 4/4 time, the second in 3/4, and the third in 5/4. The score includes various musical notations such as triplets, dynamic markings (mf, p, mp, pp), and rests. The Percussion 1 part features a descending line with triplets in the first measure, followed by a rest in the second and a triplet in the third. The Percussion 2 part has a similar pattern with a triplet in the first measure, a rest in the second, and a triplet in the third. The Percussion 3 part has a triplet in the first measure, a rest in the second, and a triplet in the third. The dynamics are mf for Percussion 1 and 2 in the first measure, p for Percussion 1 and 2 in the second measure, mp for Percussion 1 and 2 in the third measure, and mp for Percussion 3 in the first measure, pp for Percussion 3 in the second measure, and mp for Percussion 3 in the third measure.

Glockenspiel and marimba play a descending line with rhythmic *rallentando* as the thieves suddenly appear from around the corner, slowing their pace. They seem to recognize the building from the white sign, punctuated by snare drum, kick drum, and mouth siren. Perhaps hearing the Tailor and Chef inside, the thieves tiptoe backward, away from the building, cued with both marimbas, before noticing a hanging lamp. The discovery of the lamp is matched to a quick ascending marimba figure and ice bell. The ratchet is cued when the Black Hat Thief draws his sword, and an “ad lib” ascending thirty-second note pattern is played by marimba as the thieves scamper in front of the lamp.

A snare drum roll, rim shot, and marimba glissando accompany the thieves’ strike to the lamp’s cord with the sword. Percussion 4 plays the breaking glass cue when the lamp falls to the ground. As another special effect, the thieves and the building become silhouettes while the

background stays the same. Again, the marimbas play an ascending pentatonic bitonal figure, only this time with a crescendo.

The White Hat Thief thumbs his nose in the direction of the building, cued with a duck call, just as the Conquistadors exit the building and begin yelling at the thieves, cued to a manic, “ad lib” police whistle by Percussion 3. The marimbas begin the introduction of the Chase Theme, an eighth note pattern accompanied by two Chinese gongs, which accelerandos as the Conquistadors give chase to the thieves to stage right (figure 35).

Figure 35: *The Invisible Men*, Score mm. 255-258

The musical score for measures 255-258 of *The Invisible Men* features four percussion parts. Perc. 1 and 2 play a melody in treble clef, starting at measure 255 and continuing through measure 258. Perc. 3 plays a melody in bass clef, starting at measure 255 and continuing through measure 258. Perc. 4 plays a melody in bass clef, starting at measure 255 and continuing through measure 258. The score includes dynamic markings like *f*, *ff*, and crescendo markings. Annotations include "police whistle", "log drum", and "to chinese gong & cymbal - china type".

The manic “ad lib” whistle is passed to Percussion 4 as the Chef and Tailor join the pursuit.

### Scene Seven (mm. 258–267)

A melodramatic “Chinese shadow puppet”<sup>132</sup> chase occurs in Scene Seven accompanied by the offbeat marimba Chase Theme, and an ostinato pattern played on toms, log drums, marimba, and police whistle. Westlake scores a variety of cymbals and gongs for punctuation over a long hemiola pattern for police whistle as the Conquistadors, Chef, and Tailor give chase. The special effect of the chase is achieved by having the actors run in place to a “moving diorama background.”<sup>133</sup> After several measures of the chase, the leading Conquistador trips, causing a domino effect of the other characters. Descending thirty-second notes played on the marimba with “ad lib” pitches, overlapped with a polyrhythmic figure played on log drums, followed by a kick drum impact, represent the domino effect (figure 36).

Figure 36: *The Invisible Men*, Score mm. 265-266

The musical score for Figure 36, measures 265-266, is presented on five staves. The top staff features a melodic line with a key signature of one sharp (F#) and a common time signature. The second staff contains a series of eighth notes. The third staff is marked "(to marimba)" and shows a sequence of notes. The fourth staff includes a triplet of eighth notes marked with a "3" and a dynamic marking of *f* (forte). The fifth staff is marked "(to chinese gong)" and includes a "kick dr." (kick drum) impact. The score is written in a standard musical notation style with various rhythmic values and dynamic markings.

<sup>132</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 170.

<sup>133</sup> Ibid.

Quarter note triplets on a high Chinese gong, joined by a tremolo on log drums, accompany the character's struggle to stand back up. Scene Seven concludes as the film cuts to the front door of the Alchemist's residence.

### **Scene Eight** (mm. 268–286)

Scene Eight begins with a return of the Chase Theme, but with a *ritardando* instead of an *accelerando* as the thieves arrive back at the exterior to the Alchemist's residence. Exhausted, the chase concludes with a kick drum and wind gong strike.

Suddenly, the Black Hat Thief realizes his location and gestures to his staggering partner. This is accompanied by sixteenth notes on marimbas and woodblock, as he points to the broken glass. He then points to the potion, helping his partner make the connection. When the Black Hat Thief points up to the broken glass, the marimbas play an ascending figure, and when pointing to the potion, the ice bell rings. The flexitone briefly foreshadows the imminent disappearing act as The Black Hat Thief simulates drinking, punctuated by a single woodblock note.

The White Hat Thief takes his cue from his partner, and after a beat of rest, drinks the potion. With the mark tree still sustaining, the marimba plays a descending figure as the Black Hat Thief takes the potion and drinks. He sets the potion bottle down in front of the door and the two characters begin to dissolve to the sound of flexitones, with one last marimba figure expressing their exhaustion. Once invisible, two beats of rest provide a temporary pause in the action before the Alchemist and his Assistant open the door, cued by the ratchet.

The driving Closing Theme is introduced on marimbas in measure 278 just as the Alchemist picks up the bottle (figure 37).

Figure 37: *The Invisible Men*, Percussion 1, Percussion 2 mm. 278-280

The image shows a musical score for two percussion parts, Perc. 1 and Perc. 2, spanning measures 278 to 280. The score is written on a grand staff with two staves for each part. Perc. 1 is in the upper system, and Perc. 2 is in the lower system. Both parts are marked with a mezzo-piano (*mp*) dynamic. The key signature has one sharp (F#) and the time signature is 3/4. The notation includes various rhythmic patterns such as eighth notes, quarter notes, and rests, with some notes beamed together. The score is divided into three measures by vertical bar lines.

The two characters' body language is cued to the woodblocks, and the ice bell plays when the Alchemist holds up the bottle. Recognizing the bottle, the Assistant claps his hands, again cued to Percussion 4. Kick drum plays when the Alchemist and his Assistant make eye contact.

Regrettably, the Conquistadors appear from stage left to a descending marimba line and snare drum roll. A case of mistaken identity occurs as the Alchemist and his Assistant are confused for the thieves, and the bottle is confiscated with a tom flourish and a cymbal crash. A three-measure snare drum and tom duet is played as the Conquistadors prepare to detain the Alchemist and his Assistant. The Closing Theme reemerges in measure 285, transposed higher while the snare drum prepares to march off the prisoners (figure 38). The Alchemist's Assistant gestures wildly to the camera, cued to the mouth siren.

Figure 38: *The Invisible Men*, Percussion 1, Percussion 2 m. 285



As the characters exit stage left, a manic crescendoing thirty-second note flourish on marimbas in contrary motion and a mouth whistle transition to a drum roll and the next scene.

### Scene Nine (mm. 287–328)

Scene Nine begins with a timpani and snare drum roll (figure 39) signifying the martial judgment of a courtroom setting. Led by a Bailiff, three judges enter the courtroom from stage right, accompanied by a bombastic timpani and snare drum duet.

Figure 39: *The Invisible Men*, Percussion 3, Percussion 4 mm. 287-289



A duck call played by Percussion 1 is squeezed into an eighth rest of the drum duet as the last judge—the Left Judge—makes a face at the regal Bailiff. The judges proceed to the front of the set and bow to the camera at the downbeat of measure 291, synchronized by the drum duet. Accompanied by marimba and flexitone, the Center Judge gestures to his colleagues, and the three turn towards the stairs, as their body language is represented by woodblock and cowbell. The three proceed to climb the stairs to the Judges' Bench. The stairs are particularly difficult for the Left Judge to climb, and an angular upbeat melody on marimbas, supported by snare drum capture his struggles. Once at the Bench, a woodblock and cowbell flourish is scored as the judges remove their hats. A descending swanee whistle accompanies the hats to the bench as the judges move in unison. The Center Judge then gestures to the Bailiff to summon the plaintiffs to the courtroom, signified by a marimba riff.

Raising his hand to a cued snare drum roll, the Bailiff signals the Tailor and Chef who storm the courtroom from stage right, to a cacophony of police whistles, rim shots, timpani, and tense sixteenth note patterns on marimbas. The snare drum plays a 3:4 hemiola (figure 40) adding to the unstable feeling of the chaotic onscreen action.

Figure 40: *The Invisible Men*, Score mm. 300-301

Westlake successfully creates an immense amount of tension in a very short time, building with a crescendo in all parts until the Bailiff can get the disorderly plaintiffs under control. A beat of rest coincides with the Bailiff restoring order and the Center Judge pointing stage right. The Tailor and Chef continue to argue with one another to the sound of a mezzo piano police whistle while the Bailiff returns stage right, summoning the defendants. Led by the Conquistadors, the Alchemist and his Assistant are manhandled by the Conquistadors, cued by fortissimo tom flourishes played in rhythmic unison by “ad lib pitches” on marimba. A Conquistador places the bottle of magic potion on the Judges’ Bench. A descending timpani figure transitions to the return of the tense sixteenth note patterns on marimbas and police whistle. The Center Judge falls over the bench during the melee and is helped back to his seat by his colleagues, punctuated with a cymbal crash.

The texture of the score thins as calm is once again restored to the courtroom. Westlake scores cues of the characters’ short outbursts with police whistles. Alternating quarter notes



between marimba and timpani maintain a feeling of forward momentum. A short ascending chromatic pattern is played on marimba as the Center Judge picks up the bottle of magic potion. The snare drum continues to represent other characters' body language. As the Center Judge descends the stairs, the marimba resumes with a slightly longer ascending pattern (figure 41).

Figure 41: *The Invisible Men*, Percussion 2 mm. 314-315

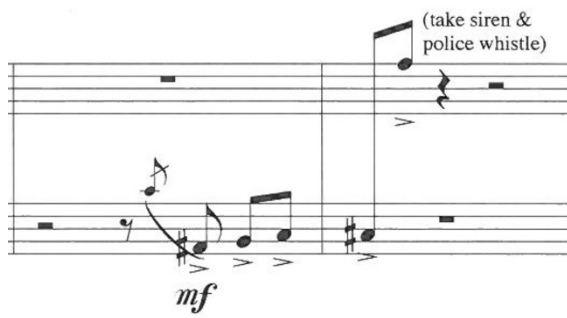


The Center Judge waves his arm and stops in front of the Chef and Tailor, accented with a rim shot, police whistle, and short timpani stroke. The onscreen action pauses for a very brief moment, as does the score with one and a third beats of rest.

Westlake greatly reduces the score's texture, decreasing the dynamic and interspersing cues that support the dialogue between the Center Judge, who's holding the potion, and among plaintiffs and defendants. Marimba, soft police whistle, bike horn, cowbell, woodblock, ratchet, and ice bell represent very subtle cues during the dialogue. The most notable cues are, the ratchet as the Center Judge partially bows, and the ice bell when he taps the bottle.

The Center Judge is convinced by the Alchemist to drink the potion and the Blues-Like Motif makes its final appearance in the score (figure 42).

Figure 42: *The Invisible Men*, Percussion 1 mm. 319-320



As the Center Judge drinks the potion and sets it on the stairs, the mark tree and flexitones are the only instruments scored. This emptiness captures the onscreen calm while the other characters freeze and observe the Center Judge.<sup>134</sup>

A long blast from the mouth siren commences the final scene of mayhem as the Left and Right Judges, Conquistadors, Chef, and Tailor engage in a frantic search for the invisible Center Judge. Meanwhile, the Alchemist and his Assistant move up the stairs, with the bottle of potion in the Alchemist's hand. Westlake creates intensity within the score using a steady sixteenth note whole step sequence on marimba playing minor thirds, a two measure log drum pattern, 5:2 polyrhythm police whistle blasts in Percussion 1, and a longer, four-note police whistle in Percussion 4 (figure 43).

<sup>134</sup> In a possible production error but more likely, a strategy to leave only primary characters on screen, the Bailiff disappears from the set. He was obscured by the Conquistadors at the 9:19 mark and can possibly be seen exiting stage right at the 9:20 mark. His absence becomes evident at the 9:37 mark.

Figure 43: *The Invisible Men*, Score mm. 325-326

This musical score snippet covers measures 325 and 326. It features four percussion parts:

- Perc. 1:** Treble and bass staves. Measure 325 has a fermata. Measure 326 has a 'police whistle' (five notes) and a dynamic marking *f* with the instruction '(take harder marimba mallets)'.
- Perc. 2:** Treble and bass staves. Both measures contain continuous sixteenth-note patterns.
- Perc. 3:** Treble staff. Both measures contain continuous sixteenth-note patterns. Measure 325 includes a 'log drum' and '(p. whistle)' markings.
- Perc. 4:** Bass staff. Both measures contain continuous sixteenth-note patterns. Measure 326 includes a '(sim.)' marking.

With a crescendo and steady sixteenth notes on timpani, the activity builds throughout, culminating on the last half of the final beat of measure 328 with a cymbal crash (figure 44).

Figure 44: *The Invisible Men*, Score m. 328

This musical score snippet shows measure 328. It features four percussion parts:

- Perc. 1:** Treble and bass staves. Both measures contain continuous sixteenth-note patterns.
- Perc. 2:** Treble and bass staves. Both measures contain continuous sixteenth-note patterns.
- Perc. 3:** Treble staff. Both measures contain continuous sixteenth-note patterns.
- Perc. 4:** Bass staff. Both measures contain continuous sixteenth-note patterns. Measure 328 includes a 'cymbal' marking and a dynamic marking *p* with the instruction 'timp'.

### Scene 10 Finale (mm. 329-347)

With the Alchemist and his Assistant on the stairs at the Judges' Bench, the Conquistadors, Left and Right Judge, Tailor, and Chef align in front, facing the camera in tableau.<sup>135</sup> On the measure 328 cymbal crash, the backdrop cuts to black. To the whirl of the mouth siren, the front row of characters turns to the Alchemist who is holding the bottle of potion with his Assistant at his side. All eight characters raise their hands in the air recognizing the Alchemist and his Assistant have symbolically replaced the Judges on the Bench.<sup>136</sup>

Westlake scores the final moments similar to the Chase Theme from Scene Seven with repeated offbeat eighth notes on marimbas. The Conquistadors, judges, Chef, and Tailor scamper about as Percussion 3 plays a kick drum and snare drum pattern, providing heavy downbeats, while timpani establishes a driving ostinato. As the screech of the mouth siren dissipates, the drums crescendo with a crash of a cymbal as the Alchemist casts a spell on the Conquistadors, judges, Chef, and Tailor, turning them all into dancing vegetables!

Westlake keeps the offbeat theme reminiscent of the Chase Theme on marimbas while Percussion 3 plays a driving pattern with kick drum and rim shot, and Percussion 4 plays a timpani ostinato (figure 45).

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<sup>135</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 170.

<sup>136</sup> Ibid.

Figure 45: *The Invisible Men*, Percussion 3, Percussion 4 mm. 333-334



On screen, the six characters are reduced to five vegetables. The Conquistadors, still holding their Halberds (medieval weapons),<sup>137</sup> are changed to a cabbage head and a tomato head, respectively. The judges are both turned to carrots, and the Chef and Tailor seemingly combined into a single pumpkin. Abel describes this scene in *The Ciné Goes to Town: French Cinema, 1896-1914*:

In a comic variation on the apotheosis finale, the remaining judges and lawyers are transformed into large dancing vegetables (apparently stencil colored in the original) and then vanish, leaving the two men by themselves, brightly lit and laughing, in a frame that is otherwise completely black.<sup>138</sup>

In an email from Abel, he describes what an apotheosis finale is:

An apotheosis finale is derived from the final tableau of early religious films and *féeries* or fairy films. For example, the ascension of Jesus in the Passion films or, more relevant for *Les Invisibles*, a spectacular tableau in which many of the characters/cast came together in a well organized formation, often to watch a group of women (sometimes in costumes from previous scenes) dancing.<sup>139</sup>

The Alchemist and his Assistant make their way past the dancing vegetables to the center of the scene as the energetic timpani ostinato and offbeat marimba notes continue. Percussion 3

<sup>137</sup> "The Halberd," All Things Medieval, accessed January 9, 2016, <http://medieval.stormthecastle.com/armorypages/halberds.htm>.

<sup>138</sup> Richard Abel, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 170.

<sup>139</sup> Richard Abel, email to author, April 13, 2015.

transitions to offbeat hi-hat and high woodblock. While the Alchemist and his Assistant celebrate among the vegetables, the marimbas play a riff a half-step apart (figure 46).

Figure 46: *The Invisible Men*, Percussion 1, Percussion 2 mm. 337-340

The musical score for measures 337-340 of *The Invisible Men* features four percussion parts. Percussion 1 and Percussion 2 are marimbas, both playing a complex, syncopated melody in treble clef with a half-step offset between them. Percussion 3 is a snare drum, indicated by 'x' marks on a single staff, playing a rhythmic pattern. Percussion 4 is a low Chinese gong, indicated by a single line in bass clef. The score includes dynamic markings: *pp* (pianissimo) for Percussion 1 and 2, *mp* (mezzo-piano) for Percussion 3, and *f* (forte) and *ff* (fortissimo) for Percussion 4. Specific instrument cues are noted: 'c. bell' for Percussion 3 in measure 337, 'w. blox' (wood block) for Percussion 3 in measure 338, 'cymbal - china type' for Percussion 3 in measure 339, and 'wind gong' for Percussion 4 in measure 340. Measure numbers 337, 338, 339, and 340 are indicated at the top of the staves.

To the cue of cymbal crashes, the Alchemist splashes each vegetable with the potion, the last splash being cued with an accented fortissimo wind gong strike. As the wind gong's resonance decays, the marimbas sneak in with a four-pitch sixteenth note pattern crescendoing from pianissimo. This pattern is accompanied by Percussion 4 playing a high and low Chinese gong and joined by Percussion 3 on snare drum (figure 47).

Figure 47: *The Invisible Men*, Score mm. 341-342

The musical score for measures 341-342 of *The Invisible Men* features four percussion parts:

- Perc. 1:** Treble clef, ascending chromatic line (half notes) with a *cresc. poco a poco* marking.
- Perc. 2:** Treble clef, ascending chromatic line (half notes) with a *cresc. poco a poco* marking.
- Perc. 3:** Treble clef, cymbal crash (marked with a cross symbol) in measure 342.
- Perc. 4:** Bass clef, ascending chromatic line (half notes) with a *pp cresc. poco a poco* marking. The notes are labeled "chinese gong (hi)" and "chinese gong (low)".

The Alchemist and his Assistant hold their pose, as the percussion parts reach their fortissimo climax with a cymbal crash, while the vegetables slowly dissolve from the scene.

Now alone, the Alchemist and his Assistant gesture jubilantly. This time cued to glockenspiel glissando, each character takes a drink of the potion. The marimbas each play an ascending chromatic line in major sixths but a minor third apart from one another. The snare drum plays its final hemiola as the three parts diminuendo (figure 48).

Figure 48: *The Invisible Men*, Score mm. 345-end

The musical score for Percussion 1, 2, 3, and 4, measures 345 to the end of the piece. Perc. 1 and 2 play a complex melodic line with 'dim poco a poco' and 'pp' markings. Perc. 3 plays a rhythmic pattern with 'dim poco a poco' and 'pp' markings, ending with an 'ice bell' cue. Perc. 4 plays a glissando pattern with 'mf' and 'p (damp)' markings.

On the last eighth note of the piece, the Alchemist and his Assistant leap into the air, disappearing to the final cue of a pianissimo ice bell.

Ninety years and thousands of miles passed between the production of *Les Invisibles* by Pathé and Synergy Percussion's commission of *The Invisible Men*. Westlake created a truly unique and prodigious work of art for the aural and visual senses. The complexity of performing a work with such detail and extra-musical preparation is well worth the investment for musicians and audiences alike. Westlake has set an example for the possibilities of original percussion scoring for silent film. *The Invisible Men* inspired percussionist and composer Gene Koshinski to score a similar film with many of the same attributes.



## Chapter 7: *The Mermaid* by Gene Koshinski

*La Sirène*, or *The Mermaid*, a 1904 Georges Méliès-produced silent film, depicts a magician and a mermaid. The first half of the film depicts a magic act through the use of substitutions using simple cuts.<sup>140</sup> The second half is more complex. A fantasy film unfolds in which a mermaid dissolves into the scene, floats, transforms into a Greek figure, and the magician transforms into Neptune.<sup>141</sup> The film is archived at the Library of Congress, Washington, D.C. and the Em Gee Film Library, Los Angeles, CA on 16mm film, and is 95 feet in length.<sup>142</sup>

Percussion artist, composer, and educator Gene Koshinski serves on the faculty at the University of Minnesota Duluth, has performed internationally, and is an American Society of Composers, Authors, and Publishers (ASCAP) award-winning composer.<sup>143</sup> He has over thirty published original compositions including eight works for percussion duo and a work for featured percussion duo with percussion quartet accompaniment.<sup>144</sup>

Koshinski is a member of the Quey Percussion Duo with percussionist and educator, Tom Broschious. Over the past ten years, Quey Percussion Duo has performed world-wide, placed in international competition, and commissioned works for the medium of percussion duo, including more than 120 works as a result of the Quey Percussion Duo Composition Contest.<sup>145</sup> The duo teaches together at the University of Minnesota Duluth and the Quey Percussion Duo serves in the capacity of Faculty Artists in Residence.<sup>146</sup>

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<sup>140</sup> Richard Able, *The Ciné Goes to Town: French Cinema 1896-1914*, (Berkeley: University of California Press, 1994), 66.

<sup>141</sup> Ibid., 67.

<sup>142</sup> Ibid., 437.

<sup>143</sup> "About," *Gene Koshinski*, accessed January 7, 2016, <http://www.genekoshinski.com/about.php>.

<sup>144</sup> "Listen," *Gene Koshinski*, accessed January 7, 2016, <http://www.genekoshinski.com/listen.php?psi=29>.

<sup>145</sup> "Quey Percussion Duo," *Tim Broschious*, <http://www.timbroscious.com/#!quey-/ceel>.

<sup>146</sup> "Percussion Area," *The University of Minnesota*, accessed January 7, 2016, <https://sfa.d.umn.edu/about/departments/department-music/about/performance-opportunities/percussion>.

Not currently published but available from the composer, *The Mermaid* was composed by Koshinski in 2010 for the Quey Percussion Duo. He scored the work for a concert of film music, which included *The Invisible Men*. Koshinski stated *The Invisible Men* “heavily influenced” *The Mermaid*.<sup>147</sup> The approximately four-minute work was composed using all original material and is intended for performance with the film. Although *The Mermaid*’s score has sufficient repetition, contrast, and form, it would lose its artistic merit as a work without the film.

Koshinski intended the piece to be performed to a click-track with in-ear monitors. He created the click-track in Finale, exported it as an audio file, and synchronized it to the film.<sup>148</sup> The click is heard with an anvil-like sound on down beats and a woodblock-like sound on the remaining beats of each measure. No cues are voiced over into the click-track.

*The Mermaid* is scored for two small percussion set-ups and Koshinski provides an Instrument Key explaining notation. The instrumentation is:

**Percussion 1:**

Vibraphone  
Bells  
Pod Rattles  
Snare Drum  
Two Cowbells  
Two Woodblocks  
Splash Cymbal  
Crash Cymbal  
8” Gliss Gong<sup>149</sup>

**Percussion 2:**

Marimba (4.3 octave)  
Two Timpani (29”, 26”)  
Two Chinese Toms (or substitute)  
Ratchet

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<sup>147</sup> Gene Koshinski, email to author, October 4, 2015.

<sup>148</sup> Gene Koshinski, email to author, January 7, 2016.

<sup>149</sup> On the Quey Percussion Duo’s YouTube performance, the “gliss gong” glissandos upward.

Because this composition was influenced by *The Invisible Men*, the instrumentation can be evaluated for similarities and differences between the two scores. Naturally, fewer instruments are scored for *The Mermaid*.

Same:

Bells/Glockenspiel

Marimba

Timpani (only two needed for *The Mermaid*)

Snare Drum

Cowbells

Woodblocks

Cymbals

Gong (Koshinski specifies “Gliss Gong” and Westlake states “Chinese Gong”)

Ratchet

Metal Slide Whistle/Swanee Whistle

Different:

Vibraphone

Pod Rattles

Splash Cymbal

Possibly the Same:

Two Chinese Toms—Westlake scores “toms” and Koshinski states “or substitute.”

However, congas, if available, would likely serve as a better substitution.

Koshinski provides mallet recommendations in the score. Percussion 1 is to use four medium rubber mallets except when cued to switch to snare drum sticks. Additionally, two rubber mallets and two brass mallets—with the latter being the inside mallets for glockenspiel—are to be used from measure 75-105. Percussion 2 is to use four medium-hard vibraphone mallets, including for timpani, except when there is time to switch to timpani mallets. He wisely notes in the score, “do not play the marimba with timpani mallets.”<sup>150</sup>

Koshinski scored *The Mermaid* differently than Westlake’s *The Invisible Men*. Although there are many similarities, including representational Foley, *The Mermaid* is far less through-composed than *The Invisible Men* and has more distinctive sections. Koshinski composes two

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<sup>150</sup> Gene Koshinski, *La Sirene (The Mermaid)* – 1904, Self published, 2010.

very distinctive melodies, annotated below as the “Magic Show” theme” and “The Waltz of the Mermaid.”<sup>151</sup> *The Invisible Men*’s thematic material is more obscured by the plethora of cues, Foley, and onscreen complexities.

Unlike my analysis of *The Invisible Men*, I’ve chosen to approach *The Mermaid* by sectionalizing the analysis into three parts. First is a synopsis of the film without reference to the score. Then I provide a chart with a structural analysis with measure numbers. The third part is a brief annotation of the film and score, identifying where and how the two intersect.

### **The Film Synopsis**

In the first of two scenes, a dapper magician enters the scene from stage right, inspects an aquarium, removes his topcoat, pushes up his sleeves, and places his top hat on a table. After testing the temperature and volume of water in the aquarium with his bare hand, he displays the empty inside of his top hat to the camera. For his first illusion, the magician produces a small canister from his top hat. He proceeds to use the canister to draw water from the aquarium and pours it into his top hat. After three pours of water, the magician takes a fishing pole lying on a nearby hammock, a step stool from beneath the aquarium, and stands above the top hat. Soon after placing the fishhook into the top hat, the magician catches a small fish and immediately releases it into the aquarium where it swims free. After catching his second small fish and releasing it the aquarium the magician transforms, through a cut in the film, into a clown-like peasant. The peasant takes the fishing pole, catches and releases a fish, moves the stool out of his way, and acquires a small fish net from the hammock. Using the net, he quickly catches several fish and releases them to the aquarium. After repeating this act two additional times, the peasant uses the fish net as a magic wand and points it at the top hat causing an explosion of white

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<sup>151</sup> Koshinski named this theme in the score.

smoke. He picks up the top hat, displays it to the camera, and proceeds to pull three rabbits and a head of lettuce from inside. After the rabbit illusion, the peasant discards the top hat from the set and exits stage left, quickly returning and placing a stage prop framing the aquarium as an undersea scene. The peasant lies down on the hammock and, in another fast cut, he and the hammock disappear as the magician reappears on the floor. Collecting himself, the magician clears the table and centers the framed aquarium on the set. For his next illusion, the magician turns his back to the camera, waves his arms, and changes the set to an underwater scene.

Scene two begins with the magician commanding the prop from scene one, previously framing the aquarium, to move forward (or give the illusion of growing in size) while he exits stage left. As the frame fills the screen and fish swim in the background, a mermaid lounging on the bottom of the frame fades into view. With fish in the foreground, the mermaid blows a kiss to the camera, transforms into a pale hue, and begins to levitate. As the frame gradually disappears, the magician reemerges from stage left, blows a kiss to the camera, waves his arms, and crawls beneath the levitating mermaid, confirming the illusion. From partially off stage right, the magician waves his arm, transforming the mermaid into a woman, dressed in a gown. Blowing kisses to the camera, the woman moves stage left and is offered a seat by the magician. The magician then waves his hand and with a cut, an abalone-like daybed appears in the center of the set. Taking the magician's hand, the woman is led to the daybed where she lies down. With an additional wave of the magician's hands, sea flora appears at the foot of the daybed. The magician circles the daybed, climbs upstage, and sits down where he magically transforms into Neptune, complete with trident. Three maidens also appear, pose in tableau around the daybed, and the film concludes.<sup>152</sup>

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<sup>152</sup> EcoworldReactor, "La Sirène (The Mermaid) - by Georges Méliès 1904," posted November 8, 2013, accessed January 7, 2016, <https://www.youtube.com/watch?v=4wzR9LxwxLA>

Table 2: *The Mermaid*, Structural Analysis

Section	Measures	Description
Introduction	1-2	Timpani Roll
Theme I	3-8	“Magic Show Theme,” Vibraphone and Marimba
Transition	8-17	Representational Foley
Theme I	18-20	“Magic Show” Fragment
Transition	21-28	Representational Foley
Theme II	29-36	“Fishing Theme,” Three Note Motif
Transition - Drums	37-41	Metric Modulation
Theme III	42-49 (x2)	“Peasant’s Theme,” Circus March, Repeats
Transition	50-51	Explosion
Development	52-67	Rhythmic Percussion Solo, Foley
Theme I	68-72	“Magic Show Theme”
Transition	73-80	Beneath the Sea, Whole Tone
Theme IV	81-103	“Waltz of the Mermaid”
Transition	104	Cymbal Roll
Theme V	105-119	“Drum Duet Theme”
Coda	120-end	Dominant/Tonic

### Annotation

In the same way as *The Invisible Men*, *The Mermaid* begins with a film leader countdown and a drum roll. However, Koshinski starts the piece when the first scene appears onscreen. A Hollywood-style forte-piano-crescendo timpani roll introduces the soundtrack, punctuated with a crash—the first cue—as the magician enters the screen. The “Magic Show Theme” (figure 49) anchors a whimsical atmosphere before the viewer is even aware the man onscreen is a magician.

Figure 49: *The Mermaid*, Score mm. 3-6

The image shows two staves of music for measures 3-6. The top staff is for Vibraphone and the bottom staff is for Marimba. Both staves are in 6/4 time. The Vibraphone part starts with a forte (*f*) dynamic and a series of chords and single notes, including a triplet in measure 4. The Marimba part also starts with a forte (*f*) dynamic and features a descending glissando in measure 5, followed by chords and single notes. Both parts end with a final chord in measure 6.

Similar to Westlake's routine of using the ratchet for representational Foley, the ratchet cues the magician removing his topcoat. Snare drum flams in measure 13 and measure 14 align with the magician testing the water with his hand and the beat four splash cymbal in measure 14 corresponds to the magician shaking his hand. The augmented chord in measure 16 matches the magician squatting while the two-octave descending glissando on marimba aligns to the water hose being removed from the aquarium (figure 50).

Figure 50: *The Mermaid*, Score mm. 16-17

The image shows two staves of music for measures 16-17. The top staff is for Vibraphone and the bottom staff is for Marimba. Both staves are in 6/4 time. The Vibraphone part features a series of chords and single notes, including a triplet in measure 16. The Marimba part features a descending glissando in measure 16, followed by chords and single notes. Both parts end with a final chord in measure 17.

A timpani note and splash cymbal punctuate the hose being tossed off screen, stage left.

Koshinski brings back the “Magic Show Theme” as the magician performs his first illusion by removing a canister from his top hat. Another augmented chord a half step higher than the previous serves as a cue for this trick. For the next several measures, Koshinski scores cues through representational Foley and uses rests to draw attention to the magician’s actions. The first is a woodblock when the magician sets the canister lid on the table. The slide whistle, another Westlake favorite, is played each time the canister is filled with water. The pod rattles emulate the water being poured into the top hat. Both the whistle and pod rattles are precisely notated to correspond with the onscreen motion. Interestingly, Koshinski has the slide whistle start each glissando at a progressively higher pitch, adding variety to an otherwise silent and repetitive moment in the film. With a splash cymbal crash, the magician shakes his hands dry and moves on to his next trick.

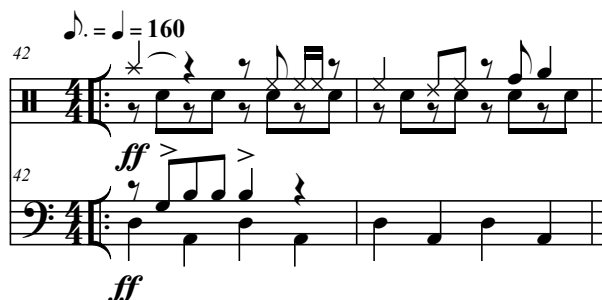
Measure 29 begins the second theme, a disjunct, three-note “Fishing Theme” motif accompanying the angular motions of the magician fishing into his top hat. Woodblocks and cowbells are cued to accompany the magician’s syncopated motions. A snare drum roll and splash cymbal crash are synchronized when the fishing hook enters the hat and the fish is caught. A splash cymbal crash also corresponds to fish being released in the aquarium. Again, during the magic act, the score’s texture is reduced to draw attention to the onscreen illusions.

With the fishing illusion complete, Koshinski builds anticipation through a crescendo, by scoring a hemiola for timpani, and with an augmentative snare drum pattern. The snare drum and timpani combine in measure 40 and 41 for a smooth metric modulation to a faster tempo into the next section. All of these techniques are also found in *The Invisible Men*.



Onscreen, through the use of a cut, the magician's next illusion is to convert himself into a comical-looking peasant. The metric modulation sets up the third theme, the "Peasant's Theme" played entirely on timpani and non-pitched percussion (figure 51).

Figure 51: *The Mermaid*, Score mm. 42-43



This circus-like march creates a farcical mood as the peasant in his hurried fashion transitions from the fishing pole to a fish net, catching an absurd amount of fish from the top hat. His antics conclude when he gestures to the top hat, setting off an explosion of white smoke, accompanied by timpani, Chinese tom, snare drum, and crash cymbal. The nearest parallel to this moment in *The Invisible Men* is the energetic Chase Theme from Scene Seven.

The peasant takes the top hat and contrives his next illusion. Koshinski scores this section as a rhythmically developmental percussion solo for Percussion 1. Snare drum, cowbells, woodblocks, splash cymbal, and gliss gong combine to create a spirited, through-composed solo, catching cues of the onscreen capers. As the peasant prepares the top hat, his own hat falls to the floor with a splash cymbal crash. Then he proceeds to pull rabbits from his top hat, each anticipated with rhythmic flourishes and punctuated with a crash or gliss gong strike. Meanwhile, Percussion 2 accompanies each of the three rabbit cues with an ascending slide whistle glissando and a head of lettuce with a descending glissando. A snare drum roll

accompanies the peasant placing a stage prop framing the aquarium. Chinese toms, snare drum and splash cymbal crashes play a hemiola as the peasant makes his way into the hammock. He and the hammock fall to the floor, and through another cut and a timpani glissando, converts back into the dapper magician. Koshinski astutely returns to the “Magic Show Theme” as the magician resets the stage. With a wave of the magician’s arms and accompanied by snare drum, splash cymbal, and a forte-piano timpani roll, the magician transitions to the second scene.

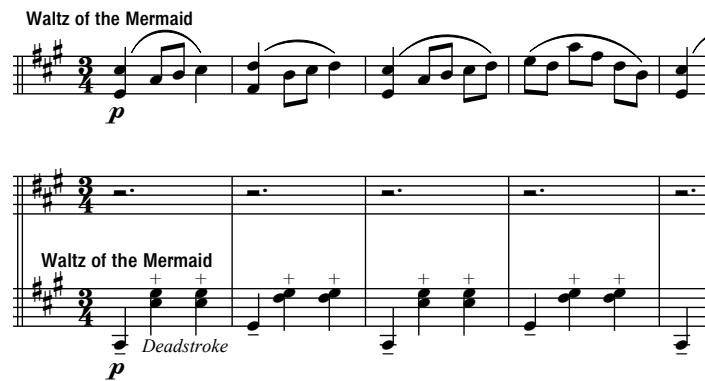
Scene two is set beneath the sea. As the timpani rolls a soft note, the prop framing the aquarium in the first scene moves towards the camera. The vibraphone plays a double stop ascending whole tone scale to the top of the instrument’s range. The whole tone scale continues on glockenspiel as the timpani diminuendos (figure 52).

Figure 52: *The Mermaid*, Score mm. 78-80



As the mermaid appears on screen, Koshinski’s delightful “Waltz of the Mermaid” is delicately played on glockenspiel, harmonized on marimba (figure 53). A serene scene is portrayed onscreen as docile fish accompany a lounging mermaid. A significant difference between *The Mermaid* and *The Invisible Men* is evident in this moment. Koshinski addresses the minimal onscreen activity with a tonal, gentle melody, free of Foley and captured cues.

Figure 53: *The Mermaid*, Score mm. 81-84



A simple crescendo cymbal roll transitions into the “Drum Duet Theme,” played primarily on timpani and snare drum (figure 54). Onscreen, the magician transforms the mermaid into a woman, while producing a daybed, and additional stage props. Koshinski sets this activity in a vigorous 12/8 meter at dotted quarter note equals 160, providing momentum to the end of the piece. After six measures of timpani solo, a rudimental-style snare drum figure is added.

Figure 54: *The Mermaid*, Percussion 1 mm. 113-114



As the “Drum Duet” comes to a close, the magician ascends to his throne which is located upstage. On the downbeat of the Coda at measure 120, the magician gradually converts to Neptune as three maidens appear. Timpani plays dominant and tonic dotted quarter notes while the vibraphone plays tonic chords. To a ritardando the characters rearrange themselves, freezing in tableau as timpani and vibraphone sustain the tonic chord.

The Mermaid is a remarkable work for chamber percussion and silent film. Koshinski's gift for melody is evident with his "Waltz of the Mermaid." Although not overtly complex, *The Mermaid* includes rudimental-based snare drum playing. From measures 42-51, both players have clever percussion patterns requiring interdependence between hands. Throughout the work, both performers function as keyboard players and multi-percussionists.

Koshinski took a delightful short film from a historically significant film producer and created a quality work that is not a difficult piece to assemble. Each player's setup is manageable in size and scope, and the requirement of one 4.3 octave marimba and one vibraphone makes it likely the piece can be performed in numerous settings. Koshinski intends to formally publish *The Mermaid* in the future.<sup>153</sup> This work serves as a great introduction to the medium of chamber percussion and silent film.

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<sup>153</sup> Gene Koshinski, email to author, January 7, 2016.

## Chapter 8: Escape by Drew Worden

Drew Worden composed *Escape: Sextet for Unclipped Triangles* for a concert including short films with original music on April 5, 2014 at the Eastman School of Music. The concert, titled “Im-Pulse Image Percussion,” featured the Eastman Percussion Ensemble, directed by Professor Michael Burritt. The short animated features were produced in the 1930s by filmmaker Mary Ellen Bute. The concert was a collaboration of the University of Rochester’s University Committee for Interdisciplinary Studies Cluster on Music and Film and was curated by Reinhild Steingröver, chair of Eastman’s Humanities Department.<sup>154</sup> Worden’s work accompanied the Bute film *Synchromy No. 4: Escape*. Other accompaniments to Bute’s films were works by John Cage, Edgar Varèse, Lou Harrison, and Henry Cowell as the selections were from the same era.<sup>155</sup>

The concert also included the premiere of a new film by Stephanie Maxwell accompanying Burritt’s 2003 composition, *Marimba Quartet*. This eight minute, thirty second piece was premiered at the 2003 Percussive Arts Society International Convention by the Northwestern University Percussion Ensemble and is dedicated to percussionist Anders Åstrand.<sup>156</sup> Maxwell’s film employs video taken underwater and 'on water' in Bonaire, Dutch Antilles in December 2013. The music and the imagery of the film “intertwine in an intimate and emotive conversation of movement, light, and location.”<sup>157</sup>

Drew Worden, a percussionist, composer, educator, and collaborator based in Rochester, New York earned a master’s degree in percussion performance and literature and the Arts

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<sup>154</sup> “Concert Features Short Films with Original Music by Eastman Musicians,” Eastman School of Music, March 28, 2014, accessed January 2, 2016, <http://www.esm.rochester.edu/news/2014/03/concert-features-short-films-with-original-music-by-eastman-musicians>

<sup>155</sup> Drew Worden, email from composer, October 13, 2015.

<sup>156</sup> “Publications,” Michael Burritt, Percussion, accessed January 2, 2016, <http://www.michaelburritt.com/html/links.php>

<sup>157</sup> “News,” Stephanie Maxwell’s Homepage, accessed January 2, 2016, <http://people.rit.edu/sampph>

Leadership Certificate from the Eastman School of Music in 2014. He currently has six self-published works, including *Escape*, and a piece published by Mallettech.<sup>158</sup> The only publicly available recording of *Escape* was published to YouTube October 16, 2014 and features the Eastman Percussion Ensemble.<sup>159</sup> This performance is without the Bute film.

Mary Ellen Bute (1906-1983) was a significant contributor to the development of film. Ed Halter, film critic, curator, and founder and director of Light Industry, a venue for film and electronic art in Brooklyn, New York wrote of Bute:

A pioneer of visual music and electronic art, Mary Ellen Bute produced over a dozen short abstract animations between the 1930s to the 1950s. Set to classical music by the likes of Bach, Saint-Saëns or Shostakovich, and filled with colorful forms, elegant design and sprightly, dance-like-rhythms, Bute's filmmaking is at once formally rigorous and energetically high-spirited, like a marriage of high modernism and Merrie Melodies. In the late 1940s, Lewis Jacobs observed that Bute's films were "composed upon mathematical formulae depicting in ever-changing lights and shadows, growing lines and forms, deepening colors and tones, the tumbling, racing impressions evoked by the musical accompaniment." Bute herself wrote that she sought to "bring to the eyes a combination of visual forms unfolding along with the thematic development and rhythmic cadences of music."<sup>160</sup>

Bute had strong opinions about working in a single medium. She felt a limitation in painting, in that only one sense is targeted. This led her to pursue the creation of multimedia experiences:

One sense of perception such as sight or hearing is not enough to induce a strong reaction and to put our emotions in balance with the present highly developed intellect. To achieve strong emotional reactions we must charge our perception sensual apparatus with greater and more intense excitors. In the field of art these stringer excitors are synchronized art forms.<sup>161</sup>

In the 1930s, Bute worked closely with Leon Theremin, a Russian physicist and creator of the early electronic instrument, which bears his name. She also worked with Joseph Schillinger, a

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<sup>158</sup> "Composition Store," Drew Worden, accessed January 3, 2016, [http://www.drewworden.com/store/c1/Featured\\_Products.html](http://www.drewworden.com/store/c1/Featured_Products.html)

<sup>159</sup> Drew Worden, "Escape: Sextet for Triangles by Drew Worden," posted October 16, 2014, accessed January 3, 2016, <https://www.youtube.com/watch?v=IwwrxAsNPjU>

<sup>160</sup> "Mary Ellen Bute," Center for Visual Music, accessed January 4, 2016, <http://www.centerforvisualmusic.org/Bute.htm>

<sup>161</sup> Lauren Rabinovitz, "Mary Ellen Bute," in *Lovers of Cinema: The First American Film Avant-Garde 1919-1945*, ed. Jan-Christopher Horak (Madison: University of Wisconsin Press, 1995), 320.

composer interested in applying mathematical formulas to music composition. The result of this collaboration was the film *Synchromy* (1933). Bute credits this collaboration with teaching her “how to plan film coordinates from a mathematical formula for musical composition.”<sup>162</sup>

For her film *Synchromy No. 4: Escape* (1937), Bute used the “Toccata” from Johann Sebastian Bach’s *Toccata and Fugue in D minor*, BWV 565, as the soundtrack to accompany animated abstract drawings. Dr. Lauren Rabinovitz, Professor of Cinematic Arts at the University of Iowa describes the narrative:

The “hero” is an orange triangle, who attempts a rhythmic “escape” through a series of backgrounds: a green-blue swirling plane; black grids that are overlaid, turned and expanded; grids overlaid and turned on arcs and spirals. The movements are almost balletic in their rhythmic and spatial suggestions.<sup>163</sup>

*Escape* utilizes the simplest setup of the works addressed in this document requiring only six triangles, one per performer, held in the performer’s hand without triangle clips. Each performer uses a single triangle beater. Although not notated or addressed in the score, the Eastman Percussion Ensemble used graduated-sized triangles with the first triangle performer using the smallest and the sixth triangle performer using the largest instrument in their YouTube recording.

Besides the absence of triangle clips, the piece uses several extended techniques. Similar to hi-hat notation, the symbol “+” is used for a dampened triangle sound, “using all fingers,” and the symbol “o” is used for a resonant sound, “unmuffling/lightly tossing” the triangle.<sup>164</sup> There are indications in the score for the performers to “throw the triangle.” This occurs primarily on eighth notes (figure 55) and dotted eighth notes and creates both an aural and visual effect as the triangle is struck and allowed to resonate the desired note value.

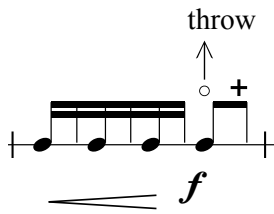
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<sup>162</sup> Lauren Rabinovitz, “Mary Ellen Bute,” in *Lovers of Cinema: The First American Film Avant-Garde 1919-1945*, ed. Jan-Christopher Horak (Madison: University of Wisconsin Press, 1995), 321.

<sup>163</sup> Ibid., 324.

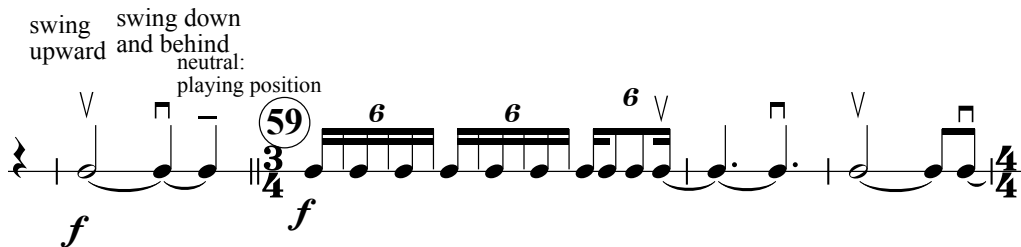
<sup>164</sup> Drew Worden, *Escape: Sextet for Unclipped Triangles*, self published, 2014.

Figure 55: *Escape*, m. 56



This technique is employed in the final measure of the piece for the length of a half note. The final extended technique used in the piece involves swinging the triangle upward and in front of the performer after striking and down and behind the performer without striking. These techniques are indicated with string bowings—up and down respectively. A tenuto marking is used to notate returning the triangle to a neutral playing position (figure 56).

Figure 56: *Escape*, Triangle 1 mm. 58-61



Although not addressed in the performance notes, sections of the piece include rhythms without note heads, likely indicating dampening of the triangle to create ghost notes (figure 57).

Figure 57: *Escape*, Triangle 1 m. 18





The piece is available for purchase from the composer's website, and is an original composition written for performance with the silenced film. It is strictly composed without improvisation and can be performed as a chamber percussion ensemble without conductor.

The Eastman Percussion Ensemble's YouTube recording of the work is without film accompaniment. In the score's performance notes, the composer indicates the composition was written to accompany the Bute film, but may be performed with or without the film.<sup>165</sup> When performed with the film, the YouTube video should be muted.

To date, the only complete publicly available video of *Synchromy No. 4: Escape* was published on YouTube March 17, 2008.<sup>166</sup> In the opening credits, a quote by filmmaker, producer, and film professor Cecile Starr states:

Mary Ellen Bute's first color film tells the story in abstraction of an orange/red triangle imprisoned behind a grid of vertical and horizontal lines under a sky-blue expanse, perhaps representing freedom. J.S. Bach's *Toccata* (in D Minor) adds dramatic tension to the visual variables in motion.<sup>167</sup>

This triangle theme in the film undoubtedly inspired Worden's choice of instruments for his work.

*Escape* can be analyzed as:

Table 3: *Escape*, Formal Analysis

A			B	A			B	C	D	Coda
a	Trans.	b		a	Trans.	b			m. 74 vamp m. 75 rolls (Cadenza)	
1-10	11-12	13-16	17-29	30-33	34-35	36-39	40-49	50-58	61-75	76-82

<sup>165</sup> Drew Worden, *Escape: Sextet for Unclipped Triangles*, self published, 2014.

<sup>166</sup> Glangorous, "Synchromy No. 4: Escape (Mary Ellen Bute-1938)," posted March 17, 2008, <https://www.youtube.com/watch?v=YRmu-GcClls>

<sup>167</sup> Ibid.

The performers begin the piece during the opening credits and arrive at the first B section (measure 17) at the moment in the film when the triangle turns from black to orange.

Coordinating this occurs at one minute and forty-seven seconds in the YouTube video. The tempo of the piece is 90 beats per minute and there are sixty-five beats of music prior to the downbeat of measure 17. This takes approximately forty-three seconds. The performers will need to determine the best moment in the film to begin the piece. The options include:

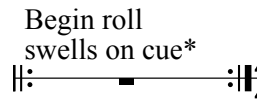
- Wait to begin the piece until the one minute, four second mark in the film.
- Cue the video to begin on the downbeat at the one minute, four second mark in the film.
- Cue the video to begin at the fifty-four second mark, a moment in the film that bypasses the credits and begins with a graphic stating the film's title, copyright, and filmmaker.

The performers can then count four measures in 4/4 time (16 counts) beginning at the one minute, four second mark in the film. At approximately this moment, the film fades to black.

Worden added a one-measure vamp in measure 74. This vamp allows for the performers to re-synchronize should they have altered their tempo during the course of the performance. Although the performers could use a click-track from the beginning until the end of measure 74, it is made unnecessary by Worden's inclusion of the vamp. Because the performers swing, throw, and catch the triangles near the floor, in-ear monitors and cables would interrupt the visual element of the piece.

At measure 75, the musicians turn toward the screen for a moment to interact with the film (figure 58). The performers crescendo a roll, in unison, as the orange triangle depicted in the film is unrestrained from the graphics that had previously imprisoned it in the foreground.

Figure 58: *Escape*, m. 75



The orange triangle zooms forward twenty-one times; beginning at the three minute, thirty-eight second mark in the film. This cadenza-like section concludes as the orange triangle distorts and the film continues. At this point, the performers resume the work at the coda (measure 76) and conclude the work as the word, “end” appears on the screen.

At approximately four minutes in length and utilizing a simple instrument setup, Worden’s *Escape: Sextet for Triangles* is a valuable original work for the genre of chamber percussion and silenced film in its simplicity. The combination of the representation of the orange triangle in the film being portrayed by live performers on an instrument of the same design and shape, the visual element of the performers visually manipulating their respective triangles through technique, and the fact Bute’s film was originally intended to visually represent music makes the piece unique from the other works discussed in this document.

## Chapter 9: Science Fiction by Rick Dior

The Brooklyn, New York born percussionist, composer, educator, engineer, and producer Rick Dior created a large-scale work for the medium of chamber percussion and film. *Science Fiction* was composed in 2008 for twelve percussionists performing over sixty percussion instruments, drum machine, theremin, synthesizer, and a sampler trigger. In addition to composing this twelve minute, twenty second work, Dior compiled a montage of video clips extracted from mid-20<sup>th</sup> century science fiction and horror films. The work is to be conducted, as no click-track is provided and would be logistically problematic for twelve performers. The conductor is responsible for tempos and ensuring synchronization with moments in the video montage.

Published by TapSPACE Publications in 2014, this piece provides the most substantial performance notes of any of the pieces discussed in this document. In addition to program and performance notes, the score includes comprehensive notes on electronics, notes on the video, and a thorough graphic of the suggested setup for each percussion part. The University of North Carolina at Charlotte Percussion Ensemble premiered *Science Fiction*. Dior conducted and performed the “Electronics” part for the premiere.

With his varied musical career, composing a multimedia work for percussion ensemble was a natural fit for Dior. He has performed in numerous commercial and orchestral settings, including recordings, commercial and radio spots, and movie soundtracks.<sup>168</sup> As a composer and arranger, Dior has written for the Charlotte Civic Orchestra, the Charlotte Symphony Orchestra (of which he’s a member), the Charlotte Symphony Orchestra Percussion Ensemble, and

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<sup>168</sup> “About Rick Dior,” Acoustic Barn, accessed December 23, 2015, <http://www.acousticbarn.com/rickspcussionsite/aboutrick.html>

numerous jazz and Latin ensembles.<sup>169</sup> However, this was his first work incorporating video and chamber percussion for live performance.<sup>170</sup>

Dior's inspiration for composing *Science Fiction* came while watching an early science fiction film. In an email, Dior said "I was just watching one of these films with my son and the idea came to me that it would be perfect for one of my percussion monstrosities (pun intended)<sup>171</sup> that I was working on at the time. I wrote the music first and then matched the video clips to it."<sup>172</sup> In the score's program notes, Dior states the work is "a tribute to all of the great science fiction and horror movies of the mid-20<sup>th</sup> century."<sup>173</sup>

*Science Fiction*, dedicated to Dior's son Ryan, was conceived specifically for performance with the video montage. While the work is divided into distinct sections with recognizable themes and form, the music serves as a soundtrack and would substantially lose its impact as a composition without the video montage. Additionally, in the performance notes the composer included staging suggestions that could make the piece even more effective. These "stage antics" are for those with "a sense of adventure":

- Have the performers wear hazmat suits or other related costumes
- During the alien battle scene starting at letter M, you can reenact a battle on stage around the performers.
- Use an onstage narrator to replace some of the audio voice-over clips.

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<sup>169</sup> "About Rick Dior," Acoustic Barn, accessed December 23, 2015, <http://www.acousticbarn.com/rickspercussionsite/aboutrick.html>

<sup>170</sup> Rick Dior, email message to author, October 19, 2015.

<sup>171</sup> In an email sent on January 3, 2016, Dior explained he has several other percussion works to be published, including a 25 minute, three movement work.

<sup>172</sup> Rick Dior, email to author, October 19, 2015.

<sup>173</sup> Rick Dior, *Science Fiction Fiction for percussion ensemble and electronics with video montage*, TapSPACE Publications, 2014.

- As the piece starts to fade out, activate a disco ball in the audience and have the rest of the stage lights fade to black.<sup>174</sup>

The piece was inspired by a lifetime of watching science fiction films and the scenes in the video montage directly correlate thematically with the music. With the addition of the composer's suggestions for costuming and staging, the piece should not stand alone as a concert work without the video montage as it would lose its artistic merit.

*Science Fiction* includes significant use of electronics, including a theremin, synthesizer, drum machine, and triggered special effects. Dior states in the program notes that these instruments help “put the science in science fiction!”<sup>175</sup> These parts, to be discussed later in the document, are used in a percussive manner and are intended to blend with the other eleven percussion parts. These electronics are typical of parts performed by musicians in Drum Corps International, Winter Guard International, and high school marching band front ensembles and typically performed by percussionists. However, both Dior and Andrew Salmon, director of The Woodlands High School Percussion Ensemble, The Woodlands, TX, reference the difficulty of the “Electronics” part. Salmon stated the theremin performer had to spend time developing basic sound production.<sup>176</sup> Tapspace Publications published a live performance of The Woodlands High School Percussion Ensemble, directed by Salmon to YouTube on July 6, 2015.<sup>177</sup>

Rick Dior and Tapspace Publications collaborated to publish *Science Fiction*. The publisher's website suggests to “bring a helmet and strap in, because the monster that Rick Dior has created with *Science Fiction* is nothing short of spectacular. Scored for twelve percussionists,

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<sup>174</sup> Rick Dior, *Science Fiction Fiction for percussion ensemble and electronics with video montage*, Tapspace Publications, 2014.

<sup>175</sup> Ibid.

<sup>176</sup> Andrew Salmon, email to author, January 4, 2016.

<sup>177</sup> Tapspace Publications, “The Woodlands HS Percussion Ensemble- “Science Fiction” by Rick Dior,” (video), posted July 6, 2015, accessed January 5, 2016, <https://www.youtube.com/watch?v=jqlyaTvRUj4>

electronics, and video montage, this piece is an experience...pure and simple.”<sup>178</sup> In addition to a bound score, the piece arrives with a CD-ROM containing the individual printable parts, an audio file of the work, special effects, and four versions of the video montage.

The special effects on the CD-ROM include the nine voice-over and sound effect audio sequences as they appear in the “Electronics” part. It also includes both raw samples of the special effects and voice-overs, independent of one another. These files come as Waveform Audio Files (WAV). The four versions of the video montage are the full version for reference, a silent version for performance, a version with the special effects and voice-overs embedded in the video as an audio track, and a version with the special effects embedded in the video as an audio track but without the voice-overs. Tapspace Publications has published the video with Dior’s recording to YouTube, as well as a recording on SoundCloud. Both are linked through the Tapspace Publications website.<sup>179</sup>

The piece is scored for a large battery of percussion instruments. Keyboard percussion instruments include glockenspiel, chimes, song bells (or glockenspiel one octave lower), two vibraphones, xylophone, and two marimbas (one four-octave, one five-octave). Other large instruments include four timpani, a six-piece drum set, bass drum, surdo, and three gongs (large, medium, and small). Unique percussion instruments include three opera gongs, a Latin Percussion Vibra-Tone, a high and low waterphone marked “optional,” four low and four high metallic sounds described as pipes, brake drums (or pan fans), and four pitched gongs. The pitched gongs do not have specified pitches and the CD-ROM includes three audio samples of waterphones if these instruments are not available. Dior also scores for a doumbek and a darbuka. He puts a note in the score that the doumbek may be substituted by another “high-

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<sup>178</sup> “Science Fiction,” Tapspace Publications, accessed January 2, 2015, <http://www.tapspace.com/percussion-ensemble/science-fiction/>

<sup>179</sup> Ibid.

pitched ethnic hand drum” and the darbuka may be substituted with a “djembe played lightly with fingers.”<sup>180</sup>

The electronics in the piece include a synthesizer, theremin, drum machine, and sample pad. The score contains a section titled “Notes on Electronics” and provides tremendous advice to the director. The first suggestion is to listen to the recording provided with the score to determine how the sampled sounds and electronics are utilized. The score suggests the director or performer spend time experimenting with an available synthesizer to find the desired effects that emulate the recording.<sup>181</sup>

*Science Fiction* begins with a synthesizer performing a “dramatic portamento solo.”<sup>182</sup> The notes state the performer should cover at least four octaves of pitch range, with a “buzzy, aggressive sustaining polysynth sound” using the pitch bend wheel.<sup>183</sup> Additionally, a sine wave patch with digital delay of an eighth note at a tempo of 130 beats per minute is described in the score. These two effects were written for and performed on a motion control synthesizer, such as the Roland HandSonic HPD-20 with the “D-BEAM” for controlling sounds with hand gestures.<sup>184</sup>

The theremin, a standard effect in early science fiction films, is used in Dior’s composition. The notes recommend the theremin to be set up away from other performers to prevent interference. In the suggested setup, the “Electronics” part is positioned to the front of

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<sup>180</sup> Rick Dior, *Science Fiction for percussion ensemble and electronics with video montage*, Tapspace Publications, 2014.

<sup>181</sup> Ibid.

<sup>182</sup> Ibid.

<sup>183</sup> Ibid.

<sup>184</sup> “HandSonic HPD20,” Roland, accessed January 2, 2016, [http://www.rolandus.com/products/handsonic\\_hpd-20](http://www.rolandus.com/products/handsonic_hpd-20)



the stage and to the left of the conductor.<sup>185</sup> If a theremin is not available, an application for a tablet can be used.

There are nine special effects samples cued in *Science Fiction*. These effects are marked in the score and in the “Electronics” part. A sampler pad, such as a Roland OCTAPAD SPD-30 or Yamaha DTX-Multi 12 Electronic Percussion Pad can be used to trigger each cue. The cues are numbered in the part and score, and the first cue begins the piece with an eighteen second spoken introduction. The special effects samples are to be triggered and allowed to run. The shortest special effects sample is seventeen seconds and the longest two minutes, twenty-five seconds. In the event a trigger is not available, one of the alternate videos on the CD-ROM with the special effects embedded as an audio track can be used.

The final electronic consideration mentioned in the score’s notes pertains to the drum machine employed by “Percussion 2.” The recording makes use of the AKAI MPC 2000. The director/performer should use sounds similar to those heard on the recording, regardless of the drum machine or drum machine application.<sup>186</sup> The score also states the drum machine part, written from measure 302 until measure 368, could be played by “Percussion 3” on drum set with multi-rods and not with sticks (figure 59).<sup>187</sup>

Figure 59: *Science Fiction*, Percussion 2 mm. 303-304



<sup>185</sup> Rick Dior, *Science Fiction for percussion ensemble and electronics with video montage*, Tapspace Publications, 2014.

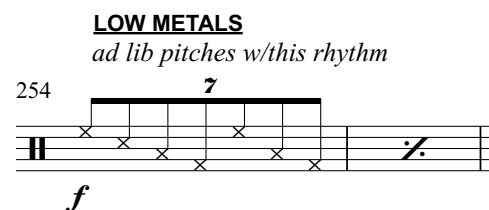
<sup>186</sup> Ibid.

<sup>187</sup> Ibid.

If this method is used, “Percussion 2” could perform the sparsely improvised high waterphone part in “Percussion 3.”

Although there are sections of the score that contain minor elements of improvisation, primarily, the piece is specifically notated. Even when a part is marked to “ad lib,” structural rhythms are provided, as shown in measure 20 until measure 58. “Percussion 1” plays a “martillo” pattern on bongos indicative of the Latin-jazz influence of the 1950-1960s time period in which the films were created. Although the rhythm and accents are notated, Dior marks “ad lib” in the part to allow the performer to create minor variations on the rhythm over the course of thirty-eight measures. Similar instructions are given throughout the piece with drum set, doumbek, darbuka, drum machine parts, and the instruction is given to “ad lib pitches” with a given rhythm on metallic instruments at measure 254 (figure 60).

Figure 60: *Science Fiction*, Percussion 1 mm. 254-255



Bowed vibraphone is marked “ethereal ad lib on rhythms” in measure 452 until the end, and two bell tree parts are given specific rhythms but the performers are to select random pitches to play with two thin triangle beaters in measure 438 until the end.

The musical concepts and themes in the work play to the strengths of percussion instruments in that they are written idiomatically. Additionally, Dior provides mallet suggestions. Compositionally, the piece has an introduction and six sections, each representing different

genres of science-fiction films and the lunar landing in the montage. After a seventeen measure introduction, the music transitions through various stylistic and meter changes. Dior states in the program notes:

The thematic material consists of the type of jazz-tinged, percussion-driven melodies and riffs that were used in many films from the 1950s and 1960s. This era also coincided with the introduction of percussion from Cuba and other South American countries, and many of these instruments are heard prominently in films of this time. There is much bombast and explosiveness in the composition, which highlights the post World War II nuclear destruction, and apocalyptic themes many sci-fi films dealt with during this period.<sup>188</sup>

The following table indicates the introduction and six sections as they relate to the film, music, and rehearsal letters in the score:

Table 4: Science Fiction, Formal Analysis

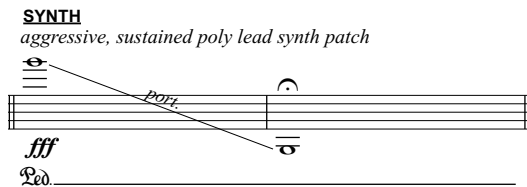
Intro	Section 1	Section 2	Section 3	Section 4	Section 5	Section 6
-Scientist -Blasts	-Alien Invasion	-Serpents and Dinosaurs	-Horror -Giant Monsters	-Outer Space	-Alien Invasion -Climax	-Moon Landing
<b>Measure 1</b> -Spoken intro -Synthesizer -Nuclear blasts	<b>Measure 18</b> -4/4 -Intro of ostinato -Flying Saucers	<b>Rehearsal D</b> -6/8 -Bembe -8 bar intro -m.86	<b>Rehearsal H</b> -3/8 -Tritone bass -m. 177 4 bar impact, 2 bar rest	<b>Rehearsal K</b> -4/4 -4 bar intro -Synth sine wave -groove	<b>Rehearsal N</b> -Rhythmic motif	<b>Rehearsal R</b> -5/8 -Synth sine wave -ethereal bowed vibraphone melody -Fade to end
<b>Measure 10</b> -Taglines -4 note motif	<b>Rehearsal A</b> -Theremin melody -Ostinato	<b>Rehearsal E</b> -Melody 2 -m. 118 cadence	<b>Rehearsal I</b> -m. 207 4 bar impact, 2 bar rest -m. 237 7 bar rest -m. 244 break/trans.	<b>Rehearsal L</b> -Melody 3 -groove continues	<b>Rehearsal O</b> -Rhythmic motif intensifies	
	<b>Rehearsal B</b> - Melody 1 -m. 59 cadence -4 bar impact transition	<b>Rehearsal F</b> -Theremin melody	<b>Rehearsal J</b> -7 against 3 -Loud and driving -m. 292 Impact/trans.	<b>Rehearsal M</b> -16 <sup>th</sup> note transition -5 bar set up to transition	<b>Rehearsal P</b> -Rhythmic motif further intensifies	
	<b>Rehearsal C</b> -Melody 1 continues -m. 75 cadence -2 bar impact/ transition	<b>Rehearsal G</b> -Melody 1 -m. 146 cadence -7 bar impact/ transition			<b>Rehearsal Q</b> -Rhythmic motif peaks -m. 441 16 <sup>th</sup> note climax -m. 443 explosion	

<sup>188</sup> Rick Dior, *Science Fiction for percussion ensemble and electronics with video montage*, TapSPACE Publications, 2014.

## Introduction

The introduction begins with the first sampled voice-over cue accompanying the projected video montage. The video clip is from the 1927 silent film *Metropolis*.<sup>189</sup> After the cue, “well, we warned you,” in the sampled voice-over, the synthesizer performs the first of six substantial and aggressive one-measure portamenti, setting up the on-screen nuclear explosion video footage (figure 61). Percussion parts 1-4 and timpani punctuate the low notes of the second through sixth portamento synthesizer parts.

Figure 61: *Science Fiction*, *Electronics* mm. 2-3



The synthesizer holds the final note of the portamento as the conductor gives preparatory beats. These preparatory beats lead into measure 10 where the bass marimba plays a tense, four note motif (figure 62).

Figure 62: *Science Fiction*, *Marimba* 2 m. 10



<sup>189</sup> Trailers, “The Complete Metropolis-Official Trailer,” posted April 26, 2010, accessed January 6, 2016, <https://www.youtube.com/watch?v=ZSExdX0tds4>

If timed correctly, “Vibraphone 2” plays a chord and “Percussion 1” plays a suspended cymbal scrape on beat four of measure 10 as the film projects “YOUR EYES WILL SEE THE WONDERS OF A WORLD...” A solo Vibra-Tone tremolo played by “Marimba 1” follows this with a pod rattle in “Percussion 2” of measure 11 as the film projects “NO EYES IN *THIS* WORLD...” The four note motif is repeated in the same way in measure 12 with “Vibraphone 2” playing the same chord up one octave and “Percussion 4” playing a gong scrape with a triangle beater on beat four as the film projects “HAVE EVER SEEN BEFORE!” “Percussion 3” plays a wood clacker solo in measure 13 with a fermata as the conductor prepares a three measure accelerando of the four note motif through measures 14-16 (figure 63).

Figure 63: *Science Fiction*, Marimba 2 mm. 14-16



An onscreen countdown from five to one takes place during measures 14-16 and the first three beats of measure 17. This video clip is from the 1929 film, *Woman in the Moon*.<sup>190</sup> At this point, the introduction has concluded and the beginning of the first section of the work is about to begin.

<sup>190</sup> Manferot, “Fritz Lang-Woman in the Moon-1929. Launch,” posted January 7, 2009, accessed January 6, 2016, <https://www.youtube.com/watch?v=I8gu1p939a4>

## Section 1

Section 1, the “Alien Invasion,” begins in measure 18 with a flexatone glissando played by the “Timpani” player and loud bass drum quarter notes from the drum set in “Percussion 3.” This takes place as the film projects “NOW!” Bongos ad lib a martillo<sup>191</sup> rhythm while “Percussion 2” plays alternating quarter notes on two metal pipes with heavy brass mallets or ball peen hammers to video clips from the 1956 film, *Earth Vs. The Flying Saucers*.<sup>192</sup> Keyboard parts layer in with ostinato establishing unstable harmonies, as the theremin enters with a glissando into rehearsal A (measure 30). Harmonized by vibraphone, the theremin plays a pair of eight measure melodies (figure 64) as the alien invasion commences on screen with video clips from the 1951 film, *The Day the Earth Stood Still*.<sup>193</sup>

Figure 64: *Science Fiction, Electronics mm. 30-38*



For the first time in the piece, all twelve performers are playing driving, repeated rhythms.

Rehearsal B (measure 48) continues with the alien invasion and “Marimba 1” establishes an arpeggiated half-diminished seventh chord and minor seventh chord melody that phrases across the bar line in groups of four sixteenth notes, a rest, five sixteenth notes, and is then repeated (figure 65).

<sup>191</sup> A martillo is a standard bongo rhythm.

<sup>192</sup> VespaGS, “Earth vs. The Flying Saucers Trailer,” posted August 27, 2006, accessed January 6, 2016, <https://www.youtube.com/watch?v=2o4fdX8gUMY>

<sup>193</sup> Idoru345, “Day the Earth Stood Still,” posted September 15, 2006, accessed January 6, 2016, [https://www.youtube.com/watch?v=OfpSXI8\\_UpY](https://www.youtube.com/watch?v=OfpSXI8_UpY)

Figure 65: *Science Fiction*, Marimba 1 mm. 48-50



“Marimba 2” enters with the same pattern but in harmony in measure 50, “Vibraphone 2” enters in unison with “Marimba 1” in measure 53, and “Glockenspiel” enters with additional harmony in measure 54. The driving ostinato creates tension, as the second voice-over sample is triggered stating, “Listen carefully. The Martians are coming...” The infectious keyboard theme concludes in measure 59 with a descending blues scale, serving as a point of cadence. The first of many ensemble impact points occurs at measure 60, transitioning into rehearsal C (measure 64) with unison ensemble figures, increased dynamics, multi-meter, and three against two and five against two rhythms. A two beat rest provides a break in tension before a timpani roll crescendos into Rehearsal C.

Rehearsal C resumes with video clips from the 1955 film, *It Came From Beneath the Sea*.<sup>194</sup> The arpeggiated melody in the keyboard percussion continues, this time adding five cowbells and the temple blocks to the unison rhythm. With an increase in volume and rhythmic content in the non-pitched percussion, the chimes play a descending half note chromatic scale, harmonized in minor thirds, until measure 75 when the xylophone, vibraphone, and marimba play the next descending point of the cadence figure. This sets up a shorter, non-pitched percussion break, transitioning into Section 2 of the work.

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<sup>194</sup> SciFiBMovieGuy, “It Came From Beneath the Sea (1955)-Movie Trailer,” posted October 7, 2009, accessed January 6, 2016, <https://www.youtube.com/watch?v=0nmOjIUR9kA>

## Section 2

Section 2, the “Dinosaur” section, begins at letter D (measure 78) and introduces a significant thematic change, as well as a meter change from predominantly 4/4 to 6/8. “Marimba 2” establishes a two measure bass line, paired with in an “ad lib” pattern on bongos by “Percussion 1” and a dominant seventh flat five chord played on “Vibraphone 2.” In the fifth measure of the section, all five percussion parts and timpani begin a Bembe/Afro-Cuban 6/8 pattern that, along with bongos and “Marimba 2,” continues for sixty-four measures.

After an eight-measure introduction, a lyrical theme is played on glockenspiel, xylophone (figure 66), and marimba with vibraphone chordal accompaniment. This melody lasts for twenty measures and is set against scenes from the trailer to the 1957 science fiction film, *20 Million Miles to Earth*.<sup>195</sup>

Figure 66: *Science Fiction*, Xylophone mm. 90-95



At the end of this melody, the third voice-over is triggered as the keyboard percussion instruments return to a similar across the bar line theme from Section 1 (figure 67) while accompanying video clips from the 1953 film, *The Beast from 20,000 Fathoms*.<sup>196</sup>

<sup>195</sup> RetroAlexander, “Movie Trailer-20 Million Miles to Earth (1957),” posted September 21, 2011, accessed January 6, 2016, <https://www.youtube.com/watch?v=8MWmCskZwM0>

<sup>196</sup> Tobar, “The Beast from 20,000 Fathoms,” posted May 28, 2006, accessed January 6, 2016, <https://www.youtube.com/watch?v=mTGMc-QPBlw>



Figure 67: *Science Fiction*, Xylophone mm. 106-108



This melodic theme breaks with the descending point of cadence scale for the return of the theremin melody, accompanied by the continued groove by the non-pitched percussion section and bass marimba leading into Rehearsal F (measure 120). The theremin accompanies a video clip from the 1957 film, *The Cyclops*.<sup>197</sup> After a seven measure descending theremin glissando, the keyboard percussion across the bar line theme returns to accompany video clips from the 1957 film, *The Black Scorpion*.<sup>198</sup> The theremin improvises during the thirteen measure melody, leading into a seven measure impacting drum break transition, accompanying a short video clip from *20 Million Miles to Earth*. This drum break is elided by the keyboard percussion descending point of cadence scale and transitions into Section 3 at Rehearsal H (measure 153).

### Section 3

Section 3 begins with the trailer to the 1931 horror film, *Frankenstein*.<sup>199</sup> Timpani and bass marimba establish a dotted-quarter note tri-tone bass line in 3/8 meter, accompanied by eerie ratchets, light snare drum (snares off) with brushes, guiro, and punctuations from the bell tree, slap stick, bass drum, cymbals, and minor second double stops on chimes. The fourth sample is triggered in measure 56 with a creepy voice-over repeatedly saying, “It’s Alive!” If the

<sup>197</sup> LDavid, “The Cyclops Trailer-1957,” posted July 22, 2007, accessed January 6, 2016, <https://www.youtube.com/watch?v=GKzrALaaOOE>

<sup>198</sup> Sleaze-O-Rama, “The Black Scorpion (1957) trailer,” posted February 10, 2013, accessed January 6, 2016, <https://www.youtube.com/watch?v=HdQxw0z44JQ> 1957

<sup>199</sup> RoboJapan, “Frankenstein (1931) Trailer,” posted October 1, 2008, accessed January 6, 2016, <https://www.youtube.com/watch?v=bKyjXjyVsfcw>

timing is correct, a four measure unison rhythmic break by ten of the twelve percussionists occurs as the image of the word, “*Frankenstein*” appears on screen, thus concluding the *Frankenstein* clip. A pause occurs in the voice-over, coinciding with a two-measure unison rest in measures 211 and 212. The same percussion parts resume for twenty measures as the video montage transitions into a brief clip from the 1922 film, *Nosferatu*.<sup>200</sup> The voice-over continues as well with a partial quote of “the vampire can assume many, many forms at will,” from the 1943 film, *Son of Dracula*.<sup>201</sup> Brief video clips are shown of the 1932 film, *The Mummy*,<sup>202</sup> a still image from the 1925 film, *The Phantom of the Opera*,<sup>203</sup> and a still image from the 1913 film, *The Werewolf*.<sup>204</sup> A loud, four measure unison ensemble break of four over three and five over three rhythms punctuates the action between video clips (figure 68).

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<sup>200</sup> Vinicius Reis, “*Nosferatu* (1922)-Trailer,” posted June 22, 2010, accessed January 6, 2016, <https://www.youtube.com/watch?v=ZxIJxDr26mM>

<sup>201</sup> Cushing97380, “*Son of Dracula* Trailer 1943,” posted August 8, 2008, accessed January 6, 2016, [https://www.youtube.com/watch?v=Qv4y\\_Y0bKWo](https://www.youtube.com/watch?v=Qv4y_Y0bKWo)

<sup>202</sup> HorrorFilmKeller, “*The Mummy*-1932-Official Trailer,” posted October 29, 2011, accessed January 6, 2016, <https://www.youtube.com/watch?v=6IzLO9AN6Hc>

<sup>203</sup> “*Phantom of the Opera* (1925),” 90to5, accessed January 6, 2016, <http://90to5.org/5MM/2015/phantom-of-the-opera-1925>

<sup>204</sup> “*The Werewolf* (1913) Among 7 Other Classic Horror Films Gone Forever,” *Werewolves*, accessed January 6, 2016, <http://www.werewolves.com/the-werewolf-1913-among-7-other-classic-horror-films-gone-forever>

Figure 68: *Science Fiction*, Score mm. 207-210

The musical score for Figure 68, *Science Fiction*, measures 207-210, is a percussion ensemble score. It is divided into four measures, with the first measure starting at measure 207 and the fourth measure ending at measure 210. The score is in 4/4 time and features complex rhythmic patterns with many beamed sixteenth and thirty-second notes. The dynamics are marked *ff* (fortissimo). The score includes parts for dry xylophone, xylophone, wood, and brass mallets. The wood part is marked 'with wood' and the brass mallets part is marked 'brass mallets'. The score is divided into four measures, with the first measure starting at measure 207 and the fourth measure ending at measure 210.

If the timing is correct, two measures of rest sets up the continued voice-over introducing brief scenes from the 1931 film, *Dracula*,<sup>205</sup> the 1922 film, *Nosferatu*; the 1959 film *The House on Haunted Hill*,<sup>206</sup> the 1959 film, *The Return of the Fly*,<sup>207</sup> and a closing still image from *The Mummy*. The vibraphone plays a solo E minor major seventh chord in measure 235, followed by

<sup>205</sup> RoboJapan, "Dracula (1931) Trailer," posted September 30, 2008, accessed January 6, 2016, <https://www.youtube.com/watch?v=7Nfmh178L98>

<sup>206</sup> JonathanWolfe038, "House on Haunted Hill-1959-Vincent Price (Full Movie)," posted October 31, 2013, accessed January 6, 2016, <https://www.youtube.com/watch?v=PjTbzrXE9u0>

<sup>207</sup> JohnnieYoung, "Return of the Fly (1959)-Trailer," posted August 25, 2008, accessed January 6, 2016, <https://www.youtube.com/watch?v=Zri0vfCwoS0>

a solo descending bell tree glissando in measure 236. These two solos precede the sixth triggered voice-over beginning with “a special news bulletin...” The voice-over takes place over seven-measures of rest from the ensemble before a six measure rhythmically-notated accelerando by the keyboard percussion in measures 244-249 (figure 69).

Figure 69: *Science Fiction*, Score, Keyboard Parts mm. 243-248

The image displays a musical score for three keyboard instruments: Glock, Xylo, and Marimba, spanning measures 243 to 248. The Glock and Xylo parts are written on a single staff with a treble clef, while the Marimba part is on a separate staff with a bass clef. The Glock and Xylo parts are marked with a '4' and a 'no pedal' instruction. The Marimba part is marked with a '4'. The score shows a descending glissando in measure 236, followed by a series of notes in measures 243-248. The notes are marked with numbers 4, 5, 6, 3, 7, and 7, indicating specific pitches or fingerings. The key signature is one flat (B-flat), and the time signature is 4/4.

During this figure, the sound of air raid sirens and crowds in panic can be heard from the triggered special effects as a scene of giant monsters from the 1967 film, *Gappa: Monster From a Prehistoric Planet*<sup>208</sup> come to life.

Rehearsal J (measure 250) begins with a fortissimo gong note, fortississimo seven against three eight notes on timpani with wood mallets (figure 70), and the same rhythm at fortissimo on bass drum.

<sup>208</sup> Gorizard TV, “Gappa (1967)-English Dub,” posted March 13, 2015, accessed January 6, 2016, [https://www.youtube.com/watch?v=t93qi\\_vj1Qs](https://www.youtube.com/watch?v=t93qi_vj1Qs)

Figure 70: *Science Fiction*, Timpani mm. 250-253



Four measures later, low and high metals join the seven against three rhythm, followed by drum set an additional four bars later. Opera gongs join the rhythm in measure 262, creating great tension as the battle scenes from *Gappa: Monster From a Prehistoric Planet* unfold. After forty measures of intense unison rhythm, punctuated by accented gong notes, the battle scene concludes with a five measure unison impact point, transitioning into Section 4.

#### Section 4

As the content of the video montage changes at measure 299, so does the thematic material. The meter shifts back to 4/4 and the first entrance of the synthesizer plays a repeated figure with a sine wave patch with delay. The seventh voice-over and special effects track is triggered in the fourth measure, setting up audio and video from the 1951 film, *The Day the Earth Stood Still*.<sup>209</sup> “Marimba 2,” doumbek, drum machine, four suspended cymbals and darbuka, soon followed by xylophone, and “Marimba 1” begin a one measure ostinato that remains constant for more than fifty measures. A waterphone improvises for sixty-eight measures. The timpani player places a thin 18” suspended cymbal upside down on the 32” timpano and rolls on the cymbal while slowly playing glissandos. This special effect continues for fifty-three measures.

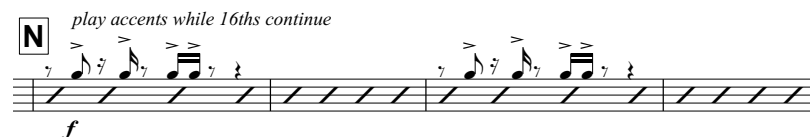
<sup>209</sup> Idoru345, “Day the Earth Stood Still,” posted September 15, 2006, accessed January 6, 2016, [https://www.youtube.com/watch?v=OfpSXI8\\_UpY](https://www.youtube.com/watch?v=OfpSXI8_UpY)

Rehearsal L (measure 307) continues with the repeated patterns in most of the ensemble, but adds song bells in unison with bowed vibraphone, creating an ethereal, space-like melody until measure 354. Meanwhile on the video montage, there are still shots of outer space, a radar dish, UFO's, crop circles, actor Orson Welles, and videos of real and recreated space ships taking flight. As the voice-over continues, the song bell and vibraphone players both switch to hard mallets and establish a soft, repeating sixteenth note ostinato beginning at Rehearsal M (measure 357). Here, images depicting the 1938 radiobroadcast of *War of the Worlds* as well as video of the 1953 film, *War of the Worlds* are projected.<sup>210</sup> This sixteenth note theme is softly added in various other instruments in measure 370 as the previous theme fades away. Static sixteenth notes are layered in leading into Section 5 at Rehearsal N (measure 381) with the eighth voice-over and special effects triggered two measures before.

## Section 5

Constant sixteenth notes with a unison syncopated accent motif (figure 71) establish the Section 5 theme of an alien invasion.

Figure 71: *Science Fiction*, Percussion 5 mm. 381-384



The steady sixteenth notes and syncopated motif continue to build while scenes from *Earth Vs. The Flying Saucers* depict the beginning of the culminating battle scene. With the exception of

<sup>210</sup> TrashTrailers, "The War of the Worlds (1953) Trailer," posted August 7, 2009, accessed January 6, 2016, <https://www.youtube.com/watch?v=P9T9f3UbGuo>

“Percussion 1” playing a bongo and conga ostinato reminiscent of the across the bar line theme in Section 1, gong rolls played by “Marimba 2,” and the tacet “Electronics” part (the sampler is running a two minute, eight second sample), the remaining parts execute the unison syncopated motif from measure 397 until measure 440. As the video portrays scenes from *Earth Vs. The Flying Saucers*, *War of the Worlds*, and the 1959 film, *The Atomic Submarine*,<sup>211</sup> the 1957 film, *The Night the World Exploded*,<sup>212</sup> and other scenes of mayhem, the syncopated motif increases in frequency, intensity, and volume. Section 5 culminates with fortississimo unison sixteenth notes and a gong roll, releasing on the downbeat of measure 443 (figure 72), timed with the on screen detonation of a nuclear bomb, and the climax of *Science Fiction*.

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<sup>211</sup> Sleaze-O-Rama, “The Atomic Submarine (1959) Trailer,” posted September 28, 2013, accessed January 6, 2016, <https://www.youtube.com/watch?v=PZyTvpvCGJE>

<sup>212</sup> Montrealflickers, “The Night the World Exploded (1957) Science Fiction Trailer,” posted January 9, 2008, accessed January 6, 2016, <https://www.youtube.com/watch?v=oGIMN1KFD50>

Figure 72: *Science Fiction*, Score mm. 441-443

The musical score for measures 441-443 of *Science Fiction* is presented in five systems. Each system contains multiple staves of music, all marked with a fortissimo (*fff*) dynamic. The notation includes various rhythmic patterns, such as eighth and sixteenth notes, and rests. A 'Lv.' (Lento) marking appears on the second staff of the second system and the second staff of the fourth system. A 'crasher' marking is present on the third staff of the third system. The score concludes with a double bar line at the end of the fifth system.

## Section 6

The finale of *Science Fiction*, Section 6, begins at Rehearsal R (measure 444) with a transition into 5/8 meter, a sine wave patch on synthesizer, and video footage of the Apollo 11 Moon landing. The ninth sample is triggered in measure 448, using original astronaut voice-over



and “satellite” sound effects.<sup>213</sup> The texture of the piece is at its thinnest with repeated synthesizer, light bell tree with thin triangle beaters, sparse waterphones, and four pitched gongs played softly. In measure 452, “Vibraphone 2” has notated bowed pitches and rhythms with the instructions “ethereal, ad lib on rhythms” in the score. This part serves as the only melodic content and concludes in measure 485. The voice-over ends with Neil Armstrong’s famous quote, “That’s one small step for man, one giant leap for mankind.” The other percussion parts are instructed in measure 481 to fade to nothing, concluding the work with images of Earth and outer space projected on screen.

Rick Dior created an outstanding work for the medium of chamber percussion and silent film. The score is very specific as to its comprehensive details, including timpani tuning cues, stick and mallet recommendations, performance notes, and structural rhythms for “ad lib” sections. Dior took into consideration mallet and instrument changes, wrote ample rests for each player, and provided courtesy measure numbers on long sections of repeats. The publisher lists the work as medium to advanced, and each part is very idiomatic, including the keyboard percussion parts. In an email, Dior said:

I still record all the percussion parts live, overdubbed one at a time for all of my pieces. This lets me check for playability as well as giving what I think is a good representation of what I feel the music should sound like in regards to tempos, tunings, stick and mallet choices, etc. So the music you hear on the Tapspace video was all recorded by me.<sup>214</sup>

There are no elements of Foley in *Science Fiction*, as the coordination is less specific from *The Invisible Men*, and Dior took a soundtrack approach to scoring. His reverse approach of composing the score, followed by setting the video montage to the music, makes this work more like a traditional Hollywood film score. Dior used the soundtrack to bring continuity to a video

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<sup>213</sup> The sound effect is labeled as “satellite” effects in the audio folder labeled “Samples for experimentation” on the CD-ROM.

<sup>214</sup> Rick Dior, email to author, October 19, 2015.

montage, that by nature does not have a true storyline. Screenplay writers and directors often use montage to deliver maximum content in an abbreviated timespan, relying on the soundtrack to provided timeline and unity. Dior's soundtrack does so exceptionally well.

The voice-over and special effects triggered throughout *Science Fiction* are unique to the piece and add a third layer of content delivery—music, film, and narration. Another addition of variety from other works in this document is the text as part of the montage. These taglines used in movie trailers add elements of tension and storyline that do not appear in *The Invisible Men* or the other works.

Dior is unfamiliar with *The Invisible Men* and took no inspiration as a result.<sup>215</sup> He composed *Science Fiction* truly out of his appreciation for percussion and science fiction films. His epic composition, both aurally and visually is a substantial contribution to the repertoire and stands alone amongst large multimedia chamber percussion works. Relying on completely original musical content, *Science Fiction* is a twelve minute, twenty second treat for the senses for performers and audience alike.

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<sup>215</sup> Rick Dior, email to author, January 3, 2016.

## Chapter 10: Conclusion

Music and film have shared a parallel and intertwining history. Since the dawn of cinema, music played a prominent role in the complete audience experience. This multi-sensory experience often involved percussion, sound effects, and live musicians interacting with the images onscreen. From borrowed music, to improvisation, to original scores, percussionists have been involved in the artistic and commercial progression of film.

Cue sheets, improvisation, Foley, and ultimately original composition have served as the medium for percussion contributions to cinema. Creative percussionists have practiced their trade and developed their skills in the multimedia environment of cinema for decades. While musicians and ensembles such as Nexus, and those vaudeville-trained cinema percussionists before them, brought film and percussion to film and concert goers, a composer on the other side of the world did the same in a very specific and sophisticated way.

Film composer Nigel Westlake scored a terrifically whimsical work for one of the great chamber percussion groups of the past forty years. In ten-minutes, thirty seconds, *The Invisible Men* manages to combine complex percussion writing for more than sixty instruments in an idiomatic and challenging manner while creating an original, contemporary soundtrack for a French film created ninety years before Westlake's soundtrack. His attention to detail capturing the onscreen action in the percussion scoring is a truly valuable contribution to the chamber percussion canon.

Other composers have followed suit with original scores for chamber percussion and silent or silenced film, whether inspired by Westlake or through their own creative processes. Gene Koshinski, an exceptional percussionist and composer, added a clever work to a film of the same era and genre as *The Invisible Men*. *The Mermaid* captures the essence of the work

Westlake did for the medium of chamber percussion and film, but added more melody with fewer cues. Using a click-track, elements of Foley, and developed themes, Koshinski's original composition for two percussionists and a short silent film-era Méliès production is a tribute to *The Invisible Men* while standing alone in its own right as a great contribution to the chamber percussion and silent or silenced film.

Drew Worden's work, *Escape: Sextet for Triangles* is a great example of how chamber percussion and film can intersect with minimal orchestration, instrumentation, and technology. His work, intended for performance with or without Mary Ellen Bute's film, *Synchromy No. 4*, *Escape* demonstrates the exciting possibilities of combining original composition with a preexisting film. Needing only the technology necessary to project the film, *Escape* gives percussionists the opportunity to perform a multimedia work with a minimum of technical or synchronization concerns.

*Science Fiction* by Rick Dior demonstrates the possibilities of larger chamber percussion ensembles with film. He utilized thematic scoring in the Hollywood model, providing an example of scoring focused on theme and mood over cues and Foley. Additionally, Dior can be credited with the entire creation from beginning to end as he created the video montage and all original musical content. Dior literally played each part, ensuring its idiomatic consistency and value as a part of the whole.

While there might be more examples of works for original chamber percussion score with silent or silenced film not mentioned in this document, the medium is unique with considerable artistic potential. Percussionists have and will continue to improvise music for recorded film soundtracks, as Nexus did in 1974 with *The Man Who Skied Down Everest*. They will also continue to adapt existing scores to accompany silent or silenced film, as Nexus has also done

with *Teddy at the Throttle*. Their commitment to the medium of film and percussion is incredibly valuable and worthy of further research. Original film scores using percussion as a primary means of the soundtrack, or even the significant use of percussion, is also valuable information and would be deserving of further research. Another worthwhile pursuit would be the research of live improvised percussion performance with film and other multimedia outlets.

It is my hope that percussionists and composers will continue to seek opportunities to create original scores for chamber percussion and silent or silenced film. Film continues to grow as a major media source for entertainment, and orchestras, film companies, and composers address this trend as Westlake has done with live performances of his score to films, such as *Babe*.<sup>216</sup> With audiences and performers alike, continually exposed to the medium of film, the potential for growth as an artistic endeavor is well suited to chamber percussion. As Westlake said, “I trust percussionists because they’re really inventive and they always have their own solutions. You guys are hungry for repertoire. You’re always adapting things and sort of making things work.”<sup>217</sup> With composers such as Westlake, Koshinski, Worden, and Dior, and their original works for chamber percussion and silence or silenced film, a foundation exists for more repertoire in this remarkable medium.

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<sup>216</sup> Nigel Westlake, interview with author, Sydney, March 1, 2015

<sup>217</sup> Ibid.

## **Appendix A: Additional Considerations for *The Invisible Men***

Performing multimedia chamber percussion works has inherent challenges beyond performing standard works. The acquisition of the additional media, the technical considerations, and rehearsal planning must be investigated and thoroughly considered. For *The Invisible Men*, acquiring the score and the performance video is the first consideration. Technology options should be investigated. With more than sixty instruments, many of which are used for representative and/or true Foley, instrument selection and performance practice must be addressed. The film should be studied, and rehearsals must be thoroughly planned.

### **Acquiring *The Invisible Men***

Unlike the other quartets that are readily available for purchase from music dealers in the United States, *The Invisible Men* must be purchased directly from the composer's publishing company.<sup>218</sup> Due to limited availability of copies of the film, Rimshot Music Australia requires a performance date to be confirmed prior to the sale of the score and parts. Once a date is confirmed and the score and parts are purchased, a DVD of the silent film and click-track is mailed approximately one month in advance, free of charge, with the assurance it will be returned within a month after the performance.<sup>219</sup>

### **Studying *The Invisible Men***

The performance of *The Invisible Men* by The Ohio State University Percussion Ensemble at the 2005 Percussive Arts Society International Convention, raised awareness for

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<sup>218</sup> Jan Westlake, e-mail message to author, March 13, 2013.

<sup>219</sup> Ibid.

this piece.<sup>220</sup> The work was also performed by the University of Minnesota Percussion Ensemble under the direction of Fernando Meza at the opening concert of the 2010 International Marimba Festival in Minneapolis, Minnesota.<sup>221</sup> To date, there are several performances of *The Invisible Men* on YouTube, including a performance by the University of Nevada, Las Vegas Percussion Ensemble,<sup>222</sup> the Adams State University Percussion Ensemble,<sup>223</sup> and the Northern Illinois University Percussion Ensemble.<sup>224</sup> No commercial DVD performances exist and the work has not been recorded or released by the publisher.

### **Instrument Considerations**

The instrument list scored for *The Invisible Men* is quite substantial and requires significant set ups for each performer. Although the composer states in the instrument list that various instruments can be shared, the practicality of shared instruments is not feasible as changes from instrument to instrument is quick for each player. However, Percussion 2 has a timpani part scored in measure 183 while all other timpani parts are exclusively in Percussion 4's part. The score calls for player two to play a single F# on beat one to be played with a pedal glissando, although the note is marked "optional" by the composer. Although the part is optional and doubled by a low toms part scored for player four, the note represents the Tailor jumping onto a table in a dramatic fashion. A possible solution to ensure the timpani note is played is for Percussion 4 to play the timpani glissando. Percussion 2 could add a low tom to his or her setup

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<sup>220</sup> Susan Powell, email to author, March 15, 2013.

<sup>221</sup> "Archive for the Marimba 2010 International festival and Conference Category," Marimba Sass: The Marimba Blog of Jeff Sass, accessed January 11, 2016, <http://www.jeffsass.com/category/marimba-2010-international-festival-and-conference>

<sup>222</sup> A.J. Merlino, *Invisible Men* (1996), posted January 25, 2013, accessed January 11, 2016, <https://www.youtube.com/watch?v=YocvVVdXx5Q>

<sup>223</sup> Adams State University, *Percussion Extravaganza-Adams State University-December 10, 2014*, posted December 12, 2014, accessed January 11, 2016, <https://www.youtube.com/watch?v=7kGWnFLYIDo>.

<sup>224</sup> Northern Illinois University School of Music, *NIU Percussion Ensemble-Nigel Westlake-Invisible Men* (1996), posted October 24, 2015, accessed January 11, 2016, <https://www.youtube.com/watch?v=mGVlgCjp54k>

and play beats one and two of Percussion 4's part. Once Percussion 4 has played the timpani glissando, he or she could return to the tom part on beat three of the same measure. A simpler solution is to add a 20" timpano to Percussion 3's setup.

Another consideration is the variety of whistles utilized. Although Percussion 1 has a relatively small setup of a marimba and flexitone, a mouth siren, police whistle, and duck call are also scored. Percussion 2 uses a mouth siren and police whistle as well as nine other instruments, while Percussion 3, in addition to twenty-seven other instruments, uses a police whistle. Percussion 4 is responsible for thirty instruments, including a police whistle, duck call, swanee whistle, mouth siren, and cuckoo whistle. In many instances, the percussionist is required to play a whistle while simultaneously playing another instrument. Careful planning and written cues are necessary to prepare the appropriate whistle before needed in instances in which both hands are engaged in playing another part. The performers may consider wearing lanyards of varying lengths, commercially available hunting whistle lanyards with multiple attachments, or a single retrofitted lanyard with multiple points of attachments. Having the various whistles at different positions on a lanyard allows for quicker access to the necessary whistle during performance.

Because the flexitone plays such a prominent role in the piece, it is important to both practice the part to meet the composer's instructions and to use an instrument that can be played slowly and sporadically. If using a flexitone with wood beaters, consider applying moleskin to the beaters to create a softer, mellower attack.



## Sound Effects

One intriguing sound effect requirement is for Percussion 4 to play “broken glass-mounted bottles, hit with a hammer-or samples.”<sup>225</sup> Different performers have interpreted this in a variety of fashions, as flying glass on stage can be dangerous to performers and audience alike. Jonathan Latta accomplished this effect for a performance in 2010 with the Animas Percussion Quartet by placing prepared bottles (partially broken within a pile of other broken bottles) in a large box on the stage floor, positioned behind four timpani. When the bottles were broken, he reached into to box with a hammer and broke the remaining bottles, followed by stirring the shards of glass with the hammer.<sup>226</sup> Gordon Stout used a similar technique when programming the work with his ensemble at Ithaca College.<sup>227</sup> A. J. Merlino directed this piece in 2011 and utilized a ribbon crasher<sup>228</sup> as did Andrew Richardson for a performance in 2011 at the University of Oklahoma.<sup>229</sup> Gary France sampled broken glass and triggered the sound on a Roland sampling pad for a 2005 performance at the Australian National University.<sup>230</sup> Westlake attended the premiere of the work<sup>231</sup> and stated Synergy Percussion threw beer bottles into a miked trashcan.<sup>232</sup>

For performances at Adams State University, this sound effect, as well as the wolf whistle and handclaps, were triggered using a KAT Percussion KTMP1 Electronic Drum and Percussion Pad Sound Module. Using Ableton Live 9, we uploaded samples of the three sound effects, entered each into a file and routed them to the KAT pad. Because we used one computer

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<sup>225</sup> Nigel Westlake, Percussion 4 part, *The Invisible Men for Percussion Quartet, Music for the Silent Movie “Les Invisibles,” produced by Pathé-Frères.” in 1906* (Australia: Rimshot Music, 1996).

<sup>226</sup> Jonathan Latta, email to author, April 2, 2013.

<sup>227</sup> Gordon Stout, email to author, April 5, 2013.

<sup>228</sup> A. J. Merlino, email to author, March 30, 2013.

<sup>229</sup> Andrew Richardson, email to author, April 2, 2013.

<sup>230</sup> Gary France, email to author, April 6, 2013.

<sup>231</sup> In our 2013 interview, Westlake stated this is the only time he’s seen the work performed.

<sup>232</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

for the the film, the click-track, and the sound effects, the use of an external audio interface was necessary to route the KAT pad and audio output of the sound effects. We used an Akai Professional EIE Pro 24-bit Electromusic Interface Expander connected to the computer through a Universal Serial Bus (USB) port. The KAT pad was connected to the Akai interface via a USB port and the sound effects in the Ableton file were routed through the Akai interface, allowing the sound effects to be triggered. Two 1/4-inch cables ran to two speakers for the sound effects. Triggering the glass breaking sound effect was a safer alternative to actual glass. We triggered the wolf whistle and hand claps to better balance the effects with the rest of the ensemble. When discussing sampling effects for the piece, Westlake said:

I trust percussionists because they're really inventive and they always have their own solutions. You guys are hungry for repertoire. You're always adapting things and sort of making things work. I think there's more than one way, of strangling a cat. Isn't it more interesting if it sounds a bit interesting each time and everyone puts there own stamp on it? So, why not?<sup>233</sup>

### **Click-Track and Technology Considerations**

In order to synchronize the performers with the onscreen actions, Westlake provides a click-track. This track accompanies the film with a pulse on every beat. The exact subito tempo changes and accelerandos and ritardandos indicated in the score are precisely represented by the click-track. In classic fashion, the film counts down from ten to two on the screen, and the click begins for the snare drum roll on the opening title. The downbeat of each measure is represented by a higher tone and the remaining beats of the measure are represented by a lower tone. Since the piece is multi-meter and changes regularly, the two different tones are of great benefit to the performer. Westlake's voice can be heard giving the measure number every ten measures.

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<sup>233</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

The best way in which to utilize this track must first be decided; the ensemble can each wear in-ear monitors or follow a conductor who is listening to the click-track. As the piece was written for Synergy for a concert, which took place in a venue typically used for rock concerts, the piece was originally intended for the performers to each wear their own in-ear monitors.<sup>234</sup> Westlake commented on the premiere of the work:

Everything was miked. They were trying to take Synergy to a new audience and so it was kind of like a rock and roll venue. I don't know if any of the rock and roll people ever actually came out but Synergy had a pretty good following anyway. They had the whole thing miked up with a big PA system and a big screen for the movie.<sup>235</sup>

Gordon Stout chose to conduct the work, as the logistics of providing each performer with a click-track was “too difficult.”<sup>236</sup> A. J. Merlino chose to conduct the work as the skill level of his ensemble varied and their ability to interpret and stay with the click-track was of concern. He also believed the performers would be able to hear one another and account for variations in time better without in-ear monitors.<sup>237</sup>

Kurt Gartner chose to have the performers each utilize in-ear monitors for a performance at Kansas State in an effort to keep the audience focused on the film without the distraction of a conductor. He avoided the restriction of the performers' movement throughout the percussion setups by using an FM transmitter to send a signal to FM receivers worn by each player.<sup>238</sup> Anthony DiSanza chose to have his ensemble at the University of Wisconsin perform using the click-track for pedagogical reasons, as the experience was more fruitful for his students.<sup>239</sup>

When I performed this work in 2010 with the Animas Percussion Quartet, we discovered that splitting a digital signal into four separate channels decreased the volume and required

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<sup>234</sup> Nigel Westlake, interview by author, Sydney, March 1, 2015.

<sup>235</sup> Ibid.

<sup>236</sup> Gordon Stout, email to author, March 30, 2013.

<sup>237</sup> A. J. Merlino, email to author, March 31, 2013.

<sup>238</sup> Kurt Gartner, email to author, March 25, 2013.

<sup>239</sup> Anthony DiSanza, email to author, March 26, 2013.

amplification. If performing the work with only a conductor listening to the click, this is unlikely to be a problem. However, if the ensemble chooses to perform without a conductor, each individual performer must use in-ear monitors.

For performances at Adams State University with the university's percussion ensemble in Fall 2014 and Spring 2015, the decision was made to perform the work with the performers using Shure SE215 in-ear monitors. The organization of the necessary technology was a three-part process, including the projection of the film, the splitting of the click-track into four channels, and the triggering sound effects addressed above. For ease of execution, one computer was utilized as a platform for all three processes.

The video of *The Invisible Men* was played through a media program such as Windows Media Player or QuickTime and outputted through the computer's High-Definition Multimedia Interface (HDMI) port to the concert hall projector. This projector displayed to the screen the exact image on the computer screen. The computer operator (in this case a performer), began the film by clicking "play" within the media program on the computer screen.

The next consideration was audio output. Because the click-track is paired with the film and we chose to trigger three sound effects from a sample pad, two audio outputs were required. For the click-track, the computer's internal audio system was used to ensure video synchronization. This audio was run out of the 1/8-inch computer headphone port and through a BEHRINGER MICROAMP HA400 four-channel powered headphone splitter. The splitter distributed the audio into four separate channels with volume control for individual performer preference. Each performer's in-ear monitors were attached to a 25-foot headphone extension cable and run to a 1/4-inch adapter (from an 1/8-inch) into the splitter, providing adequate freedom to move within his instrument set-up. Each performer determined in-ear monitor

volume during sound check, guaranteeing a balance of the click-track in his headphones while balancing the instrumental sounds of the live performance.

Additional problems might exist depending on the size of the stage and how the screen is erected. Possible screen options include a floor-built screen, or more ideally, a screen on a fly from the rafters. It is also best to plan for stand lights, as house lights might need to be dimmed in order for the projection to be seen. Since each percussion setup might require multiple stands, sufficient ambient light from multiple stand lights can help illuminate instruments for the performers.

### **Rehearsals**

Nigel Westlake expressed his thoughts in the Estes interview regarding the best strategy for rehearsing *The Invisible Men*:

It would be good to have a conductor as someone to supervise the rehearsals and I think the first performance all players had ear pieces with a click-track and the click-track has a bar count as well, so if you get lost you can find your way back in. It would probably be better to have just the conductor use the click-track and all the other players just being guided by the conductor. So the players would be free to move around and not be tied down by an earpiece with an annoying click in it. The best approach would be to just get the music sitting right first technically and get everyone comfortable with his or her parts, and then work on the sync with the film. I imagine that might be a good approach for that. Initially, just treat as a regular percussion work and get the notes right, and get the transitions right, and get the balance right, and then put it with the picture.<sup>240</sup>

For performances at Adams State University, the performers first worked independently to learn parts and determine their ideal sheet music setup that suited their needs. Because this was an educational setting, Percussion 3 and Percussion 4 were encouraged to experiment with their own setups, taking into consideration tempos, page turns, stick and mallet choices, and

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<sup>240</sup> Kevin Matthew Estes, "Solo and Chamber Percussion Works by Nigel Westlake: An Examination of *Fabian Theory*, *The Hinchinbrook Riffs*, *The Invisible Men*, *Kalabash*, *Malachite Glass*, *Moving Air*, *Omphalo Centric Lecture* and *Penguin Circus*" (D.M.A. Document, The Ohio State University, 2014), 147.

instrument layout. In Estes' DMA document, he devotes six pages to setup options.<sup>241</sup> These pages include photos and diagrams that are thorough and would be beneficial to performers with less time to experiment. Once Percussion 3 and Percussion 4 were individually prepared with setups in place, they rehearsed together. Percussion 1 and Percussion 2 rehearsed together, as their marimba parts often interrelated. Then, the quartet came together for rehearsals using a corresponding click-track built in Finale. This click-track's tempo could be manipulated for slower rehearsals. The piece was rehearsed in sections, under tempo, and with the click-track played through room monitors. Playing the click-track through room monitors allowed the performers to interact verbally and musically throughout the rehearsals. The next step was the extraction of scenes and segments of scenes from the film for rehearsal purposes. The performers were able to loop the video segments to rehearse difficult passages in quick succession without having to start and stop the video. The video was projected in the rehearsal space for most rehearsals. Finally, I joined the rehearsals to watch and listen for video synchronization, note accuracy, balance, blend, instrument selection, phrasing, and interpretation. Throughout the rehearsal process, the film was regularly referenced.

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<sup>241</sup> Kevin Matthew Estes, "Solo and Chamber Percussion Works by Nigel Westlake: An Examination of *Fabian Theory*, *The Hinchinbrook Riffs*, *The Invisible Men*, *Kalabash*, *Malachite Glass*, *Moving Air*, *Omphalo Centric Lecture* and *Penguin Circus*" (D.M.A. Document, The Ohio State University, 2014), 146-151.

**Appendix B: An Interview with Nigel Westlake**  
**March 1<sup>st</sup>, 2015 in Sydney, AU**  
**Nigel and Jan Westlake's Home**

**JD:** You have an interesting musical background and I have to ask, how did your great percussion writing come about?

**NW:** Up until 20 years ago, I made most of my living as a clarinet player and composing on the side. I never ever thought I'd be composing full time. I guess those early years were a journey. I was writing pieces for people I was playing with as a clarinetist and bass clarinetist. I had this great relationship with Michael Askill. We worked in the circus together, we worked with Synergy, we did a season together with the Flying Fruit Fly Circus, which was a children's circus where we wrote and performed all the music. It was fun and we used a lot of electronics. Additionally, I had a classical chamber music group called the Australia Ensemble. There was violin, viola, cello, flute, clarinet, and piano and I wrote a couple pieces for them. So it was really just writing for the groups, the people I knew and I played with. It wasn't until I started film work and became a bit more serious as a composer that I started to delve into getting my skills together. Then I started doing orchestration. I was writing a lot of percussion at that time just because I had a close relationship with those guys.

**JD:** Your percussion writing is so very idiomatic. It lies well on the instruments. Was there a lot of back and forth with the performers when you were commissioned?

**NW:** Not really. I remember the *Omphalo Centric Lecture*, which I guess I kind of call my "Opus 1". It started off as a trio for bass clarinet and two marimbas and it went through various permutations. I think it came through that and through working with Michael Askill, and Graeme Leak, who was also a part of Synergy. I learned a lot by just seeing them play it and I'm sure they would say, things to me, like "don't use five mallets." They probably would have instructed me but it was a lot of picking up stuff on the job. Being a self-taught composer a lot of what I know just seemed to work. What I've picked up over the years has been from working closely with other instrumentalists and the early films scores. Being on the floor and listening to the musicians play through the music and getting their suggestions. There was a lot of learning by trial and error, probably more error.

**JD:** Do you have a background in percussion yourself? Do you have an inventory of percussion instruments?

**NW:** No. When I first started mucking around with writing, I formed this jazz-rock group called the Magic Puddin' Band. We had this great drummer named Greg Sheehan. He used to take me aside and teach me all his rhythms and would play me a lot of African balafon music. He was a bit of a teacher or guru in a sense. He actually had a lot to do with developing my interest and awareness of the way rhythms work and the mathematical ways of breaking them down. When he formed a percussion group called Utungun Percussion, they were a pretty interesting group of full-on jazz-rock players who played stand-up kits and with chops to burn. He invited me to play

bass drum and I learned a lot from working with these guys. Being given a simple bass drum part and having to sit on it for an hour—having it locked down nice and tight.

**JD:** In 2004, Synergy released a CD titled, *Omphalo Centric Lecture* with two versions of the piece, the original and the long version. The long version has a lot of layered additional percussion. Were you involved with this?

**NW:** They asked me if they could do that recording and they released an EP with three different versions; a straight run and with added percussion. Soon after they asked if I'd mind if they could didgeridoo add to the piece for a concert with William Barton<sup>242</sup>, and I said, sure, why not. You guys just go for it. At the last minute, I thought I'd go to the concert, and William is notorious for not showing up to rehearsals. They did the concert on no rehearsal. I believe they told William to start with a didgeridoo cadenza and when the marimbas start, maybe just stop. And so they started playing, it's in the wrong key, he played through the whole piece! Then when the marimbas stop, he kept going! It was just bizarre. I'm sure he had no idea what he was supposed to do. That was one instance where the free interpretation went a little far.

**JD:** Regarding *Omphalo Centric Lecture*—towards the end of the piece, you have the percussionist drag beads or mallets across the bars. Do you happen to recall where that idea came from? I know that's taking us back even another five or so years before *The Invisible Men*.

**NW:** I think I can trace that. Have you heard the version before, before the full marimba version, the version that followed the two marimba and bass clarinet version? There was a version soprano sax/bass clarinet, percussion, and electronics.

**JD:** I have not.

**NW:** Would you like to?

**JD:** I would love to!

(Westlake searches through audio files on his studio computer)

**NW:** I found the recording, James, from 1984,

(He plays the track)

**NW:** It sounds so weird! We had originally performed it with two marimbas and bass clarinet, but then I performed it with Michael Askill as a duo. Do you remember the DX7 synthesizer?

**JD:** Yes, I do. From the early 1980s?

**NW:** Yes. I used to have this rack, that could hold like 8 DX7's in it and we used to program them. We had all these weird percussion noises and when I listen back now, I can see why it

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<sup>242</sup> William Barton is a well-known didgeridoo performer in Australia. <http://williambarton.com.au/about> accessed 1.10.15



didn't really last. You know how all the other synthesizers—Moog become classic? Not the DX7. No one wants that!

**JD:** It'll cycle back, don't you think?

**NW:** Maybe.

(Both laugh while the recording continues to play).

**NW:** I'm playing the soprano sax and Michael is playing the glockenspiel and marimba. Those weird drums are DX7 drums.

**JD:** I love it. And you consider this your Opus 1?

(Music still plays in the background)

**NW:** Definitely.

**JD:** This piece has been performed an unbelievable number of times for percussion quartet and virtually every university in the United States.

**NW:** We get so many purchases for schools that I wish we kept track. It's just ridiculous.

**JD:** Through social media and the Percussive Arts Society, I see my colleagues post their percussion ensemble programs and you see this piece all the time. I love the work. And I love the story behind how you found the Paul Klee print in a ditch!

**NW:** Yes! (Laughs)

(The recording continues to play)

**NW:** We recorded this version and played it a few times while doing the duo thing. Then Michael said if you're doing a concert for Synergy, why don't you do it for 4 marimbas? And so I, I should say we, reordered the structure and I re-arranged it. That's the version that students play

**JD:** And that little bead thing towards the end?

**NW:** That's (forwards the recording towards the end of the track) an electronic effect. It's kind of like flying bubbles.

**JD:** It's interesting the discussions I've had playing in different ensembles throughout the years regarding this. Everything from "it must be the beads of a rosary" to another person insistent on a particular set of beads acquired in Africa.

**NW:** That's great and it's different every time. I was thinking, how can I make that sound on a marimba? And I thought drag the mallet over the marimba bars. Maybe that will work.

**JD:** I have a few specific questions about *The Invisible Men*. The dancing skeleton, was that inspired by the Saint-Saëns, the xylophone solo in *Danse macabre*?

**NW:** I think it would have to be, wouldn't it. I'd be lying if I said it weren't.

**JD:** You have these thirty-second note marimba flourishes where you provide the starting and ending pitches but with a different note head. Are those just suggestions or are those specific pitches?

**NW:** They're just suggestions.

**JD:** You mention on your website the film was found in the Australian National Film and Sound Archive and was used by a performing family, The Corricks. Do you know how it was incorporated into their performances?

**NW:** No clue.

**JD:** To accomplish the breaking glass, do you happen to remember what Synergy did?

**NW:** I do. They had a garbage can with beer bottles and they threw them into the can. And they miked it up.

**JD:** They miked the garbage can?

**NW:** Yes. Everything was miked. They were trying to take Synergy to a new audience and so it was kind of like a rock and roll venue. I don't know if any of the rock and roll people ever actually came out but Synergy had a pretty good following anyway. They had the whole thing miked up with a big PA system and a big screen for the movie.

**JD:** This past December, my student grip triggered effects like the wolf whistle with a sampler. (Phrased with the inflection and body language of a question)

**NW:** That's great! And the glass as well?

**JD:** Yes. The glass was triggered, the wolf whistle, and the hand claps, to get the volume balanced.

**NW:** I like that. That's great. I bet it sounded great.

**JD:** I've certainly met composers that have a 'there's one way to do it' mentality and it seems that you're open, in this case, to doing things differently?

**NW:** Well, I trust percussionists because they're really inventive and they always have their own solutions. You guys are hungry for repertoire. You're always adapting things and sort of making things work. I think there's more than one way, of strangling a cat. Isn't it more interesting if it sounds a bit interesting each time and everyone puts there own stamp on it? So, why not?

**JD:** You had mentioned, you basically wrote *The Invisible Men* in just a matter of days?

**NW:** I don't remember exactly. Not as quickly as that. Maybe a couple of weeks. It was between concerts so I had to fit it in, and that was back in the day. I was trying to keep two careers going. I always found that with playing the clarinet, I would have to practice a lot because I had to keep the chops. I could never really take a lot of time off from playing. With two lives, I had to write quickly. Sometimes maybe quicker than I should have! (Laughs)

**JD:** I find it interesting you've only seen *The Invisible Men* performed once—at the premiere.

**NW:** Yes! I'd love to see it again.

**JD:** Has a commercial recording been a consideration?

**NW:** That would be great!

**JD:** There's the requirement of limited performances in which the film is sent before the performance. Would that be an issue?

**NW:** There's an agreement with the Film and Sound Archive. They don't want any money, just acknowledgement.<sup>243</sup>

**JD:** Can I ask you, and this doesn't necessarily have to just apply to *The Invisible Men*, but when you're sitting down with a film, do you first take notes and your general thoughts? What's your process?

**NW:** *The Invisible Men* is really kind of a separate thing or a different headspace. When working with a feature film, there's so much to take on board. There was a film release just a few weeks ago called *Paper Planes* and I wrote the score last year. I was working with the director and the first thing he said to me was he loved my work and would love it if I could work on his movie. What he want was an old school, full, lush orchestral score. Something that maybe goes back a bit in time and takes you back somewhere.

That immediately puts you in a particular frame of mind and I was able to creep in a bit of percussion into the score—some taiko ensemble and other stuff, which is interesting. It was made on a really tiny budget and we all thought no one would go see it. It went to number one in Australia the week it was released.

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<sup>243</sup> We discussed this later away from the recording device with Jan, his wife and business manager. She seemed to think it would be possible to negotiate with the Australian Film and Sound Archive and offered to put me in touch with the proper individuals. She also mentioned the only "authorized" copy of the performance film maintained in the United States is in the possession of "a Professor Gary Cook."

The story is about this kid who goes to Japan to participate in the paper plane championships, so we have a taiko ensemble. But the rest of the score is very traditional in a kind of a John Williams style—melodic and lush.

I was working very close with the director so we identified the scenes he wanted music for. We had a spotting meeting and worked out where the music would start and stop. Then I was left to go work on my own devices and come up with some thematic ideas. I would record the score electronically, synch it with the picture, and send the director a QuickTime movie with the audio in it. He would then respond so it was kind of a “to and fro” thing for every cue and mostly we were on the same wavelength.

He loved everything I sent him and it was really just a matter of fine-tuning it a bit. Maybe it’s going a little too long here or needing to extend more for this bit here. He was one of those directors that didn’t micromanage. Some directors want to have a say in every note, which is a little bit silly. He was like, “you’re the composer, you know what you’re doing, and of course I want to oversee what you’re doing, but please head off and do your stuff.” That was a bit more relaxed than normal and I thought this worked out pretty well.

For *The Invisible Men*, I thought, ‘great no director, I can do whatever I like and make a really great percussion score.’ I kind of liked the vaudevillian aspect of the movie. It lends itself to a comical/crazy sort of a score because it’s got a manic energy about it and it’s a strange idea—very intriguing. It has magic and the chase—it has everything!

**JD:** And the dancing vegetables at the end. What’s your take on that?

**NW:** That’s crazy. I have no idea. Maybe it’s a French thing. I had actually seen graffiti with a human body with cabbage head in France. I thought maybe it was a phrase, like “oh he’s a cabbage head.”

**JD:** I’m trying to get to the bottom of that so if I can, I’ll let you know.

**NW:** It’s pretty weird and very zany. I just loved the zaniness of it and once I got started I couldn’t stop. It was a lot of fun writing and I wanted it to be entertaining and challenging.

**JD:** It’s so much fun! I’ve been through and tried to notate every cue you caught which is virtually everything! In addition to the sound effects and things of that nature, there seems to be thematic material—reoccurring riffs. Are there particular themes that you intended?

**NW:** I didn’t set out for that.

**JD:** You didn’t really have a leitmotif for each thing?

**NW:** No, maybe I should have. Structurally it could be a little more cohesive but it was just kind of a free form thing—intuitive. I was pretty relaxed with it and maybe should’ve been a little more aware of the structure. I think if I was doing it now I would be. Again, because I was playing the clarinet and had gigs to prepare for I was like, okay I have to write this piece in a few

days and I have to start practicing for the concert next weekend. I wasn't quite as devoted to it as I might be now so it was kind of, whatever comes to mind—just do it.

**JD:** When I tell people about this piece for silent film and percussion, people automatically think “vaudevillian,” cue sheets, or ragtime, but not specifically notated work, and certainly don't expect it to be, as you allude to and I believe in a Gary France interview, you called it Foley writing.<sup>244</sup> It is really nice that is not “vaudevillian” in the sense that it doesn't sound like its from that era. It flows with the zaniness. It's great!

**JD:** To a different topic—I imagine you're constantly hit with the possibility of commissions but your scheduling is full with other projects. However, might you have potential percussion-only projects in your future?

**NW:** Synergy has talked about it but since Michael Askill left them I haven't really had that much to do with them, unfortunately, as the personnel has changed since Michael's era. They're great people, and I've worked with them all in orchestras and other settings but as a group, I haven't worked with them. Tim Constable, the current artistic director has approached me a few times but it just hasn't worked out.

**JD:** Your name comes up in virtually every discussion I've had regarding commissions but with your schedule, it seems unlikely anytime soon. Although it was interesting to see *The Hinchinbrook Riffs* added to your catalogue.

**NW:** That was originally a guitar piece. I think it was Rebecca Lagos<sup>245</sup> who said it would be great on marimba. So I altered it a little bit to make it more marimba friendly, with just few little changes—nothing structurally, just voicings and things. She recorded the piece but it hasn't been commercially released.

**JD:** You wrote your percussion concerto, *When the Clock Strikes Me* for her. Has a recording been released?

**NW:** No, it's been performed three times in Sydney and it's one of those situations where I really do go crazy with the instruments.<sup>246</sup> I think that may be one of the reasons it doesn't get played.

**JD:** From what I've read in articles and various sources, you've gone through a change in philosophy with your writing in recent years. Has that impacted your percussion writing as well? The scoring in your *Requiem*<sup>247</sup> is beautiful and the percussion writing is simply gorgeous.

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<sup>244</sup> Gary France interview of Nigel Westlake, titled “The Percussion Music of Nigel Westlake” and found under articles <http://www.rimshot.com.au/>

<sup>245</sup> Principal percussionist in the Sydney Symphony Orchestra

<sup>246</sup> *When the Clock Strikes Me* solo part is scored for xylophone, 5.0 octave marimba, crotales, 5 Peking opera gongs, 6 pitched octabans, 2 almglocken, 6 Thai gongs, 9 pitched singing bowls, 6 pieces of metal junk, splash cymbal, crash cymbal, kick drum, concert bass drum, large tam tam, and a spring drum

<sup>247</sup> *Requiem* refers to his work *Missa Solis: Requiem for Eli* for symphony orchestra SATB Chorus and male treble solo. This piece is in memory of his son, Eli.

**NW:** I haven't written percussion-only works for quite a few years so I guess the percussion in the orchestral context is something different. You treat the beast a bit differently. You don't want it to overpower the orchestra or the delicate textures and colors. It's very easy to come in with a sledgehammer and annihilate the whole sound wall. So I guess those particular pieces, the *Requiem* and *Compassion*<sup>248</sup> have been much more orientated towards an orchestral percussion section and an orchestral percussionist sensibility. Even though I still like to feature percussion, it's done so in a way that compliments the rest of the ensemble and the structure of the work.

There have been a few opportunities recently to write some more percussion ensemble work but I just haven't had the time, unfortunately. I might approach writing for percussion-only quite differently now. I look at a lot of my early pieces like *Moving Air* that are very aggressive with a lot of youthful testosterone—real driven—and think I'd probably be much more retrospective. I'd try to work for a bit more depth, a bit more musical spirituality, if you like. I'm pretty sure I'd approach it differently now.

**JD:** Speaking of *Compassion*, that work and your *Requiem* are absolutely beautiful.

**NW:** Thanks. I wanted to make both as good as I could so instead of finish them up and move on to the next thing, I took the time and tried to be a bit more careful.

**JD:** You bridge back and forth from film scoring and concert settings. Is this a challenge?

**NW:** I hadn't done a film for a long time. The last one I did, before *Paper Planes* was, I believe, 2006. That was *Miss Potter*, which I don't think did all that well in the States, but it did well here and in the UK. In 2008, we had this terrible thing. We lost our son. I couldn't get back to writing for a while. The idea of doing a film, because films can be very stressful...you've got to be really careful how you choose.

I just wasn't ready for any sort of stressful situations and I really thought, 'well I'm probably finished with film now. I don't see myself doing anymore.' I've been through a few situations where it's actually become quite traumatic—the whole film process. You get distributors coming in and taking over the movie and they want to sack you but the director doesn't want to sack you. The Hollywood guys, they deal with that stuff all the time and hats off to them because I don't know how they manage.

I wasn't going to do a film until the right one came along, and *Paper Planes* just seemed to be a nice one to ease me back into that world. Particularly with the director, Robert Connolly. It was a really excellent challenge. He owned the movie and wasn't accountable to any other big producers or distributors. The buck stopped with him and I was dealing directly with him. I thought, 'okay, that's a good situation. I can manage that.'

When the director loses control and other people come in, as in *Miss Potter*...Harvey Weinstein came in and didn't like what I was doing. So he employed his own composer, Rachael Portman, and commissioned her to write a whole score for the movie. Both the scores were recorded and

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<sup>248</sup> *Compassion* refers to a collaborative work with singer Lior. *Compassion* is a seven movement song cycle for vocalist and symphony orchestra.

then they had to choose which piece of music they were going to use for each scene. By then they had like, twelve producers because they couldn't afford to pay the actors. You know Renee Zellweger and Ewan McGregor? They became producers and all of the producers had the final say on the music. When they're doing the movie mix, they would send out two QuickTime versions of each scene, one with my music and one with Rachael Portman's music. Each producer had to vote and mine won all of the votes except for three cues. So Harvey lost out!

That sort of stress is ridiculous. It really undermines the creative process. I think it's very destructive in many ways.

**JD:** You've been doing more conducting?

**NW:** Yes. It was with the *Requiem* when I got involved with conducting. It was really a great honor, a piece that meant so much to me. I had done a little bit of conducting up until that point and when I look back at some of the videos and go 'oh man, that was awful!' (Laughs). So I took lessons. I went to the guy that conducted the premiere of the *Requiem*, Benjamin Northey<sup>249</sup> at the Melbourne Symphony Orchestra, and he took me on. He's so helpful. He's become my conducting mentor so whenever I have to conduct anything, I go have a session with him. He's really cleaned up my whole act and got me on track. Conducting is something I realize is now a part of my life.

#### **Notes on the interview:**

We spent the remainder of our visit discussing rescoring feature film soundtracks for symphony orchestra, conducting live orchestra with film—an ever increasing trend with symphonies, and his possible engagements in the United States. We also discussed his studio setup, including electronics, speakers, and artwork, his ever-increasing travel schedule, and my impending trip to the Australia National Film and Sound Archive in Canberra the following day. Westlake walked with me back to the train station and we discussed everything from Sydney's architecture to films. He was particularly interested in my take on the film, *Whiplash*, which to that point I had not seen. The Westlake's were incredibly gracious to make arrangements to meet between their busy schedule and welcome me into their home.

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<sup>249</sup> Northey is the Associate Conductor of the Melbourne Symphony Orchestra.

**Appendix C: An Interview with Meg Labrum,  
General Manager and Senior Curator  
National Film and Sound Archive  
March 2, 2015, Canberra, AU**

**ML:** The film was only one part of the Corrick Family performance. They began in the late 1890s as a performing family. There was a pair of them and eight kids, and there were singers and orators and comics and so on in the family. With the coming of film, they began with an ordered bundle of films from, I think it was an evangelical group, around about 1900. They began in New Zealand, but they were really set up in Australia. By about 1904 they were touring and they toured up to 1914 when the father died. They toured all around Australia and they went through the Middle East to Europe, but once there they had a year or two where they traveled Europe and a couple of the daughters who were very good singers got some training there.

**JD:** Oh! Okay.

**ML:** The parents were musicians themselves. The father was a music teacher before all this got started, so they were promoted as wholesome middle-class entertainment that was appropriate to the worthy, good folk of the world. There was one boy in the family and he became first projectionist, and they then got a camera and actually did some films themselves. We only know of a couple of the films that they were making. Only a couple of those still exist, but they were sort of promotional things: come to the corner of such and such a street and at one pm today to be filmed, and see yourself on the big screen tonight. They filmed things like the Easter show and various locals all around the country. It's a fabulous story. I think there's a film in that story. The film collection they built up grew from the first very little bundle they bought from the evangelical people. They were buying what was really popular and what was coming into the country at the time, so there are some films in the collection that have been identified as being the last known copies anywhere in the world. There's a British film from 1904, called *Living London*, although I think now there is a challenge to that title, but it is actuality footage of life in London in black and white. It is beautiful.

**JD:** I think that was in the documentary briefly.

**ML:** Then there are a lot of these French Pathé fantasy films with the color, and ladybugs turning into people and so on...

**JD:** Dancing vegetables...

**ML:** Yeah, yeah dancing vegetables.

**ML:** But yeah, there are a lot of those sorts of films. There's some amazing actuality films, like the 1906 earthquakes in America in San Francisco. They are these big panorama films across the board.

**JD:** And they had those as well?



**ML:** Yes. The collection that was being built up was quite a canny mixture of news across the board, entertainment, education, travel films-like the zoo in Paris, or from their trips going through the Middle East. They have footage of the boats on the Nile and things like that, although they are deteriorated. They got a lot of trick photography films as well. Lots of stop motion. Not so much drawing animation as much as manipulation of the image. Really lovely stuff. So, there are about 135 films total. Not all of them are complete, but all of them are now fully preserved and researched. We've been representing them at the Pordenone Silent Film Festival in Italy each year. We finished that in 2013 with all 135. One of the things is exposing musicians to those sorts of films and seeing the different sort of approaches that people have. It is quite amazing. We've had a number of programs of Corrick films as part of our previously touring screening programs around the traps, and the sort of accompaniment we've had has ranged from traditional piano improvisation to local bands who've come together. I haven't been to all of those, but it's amazingly different. Sometimes quite hokey, but really effective for the community. We're still looking at the possibility of exposing the Corrick Collection of films to musicians so that they can start to think in terms of that kind of vision, and think about how they might adapt to it. We're also thinking on the school front there's something there that could get people inspired as well. There's been a big story with the family: They retired when the father died in 1914 and by that time a couple of the girls had gotten married so it was starting to get more difficult to travel around. We've got a huge collection of the photographs they took throughout their career and on their travels.

**JD:** Yes, there were some in the documentary.

**ML:** Yes.

**JD:** You mentioned they would go into the public, unlike many other touring groups?

**ML:** Yes. Once the family settled, their base was in Tasmania, so most of the many kids lived out their lives in Tasmania. The collection came to us from Leonard's son John, the one boy in the family. That began in the sixties and really stretched out over a couple of decades in coming to us. They kept a lot of their films in the family garage, and then John realized that keeping nitrate film in the garage was not a great idea, but he had actually set up his own cinema in there. One of the sad things that we don't have is the actual scores that they would have used.

**JD:** So they did have scores?

**ML:** Well, they had masses of music because they were performers, and they still, up to the twenties were doing some accompaniment to silent film in Launceston where some of them were based. The Queen Victoria Museum in Launceston has got quite a lot of the papers that came from the family, so it's another fabulous collection that we lust after. We have formed a close relationship with them. They hold the scrapbooks from the family, which is basically the story of the travels and the promotion of the Corrick Family Entertainers...it's all there. We've got photocopies of some of that, but we've got the films. The actual original projector is down in Launceston, and there are also some things in between. Leonard stayed associated with music and cinemas up into the 1920s. He was also very handy with his hands, so he being a car mechanic at the same time. But he ultimately went to the ABC Band from Tasmania to play the

clarinet, left his family and kids in Tasmania, lived in Sydney as part of his ABC band for the broadcasters in those days, and came back once or twice a year for the rest of his life. It's a big big story. Amongst the daughters there was the beautiful daughter, the slightly crazy daughter, the ones you didn't marry, the ones who did marry...

**JD:** This *would* make a great film.

**ML:** It's a really lovely story, the whole thing, and it's still coming out. Marrying up the films with what's in the papers is a project someone will do someday day.

**JD:** This film's not available (the documentary)?

**ML:** No. We've produced it but we're still trying to get it broadcast at the moment. We're looking at probably doing a release at some point.

**JD:** You've mentioned that film was just part of their show. What else would take place during that show?

**ML:** There would be poems, dramatic scenes, all of the kids were musicians and/or singers so a lot of choral work. A lot of the promotion of themselves we've actually seen through scrapbooks. Is it you're a musician? Is that your business?

**JD:** Yes. I teach at a university in the United States and I'm a percussionist. I toured in a percussion quartet and we played Nigel's *The Invisible Men* and some of his other works. I had not met him, but I've wanted to meet him so I came down and met Nigel yesterday. I had some other questions for him and then started talking about the film from a pedagogical standpoint. I find his piece brilliant. Have you seen what he does to it? What he's done is brilliant. The training that my students get when we do *The Invisible Men* is unique for that setting, and from a pedagogical standpoint. I think because he's scored everything so specifically, every single cue in the film is perfect, instead of just a cue sheet and lightly adding music to the film.

**ML:** Something to keep in mind is we are always interested. Two things, I am the senior curator generally, at the moment I'm pretending to be general manager. But we're very clear about the Corrick Collection being as exposed and exploitable as possible. We worked through the Pordenone Film Festival. We connected with a lot of the American film actors and any sort of interest in being able to incorporate some Corrick material in teaching or performance or whatever, we are really interested in the possibilities. That said, there is also a vast amount of wonderful silent films that you can get at in the US as well.

**JD:** However, this whole process started with my interest in Nigel's music and I happen to love Australia.

**ML:** You can get some more specific information about the titles in the Corrick Collection through our catalogue online. It's slightly obscure but you can find it there. As I said there are about 135 films, all of them are short, fragments- a couple of minutes. The longest one might be about twelve minutes long.

**JD:** *The Invisible Men* is eleven minutes.

**ML:** Some of them have the wonderful tints and tones, a lot are in black and white, and some of them are incomplete. One of the jigsaw puzzle challenges we had is that with a lot of the films the talking tails were being chopped out or burnt through our projection way back when, so identifying them and being able to make things in sequence whether you're at the beginning or the end is a challenge. That's part of the wonder of watching the guys in Pordenone because the pianists will literally be improvising as they're watching during the whole thing, and they have been marvelous.

**JD:** You said the festival is in Italy? What time of year?

**ML:** It's in October. Pordenone is about an hour's train ride from Venice up in the north. It's just great, you've got musicians and film people and film archives and Italians all around you and it's delightful. I've been going for many years and it gets better and better.

**JD:** That sounds amazing. The whole multimedia aspect is certainly of interest to me.

**ML:** One of the interesting things that happened just a couple of years ago was a theater company called *Legs on the Wall* in Australia used some of the Pathé images as a basis for a city festival called *My Bicycle Loves You*. They incorporated some of the actual footage, but they turned it into a part of the whole evening's performance with acrobats and such. I can't even describe it but it was just wonderful. John Corrick was there. John's now a frail eighty-something and he was just ecstatic seeing the collection coming alive because it was kind of like an extension of what the Corrick Family Entertainers were doing way back when.

**JD:** Is there a primary source on that family, or did you sort it all?

**ML:** We've done some of it, and the Queen Victoria in Launceston is the other one. There's a whole lot of opportunity for publication.

**JD:** There's not necessarily been a family biography or story?

**ML:** If you go online there have been some family trees that have been done, so you'll see the different arms of the family. If you think of those eight kids branching, and there have been different things written by different parts of the family. As I've said, we've got some of the big scrapbooks or copies of the big scrapbooks here. You're just passing through now, so remember us and get back in touch because we're hopefully going to put more and more of it online down the trail.

**JD:** Every chance I get a try to head down here now. I scheduled this to meet Nigel, to ask some questions about the Corrick family, and put together a paper on *The Invisible Men*.

**ML:** The interesting thing is that Nigel got into *The Invisible Men* before we really launched the collection into the public eye, so actually I think I should get back in touch with him because he's one who could do some fantastic new things with it.

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Date: May 2016

## **Curriculum Vitae**

Graduate College  
University of Nevada, Las Vegas

James William Doyle III

Home Address:  
208 Edgemont Blvd.  
Alamosa, CO 81101

### Degrees:

University of Central Missouri  
Bachelor of Music Education, 1998

Louisiana State University  
Master of Music, 2000

Document Title: Original Chamber Percussion Works for Silent or Silenced Film in Live  
Performance

### Examination Committee:

Chairperson, Timothy Jones, D.M.A.  
Committee Member, Dean Gronemeier, D.M.A., J.D.  
Committee Member, Kenneth Hanlon, D.M.A.  
Committee Member, Anthony LaBounty, M.S.  
Graduate College Faculty Representative, Sean Clark, M.F.A.