

Recreation and Redefinition:
An examination of the transcription and evolution of
a cappella choral works transcribed for Wind Band.

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Abstract

Transcriptions make up a significant proportion of the wind band repertoire. Early arrangements of orchestral works, folk songs and marches simply sought to replicate the sounds of the original scoring. By the early twentieth century, many transcriptions sought to also allow the wind band to showcase its unique instrumentations and timbres.

Whilst extensive research on re-orchestrating within the wind band medium is readily available, the purpose of this document is to discuss techniques for orchestrating from a choral setting, not between different instrumental ensembles and band. Although there is information available on techniques of reproducing a solo voice within a wind band's instrumentation, there is little research on successful techniques in replicating a homogenous a cappella choral work in a heterogeneous wind band setting.

This study aimed to identify some of the techniques utilised by three contemporary composers and their transcriptions of their own choral works for wind band.

The investigation involved analysis of both the choral and wind band score, and comparison of similarities and differences in the transcription, with significant focus on the re-organisation of melodic material and the use of timbre as a compositional device. Results were compared to existing research on choral replication and determined that whilst the works are linked via similar material, the transcription has effectively redefined the original, creating a new work in the wind band repertoire.

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PROJECT SUMMARY

This project will investigate compositional techniques employed by three significant composers of wind band music in their own transcriptions of original choral works for wind band, through musical score comparison and investigation of orchestration. Whilst previous studies have highlighted parallels between the choral and band realisations of the same piece, they have primarily focused on how composers and arrangers have recreated a choral effect. The aspect of how the transcription has expanded and redefined the composition from the original is largely unexplored. The project will produce new data on the use of timbres in addition to instrument grouping and selection in transcriptions of a cappella works for wind band, offering insight into the use of timbre as a compositional device and its impact on audience and performer. Such data will have practical applications for composers and arrangers, including identification of orchestration techniques and unique timbral groupings of instruments that can be utilised when transcribing a choral work for wind band. Conductors will benefit from this scholarship, in assisting them with identifying timbral groupings and other musical elements found in the wind band version which are not found in the original choral work, contributing to more effective performance practice and rehearsal techniques.

CHAPTER ONE: AIMS AND QUESTIONS

The research project will examine the orchestration techniques utilised by Eric Whitacre, Frank Ticheli and Ola Gjeilo in their transcription of their own choral works to settings for wind band, with a focus on exploring how timbre is used to successfully move the work from one medium to another. The three works utilised for this research (*Lux Aurumque*, *Rest* and *Serenity*) are representative of contemporary choral writing. Each work displays numerous instances of extended tonal harmony, close voice writing and multiple part divisions within the initial SATB voicing. All three wind band settings display variations from the source material. Each selected choral work is a musical setting of commissioned or previously composed text with multiple variations of voice groupings.

The proposed research project will address the following questions:

- What are the orchestration techniques used by composers and arrangers for successful recreation of a homogenous choral work for a heterogeneous ensemble such as the wind band and the resulting distribution of melodic material and timbral groupings?
- What are the overarching parallels and differentiations between the original choral composition and the wind band transcription?
- Are melodic lines simply assigned to an instrument based upon its original pitch or is the original material manipulated via octave displacements to expand upon the original composition?

- Is the ensemble treated as a whole or are sub ensembles present within the new setting?
- How has the text of the original choral work influenced instrument selection and articulations for the band transcription in order to retain the original intent of the text?
- Can the absence of text affect the development of the original choral material?
- Does a particular instrument or group of similar instruments dominate the redistribution of the choral material?
- Are choices of timbre and instrumentation aimed to replicate the original homogenous setting, or are choices made for distinct and conflicting timbres of differing instruments to be heard at the same time?
- How have the resulting changes of timbre, form and other differentiations redefined the work as a stand-alone work for wind band?
- Can timbre be mapped as a graphic chart for assistance to performers and conductors to visually determine timbral dissimilarities from the original choral work?

CHAPTER TWO: LITERATURE REVIEW

Wind Band Repertoire and Transcriptions

Transcriptions made up the majority of the repertoire of wind bands throughout America and Europe in the early twentieth century. Initial emphasis was on orchestral transcriptions (comprising of major works and opera overtures), marches, light music such as waltzes, polkas, patriotic tunes and popular folk melodies (Battisti, 2002). Due to the high cost of orchestral concerts and opera, many band performances offered the general public opportunities to hear music in the pre recording era. Transcriptions for wind band not only allow for popular music of all genres to be performed more regularly, but for composers and artists to have their new music be performed and listened to by a much larger, widespread audience. John Philip Sousa (1854-1932) was an admirable example of this trend. With his band performing often throughout its thirty-nine year existence, Sousa exposed thousands of Americans to the music of Richard Wagner (1813-1883), Gioacchino Antonio Rossini (1792-1868), Richard Strauss (1864-1949), Sir Edward Elgar (1857-1934), and other classical composers for the first time through transcriptions, followed by encores of his own music (Schoenherr, 1998). Paul E. Bierley states "...it is well to remember that Sousa bought classics to dozens of cities and towns where the sound of a symphony orchestra had not been heard" (Bierley, 1984). Bierley continues by making note of the importance of Sousa promoting classic works more than any symphony orchestra of the time (Bierley, 1984).

Numerous composers used wind ensembles of various instrumentations prior to the twentieth century, yet these were largely restricted to ceremonial roles and light

entertainment in outdoor settings, leaving the concert halls reserved for the highly regarded symphony orchestras. Conversely, European wind “octets” (often described as “Harmoniemusik”) of the eighteenth century have been described as existing predominantly to perform concerts and served no functional, military or entertainment purpose, serving as a predecessor to the contemporary wind band (Battisti, 2002). At the apex of Harmoniemusik’s popularity, publishers and composers alike held transcriptions of original works in the same importance with great composers such as Wolfgang Amadeus Mozart (1756 – 1791), Carl Andreas Göpfert (1768 – 1818) and Ludwig van Beethoven (1770 – 1827) overseeing the transcription process (Ross, 2015). Orchestral composers such as Hector Berlioz (1803-1869), Wagner, Gustav Holst (1874-1934) and Igor Stravinsky (1882-1971) were all leaders in their use and advancement of wind instruments, taking advantage of their unique colours and capabilities (Fennell, 1954).

The 1789 National Guard Band in Paris was deemed as the first modern wind band (Goldman, 1961; Jagow, 2007; Rager, 2013; Rhodes, n.d.). Differing from the numerous smaller chamber groups, this was the first true division between band and orchestra. The French Revolution then led to the advancement of the wind band, with many large bands enjoying success. With new instruments being developed and existing ones improved upon, original music soon became more readily available (Goldman, 1946).

The German wind band soon found influence and led to the formation of the British military band. Many of these bands were formed for ceremonial duties in addition to regular performances of popular tunes and orchestral transcriptions. (Adkins, 1931;

Rager, 2013). Since the death of Henry Purcell (1659-1695) until the emergence of Elgar, England was without a composer of significant international status (Rhodes, n.d.). With the formation of the Royal Military School of Music at Kneller Hall, composers such as Ralph Vaughn Williams (1872-1958), Elgar and Holst were commissioned to create new original works for the medium based upon its unique instrumentation (Adkins, 1931). A number of composers utilised British folk tunes. Holst's *First Suite in E flat*, for example, has since become a cornerstone in the wind band repertoire (Rhodes, n.d.).

In his book, *The American Wind Band: A Cultural History*, Richard K. Hansen depicts a significant change in the public's perception of the wind band at the commencement of the twentieth century in America. This was largely influenced by the formation of the New York Military Band in 1911, founded by Edwin Franko Goldman, and the establishment of the Eastman Wind Ensemble in 1952 by Frederick Fennell at the Eastman School of Music, University of Rochester (Hansen, 2005). Both ensembles commissioned well known and regarded composers to compose for the wind band with Goldman commenting on the desired "original repertoire especially designed for its particular capabilities" (Hansen, 2005). In addition to expansion of the ensemble's repertoire, these developments were designed to "help raise the standards of bands and band music" (Smith, 2002). Composers such as Williams, Holst and Percy Grainger (1882-1961) were some of first to respond to these requests. Grainger presented not only original music, but also transcriptions of the music of J.S. Bach, Fauré, Goossens, Franck, Sandby and Liszt, showcasing the wind band's increasing expressive possibilities (Battisti, 2002).

Transcriptions from all genres of music continue to make up a large part of the wind band's repertoire. For example, of the 157 pieces performed by wind bands at the 2014 Midwest Clinic in Chicago, 63 were transcriptions from a variety of original settings, equating to 40.1% (The Midwest Clinic, 2014). The later part of the twentieth century, however, saw an increase in original music composed for the ensemble, largely from the influence of Goldman and Fennell's ensembles and the American School Band Movement (Battisti, 2002; Rhodes, n.d.). With the establishment of many band programs within schools, universities and communities, composers began to receive numerous commissions, expanding the repertoire significantly (Rhodes, n.d.).

Transcribing music for a different medium, however, can propose numerous issues for the transcriber. In *Music Arranging and Orchestration*, John Cavacas states, "I insist there is no ensemble more difficult to write for than a symphonic or concert band" (Cacavas, 1975). Due to the wind band's unbalanced nature when compared to the orchestra and the absence of the sustain and shimmer of both the high and low strings, the ensemble presents transcribers with many issues when attempting to recreate orchestral timbres and textures (Adkins, 1931; Cacavas, 1975; "What Is A Wind Symphony", 1998; Brinkman, 2009). Other concerns are the significantly diverse timbres within the wind band instrumentation, particularly with the inclusion of the saxophone family, and variations in size, balance and standard of ensemble. These issues necessitate that all transcriptions from other mediums must be carefully considered to accommodate logistical constraints whilst attempting to still fulfill the desired effect (Cacavas, 1975; Alder, 1989, Keenan, K. & Grantham, D. 1998; Brinkman, 2009; Gale, 2010).

Originally, orchestral transcriptions saw the violin parts rewritten for clarinets; however, the technique has now become unfashionable, as much research and experimentation has demonstrated that the timbre and idiomatic techniques of the clarinet vary greatly to that of a string section (Erickson, 1983; Battisti, 2002). Cacavas offers two alternatives for transcription, “shall I be as true to the original sounds as possible, shall I make it sound as good as I can for band?” Identifying issues for both alternatives, he suggests to only select those works that lend themselves to the band medium for transcription and to experiment with new orchestrations and sounds (Cacavas, 1975). Frank Erickson gives the following explanation of a more modern approach, “to consider the orchestra score as a general basis for the band piece, maintaining as much of the essence of the original as possible”. He notes that while the brass, oboe and bassoon can be duplicated closely to the original, the flute and clarinet families are vastly different from their orchestral counterparts, in addition to the inclusion of the saxophone family, that “string parts must be reconsidered completely” (Erickson, 1983).

The art of orchestration and arranging for wind band from a variety of different mediums has been well researched and documented. Transcribing orchestral and keyboard pieces for wind band has been discussed at length (Adler, 1989; Erickson, 1983; Kennan & Grantham, 2002; Lang, 1950; Nestico, 1993; Adkins, 1931), while orchestrations for the ensemble to accompany solo voices or choruses have also received similar attention (Berlioz, 1843; Rimsky-Korsakov, 1891; Adkins, 1931, Cacavas, 1975). There is currently, however, a limited amount of published papers relating to transcribing a choral piece for wind band. Whilst some research has focused upon elementary techniques such as unison octave doublings, expanding or reducing

instrumentation (Lang, 1950), and allocating voice parts to selected wind instruments based on timbre (Clappé, 1921; Adkins, 1931, Lang 1950), little of the vast amount of orchestration research demonstrates an instructional method for transcribing a choral composition to the vastly different medium of wind band.

Previous studies on transcription for voices have identified a number of key study points. Nathaniel Johnson, in his thesis on “Creation of historically informed transcriptions for chorus and winds of Franz Shubert’s *Mass in G* and Gabriel Faure’s *Requiem*”, identified five key elements of investigation to be taken into consideration when dealing with transcriptions originally involving voice:

1. Instrumentation
2. Key Center
3. Range/Tessitura
4. Individual Part Writing
5. Scoring

(Johnson, 2005)

Johnson has effectively identified fundamental components that are beneficial when investigating transcriptions from an a cappella choral medium to the wind band, providing the researcher with a firm basis for investigation and comparison.

Timbre/Tone Colour of the Wind Band

Whilst many treatises have been written on orchestration and the wind band's instruments, many identify the timbral features of instruments as individuals, not as an ensemble as a whole or in instrumental family groupings. (Berlioz, 1843; Rimsky-Korsakov, 1891; Clappé 1921; Adkins, 1931; Cacavas, 1975).

The influence that effective orchestration techniques can have on a transcription from a homogenous ensemble, such as string, brass or choral, to a heterogeneous sounding ensemble, such as that of the wind band, can be abundant (Miller, 2014). Whereas the former ensembles are designed by the nature of their instrumentation to blend their timbres together effortlessly, the latter has several contrasting timbre groupings within its instrument families, showcasing a unique sounding ensemble. Composer Percy Grainger was an advocate of the wind band, encouraging other composers to investigate and utilise the full possibilities of the ensemble's sound. He noted that the ensemble has considerable variety of tone colour, observing that "the brass section, lovely, noble and heroic as its sound colors are, has not the great variety and expressibility of a fully-equipped reed section, comprising complete families of each of the following groups: Clarinets, saxophones, oboe-bassoon group" (Gilles & Clunies Ross, 1999). Grainger was also a pioneer in the technique of elastic scoring, where he sought to create transcriptions of works with multiple variations of instrumentation, leading to each interpretation of the original to hold unique timbral groupings and sounds. This combined with Grainger's tendency to add to and manipulate existing works, saw many of these new transcriptions being designated as new works themselves (Fairfax, 1981).

Grainger's descriptions and examination of the wind band's numerous colours can be applied to the investigation of transcriptions from differing mediums to the wind band. They can assist in identifying the two versions similarities and differences, as found in the wind band transcriptions of Eric Whitacre's *Lux Aurumque*, Frank Ticheli's *Rest* and Ola Gjeilo's *Serenity*. When investigating transcriptions such as these, research can identify successful examples of the reassignment of melodic material and the use of colour to present the work either as a faithful reproduction or as a reimagination of the original piece. Grainger has commented on such orchestration techniques when compared to poor transcriptions "...often monotonous tone color of wind bands will give place to a kaleidoscopic variety of tone colors comparable to those in the orchestration Wagner, Stravinsky or Delius" (Gilles & Clunies Ross, 1999). Grainger himself made use of considered transcriptions of the same work for various ensemble settings utilising a technique called elastic scoring. Prime examples of this technique, but not limited to, are the composer's multiple settings of *Colonial Song*, *Harvest Hymn* and *Irish Tune from County Derry* (Thomas, 1991; Gilles & Clunies Ross, 1999; Bird, 1999).

Timbre has been the subject of numerous scientific studies involving sound waves, computer modeling and physiology (Nielzen & Olsson, 1989; Padova, Santoboni & Belardinelli, 2005; Hartmann, Saari, Toiciainen & Lartillot, 2013). These studies, however, focus heavily upon the science of tone colour, without much consideration to how changing timbre groupings within a work can ultimately redefine the piece. In comparison, tone colour is a commonly taught topic within primary and secondary education levels with the use of descriptive words that can, however, be considered

subjective due to the diverse responses that people have to different sounds (Glover, & Ward, 1998; Composer Tools, 2005).

Thomas O'Neal has researched the use of timbre as a compositional device in the wind band medium with focus on the impact of Paul Hindemith's (1895 – 1963) "*Symphony in B-flat*" and Karel Husa's (1921 – 2016) "*Music for Prague 1968*" (O'Neal, 1993). O'Neal's investigation explores the possibilities of the wind band with some identification of ensemble timbral grouping, however, these are explorations of original works and not of the transcriptions from different mediums. Arthur Butterworth poses the question of whether timbre is part of a composer's original conception and whether changing it via variation demeans or invalidates it (Butterworth, n.d.).

The German Fach system is an attempt to classify vocal timbre of a solo singer into different voice types. This system is restricted to solo singers, and whilst utilised worldwide, especially in Europe, does not represent the vocal qualities of the choral voice (Steane, 1992).

Previous studies on timbre have used discrimination and dissimilarity tests to understand timbre. More recent research has used emotion as a means to explore its effect on the response from listeners. The research has shown that emotional attachment to a work is closely related to timbre as both are complex, multi dimensional and subjective (Wu, Horner & Lee, 2014).

Further research has found that timbre is able to speed up discrimination of emotion categories (Peretz et al., 1998, p. 111-141). Additional studies have conveyed

comparable results in their study of similarities in emotional responses between short contrasting musical excerpts (Bigand et al., 2005, p. 1113-1139). Each study found that individual musical instruments possess features that are consistently recognized by listeners and assigned to emotional expression (Wu et al., 2014). Future considerations for the study discussed include exploration of ideas such as whether emotion varies with pitch, dynamic level, brightness, and articulation. Do these considerations change emotion in a constant way, or does it differ from instrument to instrument? (Wu et al., 2014).

There appears to be limited research and publications into the considerations and descriptions of the timbre of different instrumental groupings. This vastly unexplored field of study would greatly benefit composers, arrangers and conductors alike.

CHAPTER THREE: METHODOLOGY

This project will employ the research methodologies of score analysis and archival research.

The score analysis research will compare both the original choral score and the score of the transcription for wind band identifying overarching parallels and differences such as:

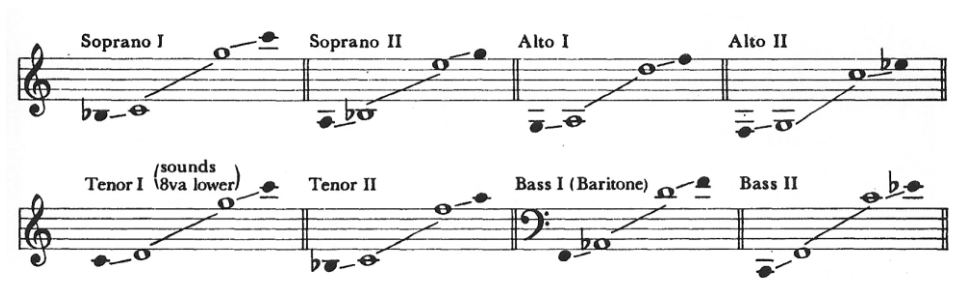
- Voice reorganization
- Instrumentation
- Range/octave displacements
- Key
- Dynamics
- Tempo
- Timbre and instrumental groupings
- Form (with the addition of new material)
- Text, its influence on idiomatic writing and word painting

Lang's vocal register classification of wind instruments (Lang 1950) and Ades' standard and extended vocal ranges (Ades 1966) are leading examples of existing research that will be applied to the project in order to gauge the authenticity of its findings. Below you will find figures of these classifications (see figures 3.1 and 3.2). In addition, historical musicology methods will also be utilised to examine the composer's compositional output, techniques and common musical traits.

Figure 3.1 Lang’s vocal register classification of wind instruments (Lang, 1950)

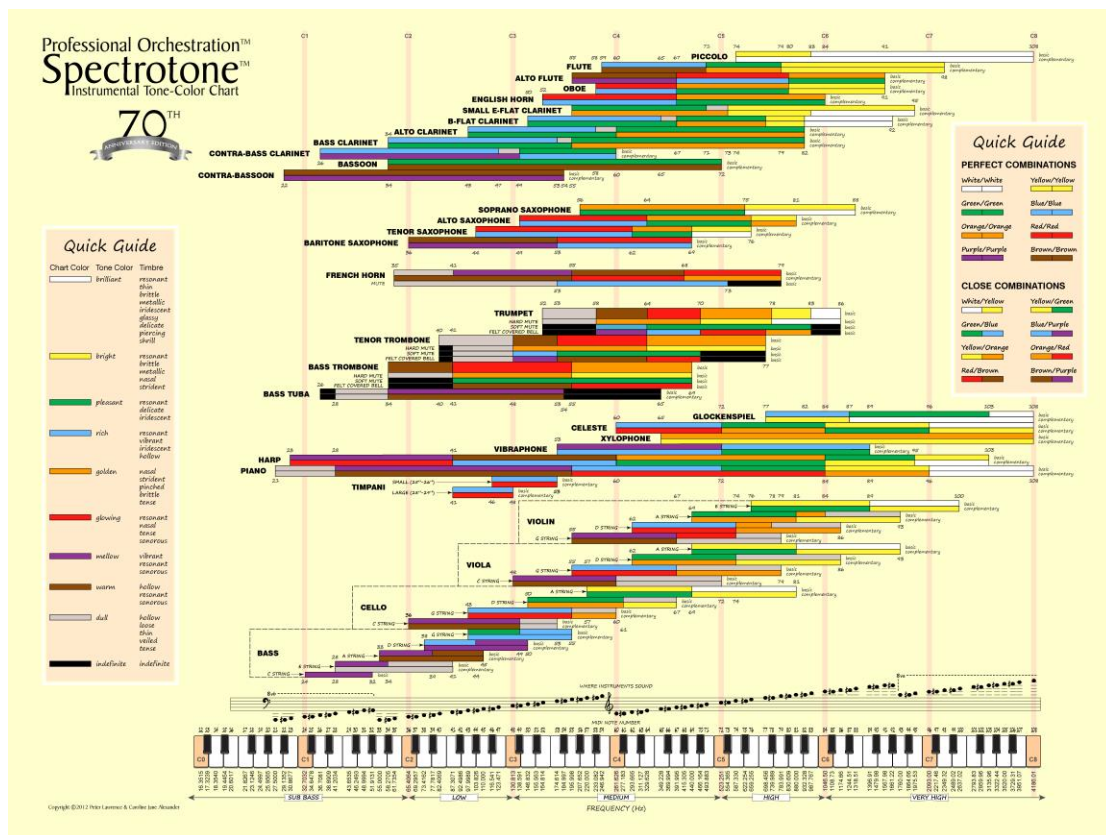
Instrument	Soprano	Alto	Tenor	Bass
Piccolo (C and D-flat)	A			
Flute	A			
Alto Flute	B	A		
Oboe	A			
English Horn	B	A		
E-flat Clarinet	A	B		
B-flat Clarinet	A	B	C	
E-flat Alto Clarinet		B	A	C
B-flat Bass Clarinet			B	A
B-flat Contrabass Clarinet			B	A
Bassoon		C	B	A
Contrabassoon				A
E-flat Alto Saxophone	B	A	C	
B-flat Tenor Saxophone		B	A	C
E-flat Baritone Saxophone			B	A
B-flat Bass Saxophone				A
E-flat Cornet	A			
B-flat Cornet	A	B		
Trumpet	A	B		
Flugelhorn	B	A		
French Horn		A	B	
Alto Horn (Mellophone)		A	B	
Trombone		C	A	B
Bass Trombone			B	A
Euphonium		C	A	B
E-flat Tuba				A
B-flat Tuba				A
Marimba	B	A		
Xylophone	A	B		
Chimes		B		
Steel Bells	A			
Timpani				A

Figure 3.2 Ades' standard and extended vocal ranges (Ades, 1966)



For this study, Arthur Lange's Spectrotone Chart (see figure 3.3) shall also be employed in order to identify each individual instrument's tone colour and to make observations on the similarities and differences between the two versions of the work.

Figure 3.3 Arthur Lange's Spectrotone Chart (Lange, 2012)



Qualitative research methods including observation of a variety of recordings of the works in question will also be applied to the study for further findings and clarifications. This will include the effect that the original voice settings and subsequent transcribed instrumental groupings have on both the performance and to the listener. Study of the desired effect in the absence of text will examine which groupings of instruments work cohesively when transcribing choral works for wind band.

CHAPTER FOUR: LUX AURUMQUE

The Composer: Eric Whitacre

Eric Whitacre (b. 1970) is one of the most popular and widely performed composers of the modern era with thousands of performances of his published works and worldwide sales in excess of 350,000 copies (Stewart, 2007). Raised in Reno, Nevada, his initial introduction to music was through piano lessons and playing trumpet in his high school marching band (Whitacre, 2017). Whitacre enrolled at the University of Nevada, Las Vegas, with the initial aim of achieving his Bachelor of Music Education (Fein, 2004). Here he was exposed to choral music for the first time and subsequently began composing for the medium without formal training. He subsequently studied at the Julliard School of Music in New York in order to gain his Master of Music degree in 1997, under the tutorage of John Corigliano and David Diamond (Hollinger, 2004).

Whilst Whitacre is probably best known for his choral output, he also has a significant output of orchestral and wind band music, with a number of his works recognised as standards of both the choral and symphonic repertoires. Choral works such as *Water Night*, *Cloudburst*, *Sleep*, *Lux Aurumque*, *When David Heard* and *A Boy and a Girl* have become some of the most popular choral works of the last decade. His wind band works such as *Ghost Train Triptych* (his first composition for band), *Equus*, *Godzilla Eats Las Vegas* and *October* have garnered significant praise from within the symphonic wind band scene (Fisher, 2004).

Whitacre's music has been described as "works of unearthly beauty and imagination, with electric, chilling harmonies" (Robinson, 2000). Much of his music makes use of pan-diatonic clusters arranged in steadily increasing or decreasing density. By splitting voices in his choral works as *divisi*, Whitacre achieves this growth and decay, with regular instances of 12 part with up to and including 18 part chords (Shrock, 2009). By his own admission, Whitacre always seeks to identify a "golden brick" in his compositions. This singular idea voiced over a "palette of colours" gives his pieces a feeling of unity, direction, purpose and a connection for the listener (USI Events, 2014; Eight, Arizona PBS, 2014). His works have, however, come under some criticism. A recent review of the BBC Proms 32 saw his music described as a "long exercise in sonic paint drying". In addition to his output critiqued as "the slick yet hollow package", it was remarked that a number of Whitacre's signature techniques "overstayed its welcome" (Allison, 2015). David Vernier echoes Allison's thoughts commenting that many of Whitacre's works become belabored and he is guilty of forcing ideas already exhausted (Vernier, 2012).

Whitacre frequently uses quartal, quintal and secundal harmonies. He is a proponent of unusual chord progressions that regularly display an avoidance of the tonic chord for extended periods of time and the weakening of the dominant chord via suspensions and extended harmony (Lange, 2013). He often employs mixed, complex, and/or compound meters with his works occasionally including frequent meter changes and uncommon rhythmic configurations (Shrock, 2009). Selected pieces in Whitacre's repertoire have made use of aleatoric and indeterminate sections, as well as unusual score instructions involving, in some cases, hand actions and/or props (Shrock, 2009).

Eric Whitacre is the recipient of numerous commissions of original works and also for transcriptions of his original works for different mediums. A number of his works have been self adapted from choral to wind band such as *Lux Aurumque*, *Cloudburst* and *Sleep*, while the wind band piece *October* has subsequently been transcribed as the choral work *Alleluia*. Wind band pieces such as *Equus* and *Ghost Train Triptych* along with choral works *Water Night* and *Lux Aurumque* have received full orchestral transcriptions (Whitacre 2017).

Whitacre's musical, *Paradise Lost: Shadows and Wings*, has seen multiple performance seasons including Los Angeles and New York (Whitacre, 2017). His most recent major composition, *Deep Field*, was premiered with the Minnesota Symphony Orchestra in May of 2015 (The Choral Stream, 2015; Whitacre, 2017).

Whitacre's music and transcriptions have been the discussion of numerous theses and dissertations, focusing primarily on his choral music, wind band repertoire and the sonorities found within his distinct style (Houser, 2008; Hairel, 2009; Grassi, 2010; Hall, 2012). In his thesis "An analysis of three choral transcriptions for winds by Eric Whitacre", Daniel Grassi focuses primarily on the delegation of choral parts to wind instruments, the integrity of wind work compared to choral work and Whitacre's motivation for transcribing his own works (Grassi, 2010). The investigation, however, is limited on its examination and evaluation of the changes within the sonorities of the works, in particular, the expanded tone colours of the transcriptions.

Lux Aurumque for Wind Band

Originally, a one movement SATB choral work, *Lux Aurumque* was composed in 2000 via a commission from the Master Chorale of Tampa Bay with a dedication to Dr. Jo-Michael Scheibe (Shrock, 2009; Whitacre, 2017). It was inspired by the short poem “Light and Gold” by Edward Esch (1970-) (Whitacre 2001; Whitacre, 2017). Whitacre had friend and poet Charles Anthony Silvestri translate the text from English into Latin in order to attempt to render “the original poem into Latin as singably and as sonically beautifully as I could” (Silvestri, 2017; Whitacre, 2017). The work is considered a Christmas piece whose text speaks of a newborn baby (see Appendix 1). The work has become a staple in the choral repertoire and gained international notability through Whitacre’s ‘Virtual Choir’ project in 2009 (Music Sales Classical, 2010).

Lux Aurumque has seen numerous transcriptions including TTBB choir commissioned by the Gay Men’s Chorus of Los Angeles (dedicated to Dr. Bruce Mayhall), an all brass version commissioned by United Brass and a string orchestra version commissioned by the Midwest Band and Orchestra Clinic (Stewart, 2007; Whitacre 2017).

Transcribed for wind band in 2005, *Lux Aurumque* was commissioned by a consortium of Texas Band Directors and the Texas Music Educator’s Association for the Texas All-State Band and is dedicated to Gary Green (Whitacre, 2005). The transcription was premiered at the annual conference of the Texas Music Educators Association. Originally for SATB (divsi) with soprano solo, the work has now been rescored for the following distinct instrumentation:

Flute 1st, 2nd, 3rd and 4th
Oboe 1st and 2nd
Bassoon 1st and 2nd
Contrabassoon
Bb Clarinet 1st, 2nd and 3rd (*divisi*)
Bass Clarinet (*divisi*)
Eb Alto Saxophone 1st and 2nd
Bb Tenor Saxophone
Eb Baritone Saxophone
Bb Trumpet 1st, 2nd, 3rd and 4th
F Horn 1st, 2nd, 3rd and 4th
Trombone 1st and 2nd
Bass Trombone
Euphonium (*divisi*)
Tuba (*divisi*)

Each of the transcriptions for wind band, brass ensemble and string orchestra feature different melodic material than that of the original choral score. Whitacre has inserted material from his musical *Paradise Lost: Shadows and Wings* and an unpublished work *Lux Aurorum* (Grassi, 2010; Whitacre, 2015). Influenced by the evolution of the piece through the inclusion of new material and the wind band's sonorities and colours, Whitacre has subsequently arranged a second version for choir, retaining the new material and renaming the work *Lux Nova – 'Lux Aurumque' Reimagined* (Whitacre, 2014). Both realisations of *Lux Aurumque* have been examined in a number of studies with a focus on the successful reproduction of the original choral work (Hairel, 2009; Grassi, 2010). However, one aspect discussed only in limited detail is the transformation of the work through the timbres and tone colours of the wind band. Whitacre himself has noted "I'm amazed at how much the character of the piece changes with different instruments" (Stuart, 2007).

Analysis

Form and Structure

Lux Aurumque for wind band displays many similarities with its original choral counterpart. Whitacre has, however, made numerous significant alterations.

The work is still presented in its original metre of *f*... and is marked “Adagio; Molto legato” as per the original choral version. It should be noted that the wind band transcription displays a metronome marking of crotchet equals 56 beats per minute, compared to the choral version’s 60-66. It is plausible that this could be the composer’s intention to allow for the more complex instrumentation’s timbres and sonorities to be expanded on, balanced correctly and permitting more time for sound dissipation. In similarity to a choral performance of the work, the band transcription lends itself to a rubato style, accentuating the tight harmonies and Whitacre’s usage of tension and release through consonance and dissonance.

The selected instrumentation displays unique requirements. Whilst the set instrumentation of a wind band is difficult to define, Whitacre may have been seeking the timbres of selected instrument families in regards to the increased parts per instrument and divisions amongst instruments. External constraints may have also affected the eventual orchestration. As the wind band transcription was commissioned for the 2005 Texas All State Band, a high school based ensemble (albeit of an exceptionally high level), some instrumentation is presumed when writing for such an ensemble. The omission of percussion is a relatively common practice for slow, hymn

like works, with the timbres not always lending themselves to the composition (Hairel, 2009). Whitacre has, however, retained the usage of the saxophone family and euphonium, neither of which are orchestral based instruments. Whilst the euphonium's colour blends well with other brass instruments, the saxophone family is difficult to write for due to its distinct sound qualities and difficulty in soft low articulations (Erickson, 1983). To exclude saxophones from the composition would result in a large section of school-based ensembles excluded from the performance, possibly hindering the composition's selection by directors for future performances and score sales.

The work has been transposed down one semitone for the transcription, possibly allowing for easier reading amongst high school level musicians (Grassi, 2010; Hairel, 2009). The work retains the same overall harmonic structure as the original, modulating from c minor to its subdominant f minor and finally to its parallel major, C major (originally c# minor, f# minor and C# major).

When contrasted with its choral counterpart, the wind band version's overarching form retains the composer's original setting, with the wind band transcription presented in a modified ternary form with the inclusion of a transition and a coda (Stewart, 2007). Whilst retaining the initial form, by inserting new material, the transcription's authenticity is to be questioned suggesting that it is now a stand alone work and not purely a recreation of the original (see table 4.1).

Table 4.1 *Lux Aurumque* form and bar numbers of original and transcription

	Choral Version	Wind Band Version
Section	Bar Number	Bar Number
A	1 – 17	1 – 17
Transition	18 – 21	18 – 21
B*	22 – 29	22 – 35
A	30 – 37	36 – 43
Coda	38 - 48	44 – 54

* Contains different material

With the inclusion of the *Lux Aurorum* and *Paradise Lost: Shadows and Wings* material, the original forty-eight bars have been expanded to fifty-four (see table 4.2).

Table 4.2 *Lux Aurumque* for wind band source material

Choral Source Material	Wind Band Transcription
<i>Lux Aurumque</i> Bars 1 – 21	Bars 1 – 21 Rehearsal Marking: Introduction to B
Bars 22-35 of <i>Lux Aurorum (Bliss Theme)</i> . Replaces bars 22-29 of choral version of <i>Lux Aurumque</i>	Bars 22-35 Rehearsal Marking: C to D
<i>Lux Aurumque</i> Bars 30 -48	Bars 36-54 Rehearsal Marking: E - F









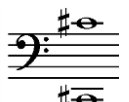

Instrumentation and Range

With a unique grouping of four flute, trumpet and horn parts in conjunction with essentially six clarinet lines (1st, 2nd and 3rd *divisi*), Whitacre is able to expand upon the voicing options he originally composed for in this SATB (*divisi*) choral setting.

The orchestration makes usage of these smaller instrumental sub-family groupings (within the larger woodwind and brass families) to reconstruct the original vertical setting of the vocal lines. Whilst there are many instances of cross scoring and doubling, each additional instrument allows for more complex timbral combinations

than that originally presented in the choral score. The use of octave doubling creates adequate balance amongst the ensemble, allowing for projection of all lines to the audience with a brilliant, clear and vibrant orchestration (Corozine, 2002). Instruments such as the flute, tuba, bass trombone, and contra bassoon greatly increase the work's overall range, exceeding both the tessitura and range of the human voice (see table 4.3). Whilst the work can be performed without the contrabassoon, its unique timbre increases the palette of colours Whitacre has used in the transcription.

Table 4.3 *Lux Aurumque* choral and wind band ranges

Voice	Choral Version Range	Wind Band Transcription Range (via orchestration)	Choral Version Range	Concert Band Range
Soprano	 C# 4 - G# 5	 C 4 - G 6		
Alto	 G# 3 - C# 5	 Bb 2 - Bb 5	 C# 2 - G# 5	 Db 1 - G 6
Tenor	 D# 3 - F# 4	 Bb 2 - Bb 5		
Bass	 C# 2 - C# 4	 Db 1 - Eb 5		

To effectively reproduce the original choral work, the melodic material has been redistributed from the original SATB (*divisi*) setting to the unique wind band instrumentation he has elected to use. A number of studies debate that Whitacre employs a simple linear approach to his redistribution (Grassi, 2010; Hairel, 2009), however analysis shows sections of the work where instruments constantly change between not only the first and second parts of selected voices, but actual voice types entirely, allowing for new melodic lines and sonorities to be shaped.

Melodic Material Redistribution and Orchestration Techniques

The eight bar introduction of the composition is based on C minor dyads transitioning to a C minor 9 chords in second inversion (see figure 4.1).

Figure 4.1 *Lux Aurumque* bars 1 - 2 piano reduction



Each of these coupled bars is a representation of the choral work's opening text "*lux*" meaning "*light*". Whitacre has employed woodwind colours only in this section. Soprano (1 and 2) and alto (1 and 2) are assigned to the higher pitched and lighter timbre of the four separate flute lines, both oboes and 1st and 2nd (*divisi*) clarinet. The lower voices of tenor (1 and 2) and bass (1 and 2) are assigned to bassoons, 3rd clarinet (*divisi*),

1st and 2nd alto saxophone and tenor saxophone (see table 4.4). The absence of brass allows for the lighter tone colours of the wind instruments to emulate the higher setting of the original choral work (see figures 4.2 and 4.4).

Figure 4.2 *Lux Aurumque* choral version bars 1 - 8 (Whitacre, 2001)

Commissioned by the Master Chorale of Tampa Bay
LUX AURUMQUE
 for Dr Jo-Michael Schiebe

EDWARD ESCH
 Latin translation by
 CHARLES ANTHONY SILVESTRI

ERIC WHITACRE

Adagio, molto legato $\text{♩} = 60-66$

SOLO

SOPRANO
 Lux, _____

ALTO
 Lux, _____ lux, _____ lux, _____ lux, _____

TENOR
 Lux, _____ lux, _____ lux, _____ lux, _____

BASS
 Lux, _____ lux, _____ lux, _____ lux, _____

Piano (for rehearsal only)

Figure 4.3 *Lux Aurumque* for wind band bars 1 - 8 (Whitacre, 2005)

Commissioned by a consortium of Texas Band Directors
 and the Texas Music Educator's Association for the 2005 Texas All-State Band
LUX AURUMQUE
 (Light and Gold)
 for Gary Green

ERIC WHITACRE

Adagio; Molto Legato ($\text{♩} = 56$)

Flute 1-2
 Flute 3-4
 Oboe 1
 Oboe 2
 Bassoon 1-2
 Contrabassoon

Clarinet 1 in Bb
 Clarinet 2 in Bb
 Clarinet 3 in Bb
 Bass Clarinet

Alto Saxophone 1-2
 Tenor Saxophone
 Baritone Saxophone

Adagio; Molto Legato ($\text{♩} = 56$)

Trumpet 1-2 in Bb
 Trumpet 3-4 in Bb
 Horn 1-2 in F
 Horn 3-4 in F
 Trombone 1-2
 Bass Trombone
 Euphonium
 Tuba

The composer elects not to use the bass clarinet and baritone sax until the c minor 9 second inversion chord (bar 2). This allows for the lighter unison bass of the c minor dyad to be juxtaposed against the deeper c minor 9 second inversion bass 2 line, as both bass clarinet and baritone saxophone have distinct timbral qualities and more prominent articulation action than other woodwinds (Erickson, 1983). Whitacre may have also elected to omit these instruments from the opening so as to not affect the balance and clarity of the commencement of each dyad.

The orchestration does not simply assign one voice to an instrument. Each of the c minor 9 second inversion chords explores different voicings amongst the instrumentation. 1st bassoon and tenor saxophone changes from bass to alto 1, whilst 3rd clarinet (*divisi*) and 2nd alto saxophone alternates from bass to tenor 2. This change in voice leading allows for greater blend and balance within the cluster chord. Whitacre has also opted to omit the bass 1 line from each of the c minor 9 second inversion chords, possibly allowing for balance. The pitch of C, however, is present via the soprano 2 assigned material.

The wind band transcription shows minimal pitch displacements in the introduction. Only the tenor sax and bassoon, replicating the A1 pitch for the c minor 9 second inversion chord, perform an octave lower than the original. The dynamic markings remain the same as the choral work.

The composer makes use of the oboe in place of the soprano solo, utilising its penetrating yet light timbre, which can be emphasised with vibrato. This separates it from the dyads and clusters of the other woodwind instruments.

Table 4.4 *Lux Aurumque* melodic material redistribution chart bars 1 - 8

Chart Key	
v	Octave below displacement
^	Octave above displacement
*	Number of octaves
(T)	Tremolo
(N)	New material/harmony
(O)	Ossia

INTRODUCTION (Bars 1 – 8)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
1	Fl. 1 Fl. 2 Ob. 1 Ob. 2 Cl. 1 (div)	Unison		Fl. 3 Cl. 2 (div)	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Unison	Bsn. 1 Bsn. 2 Cl. 3 (div) A. Sax. 2 T. Sax.	Unison	
2	Fl. 1 Ob. 1 Cl. 1 (div)	Fl. 2 Ob. 2 Cl. 1 (div)		Fl. 3 Bsn. 1 v* Cl. 2 (div) T. Sax. v*	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Cl. 3 (div) A. Sax. 2	NO ASSIGNED VOICING	Bsn. 2 B. Cl. B. Sax.	
3	Fl. 1 Fl. 2 Ob. 1 Ob. 2 Cl. 1 (div)	Unison		Fl. 3 Cl. 2 (div)	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Unison	Bsn. 1 Bsn. 2 Cl. 3 (div) A. Sax. 2 T. Sax.	Unison	
4	Fl. 1 Ob. 1 Cl. 1 (div)	Fl. 2 Ob. 2 Cl. 1 (div)		Fl. 3 Bsn. 1 v* Cl. 2 (div) T. Sax. v*	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Cl. 3 (div) A. Sax. 2	NO ASSIGNED VOICING	Bsn. 2 B. Cl. B. Sax.	
5	Fl. 1 Fl. 2 Ob. 1 Ob. 2 Cl. 1 (div)	Unison	Ob. 1	Fl. 3 Cl. 2 (div)	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Unison	Bsn. 1 Bsn. 2 Cl. 3 (div) A. Sax. 2 T. Sax.	Unison	
6	Fl. 1 Ob. 1 Cl. 1 (div)	Fl. 2 Ob. 2 Cl. 1 (div)	Ob. 1	Fl. 3 Bsn. 1 v* Cl. 2 (div) T. Sax. v*	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Cl. 3 (div) A. Sax. 2	NO ASSIGNED VOICING	Bsn. 2 B. Cl. B. Sax.	
7	Fl. 1 Fl. 2 Ob. 1 Ob. 2 Cl. 1 (div)	Unison	Ob. 1	Fl. 3 Cl. 2 (div)	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Unison	Bsn. 1 Bsn. 2 Cl. 3 (div) A. Sax. 2 T. Sax.	Unison	
8	Fl. 1 Ob. 1 Cl. 1 (div)	Fl. 2 Ob. 2 Cl. 1 (div)	Ob. 1	Fl. 3 Bsn. 1 v* Cl. 2 (div) T. Sax. v*	Fl. 4 Cl. 2 (div)	Cl. 3 (div) A. Sax. 1	Cl. 3 (div) A. Sax. 2	NO ASSIGNED VOICING	Bsn. 2 B. Cl. B. Sax.	

Commencing at bar 9, the melodic material is a representation of the word “*calida*”, translated as “*warm*”. The Ab major triads offer a more rounded chord (warmer) than the preceding dyads, resolving to a Bb sus4 second inversion. Whitacre repeats this with an inverted Ab major triad and a lower voiced variant of the Bb sus4 second inversion (see figure 4.4).

Figure 4.4 *Lux Aurumque* bars 9 - 12 piano reduction (Whitacre, 2001)

The image shows a piano reduction of the vocal lines from 'Lux Aurumque' bars 9-12. It consists of two staves: a treble clef staff and a bass clef staff. The key signature is three sharps (F#, C#, G#). The treble staff contains two vocal lines. The first line has the lyrics 'ca - li - da' under the first two bars and 'ca - li - da' under the last two bars. The second line has the lyrics 'ca - li - da' under the last two bars. The bass staff contains two vocal lines. The first line has the lyrics 'ca - li - da' under the last two bars. The second line has the lyrics 'ca - li - da' under the last two bars. The music is written in a style that suggests a piano accompaniment, with chords and melodic fragments.

The transcription has included brass in this section to emulate a warmer timbre than the preceding introduction. It has, however, excluded lower instruments including bassoon, bass clarinet, baritone saxophone, euphonium and tuba, retaining their low sonorities for the impending word (“*gravisque*”) of the text.

As brass instruments are articulated via the syllable “tu” and “du” (Farkas, 1962; Goldman & Smith, 1982), the harsher consonant sound of “*calida*” lends itself to a brass replication more than the preceding “*lux*”. The introduction of the new brass timbres allow for extended variations of the wind band sonic output. All material is firmly within each instrument’s tessitura for maximum timbral blend and balance, with no instrument dominating either chord.

Whitacre has reassigned parts within instrumental families with the upper flutes, clarinets and trumpets predominantly supplying the soprano and alto material, while the remainder of the ensemble adds the tenor and bass vocal lines. Vocal lines cross over with part assignment, creating different resolutions to that of the choral work (see table 4.5). The dynamics of bars 9 to 12 have been amplified from the original

composition. Whilst all instruments are capable of performing at the original *mp* and *mf* at their given pitches, this may have been an attempt by the composer to allow for more variation within the work due to the absence of text.

To represent “*gravisque*” (translated as “heavy”), the original choral music pitches the melodic material lower than that of the preceding “*calida*” (see figure 4.5).

Figure 4.5 *Lux Aurumque* bars 13 - 17 piano reduction (Whitacre, 2001)

The image shows a piano reduction of vocal lines for bars 13-17 of 'Lux Aurumque'. It features a grand staff with a treble clef on the top staff and a bass clef on the bottom staff. The key signature is three sharps (F#, C#, G#). The lyrics are written below the staves, with some words split across lines. The lyrics are: 'gra - - vis-que gra-vis-que' on the top line; 'gra - vis - que, gra vis-que grav vis - que' on the second line; 'gra vis que, gra-vis-que, gra - vis - que,' on the third line; and 'gra-vis - que, grav vis-que, gra - vis - que,' on the bottom line. The music consists of chords and moving lines in both hands, with some notes tied across bar lines.

Whitacre omits the higher pitched woodwinds of flute and oboe, assigning soprano vocal lines to 1st clarinet, 1st alto saxophone and 1st trumpet. The euphonium and tuba are employed for the first time in bar 14, emphasising the second representation of “*gravisque*”. In bars 13 to 15, the composer splits the vocal lines of soprano and alto amongst the higher pitched instrument families, accentuating the heterophonic texture created by the suspensions in the descending chromatic crotchets. He likewise allocates the tenor and bass lines with the lower pitched woodwinds and brass. This use of the descending and decaying harmony is a worthy example of word painting in the absence of text, representing the weight of the word “*heavy*”.

In bars 13 and 15, the scoring assigns different rhythms to clarinet (2nd and 3rd), bass clarinet and 2nd alto saxophone (see figure 4.7), while the brass play the original rhythms from the choral score (see figure 4.8). It is plausible this may be an attempt by the composer to create variation amongst the textures or possibly to create more sustain amongst the ensemble against the lower articulations.

The final statement of “*gravisque*” in the original choral work sees the sopranos omitted with a simpler texture amongst the remaining voices (see figure 4.6). Whitacre reduces instrumentation to the clarinet family, horns, euphonium and tuba (see figure 4.7). By assigning the alto 1 line to 1st clarinet and 1st horn, with alto 2 being allocated to 2nd clarinet and 2nd horn, Whitacre assures successful timbral blend and balance amongst the ensemble, with lower clarinets and brass complementing with the tenor and bass lines. A solo horn representing a low soprano (in contrast to the opening solo) transitions into the next section of the work. This section of the transcription displays no pitch displacements.

Figure 4.6 *Lux Aurumque* choral version bars 9 - 17 (Whitacre, 2001)

9 *mp* *mf* *sim.* *mf*
 ca - li - da, ca - li - da gra -
mp *mf* *sim.* *mf*
 ca - li - da, ca - li - da gra - vis -
mp *mf* *sim.* *mf*
 ca - li - da, ca - li - da gra -
mp *mf* *sim.* *mf*
 ca - li - da, ca - li - da gra - vis -

14 *mp* *p*
 - vis - que, gra - vis - que, pu -
mp
 - que, gra - vis - que, gra - vis - que,
mp *p*
 - vis - que, gra - vis - que, gra - vis - que,
mp *p*
 - que, gra - vis - que, gra - vis - que,

Figure 4.7 *Lux Aurumque* for wind band bars 9 - 17 (Whitacre, 2005)

2

9 **A**
 Fl. 1-2 *mf* *f* *mf* *f*
 Fl. 3-4 *mf* *f* *mf* *f*
 Ob. 1-2 *mf* *f* *mf* *f*
 Bsn. 1-2 *mf* *f* *mf* *f*
 Cbsn. *mf* *f* *mf* *f*
 Cl. 1 (div.) *mf* *f* *mf* *f* unis. *mf* *mp* *p* *mp*
 Cl. 2 (div.) *mf* *f* *mf* *f* unis. *mf* *mp* *p* *mp*
 Cl. 3 *mf* *f* *mf* *f* unis. *mf* *mp* *p* *mp*
 B. Cl. *mf* *f* *mf* *f* unis. *mf* *mp* *p* *mp*
 A. Sax. 1-2 *mf* *f* *mf* *f* *mp*
 T. Sax. *mf* *f* *mf* *f* *mp*
 B. Sax. *mf* *f* *mf* *f* *mp*
A
 Tpt. 1-2 *mf* *f* *mf* *f* *mp*
 Tpt. 3-4 *mf* *f* *mf* *f* *mp*
 Hn. 1-2 *mf* *f* *mf* *f* *mp* 1. solo *p* *mp*
 Hn. 3-4 *mf* *f* *mf* *f* *mp* *p* *mp*
 Tbn. 1-2 *mf* *f* *mf* *f* *mp*
 B. Tbn. *mf* *f* *mf* *f* *mp*
 Euph. *mf* *f* *mf* *f* *mp* div. *mf* *mp* *p* *mp*
 Tba. *mf* *f* *mf* *f* *mp* *p* *mp*

Table 4.5 *Lux Aurumque* melodic material redistribution chart bars 9 - 17

REHEARSAL MARK A (Bars 9 - 17)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
9	Fl. 1 Fl. 2 Cl. 1 (div) Tpt. 1 Tpt. 2	Unison		Fl. 3 Cl. 2 (div) Tpt. 3	Fl. 4 Cl. 2 (div) Tpt. 4	A. Sax. 1 Hn. 1 Tbn. 1	Hn. 2	A. Sax. 2 Hn. 3 Hn. 4 Tbn. 2	T. Sax. B. Tbn.	
10	Fl. 1 Cl. 1 (div)	Fl. 2 Cl. 2 (div) Tpt. 2		NO ASSIGNED VOICING	Fl. 3 Cl. 2 (div) Tpt. 3	Fl. 4 Cl. 2 (div)	A. Sax. 1 Tpt. 4 Hn. 1 Tbn. 1	A. Sax. 2 Tbn. 2 Hn. 2	T. Sax. Hn. 3 Hn. 4 B. Tbn.	
11	Fl. 1 Cl. 1 (div) Tpt. 1	Unison		Fl. 2 Cl. 1 (div) Tpt. 2	Fl. 3 Fl. 4 Cl. 2 (div) Tpt. 3 Tpt. 4	NO ASSIGNED VOICING	A. Sax. 1 Hn. 1 Hn. 2 Tbn. 1	A. Sax. 2 Hn. 3 Tbn. 2	T. Sax. Hn. 4 B. Tbn.	
12	NO ASSIGNED VOICING	Fl. 1 Cl. 1 (div) Tpt. 1		NO ASSIGNED VOICING	Fl. 3 Cl. 2 (div) Tpt. 3 Hn. 1	Fl. 2 Cl. 1 (div) Tpt. 2	Fl. 4 Cl. 2 (div) A. Sax. 1 Tpt. 4 Hn. 2 Tbn. 1	A. Sax. 2 Hn. 3 Tbn. 2	T. Sax. Hn. 4 B. Tbn.	
13	Cl. 1 A. Sax. 1 Tpt. 1	Unison		Cl. 2 A. Sax. 2 Tpt. 3	Cl. 3 T. Sax. Tpt. 4	Bsn. 1 Tbn. 1	Unison	Bsn. 2 Tbn. 2	B. Cl. B. Sax. B. Tbn.	
14	Cl. 1 A. Sax. 1 Tpt. 1	Unison		Cl. 2 A. Sax. 2 Tpt. 3	Cl. 3 T. Sax. Tpt. 4	Bsn. 1 Tbn. 1 Euph. (div)	Unison	Bsn. 2 Tbn. 2 Euph. (div)	B. Cl. B. Sax. B. Tbn. Tba.	
15	Cl. 1 A. Sax. 1 Tpt. 1	Unison		Cl. 2 A. Sax. 2 Tpt. 3 Hn. 1 Hn. 2	Cl. 3 T. Sax. Tpt. 4 Hn. 3 Hn. 4	Bsn. 1 Tbn. 1 Euph. (div)	Unison	Bsn. 2 Tbn. 2 Euph. (div)	B. Cl. B. Sax. B. Tbn. Tba.	
16				Cl. 1 Hn. 1 Hn. 2	Cl. 2 Hn. 3 Hn. 4	Cl. 3 Euph.	Unison	B. Cl. Tba.	Unison	
17	Hn. 1	Unison		Cl. 1 Hn. 2 Hn. 3	Unison	Cl. 2 Cl. 3 Hn. 4	Unison	B. Cl. Euph.	Tba.	

In contrast to “*gravisque*”, the word “*pura*” (*pure*) is presented via new timbres and instrumental groupings.

Figure 4.8 *Lux Aurumque* bars 18 - 21 piano reduction (Whitacre, 2001)

pu - - ra, ve - lut

pu - ra,

pu - ra,

pu - ra,

pu ra,

pu - ra,

pu ra,

Soprano and alto lines are divided amongst trumpet (1st and 2nd) and horn (1st and 2nd) in a rather linear fashion, with the remaining brass completing the remainder of the vocal lines in a brass sectional. The staggered entries of the vocal lines have been retained via high-pitched brass to lower instruments (see figures 4.9 and 4.10).

To present “*pura*” without text, Whitacre uses the idiomatic ornamentation of tremolo amongst the woodwinds. With similar part division to that of the brass section, the composer allows for the unique timbres of the flute, oboe, clarinet and saxophone sectionals to be combined to compliment the brass setting to create a unified ensemble. This enhances the shimmer and glow characteristic that Whitacre has stated is essential to the success of the work (Stewart, 2007).

There are minimal octave displacements used in this transitional section. Several occur within the tremolos (perhaps for voice leading clarity), whilst others occur as doubling of parts in the transition leading into the next section, supported by the inclusion of lower brass in bar 21 (see table 4.6). These displacements are in affect setting up the transformation of the middle section of the wind band transcription.

Figure 4.9 *Lux Aurumque* choral version bars 17 - 21 (Whitacre, 2001)

Figure 4.9 shows the choral version of *Lux Aurumque* for bars 17-21. The score is written for a choir with lyrics in Latin. The lyrics are: "pu - ra ve - lut - ra, pu - ra ve - lut - ra, pu - ra". The music features dynamic markings such as *p* (piano), *mp* (mezzo-piano), and *mf* (mezzo-forte), along with crescendo and decrescendo hairpins. The vocal parts are arranged in four staves, with the lyrics written below the notes.

Figure 4.10 *Lux Aurumque* for wind band bars 18 - 21 (Whitacre, 2005)

Figure 4.10 shows the wind band version of *Lux Aurumque* for bars 18-21. The score is written for a wind band and includes parts for various instruments: Flutes (Fl. 1-2, Fl. 3-4), Oboes (Ob. 1-2), Bassoons (Ban. 1-2, Cbsn.), Clarinets (Cl. 1, Cl. 2, Cl. 3, B. Cl.), Saxophones (A. Sax. 1-2, T. Sax., B. Sax.), Trumpets (Tpt. 1-2, Tpt. 3-4), Horns (Hn. 1-2, Hn. 3-4), Trombones (Tbn. 1-2, B. Tbn.), Euphonium (Euph.), and Tuba (Tba.). The score includes dynamic markings such as *p*, *mf*, and *mp*, along with crescendo and decrescendo hairpins. The instruments are arranged in multiple staves, with some parts marked *tutti*.

Table 4.6 *Lux Aurumque* melodic material redistribution chart bars 18 - 21

REHEARSAL MARK B (Bars 18 – 21)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
18	Fl. 1 (τ) Fl. 2 (τ) Cl. 1 (τ) Tpt. 1 Hn. 1	Unison		Fl. 1 (τ) Fl. 2 (τ) Cl. 1 (τ) Tpt. 2 Hn. 2	Unison	Cl. 2 (τ) Cl. 3 (τ) Tpt. 3 Hn. 3	Unison	Cl. 2 (τ) Cl. 3 (τ) Tpt. 4 Hn. 1 Tbn. 1	Unison	
19	Tpt. 1	Cl. 1 (τ) Cl. 2 (τ) Tpt. 2		Fl. 1 (τ) Fl. 2 (τ) Cl. 1 (τ) Cl. 2 (τ) Tpt. 3 Hn. 2	Fl. 3 Fl. 4 Cl. 2 (τ) Tpt. 4 Hn. 3	Cl. 3 (τ)	Fl. 1 Δ* Fl. 2 Δ* Cl. 2 Tpt. 1 Δ* Hn. 1 Δ* Hn. 4	Cl. 3 (τ) Tbn. 1	Tbn. 2	
20	Fl. 1 (τ) Fl. 2 (τ) Fl. 3 (τ) Fl. 4 (τ) Cl. 1 (τ) Cl. 2 (τ) A. Sax. 1 (τ) A. Sax. 2 (τ) Tpt. 1	Fl. 1 (τ) Fl. 2 (τ) Cl. 1 (T) A. Sax. 1 (τ) A. Sax. 2 (τ) Tpt. 2 Hn. 1		Fl. 3 (τ) Fl. 4 (τ) Cl. 2 (τ) Cl. 3 (τ) T. Sax. (τ) Tpt. 3 Hn. 2	Unison	Cl. 3 (τ) B. Cl. (τ) T. Sax. (τ) B. Sax. (τ) Tpt. 4 Hn. 3	Unison	B. Cl. (τ) B. Sax. (τ) Hn. 4 Tbn. 1	Unison	
21	Fl. 1 Δ* Fl. 2 Δ* Fl. 3 (τ) Fl. 4 (τ) Ob. 2 Cl. 2 (τ) A. Sax. 1 (τ) A. Sax. 2 (τ) Tpt. 1	Fl. 3 Fl. 4 Fl. 3 Δ* Fl. 4 Δ* Ob. 1 Δ* Cl. 2 (τ) A. Sax. 1 (τ) A. Sax. 2 (τ) Tpt. 2 Hn. 1		Cl. 3 (τ) T. Sax. (τ) Tpt. 3 Tpt. 4 Hn. 2	Fl. 1 Δ* (τ) Fl. 2 Δ* (τ) Cl. 1 Δ* (τ) B. Cl. (τ) Tpt. 4 Hn. 3	Cl. 3 (τ) T. Sax. (τ) B. Sax. (τ)	Fl. 1 Δ* (τ) Fl. 2 Δ* (τ) Cl. 1 Δ* (τ) B. Cl. (τ) Tpt. 2 Δ* Tpt. 3 Δ* Hn. 1 Δ* Hn. 4	Bsn. 1 Bsn. 2 B. Sax. (τ) Tbn. 1	Tbn. 2 B. Tbn. Euph.	

In bars 22 to 35 of the wind band transcription, Whitacre inserted material from *Lux Aurorum*, discarding bars 22 to 29 of the original choral version (see figure 4.11). This section displays the most expansion on the original material in terms of orchestration (see figure 4.12).

Figure 4.11 *Lux Aurorum (First Light)* choral version bars 22 - 35 (Grassi, 2010)

f
 A - - - - la, a - - - -
f
 A - - - - la, a - - - -
f
 A - - - - la, a - - - -
f
 A - - - - la, a - - - -

mf *mp*
 a la, et an ge . li som .
mf *mp*
 a la, et an ge . li som .
mf
 a la, an ge . li
mf
 a la, an ge . li

S
 la, A la,
 A
 la, A la,
 T
 la, A la,
 B
 la, A la,

S
 ni - ons
 A
 ni - ons
 T
mp *p*
 som - ni - ons au - ro - rum,
 B
mp *p*
 som - ni - ons au - ro - rum,

Retaining the same harmonic structure as *Lux Aurorum*, the composer has accordingly transposed the material to the same key as the wind band version. Utilising similar reassignment techniques, the composer allocates higher vocal lines of soprano and alto to instrumental family groupings of higher pitched woodwinds and brass, supported by lower woodwinds and brass. Extensive doubling, octave displacements of lines and suspensions in the transcription intensify the climax to the work (see table 4.7). Contrabassoon is added to the now full ensemble setting, providing its unique timbre and range, with it performing the bass 2 line at a two-octave displacement below the original pitch in bar 29. This in conjunction with leaping octaves and intervals of fourths in the bass lines enhances the essential tension and release component of the work.

Figure 4.12 *Lux Aurumque* for wind band bars 22 - 29 (Whitacre, 2005)

This page of the musical score covers bars 22 to 29. It features a rehearsal mark 'C' at the beginning of bar 22. The instruments listed on the left are: Fl. 1-2, Fl. 3-4, Ob. 1-2, Bsn. 1-2, Cbsn., Cl. 1, Cl. 2, Cl. 3, B. Cl., A. Sax. 1-2, T. Sax., B. Sax., Tpt. 1-2, Tpt. 3-4, Hn. 1-2, Hn. 3-4, Tbn. 1-2, B. Tbn., Euph., and Tba. The score includes dynamic markings such as *f* and *mf*, and articulation like accents. A section marked 'div.' (divisi) is present for the Tuba (Tba.) in bar 22.

This page of the musical score covers bars 26 to 29. It features a rehearsal mark '26' at the beginning of bar 26. The instruments listed on the left are: Fl. 1-2, Fl. 3-4, Ob. 1-2, Bsn. 1-2, Cbsn., Cl. 1, Cl. 2, Cl. 3, B. Cl., A. Sax. 1-2, T. Sax., B. Sax., Tpt. 1-2, Tpt. 3-4, Hn. 1-2, Hn. 3-4, Tbn. 1-2, B. Tbn., Euph., and Tba. The score includes dynamic markings such as *f* and *mf*, and articulation like accents. Sections marked 'div.' (divisi) are present for Clarinet 1 (Cl. 1), Clarinet 2 (Cl. 2), and Tuba (Tba.) in bars 26 and 27. A section marked 'unis.' (unison) is present for Tuba (Tba.) in bar 28.

Bridging the two four bar phrases of the ‘grand bliss’ theme is a three crotchet theme in bar 25. This phrase, performed by 3rd clarinet, tenor saxophone, baritone sax, 3rd and 4th trumpet, 3rd and 4th horn, euphonium (with support from 3rd and 4th flute with 1st and 2nd oboe) sings above the bb minor first inversion chord (doubled for strength) leading back into the f minor chord of bar 26 (see figure 4.13). It is conceivable Whitacre has elected to not use the alto saxophones to double the horns, a common technique, to retain strength within the alto lines. The composer has stated “I wanted to take advantage of the forces of the wind symphony, letting the horns sing high and triumphant” (Whitacre, 2014).

Figure 4.13 *Lux Aurumque* for wind band bar 25 horn call (Whitacre, 2005)



Table 4.7 *Lux Aurumque* melodic material redistribution chart bars 22 - 29

REHEARSAL MARK C (Bars 22 – 29)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
22	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Tpt. 1	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Hn. 1		Cl. 2 ^{Λ*} A. Sax. 2 Tpt. 3 Hn. 2	Cl. 3 ^{Λ*} T. Sax. Tpt. 4 Hn. 3 Hn. 4	B. Sax. Tbn. 1 Euph.	Unison	B. Cl. Tbn. 2 B. Tbn.	Bsn. 1 Bsn. 2 C.Bsn. ^{v*} B. Sax. ^{Λ*} Tbn. 1 ^{Λ*} Tbn. 2 ^{Λ*} Euph. ^{Λ*} Tba. (div) Tba. (div) ^{v*}	
23	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Cl. 3 T. Sax. ^{v*} Tpt. 1 Tpt. 4 ^{v*} Hn. 4 ^{v*}	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Hn. 1		Cl. 2 ^{Λ*} A. Sax. 2 B. Sax. ^{v*} Tpt. 3 Hn. 2 Hn. 3 Tbn. 1 ^{v*} Euph. ^{v*}	Unison	Tbn. 1	Unison	B. Cl. B. Tbn.	Bsn. 1 Bsn. 2 C.Bsn. ^{v*} Tba. Tba. ^{v*}	
24	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Tpt. 1	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Hn. 1		Cl. 2 ^{Λ*} A. Sax. 2 Tpt. 3 Tpt. 4 Hn. 2 Hn. 3	Unison	Tbn. 1	Tpt. 3 ^{Λ*} Tbn. 2 Euph.	B. Cl. B. Sax. B. Tbn.	Bsn. 1 Bsn. 2 C.Bsn. ^{v*} Cl. 3 ^{Λ***} T. Sax. ^{Λ**} B. Sax. ^{Λ*} Hn. 4 ^{Λ**} Tbn. 2 ^{Λ*} Euph. ^{Λ*} Tba.	
25	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Cl. 2 Tpt. 1	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 3 T. Sax. ^{v*}		Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Tpt. 3 Hn. 1	A. Sax. 2 Tpt. 4 Hn. 2 Hn. 3	Hn. 4 Tbn. 1	B. Cl. Tbn. 2 B. Tbn. ^{v*}	B. Sax. Euph.	Bsn. 1 ^{v*} Bsn. 2 ^{v*} C.Bsn. ^{v**} Tba. ^{v*}	Fl. 3 (N) Fl. 4 (N) Ob. 2 (N) Cl. 3 (N) T. Sax (N) B. Sax (N) Tpt. 2 (N) Tpt. 3 (N) Hn. 3 (N) Hn. 4 (N) Euph. (N)
26	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Tpt. 1	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Hn. 1		Cl. 2 ^{Λ*} A. Sax. 2 Tpt. 3 Hn. 2	Cl. 3 ^{Λ*} T. Sax. Tpt. 4 Hn. 3 Hn. 4	B. Sax. Tbn. 1 Tbn. 2	Unison	B. Cl. B. Sax. ^{Λ*} Tbn. 1 ^{Λ*} B. Tbn. Euph. ^{Λ*} Euph.	Bsn. 1 Bsn. 2 C.Bsn. ^{v*} Tbn. 2 ^{Λ*} Tba. (div) Tba. (div) ^{v*}	
27	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Cl. 3 T. Sax. ^{v*} Tpt. 1 Tpt. 4 ^{v*} Hn. 4 ^{v*}	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Hn. 1		Cl. 2 ^{Λ*} A. Sax. 2 B. Sax. ^{v*} Tpt. 3 Hn. 2 Hn. 3 Tbn. 2 ^{v*} Euph. ^{v*}	Unison	Tbn. 1	Unison	B. Cl. B. Tbn.	Bsn. 1 Bsn. 2 C.Bsn. ^{v*} Tba. (div) Tba. (div) ^{v*}	
28	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Tpt. 1	Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} A. Sax. 1 Tpt. 2 Hn. 1		Cl. 2 ^{Λ*} A. Sax. 2 Tpt. 3 Tpt. 4 Hn. 2 Hn. 3	Unison	Cl. 3 ^{Λ*} T. Sax. Hn. 4 Tbn. 1	Fl. 3 ^{Λ**} Fl. 4 ^{Λ**} Ob. 2 ^{Λ*} Cl. 1 ^{Λ**} B. Sax. Tpt. 2 ^{Λ*} Tpt. 3 ^{Λ*} Hn. 1 ^{Λ*} Tbn. 2 Euph.	B. Cl. B. Sax. ^{Λ*} B. Tbn.	Bsn. 1 Bsn. 2 C.Bsn. ^{v*} Cl. 3 ^{Λ***} T. Sax. ^{Λ**} Hn. 4 ^{Λ**} Tbn. 2 ^{Λ*} Euph. ^{Λ*} Tba. (div)	
29	Fl. 1 ^{Λ*} Fl. 2 ^{Λ*} Ob. 1 Tpt. 1 Cl. 1 (div) ^{Λ*} A. Sax. 1 A. Sax. 2 Tpt. 2 Hn. 1 Hn. 2	Cl. 3 A. Sax. 1 Cl. 2 (div) ^{Λ*}		Fl. 3 ^{Λ*} Fl. 4 ^{Λ*} Ob. 2 Cl. 1 ^{Λ*} Tpt. 2 Hn. 1 Cl. 3 T. Sax. Tpt. 3 Hn. 3 Hn. 4	Cl. 2 ^{Λ*} A. Sax. 2 Tpt. 4 Hn. 2 Hn. 3	T. Sax. Hn. 4 Tbn. 1	B. Cl. ^{v*} B. Sax. Tpt. 3 ^{Λ*} Tbn. 2 B. Tbn. ^{v*}	Euph.	Bsn. 1 ^{v*} Bsn. 2 ^{v*} C.Bsn. ^{v**} Tba. (div) ^{v*}	

Figure 4.15 *Lux Aurumque* for wind band bars 30 - 35 (Whitacre, 2005)

The image displays a musical score for a wind band, covering bars 30 to 35 of the piece *Lux Aurumque* by Whitacre (2005). The score is arranged in a standard wind band layout, with instruments listed on the left and their corresponding staves on the right. The instruments included are:

- Fl. 1-2
- Fl. 3-4
- Ob. 1-2
- Bsn. 1-2
- Cbsn.
- Cl. 1
- Cl. 2
- Cl. 3
- B. Cl.
- A. Sax. 1-2
- T. Sax.
- B. Sax.
- Tpt. 1-2
- Tpt. 3-4
- Hn. 1-2
- Hn. 3-4
- Tbn. 1-2
- B. Tbn.
- Euph.
- Tba.

The score features a key signature of one sharp (F#) and a 4/4 time signature. A dynamic marking of *mf* (mezzo-forte) is present throughout the passage. A section marked with a boxed 'D' begins at bar 30. The music consists of melodic lines for the woodwinds and brass, with some instruments playing sustained notes. The woodwinds (Flutes, Oboes, Clarinets, Bass Clarinet, Saxophones) and brass (Trumpets, Horns, Trombones, Euphonium, Tuba) parts are clearly delineated. The score includes various musical notations such as stems, beams, slurs, and dynamic markings.

Table 4.8 *Lux Aurumque* melodic material redistribution chart bars 30 - 35

REHEARSAL MARK D (Bars 30 – 35)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
30	Fl. 1 ^Λ * Ob. 1 ^Λ * Cl. 1 ^Λ * A. Sax. 1 Tpt. 1 Hn. 1	Fl. 2 ^Λ * Ob. 2 ^Λ * Cl. 1 (div) ^Λ * A. Sax. 2 Tpt. 2 Hn. 2		Fl. 3 ^Λ * Cl. 2 (div) ^Λ * T. Sax. Tpt. 3 Hn. 3	Fl. 4 ^Λ * Cl. 2 (div) ^Λ * Tpt. 4 Hn. 4	Bsn. 1 Cl. 3 ^Λ *	NO ASSIGNED VOICING	Bsn. 2 Tbn. 2	B. Cl. B. Sax. ^Λ * Tbn. 1 ^Λ * B. Tbn. Euph. ^Λ * Tba. v*	
31	Fl. 1 ^Λ * Fl. 2 ^Λ * Ob. 1 ^Λ * Cl. 1 (div) ^Λ * Cl. 1 (div) Cl. 2 (div) Cl. 3 A. Sax. 1 A. Sax. 2 Tpt. 1 Tpt. 2 Hn. 1 Hn. 2	Unison		Fl. 3 ^Λ * Ob. 2 ^Λ * Bsn. 1 Cl. 2 (div) ^Λ * T. Sax. Tpt. 3 Tpt. 4 Hn. 3 Hn. 4 Tbn. 1	Unison	Bsn. 2 Cl. 3 ^Λ * Tbn. 2	Unison	Fl. 4 ^Λ ** Cl. 2 (div) ^Λ ** B. Cl. B. Sax. ^Λ * Tpt. 4 ^Λ * Hn. 4 ^Λ * B. Tbn. Euph. ^Λ * Tba. v*	Unison	
32	Cl. 1 Cl. 2 Cl. 3 A. Sax. 1 Tpt. 1 Tpt. 2 Hn. 1	A. Sax. 2 Hn. 2		T. Sax. Tpt. 3 Hn. 3	Tpt. 4 Hn. 4	Bsn. 1 Tbn. 1	NO ASSIGNED VOICING	Bsn. 2 Tbn. 2	B. Cl. B. Sax. B. Tbn. Euph. ^Λ * Tba. v*	Cl. 1 (N) Cl. 2 (N) Cl. 3 (N) T. Sax. (N) Tpt. 1 (N) Tpt. 2 (N) Tpt. 3 (N) Tpt. 4 (N) Hn. 1 (N) Hn. 2 (N) Hn. 3 (N) Hn. 4 (N)
33	Cl. 1 A. Sax. 1 Tpt. 1 Hn. 1	Unison		Cl. 2 A. Sax. 2 Tpt. 2 Tpt. 3 Hn. 2	Unison	Bsn. 2 Cl. 1 Cl. 2 Cl. 3 Hn. 1 Hn. 2 Hn. 3 Hn. 4 Tbn. 2	Unison	B. Cl. B. Sax. Hn. 4 ^Λ * B. Tbn. Euph. ^Λ * Tba. v*	Unison	Bsn. 1 (N) Cl. 3 (N) T. Sax. (N) Tpt. 4 (N) Hn. 3 (N) Tbn. 1 (N)
34						Cl. 1 Cl. 3 Hn. 1	Cl. 2 Hn. 2	B. Cl. Hn. 4 Tbn. 1	B. Tbn. Tba. v*	Cl. 3 (N) Hn. 3 (N) Tbn. 2 (N)
35						Cl. 1 Cl. 2 Hn. 1 Hn. 2 Tbn. 1	Unison	Cl. 3 B. Cl. Hn. 3 Hn. 4 Tbn. 2	B. Tbn. Tba. v*	

Rehearsal mark E marks the return to the melodic material of the original choral score. Whitacre has distributed the low pitched melodic material within the clarinet, bassoon and saxophone families only (see table 4.9). This section sees minute variation in its material assignment due to its repeating nature. Dynamics have been increased (from pp and p to p and mp), possibly due to the difficulty of note articulation in the lower ranges of the saxophone and bassoon. This balanced ensemble restates the opening

material with a much lower, warmer timbre, accentuated by additional octave displacements. 1st clarinet is assigned the sustained concert G in bar 41 until the conclusion of the work, conceivably due to the instrument's timbre and ease of air control at the required pitch (see figures 4.16 and 4.17).

Figure 4.16 *Lux Aurumque* choral version bars 30 - 37 (Whitacre, 2005)

30 *pp* *p* *sim.*
ca - nunt, ca - nunt,
pp *p* *sim.*
ca - nunt, ca - nunt,
pp *p* *sim.*
ca - nunt, ca - nunt,
pp *p* *sim.*
ca - nunt, ca - nunt,

34 **SOPRANO 1** *p* *rit.*
ca - nunt mol - li - ter na -
SOPRANO 2 & 3 *pp*
ca - nunt mol - li - ter
pp
ca - nunt mol - li - ter
pp
ca - nunt mol - li - ter
pp
ca - nunt mol - li - ter

Figure 4.17 *Lux Aurumque* for wind band bars 36 - 43 (Whitacre, 2005)

36 **E**
Fl. 1-2
Fl. 3-4
Ob. 1-2
Bsn. 1-2
Cbsn.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
A. Sax. 1-2
T. Sax.
B. Sax.
E
Tpt. 1-2
Tpt. 3-4
Hn. 1-2
Hn. 3-4
Tbn. 1-2
B. Tbn.
Euph.
Tba.

p *mp* *p* *mp* *p* *mp* *p*
p *mp* *p* *mp* *p* *mp* *p*
p *mp* *p* *mp* *p* *mp* *p*
p *mp* *p* *mp* *p* *mp* *p*
p *mp* *p* *mp* *p* *mp* *p*
p *mp* *p* *mp* *p* *mp* *p*
p *mp* *p* *mp* *p* *mp* *p*

div. *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*

div. *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*

div. *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*

div. *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*
div. *p* *mp* *p* *mp* *p* *mp* *p*

Table 4.9 Lux Aurumque melodic material redistribution chart bars 36 - 43

REHEARSAL MARK E (Bars 36 – 43)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
36	Cl. 1 (div) Cl. 2 (div) A. Sax. 1 A. Sax. 2	Unison		Cl. 1 (div) Cl. 2 (div) A. Sax. 1 A. Sax. 2	Unison	Cl. 3 T. Sax.	Unison	Bsn. 1 Bsn. 2 B. Cl. B. Sax.	Unison	
37	Cl. 1 (div) A. Sax. 1	Cl. 1 (div) A. Sax. 2		Bsn. 1 v* Cl. 2 (div) B. Cl (div) v* T. Sax.	Cl. 2 (div)	Cl. 3 (div)	Cl. 3 (div)	NO ASSIGNED VOICING	Bsn. 2 B. Cl. (div) B. Sax.	
38	Cl. 1 (div) Cl. 2 (div) A. Sax. 1 A. Sax. 2	Unison		Cl. 1 (div) Cl. 2 (div) A. Sax. 1 A. Sax. 2	Unison	Cl. 3 T. Sax.	Unison	Bsn. 1 Bsn. 2 B. Cl. B. Sax.	Unison	
39	Cl. 1 (div) A. Sax. 1	Cl. 1 (div) A. Sax. 2		Bsn. 1 v* Cl. 2 (div) B. Cl (div) v* T. Sax.	Cl. 2 (div)	Cl. 3 (div)	Cl. 3 (div)	NO ASSIGNED VOICING	Bsn. 2 B. Cl. (div) B. Sax.	
40	Cl. 1 (div) Cl. 2 (div) A. Sax. 1 A. Sax. 2	Unison	Unison	Cl. 1 (div) Cl. 2 (div) A. Sax. 1 A. Sax. 2	Unison	Cl. 3 T. Sax.	Unison	Bsn. 1 Bsn. 2 B. Cl. B. Sax.	Unison	
41	Cl. 1 (div)	A. Sax. 1	Cl. 1 (div) A. Sax. 2	Bsn. 1 v* Cl. 2 (div) B. Cl (div) v* T. Sax.	Cl. 2 (div)	Cl. 3 (div)	Cl. 3 (div)	NO ASSIGNED VOICING	Bsn. 2 B. Cl. (div) B. Sax.	
42	Cl. 1	A. Sax. 1	A. Sax. 2	Bsn. 1 v* Cl. 2 (div) B. Cl (div) v* T. Sax.	Cl. 2 (div)	Cl. 3 (div)	Cl. 3 (div)	NO ASSIGNED VOICING	Bsn. 2 B. Cl. (div) B. Sax.	
43	Cl. 1	A. Sax. 1	A. Sax. 2	Bsn. 1 v* Cl. 2 (div) B. Cl (div) v* T. Sax.	Cl. 2 (div)	Cl. 3 (div)	Cl. 3 (div)	NO ASSIGNED VOICING	Bsn. 2 B. Cl. (div) B. Sax.	

The conclusion (or coda) of the work has been orchestrated as a full ensemble with the omission of the penetrating timbres of oboe, contra bassoon and trumpet, allowing for further variation and blend. The scoring uses similar orchestration in the assignment of melodic lines, with each sub family of the ensemble supplying a majority of all vocal lines (see table 4.10). Dynamics have again increased from the original (from ppp and pp to pp and p) in reflection of difficulty of articulation. Some octave displacements occur, creating new melodic lines independent of the original choral work.

The tuba part is of significant note. In the original choral score, Whitacre marks the final three bars with “*ossia*” on the bass part. The correct pitch is marked C#2 and G#2, however, Whitacre offers an *ossia* of G#2 and C#3 if the chorus members are

unable to reach this note, effectively ending the work on an inversion (see figure 4.18). From bar 38 of the choral score until the completion of the work, Whitacre writes a repeating C# major chord resolving to a d# minor 11 cluster chord pattern, with the C# chord in inversion. With the extended range of a tuba compared to that of a standard male bass voice, Whitacre is able to take advantage of the instrumentation and adapt the entire coda with the chord in root position (see figure 4.19).

Figure 4.18 *Lux Aurumque* choral version bars 38 - 48 (Whitacre, 2001)

a tempo

38 *ppp*
- tum.

ppp *pp* *sim.*
na - tum, na - tum, na -

ppp *pp* *sim.*
na - tum, na - tum, na -

ppp *pp* *sim.*
na - tum, na - tum, na -

ppp *pp* *sim.*
na - tum, na - tum, na -

43 *pp* *ppp*
- tum, mo - do na - tum.

pp *ppp*
- tum, mo - do na - tum.

pp *ppp*
- tum, mo - do na - tum.

pp *ppp*
- tum, mo - do na - tum.

*ossia
Los Angeles, July 2000

Figure 4.19 *Lux Aurumque* for wind band bars 44 - 54 (Whitacre, 2005)

44 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*
Fl. 1-2

Fl. 3-4

Ob. 1-2

Bsn. 1-2
ppp *p* *ppp* *p* *ppp* *p* *ppp*

Cbsn.

Cl. 1

Cl. 2 *ppp* *p* *ppp* *p* *ppp* *p* *ppp* unis.

Cl. 3 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

B. Cl. *ppp* *p* *ppp* *p* *ppp* *p* *ppp* unis.

A. Sax. 1-2 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

T. Sax. *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

B. Sax. *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

44 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*
Tpt. 1-2

Tpt. 3-4

Hn. 1-2 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

Hn. 3-4 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

Tbn. 1-2 *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

B. Tbn. *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

Euph. *ppp* *p* *ppp* *p* *ppp* *p* *ppp*

Tba. *ppp* *p* *ppp* *p* *ppp* *p* *ppp* div.

Los Angeles, January 2005

Table 4.10 *Lux Aurumque* melodic material redistribution chart bars 44 - 54

REHEARSAL MARK F (Bars 44 – 54)										
	S1	S2	S3/ Solo	A1	A2	T1	T2	B1	B2	New Material/ Harmony
44	Cl. 1	Fl. 1 Fl. 2 Cl. 2 A. Sax. 1 A. Sax. 2 Hn. 1 Hn. 2	Unison	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) Hn. 4	B. Sax.	Bsn. 1 B. Cl. Tbn. 1 Euph.	Bsn. 2 Tbn. 2	B. Tbn Tba. (div)	Tba. (div) (0)
45	Cl. 1	Fl. 1 Cl. 2 (div) A. Sax. 1 Hn. 1	Fl. 2 Cl. 2 (div) A. Sax. 2 Hn. 2	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	B. Cl. Euph.	Bsn. 1 Tbn. 1	B. Tbn Tba. (div)	Bsn. 2 Tbn. 2 ^+ Tba. (div)	
46	Cl. 1	Fl. 1 Fl. 2 Cl. 2 A. Sax. 1 A. Sax. 2 Hn. 1 Hn. 2	Unison	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) Hn. 4	B. Sax.	Bsn. 1 B. Cl. Tbn. 1 Euph.	Bsn. 2 Tbn. 2	B. Tbn Tba. (div)	Tba. (div) (0)
47	Cl. 1	Fl. 1 Cl. 2 (div) A. Sax. 1 Hn. 1	Fl. 2 Cl. 2 (div) A. Sax. 2 Hn. 2	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	B. Cl. Euph.	Bsn. 1 Tbn. 1	B. Tbn Tba. (div)	Bsn. 2 Tbn. 2 ^+ Tba. (div)	
48	Cl. 1	Fl. 1 Fl. 2 Cl. 2 A. Sax. 1 A. Sax. 2 Hn. 1 Hn. 2	Unison	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) Hn. 4	B. Sax.	Bsn. 1 B. Cl. Tbn. 1 Euph.	Bsn. 2 Tbn. 2	B. Tbn Tba. (div)	Tba. (div) (0)
49	Cl. 1	Fl. 1 Cl. 2 (div) A. Sax. 1 Hn. 1	Fl. 2 Cl. 2 (div) A. Sax. 2 Hn. 2	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	B. Cl. Euph.	Bsn. 1 Tbn. 1	B. Tbn Tba. (div)	Bsn. 2 Tbn. 2 ^+ Tba. (div)	
50	Cl. 1	Fl. 1 Cl. 2 (div) A. Sax. 1 Hn. 1	Fl. 2 Cl. 2 (div) A. Sax. 2 Hn. 2	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	B. Cl. Euph.	Bsn. 1 Tbn. 1	B. Tbn Tba. (div)	Bsn. 2 Tbn. 2 ^+ Tba. (div)	
51	Cl. 1									
52	Cl. 1	Fl. 1 Fl. 2 Cl. 2 A. Sax. 1 A. Sax. 2 Hn. 1 Hn. 2	Unison	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	Bsn. 1 B. Cl. Tbn. 1 Euph.	Unison	B. Tbn Tba. (div)	Bsn. 2 ^+ Tbn. 2 ^+ Tba. (div)	
53	Cl. 1	Fl. 1 Fl. 2 Cl. 2 A. Sax. 1 A. Sax. 2 Hn. 1 Hn. 2	Unison	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	Bsn. 1 B. Cl. Tbn. 1 Euph.	Unison	B. Tbn Tba. (div)	Bsn. 2 ^+ Tbn. 2 ^+ Tba. (div)	
54	Cl. 1	Fl. 1 Fl. 2 Cl. 2 A. Sax. 1 A. Sax. 2 Hn. 1 Hn. 2	Unison	Cl. 3 (div) T. Sax. Hn. 3	Cl. 3 (div) B. Sax. Hn. 4	Bsn. 1 B. Cl. Tbn. 1 Euph.	Unison	B. Tbn Tba. (div)	Bsn. 2 ^+ Tbn. 2 ^+ Tba. (div)	

Use of Timbre

Whitacre's use of instrumentation, voicing and octave displacements have led to the original choral work's homogenous sound being recreated in a more complex heterogeneous setting.

When paralleled to Lang's Vocal Register Classification of Wind Instruments (Lang, 1950), it is evident that Whitacre hasn't simply sought to recreate the work in a similar setting. There are numerous instances where instruments are assigned lines in Lang's third preference as well as voices utilised that are not recommended for instrument types (see table 4.11). Where earlier transpositions of works for wind band sought to simply emulate the original, *Lux Aurumque* seeks to give voice to all of the unique timbres of its instrumentation. This displays more characteristics of a wind band composition of the later half of the twentieth century when compared to transcriptions of the first half of the century.

Table 4.11 Lang’s Vocal Register Classification of Wind Instruments in comparison to the melodic material redistribution of *Lux Aurumque*

Chart Key	
A	Lang’s 1 st recommendation
B	Lang’s 2 nd recommendation
C	Lang’s 3 rd recommendation
✓	Assigned part at pitch
☑	Assigned part via octave displacement

Instrument	Soprano		Alto		Tenor		Bass	
	Lang	Whitacre	Lang	Whitacre	Lang	Whitacre	Lang	Whitacre
Flute	A	☑		☑		☑		☑
Oboe	A	☑		☑		☑		
Bassoon			C	☑	B	✓	A	☑
Contrabassoon							A	☑
Clarinet	A	☑	B	☑	C	☑		☑
Bass Clarinet			C	☑	B	☑	A	✓
Alto Saxophone	B	✓	A	✓	C	✓		
Tenor Saxophone		☑	B	☑	A	✓	C	✓
Baritone Saxophone				☑	B	✓	A	☑
Trumpet	A	☑	B	✓		☑		
French Horn		☑	A	✓	B	☑		☑
Trombone			C	☑	A	✓	B	☑
Bass Trombone					B	☑	A	✓
Euphonium			C	☑	A	✓	B	☑
Tuba							A	☑

For instruments such as the clarinet and saxophone family, it isn’t uncommon for Whitacre to utilise these instruments over the four voice types. Small ensembles such as these within the full wind band allow for a variation of their unique timbres not found in the original choral work. Grouping of the instruments displays similarities to the sort of sound pyramid described for example by W.F. McBeth (McBeth, 1972). This is evident during the full ensemble setting, yet Whitacre treats each sub ensemble setting in similar fashion. This permits for each instrument’s unique timbre, balance and blend.

A choral timbre is based upon the sounds of the vowels, consonants, blend and balance of the singers (Kob, 2011), where as a wind band's timbre is based upon instrumentation, voicing and intensity (O'Neal, 1993). The original choral work sees only three variations in its melodic distribution. The majority of the work is SATB (with some *divisi*), with some variation through the use of ATB and TB voicing. The wind band transcription displays a greater variation throughout the work, with a total of thirteen variations, all with unique instrumentation. Material has been redistributed throughout the ensemble with variations such as a woodwind choir, brass choir, mixed and the full ensemble itself (see table 4.12). Whitacre favours use of the clarinet and saxophone families due to their versatilities. Combinations of these woodwinds with tenor instruments such as horn and trombone create blend across a now heterogeneous sound scape, further expanded by the use of the full wind orchestra.

Table 4.12 *Lux Aurumque* significant orchestration statistics

ORCHESTRATION	TOTAL OCCURRENCE WITHIN TIMBRAL VARIATIONS	PERCENTAGE OF VARIATIONS
Timbral Changes	13	100.00
Unique Instrumental Groupings	13	100.00
WOODWIND		
Flute	7	53.85
Oboe	3	23.08
Bassoon	8	61.54
Contrabassoon	2	15.38
Clarinet	13	100.00
Bass Clarinet	11	84.62
Alto Saxophone	10	76.92
Tenor Saxophone	10	76.92
Baritone Saxophone	9	69.23
BRASS		
Trumpet	8	61.54
Horn	9	69.23
Trombone	10	76.92
Bass Trombone	8	61.54
Euphonium	6	46.15
Tuba	5	38.46
SIGNIFICANT COMBINATIONS		
Clarinet and Saxophone	10	76.92
Clarinet and Horn	9	69.23
Horn and Trombone	8	61.54
Clarinet and Trombone	10	76.92
Two or more of the above	13	100.00
Clarinet Family	11	84.62
Saxophone Family	9	69.23
Woodwind Choir	1	7.69
Brass Choir	0	0.00

Timbres can be mapped out using Arthur Lange’s Spectrotone Chart (Lange, 2012), revealing the more intricate nature of the wind band transcription in its complexity of different instrument voices and timbres throughout their ranges (see table 4.13). As most instruments have multiple parts and lines, it is quite common for a single instrument to display multiple colours at the same time, greatly expanding upon the homogenous sounds of the choral version. A comparison of these two distinct timbral variations can be found via professional recordings of each work (Whitacre, 2010, track 1 & Whitacre, 2012, track 6).

Table 4.13 *Lux Aurumque* variations of timbre and instrumental grouping in accordance with Arthur Lange’s Spectrotone Chart.

Bar Numbers	Choir Voicing	Wind Band Instrumentation	Number of instrument type utilised*	Number of unique timbre variations
1 to 8	SATB	Woodwind Choir	8	10
		Flute, oboe, bassoon, clarinet family, saxophone family		
9 to 12	SATB	Woodwinds and Brass	8	16
		Flute, B \flat clarinet, alto saxophone, tenor saxophone, trumpet, horn, trombone, bass trombone		
13 to 14	SATB	Woodwinds and Brass	9	14
		Bassoon, clarinet family, saxophone family, trumpet, trombone, bass trombone		
15	SATB	Woodwinds and Brass	11	17
		Bassoon, clarinet family, saxophone family, trumpet, trombone, bass trombone, euphonium, tuba		
Q316 to 17	ATB	Clarinets and Brass	5	6
		Clarinet family, horn, euphonium, tuba		
18 to 19	SATB	Woodwinds and Brass	5	11
		Flute, B \flat clarinet, trumpet, horn, trombone		
20	SATB	Woodwinds and Brass	9	16
		Flute, clarinet family, saxophone family, trumpet, horn, trombone		
21	SATB	Woodwinds and Brass	14	22
		Flute, oboe, bassoon, clarinet family, saxophone family, trumpet, horn, trombone, bass trombone, euphonium		
22 to 31	SATB	Full Ensemble	16	35
		Flute, oboe, bassoon family, clarinet family, saxophone family, trumpet, horn, trombone, bass trombone, euphonium, tuba		
32 to 33	SATB	Woodwinds and Brass	13	27
		Bassoon family, clarinet family, saxophone family, trumpet, horn, trombone, bass trombone, euphonium		
34 to 35	TB	Clarinets and Brass	6	8
		Clarinet family, horn, trombone, bass trombone, tuba		
36 to 43	SATB	Woodwind Choir	6	8
		Bassoon, clarinet family, saxophone family		
44 to 54	SATB	Woodwinds and Brass	12	18
		Flute, bassoon, clarinet family, saxophone family, horn, trombone, bass trombone, euphonium, tuba		

* based upon individual instrument types, not parts per instrument

The wind band transcription displays a vastly greater amount of timbral variations. Whitacre makes use of the timbre to clearly define each section of the work and aid characteristics of word painting in the absence of text. The work opens and closes with smaller timbre variations, effectively bookending the work. Bars 21, 22 to 31 and 32 to 33 display the most complex sections of timbral blend, allowing for the listener's emotional connection to the work to be heightened during the climax of the piece.

Making use of Arthur Lange's Spectrotone Chart, it is possible to compile a graphic score of the work based upon the timbre variations found throughout its instrumentation (see Appendix 2). From this, it is possible to see Whitacre's use of colour, combinations of ensemble, effectiveness in replicating the initial meaning of the work and expansion of the middle section. The scoring reflects a desire for overall blend, with numerous instances of both "perfect" and "close color combinations" (Lange, 2012). Whilst the composer makes use of contrasting tone colours in the climax of the work, the contrasts of the extremes (low and high) are balanced via combinations with mid-range instruments' tone colours. This score may prove to be beneficial to conductors, composer and arrangers in their attempts to understand Whitacre's use of timbre in redefining *Lux Aurumque*.

CHAPTER FIVE: REST

The Composer: Frank Ticheli

Frank Paul Ticheli IV was born in in Monroe, Louisiana on January 21 1958 (Burrack, 2013). Ticheli's most notable output is original works for the wind band, many of which have become standards in the repertoire and appear on numerous state festival lists in the United States ("Frank Ticheli MusicNow", 2016; The Wind Repertory Project, 2014). Ticheli states that he is drawn to writing for the concert band due to "the rich variety of colors (sic) that large group of wind instruments can offer" (Banddirector.com, 2008). In addition to his wind ensemble works, Ticheli's orchestral works, whilst not as successful as his output for band, have received considerable international recognition with performances by professional ensembles based in Frankfurt, Saarbrücken, Austria, Hong Kong along with numerous others (Moorhouse, 2006, Ticheli, 2017).

Ticheli began his musical education on trumpet at the age of nine. In 1971 his family relocated to Richardson, a suburb of Dallas, Texas. Ticheli has stated that the experiences of the Richardson band programs would later influence his decision to study composition (Banddirector.com, 2008; Popp, 2013). Ticheli received his Bachelor of Music from Southern Methodist University studying under Bruce Faulcone, Jack Waldenmaier and Donald Erb. After a period working as an assistant band director in Harland Texas, Ticheli subsequently attended the University of Michigan in order to gain both his Masters and Doctorate degrees in composition,

where his primary instructors were William Bolcom, Leslie Bassett, William Albright and George B. Wilson. (Moorhouse, 2006; Besse, 2012; Burrack, 2013; Ticheli 2017).

An eclectic composer, Ticheli's music has been described as "optimistic and thoughtful" (Cariaga, 1994) and "lean and muscular" (Holland, 1989). In his review for the Miami Herald, Lawrence Budmen noted that "the gifted composer of orchestral and wind ensemble works equally at home in the vocal realm" (Budmen, 2014). Ticheli himself notes that his use of rhythmic language lends itself to the wind band (Banddirector.com, 2008). Many of the composer's works are the result of commissions from high school, university and community based ensembles and are published almost exclusively through Manhattan Beach Music where Ticheli has established a strong relationship with publisher Bob Margolis (Popp, 2013). This continued relationship has drawn criticism of the authenticity of the musical achievement of some of Ticheli's works and their popularity. In his blog, Nate Craddock has stated that Ticheli has "the benefit of Manhattan Beach singing parans to him with every release" and that while his attempts at twelve tone compositions are still of high quality, they "aren't quite 1930's Vienna" (Craddock, 2011). A minority of his output (primarily non band works) is published by Encore Music Publishers and Hinshaw Music (Burrack, 2013; Ticheli, 2017). With the majority of his output focused on melodic and tonal compositions, Ticheli is clearly a post-modernist composer.

Criticism for Ticheli's compositions and writing style is often difficult to source. The composer's composition *Wild Nights!*, has been referred to as being too "cluttered" in its writing and Ticheli's score directions at times allowing for "bland and uninspired" interpretations from conductors (Sputnik Music, 2009; Boldin; 2011). A review for

Ticheli's well-known work *An American Elegy*, written in honour to the victims and survivors of the Columbine High School shooting, calls the composition euphonious, whilst overwhelmingly "rather bland and forgettable occasion music" (Grames, 2013). Steve Schwartz notes some unoriginality in that while Ticheli's writing has a "familiar look to Morton Lauridsen's" it ultimately is "pretty enough to stand on its own" (Schwartz, 2008).

Whilst predominantly composing for concert band, Ticheli regular writes for orchestra, chorus and chamber ensembles of varying instrumentation (Ticheli, 2017). A number of his works have received transcriptions from one medium to another including *Earth Song* (Chorus, Concert Band), *An American Elegy* (Concert Band, Orchestra, Orchestra with solo) and *There Will Be Rest/Rest* (Chorus, Concert Band, String Orchestra). The composer has presented a number of solo concertos and concertinos, with his *Concerto for Clarinet and Orchestra* (2011) compared to Gershwin's *Rhapsody in Blue* and noted similarities to Bernstein and Copland's portrayal of American music (Pitcher, 2016). Ticheli is still active as a composer with recent works including (but not limited to) *Silver Lining – Concerto for Flute and Wind Ensemble* (2017), *Dancing on Water* (2015), *Concerto for Alto Saxophone and Wind Ensemble* (2014), all for concert band and *The Shore* (2013), a choral symphony for chorus and orchestra based on four poems of David St. John (Ticheli, 2017).

Ticheli has held positions with many well-respected ensembles and institutions. He has served as Assistant Professor of Music at Trinity University in San Antonio, Texas (Banddirector.com, 2008). Whilst here, he was a member of the advisory committee for San Antonio Symphony's 'Music of the Americas' project and as a member of the

board of directors of the Texas Composers Forum (Ticheli, 2017). Between the years of 1991 and 1998, Ticheli was appointed composer-in-residence with the Pacific Symphony Orchestra in Orange County, California, forming a connection with the Pacific Chorale, the orchestra's vocal counterpart (Banddirector.com, 2008). Since 1991, he has held the position of Professor of Composition at the Thornton School of Music, located at the University of Southern California (Burrack, 2013; Ticheli 2017).

Rest for Concert Band

Ticheli's music has been the topic of numerous theses and dissertations, focusing predominantly on his wind band music, its compositional techniques, orchestration and rehearsal preparation (Darling, 2001; Moorhouse, 2006; Gershman, 2012; Besse, 2012; Popp, 2013; Burrack, 2013). As Ticheli's output is primarily for wind band, there is minimal academic deliberation in relation to Ticheli's choral music and its transcriptions. In the dissertation "An Examination of Orchestration Techniques Used In Wind Band Transcriptions Of A Cappella Choral Works", Shaun R. Popp discusses the similarities to and deviations from the original choral work *There Will Be Rest* and its concert band transcription, *Rest* (Popp, 2013). The investigation, however, is devoid in its investigations of how the orchestration ultimately transforms the work through the new medium and focuses primarily on melodic redistribution.

Originating from Ticheli's choral work for SATB (*divisi*) chorus, *There Will Be Rest*, the work was commissioned by the Pacific Chorale and its artistic director, John Alexander (Ticheli, 2000). The work utilises the text of American poet Sara Teasdale's (1884 – 1933) poem of the same title (see Appendix 3).

Teasdale's poetic output centred on changing perspectives in beauty, love and death (Burrack, 2013), with *There Will Be Rest* being no exception. The poem was composed shortly before the author took her own life. A lifelong battle with depression, and weakened by pneumonia, Teasdale's last works primarily deal with death and the peace that is received with it. The work was published posthumously in her collection of works *Strange Victories* after the poet's suicide in January 1933 (The Academy of American Poets, n.d.). The chosen text suitably accentuates the dedication of original choral work, for the composer dedicated the piece to a close friend's son, Cole Carson St. Clair, who tragically drowned at a young age (Ticheli, 2010; Burrack, 2013).

Adapted by the composer for concert band in 2010, *Rest* was commissioned by Russel Mikkelson, Director of Bands at The Ohio State University and family in memory of his father, Elling Mikkelson (Ticheli, 2010).

In his transcription for concert band, Ticheli employs the following instrumentation:

Flute 1st and 2nd
Oboe 1st and 2nd
Bb Clarinet 1st (*divisi*), 2nd and 3rd
Bb Bass Clarinet (*divisi*)
Bassoon 1st and 2nd
Eb Alto Saxophone 1st and 2nd
Bb Tenor Saxophone
Eb Baritone Saxophone
Bb Trumpet 1st, 2nd and 3rd
F Horn 1st, 2nd, 3rd and 4th
Trombone 1st, 2nd and 3rd
Euphonium
Tuba (*divisi*)
String Bass
Timpani
Suspended Cymbal

This style of instrumentation is typical for Ticheli to employ and will be further discussed below. In the program notes provided in the front of the concert band score, Ticheli states: “In making this version, I preserved almost everything from the original; harmony, dynamics, even the original registration. I also endeavoured to preserve carefully the fragile beauty and quiet dignity suggested by Sara Teasdale’s words” (Ticheli, 2010).

A notable difference between the two versions is that the concert band transcription features new melodic material developed and is extended upon from the original choral score (Ticheli, 2010, Gershman, 2012). In reflection on the removal of text from the work, Ticheli made note:

...I felt free to enhance certain aspects of the music, most strikingly with the addition of a sustained climax on the main theme. This extended climax allows the band version to transcend the expressive boundaries of a straight note-for-note setting of the original. Thus, both versions are intimately tied and yet independent of one another, each possessing it’s own strengths and unique qualities (Ticheli, 2010).

Whilst numerous assessments of the work detail an analysis of the score and rehearsal techniques, little investigation has been made into how timbre and tone colour has altered the work allows it to transcend as Ticheli intended.

Analysis

Form and Structure

Rest for concert band exhibits considerable similarities with *There Will Be Rest*, though Ticheli has included further development of the original melodic material.

Rest retains its original metre of *f*... and is marked “Tempo Rubato” with a metronome marking of crotchet equals 50 beats per minute. The markings throughout the work remain relatively the same as the original choral work. There are three times that the tempo markings deviate from the original. Bar 23 sees the concert band present the material at a slower crotchet equals 66 instead of 72. At two instances (bars 65 and 75), the concert band transcription calls for a faster tempo than that of the original choral composition. It is conceivable, that due to presenting the work and its developmental sections without text, these slight alterations are the composer’s efforts to present the emotional content and desired response via a more complex timbral palette. In comparison to the choral version of the work, the piece is suited to a rubato style, accentuating the composer’s usage of clusters, dissonance and consonance in addition to tension and release to accentuate the emotional content of the work.

When compared with the original choral setting, the transcription’s overarching form differs from the original setting, with the concert band transcription presented in a rounded binary form framed within an introduction and a coda. (Burrack, 2013). Table 5.1 demonstrates the major similarities and differences between the two versions of the work.

Table 5.1 *There Will Be Rest* and *Rest* form and bar numbers of original and transcription

Section	Choral Version		Concert Band Version	
	Bar Number	Key	Bar Number	Key
Introduction	1 - 7	E \flat major	1 - 7	E \flat major
A	8 - 21	E \flat major	8 - 21	E \flat major
A'	22 - 48	E \flat major, G \flat major, E \flat major	22 - 48	E \flat major, G \flat major, E \flat major
B	49 - 74	E \flat major	49 - 72	E \flat major
A''			73 - 93	E \flat major
Coda	75 - 84	G major	94 - 103	G major

With the inclusion of the A'' section and developed material, the choral work's original eighty-four bars are expanded to one hundred and three (see table 5.2)

Table 5.2 *Rest* for concert band source material

Original Choral Material	Concert Band Transcription
Bars 1 - 64	Bars 1 - 64
Bars 65 - 72	Bars 65 - 71 With additional ornamentation
Bars 7 - 21 Source material for development	Bars 72 - 92 Development of material
Bars 73 - 74 Source material for development	Bars 90 - 93 Developed material for transition
Bars 74 - 84	Bars 94 - 103










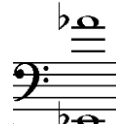
Instrumentation and Range

The selection of instrumentation is the standard instrumentation for an American concert band. The composer avoids the use of less common instruments like the piccolo, Eb clarinet, alto clarinet and contra bassoon. By utilising smaller chamber like groups within instrument families or combinations of these, Ticheli is able to achieve a greater selection of voicing options and colours than that found in the original SATB (*divisi*) choral setting. As the work was commissioned by a university ensemble (The Ohio State University Wind Symphony), the piece is written for a mature sound. Ticheli describes this as “ensemble sound at the forefront” and is reliant on significant attention to tone, intonation and ensemble balance and is considered expressively challenging (Ticheli, 2010).

It has been previously noted that the omission of percussion is a relatively common practice for slow, hymn like works, with the timbres not always lending themselves to the composition (Hairel, 2009). Ticheli, however, uses only a small percussion feature to emphasis the extended climax of the work, differentiating it further from the original.

Aside from the extended development, the work mostly retains its original registration, overall harmonic structure and key centres (see table 5.1) beginning in Eb major, a favourable key for wind bands of all levels (Erickson, 1983) (see table 5.3).

Table 5.3 *There Will Be Rest* choral and *Rest* for concert band ranges

Voice	Choral Version Range	Concert Band Transcription Range (via orchestration)	Choral Version Range	Concert Band Range with extended climax
Soprano	 Bb 3 - Ab 5	 Bb 3 - C 6		
Alto	 Ab 3 - Eb 5	 Ab 3 - F 5	 Eb 2 - Ab 5	 E 1 - C 7
Tenor	 Eb 3 - Ab 4	 Eb 3 - Ab 4		
Bass	 Eb 2 - Eb 4	 Eb 2 - Ab 4		

Ticheli predominantly employs a linear approach to his melodic redistribution (Popp, 2013). It should be noted though that there are numerous instances of cross part writing, which are explored in the analysis of the work. These variations, in conjunction with the extended climax, allow the concert band version to differentiate itself from the original (Gershman, 2012).

Melodic Material Redistribution and Orchestration Techniques

The seven bar introduction opens with an ambiguous cluster chord emerging from a unison pitch on the words “*There will be rest*”. Ticheli restates this cluster like figure three times during the introduction (see figure 5.1). To engage the warmth of the text, the composer utilises blend of the lower pitch clarinet family, horns and euphonium to replicate the blend of the original tenor and bass voices. New colours such as the bassoon and trombone are introduced for each repetition of the motif, given the variation of the vocal arrangement (see figures 5.2 and 5.3). Vocal parts are assigned to instruments with minimal cross over within a phrase, though these may change for effect upon the motif’s restatement. There are instances in this section (and throughout the work) where rhythmic material has been manipulated in order to create suspensions and a sense of sustained line. This can be witnessed in the held notes of bar 1 whereas the original choral lines were all separated crotchets (see figures 5.2 and 5.3). Material is spread evenly over instrument families such as clarinet and brass (see table 5.4). Instruments such as 3rd clarinet, bass clarinet, 1st trombone and euphonium emphasis the cluster chord by switching voice assignments with each other respectively.

Figure 5.1 *Rest* introduction piano reduction

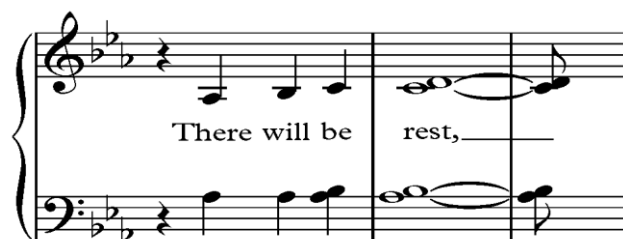


Figure 5.2 *There Will Be Rest* choral score bars 1 - 6 (Ticheli, 2000)

THERE WILL BE REST

For Mixed Voices, S.A.T.B. (div.), a cappella

SARA TEASDALE FRANK TICHELI

Tempo Rubato (♩ = ca. 50) *pp*

Soprano: There will be rest,

Alto: There will be rest,

Tenor: There will be rest, There will be rest,

Bass: There will be rest,

poco più mosso
p

5 and sure stars shin-ing

Figure 5.3 *Rest* for concert band score bars 1 - 6 (Ticheli, 2010)

REST
FOR CONCERT BAND

FRANK TICHELI

Tempo Rubato (♩ = ca. 50) *poco più mosso* **8** Più mosso (♩ = ca. 66)

Flute 1, 2

Oboe 1, 2

B♭ Clarinet 1, 2, 3

B♭ Bass Clarinet

Bassoon 1, 2

E♭ Alto Saxophone 1, 2

B♭ Tenor Saxophone

E♭ Baritone Saxophone

B♭ Trumpet 1, 2, 3

F Horn 1, 2, 3, 4

Trombone 1, 2, 3

Euphonium

Tuba

String Bass

Timpani

Suspended Cymbal

Table 5.4 Rest melodic material redistribution charts bars 1 - 6

BARS 1 - 6										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
1					Cl. 1 Cl. 2 Hn. 1 Hn. 2	Unison	Cl. 3 Hn. 3	B. Cl. Euph.		
2					Cl. 1 Hn. 1	Cl. 2 Hn. 2	Cl. 3 Hn. 3	B. Cl. Euph.		
3	Cl. 1 Cl. 2 Hn. 1 Hn. 2 Hn. 3	Unison	Cl. 3 Hn. 2	B. Cl. Hn. 4	Bsn. Euph.	Unison				
4	Cl. 1 Hn. 1	Cl. 2 Hn. 3	Cl. 3 Hn. 2	B. Cl. Hn. 4	Bsn. Euph.	Unison				
5	Cl. 1 Hn. 1 Hn. 2	Unison	Cl. 2 Hn. 3 Hn. 4	Unison	Cl. 3 Bsn. Tbn. 1	Unison	B. Cl. Euph.	Unison		
6	Cl. 1 Hn. 1 Hn. 2	Unison	Cl. 2 Hn. 3 Hn. 4	Unison	Cl. 3 B. Cl. Bsn. Tbn. 1 Euph.	Unison	Cl. 3 B. Cl. Bsn. Tbn. 1 Euph.	Unison		

Bar 8 (with a three beat anacrusis) sees the work firmly based in Eb major and the melodic material begins to develop. Ticheli employs a warm balanced homophonic ensemble for this section (see table 5.5). The 3rd clarinet, 3rd and 4th horn and 1st trombone lines initially state the melody though this is quickly passed to other instruments due to the material of the original choral work (see figures 5.4 and 5.5). The addition of more brass instruments, saxophones and the extended range of the soft sounding clarion range of the clarinets reaffirm this as the beginning of the A section and emphasize the text of “*sure stars shining over the rooftops crowned with snow*”.

Figure 5.4 *There Will Be Rest* choral score bars 7 - 12 (Ticheli, 2000)

8 *più mosso* (♩ = ca. 72)

there will be rest, there will be there will be rest,

9 *mp cresc.* and sure stars shin-ing O-ver the roof-tops crowned with snow, A *mf* *p* ()

sure stars shin-ing O-ver the roof-tops crowned with snow, *mf* *p*

rest, shin-ing O-ver the roof-tops crowned with snow, *mf* *p*

sure stars shin-ing O-ver the roof-tops crowned with snow, *mf* *p*

Figure 5.5 *Rest for* concert band score bars 7 - 12 (Ticheli, 2010)

8 *Più mosso* (♩ = ca. 66)

Fl. 1, 2
Ob. 1, 2
B♭ Cl. 1, 2, 3
B♭ Bass Cl.
Bsn. 1, 2
E♭ Alto Sax. 1, 2
E♭ Ten. Sax.
E♭ Bari. Sax.
B♭ Tpt. 1, 2, 3
F Hrn. 1, 2, 3, 4
Tbn. 1, 2, 3
Euph.
Tba.
Str. Bs.
Timp.
Sus. Cymb.

Table 5.5 Rest melodic material redistribution charts bars 7 - 12

BARS 7 - 12										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
7			Cl. 1 Cl. 2 T. Sax. Hn. 1 Hn. 2	Unison			B. Cl. Tbn. 2 Euph.	Unison		
8			Cl. 1 Cl. 2 T. Sax. Hn. 1 Hn. 2	Unison	Cl. 3 Hn. 3 Hn. 4 Tbn. 1	Unison	Bsn. 1 Tbn. 2	B. Cl. Bsn. 2 Euph.		
9	Cl. 1 Cl. 2 A. Sax 1	Unison	Cl. 3 T. Sax. Hn. 1 Hn. 2	Unison	Cl. 3 Hn. 3 Hn. 4 Tbn. 1	Unison	Bsn. 1 Tbn. 2	B. Cl. Bsn. 2 Euph.		
10	Cl. 1 Cl. 2 A. Sax 1	Unison	Cl. 3 T. Sax. Hn. 1 Hn. 2	Unison	Bsn. 1 Hn. 3 Hn. 4 Tbn. 1	Unison	B. Cl. Bsn. 1 Bsn. 2 Tbn. 2 Euph.	Unison		
11	Cl. 1 Cl. 2	Cl. 3 A. Sax 1	T. Sax. Hn. 1 Hn. 2	T. Sax. Hn. 1 Hn. 2	Bsn. 1 Hn. 3 Hn. 4	Unison	Bsn. 2 Euph.	Unison		
12	Cl. 1 Cl. 2	Unison	Cl. 3 A. Sax 1 Hn. 1 Hn. 2	Unison	Bsn. 1 T. Sax. Hn. 3 Hn. 4	Unison	Bsn. 2 Euph.	Unison		

Upper woodwinds such as flutes and oboes are introduced for the first time in bars 13 through to 16, appropriately replicating the soprano material (see table 5.6). The flute and clarinet lines have a more sustained rhythm from that of the original, creating greater sustain and suspension amongst the ensemble. Material is once again spread evenly across instrument types with appropriate sections based upon timbre and capabilities. To incorporate the increased range of the bass parts, Ticheli utilises the chalumeau register of the bass clarinet combined with 3rd trombone, tuba and string bass for the first time, creating a more sonorous rich ensemble sound (see figures 5.6 and 5.7).

Figure 5.6 *There Will Be Rest* choral score bars 13 - 16 (Ticheli, 2000)

Musical score for 'There Will Be Rest' choral score bars 13-16. The score is in 4/4 time and begins with a tempo marking of *meno mosso*. It features four vocal parts: Soprano (S), Alto (A), Tenor (T), and Bass (B). The lyrics are: 'reign of rest, se - rene' for the Soprano part; 'A reign of rest, se - rene for - get - ting,' for the Alto and Tenor parts; and 'reign se - rene' for the Bass part. The score includes various musical notations such as rests, slurs, and dynamic markings.

Figure 5.7 *Rest* for concert band score bars 13 - 16 (Ticheli, 2010)

Musical score for 'Rest' for concert band score bars 13-16. The score is in 4/4 time and begins with a tempo marking of *poco meno mosso*. It features a concert band arrangement with various instruments including woodwinds, brass, and percussion. The score includes dynamic markings such as *mp* and *p*, and includes instructions like '(if one only, always play bottom notes)'. The score is divided into sections with first, second, and third endings, and includes a section starting at bar 13.

Table 5.6 Rest melodic material redistribution charts bars 13 - 16

BARS 13 - 16										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
13	Fl. 1 Ob. 1	Unison	Cl. 1 A. Sax 1	Cl. 2 Cl. 3 v* A. Sax 2	Cl. 2 Cl. 3 Bsn. 1 A. Sax 2 Hn. 1 Hn. 2 Euph.	Unison	B. Cl. (div) Tbn. 3 Str. Bs.	B. Cl. (div) Tba. Str. Bs.		
14	Fl. 1 Ob. 1	Unison	Cl. 1 A. Sax 1	Cl. 2 Cl. 3 v* A. Sax 2	Bsn. 1 Hn. 1 Hn. 2 Euph.	Unison	B. Cl. (div) Tbn. 3 Str. Bs.	B. Cl. (div) Tba. Str. Bs.		
15	Fl. 1	Ob. 1	Cl. 1 A. Sax 1	Cl. 2 Cl. 3 A. Sax 2	Cl. 2 Bsn. 1 Hn. 1 Hn. 2 Euph.	Unison	B. Cl. (div) Hn. 1 Hn. 2 Tbn. 3 Euph. Str. Bs.	Cl. 3 ^* B. Cl. (div) Tba. Str. Bs.		
16	Fl. 1 Ob. 1	Unison	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2	Bsn. 1 Hn. 1 Hn. 2 Euph.	Unison	B. Cl. (div) Tbn. 3	Cl. 3 ^* B. Cl. (div) Tba. Str. Bs.		

Bars 17 to 21 sees a new orchestration technique employed by Ticheli. Melodic material is spread evenly across the instrument lines as before, with the exception of the 2nd soprano and alto lines. However, instead of incorporating this into the clarinet family, it is found solely within the 1st alto saxophone and horn section respectively (see table 5.7). This allows for the individual lines to be differentiated from each other due to the different timbres of each lines. The composer has chosen to retain the sparse orchestration in bar 21 to replicate the original text “*low*” (see figures 5.8 and 5.9).

Figure 5.8 *There Will Be Rest* choral score bars 17 - 21 (Ticheli, 2000)

Figure 5.8 shows the vocal parts for the choral score of *There Will Be Rest* (Ticheli, 2000), bars 17-21. The score is in 4/4 time and B-flat major. The lyrics are: "The mu-sic — the mus - sic of still-ness ho - ly and low —". The Soprano part begins with a treble clef and a box around the number 17. The Alto part begins with a treble clef. The Tenor part begins with a treble clef and a box around the number 8. The Bass part begins with a bass clef. The lyrics are: "The mu-sic — the mus - sic of still-ness ho - ly and low —".

Figure 5.9 *Rest for* concert band score bars 17 - 21 (Ticheli, 2010)

Figure 5.9 shows the instrumental parts for the concert band score of *Rest for* (Ticheli, 2010), bars 17-21. The score is in 4/4 time and B-flat major. The score includes parts for Flute, Clarinet, Saxophone, Trumpet, Trombone, Euphonium, Tuba, Percussion, and Drums. The lyrics are: "The mu-sic — the mus - sic of still-ness ho - ly and low —". The score includes dynamic markings such as *ppp* and *p*, and performance instructions like *rit.* and *one only*.

Table 5.7 Rest melodic material redistribution charts bars 17 - 21

BARS 17 - 21										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
17	Cl. 1	A. Sax 1	Hn. 1	Hn. 3	Cl. 2 Cl. 3	Unison	B. Cl. (div) Tbn. 3	B. Cl. (div) Tba. Str. Bs.		
18	Cl. 1	A. Sax 1	Hn. 1	Hn. 3	Cl. 2 Cl. 3	Unison	B. Cl. (div) Tbn. 3	B. Cl. (div) Tba. Str. Bs.		
19	Cl. 1 Euph. v*	Unison	A. Sax 1 Hn. 1	Hn. 3	Cl. 2 Cl. 3 Euph.	Unison	B. Cl. (div) Tbn. 3	B. Cl. (div) Tba. Str. Bs.		
20	Cl. 1	Unison	A. Sax 1 Hn. 1	Hn. 3	Cl. 2 Cl. 3 Hn. 3 Euph.	Unison	B. Cl. (div) Tbn. 3	B. Cl. (div) Tba. Str. Bs.		
21	Cl. 1	Unison	A. Sax 1 Hn. 1	Unison	Cl. 3 Euph.	Cl. 2 Hn. 3	B. Cl. (div) Tbn. 3	B. Cl. (div) Tba. Str. Bs.		

Bar 22 marks a return of the A section's material in modified form. A fuller ensemble is employed to give variation of timbre and support to the more resonant homophonic nature of the phrase (see table 5.8). Ticheli once again extends the melodic redistribution across the ensemble with upper woodwinds primarily taking the soprano material and bass instruments incorporating the bass lines. The alto and tenor lines are once again allocated amongst midrange woodwinds and brass (bassoons, saxophones horns, trombones), similarly to the previous phrase (see figures 5.10 and 5.11).

Figure 5.10 *There Will Be Rest* choral score bars 22 - 27 (Ticheli, 2000)

Figure 5.10 shows the choral score for bars 22-27 of 'There Will Be Rest'. The score is written for four voices: Soprano, Alto, Tenor, and Bass. The tempo is marked as $\text{♩} = \text{ca. } 72$. The score begins with a mp cresc. dynamic and includes lyrics: 'and sure stars shin-ing O-ver the'. The lyrics for the subsequent lines are: 'There will be rest, sure stars shin-ing O-ver the', 'There will be rest, shin-ing O-ver the', and 'There will be rest, sure stars shin-ing O-ver the'. The score includes dynamics such as *p*, *cresc.*, and *mf*. The piece concludes with the lyrics 'roof - tops crowned with snow,' repeated for all four voices.

Figure 5.11 *Rest* for concert band score bars 22 - 27 (Ticheli, 2010)

Figure 5.11 shows the concert band score for bars 22-27 of 'Rest'. The score is written for a concert band with various instruments including woodwinds, brass, and percussion. The tempo is marked as $\text{♩} = \text{ca. } 66_2$. The score begins with a mp cresc. dynamic and includes lyrics: 'and sure stars shin-ing O-ver the'. The lyrics for the subsequent lines are: 'There will be rest, sure stars shin-ing O-ver the', 'There will be rest, shin-ing O-ver the', and 'There will be rest, sure stars shin-ing O-ver the'. The score includes dynamics such as *p*, *cresc.*, *mf*, and *mp cresc.*. The piece concludes with the lyrics 'roof - tops crowned with snow,' repeated for all instruments.

Table 5.8 *Rest* melodic material redistribution charts bars 22 - 27

BARS 22 - 27										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
22			Cl. 1 Cl. 2 A. Sax 2 Hn. 1 Hn. 2	Unison			B. Cl. Bsn. 1 Bsn. 2 Tbn. 2 Tbn. 3 Euph.	Unison		
23			Cl. 1 Cl. 2 A. Sax 2 Hn. 1 Hn. 2	Unison	Cl. 3 T. Sax Hn. 3 Hn. 4 Tbn. 1	Unison	Bsn. 1 Tbn. 2	B. Cl. Bsn. 2 Tbn. 3 Euph.		
24	Fl. 2 Ob. 1	Cl. 1 Cl. 2 A. Sax 1	Cl. 3 A. Sax 2 Hn. 1 Hn. 2	Unison	Cl. 3 T. Sax Hn. 3 Hn. 4 Tbn. 1	Unison	Bsn. 1 B. Sax Tbn. 2	B. Cl. Bsn. 2 Tbn. 3 Euph.		
25	Fl. 2 Ob. 1	Cl. 1 Cl. 2 Cl. 3 A. Sax 1	Cl. 3 A. Sax 1 A. Sax 2 Hn. 1 Hn. 2	Unison	Bsn. 1 T. Sax Hn. 3 Hn. 4 Tbn. 1	Unison	B. Cl. Bsn. 1 Bsn. 2 B. Sax Tbn. 2 Tbn. 3 Euph.	Unison		
26	Fl. 2 Cl. 1 Cl. 2	Ob. 1 Cl. 3 A. Sax 1	Cl. 3 A. Sax 2 Hn. 1 Hn. 2	Unison	Bsn. 1 T. Sax Hn. 3 Hn. 4 Tbn. 1	Unison	B. Cl. Bsn. 2 B. Sax Tbn. 2 Tbn. 3 Euph.	Unison		
27	Fl. 2 Cl. 1 Cl. 2 A. Sax 1	Unison	Ob. 1 Cl. 3 A. Sax 2 Hn. 1 Hn. 2	Unison	Bsn. 1 T. Sax Hn. 3 Hn. 4 Tbn. 1	Unison	B. Cl. Bsn. 2 B. Sax Tbn. 2 Tbn. 3 Euph.	Unison		

Bars 28 through to 31 utilises a similar ensemble grouping from the previous statement of “*A reign of rest serene*”, with additional bass reinforcement from the baritone saxophone and 2nd trombone (see table 5.8). To differentiate this section from its previous statement, the soprano line has also been allocated to a solo trumpet incorporating a cup mute. This unique timbral effect allows the trumpet to blend with other soprano allocated instruments (flute and oboe) whilst retaining a unique sound. A rhythmic variation occurs for the anacrusis of bars 28 where the original quaver has been changed to a tenuto marked crochet. This is most likely a deliberate alteration by the composer to allow for fuller sound of the chosen pitch after the initial attack for a wind and brass player (see figures 5.12 and 5.13).

Figure 5.12 *There Will Be Rest* choral score bars 28 - 31 (Ticheli, 2000)

28 *meno mosso*

A reign of rest, — se -

30

rene —

A reign of rest, — se - rene for - get - ting, —

A reign of rest, — se - rene for - get - ting, —

A reign — se - rene —

Figure 5.13 *Rest* for concert band score bars 28 - 31 (Ticheli, 2010)

28 *poco meno mosso*

1. *mp*

30

se - rene for - get - ting, —

se - rene for - get - ting, —

se - rene —

Solo Cup mute

mp

1. (1.)

3. (3.)

p

p

Table 5.9 Rest melodic material redistribution charts bars 28 - 31

BARS 28 - 31										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
28	Fl. 1 Tpt. 1 (mute)	Unison	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2 Hn. 1	Cl. 3 Bsn. 1 A. Sax 1 B. Sax Hn. 1 Hn. 3 Euph.	Unison	Cl. 2 Cl. 3 B. Sax Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. B. Cl. Tba. Str. Bs.	
29	Fl. 1 Tpt. 1 (mute)	Unison	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2 Hn. 1	Bsn. 1 Hn. 3 Euph.	Unison	Cl. 3 B. Sax Tbn. 2	Tbn. 3 Str. Bs.	Tba. Str. Bs.	
30	Fl. 1 Tpt. 1 (mute)	Ob. 1	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2 Hn. 1	Cl. 3 Bsn. 1 Hn. 3 Euph.	Unison	Cl. 2 Cl. 3 Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. Tba. S. Bs.	
31	Fl. 1 Ob. 1 Tpt. 1 (mute)	Unison	Cl. 1 A. Sax 1	A. Sax 2 Hn. 1	Bsn. 1 B. Sax Hn. 3 Euph.	Unison	B. Sax Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. Tba. Str. Bs.	

Ticheli employs the sparsest instrumentation in the piece thus far between bars 32 and 39. In contrast to the previous statement of “*The music of stillness*”, no brass is utilised here, instead a woodwind chorus is presented (see table 5.10). The composer divides the SATB material throughout the parts, as in previous sections, with soprano and alto lines not necessarily found within the same instrument, but instead on a different instrument. For example, bar 32 has the 1st and 2nd clarinets replicating the soprano tenor lines respectively, while the alto saxophone and tenor saxophones replicate the alto and bass lines in turn. There is yet again more incorporation of suspensions and different rhythmic patterns in bar 33 not found in the original choral version (see figures 5.15 and 5.16). With the melodic material in the choral work showing less movement in bars 36 – 39, Ticheli yet again reduces the instrumentation for clarity of line, creating a chamber-like call and response effect (see figures 5.14 and 5.15)

Figure 5.14 *There Will Be Rest* choral score bars 32 - 39 (Ticheli, 2000)

The music the music of
 still-ness the music of still-ness
 still-ness mu-sic still-ness
 still-ness the mu-sic of still-ness
 still-ness
 still-ness ho-ly and low, The
 still-ness ho-ly and low, (4)
 still-ness ho-ly and low,
 still-ness ho-ly and low,

Figure 5.15 *Rest* for concert band score bars 32 - 39 (Ticheli, 2010)

(Solo) rit.
 p

Table 5.10 *Rest* melodic material redistribution charts bars 32 - 39

BARS 32 - 39										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
32	Cl. 1	Unison	A. Sax 1	A. Sax 2	Cl. 2 Bsn. 1	Unison	Cl. 3 T. Sax	Bsn. 2	B. Cl.	
33	Cl. 1	Unison	A. Sax 1	A. Sax 2	Cl. 2 Bsn. 1	Unison	Cl. 3 T. Sax <small>No Assigned Voicing on Beats 3&4</small>	Bsn. 2	Cl. 3 ^* B. Cl. T. Sax ^*	
34	Cl. 1	Unison	A. Sax 1	A. Sax 2	Cl. 2 Bsn. 1	Unison	Cl. 3 T. Sax	Bsn. 2	B. Cl.	
35	Cl. 1	Unison	A. Sax 1	A. Sax 2	Cl. 2 Bsn. 1	Unison	Cl. 3 T. Sax	Bsn. 2	B. Cl.	
36	Cl. 1	Unison	A. Sax 1	Unison	Cl. 2	Unison	Bsn. 1	Unison	Unison	
37	Cl. 1	Unison	A. Sax 1	Unison	Cl. 2	Unison	Bsn. 1	Unison	Unison	
38	Cl. 1	Unison	A. Sax 1	Unison	Cl. 2	Unison	Bsn. 1	Unison	Unison	
39	Cl. 1	Unison	A. Sax 1	Unison	Cl. 2	Unison	Bsn. 1	Unison	Unison	

Ticheli finishes of the A' section with a return to a more expansive ensemble, though still not utilising all performers at one time (see table 5.11). To compensate for the thicker choral texture of bars 44-47 (see figure 5.16), additional brass instruments are added, though with a dynamic marking of *mf* not found in the original (see figure 5.17). This could be a deliberate attempt for a more dramatic close to the A' section, or possibly to assist wind players in the sounding of their assigned pitches. Once again Ticheli makes use of added suspensions and rhythmic alterations in bars 42 and 43. The section closes with a retraction back to a clarinet family and low brass chorus marked *p* instead of the original *pp*.

Figure 5.16 *There Will Be Rest* choral score bars 40 - 48 (Ticheli, 2000)

40 *a tempo*
The mu - sic the mu - sic the
a tempo
a reign of rest, se - rene for - get - ting, the
a tempo
a reign of rest, se - rene for - get - ting,
a tempo
ho - ly and low.

44 *rit.*
mu - sic of still - ness ho - ly and low.
pp rit.
mu - sic of still - ness ho - ly and low, ho - ly and
pp rit.
mu - sic still - ness ho - ly and low, ho - ly and
pp rit.
mu - sic still - ness ho - ly and low, ho - ly and

Figure 5.17 *Rest* for concert band score bars 40 - 48 (Ticheli, 2010)

40 A Tempo (♩ = c. 66)
mu - sic of still - ness ho - ly and low.
mu - sic of still - ness ho - ly and low, ho - ly and
mu - sic still - ness ho - ly and low, ho - ly and
mu - sic still - ness ho - ly and low, ho - ly and

44 *rit.*
mu - sic of still - ness ho - ly and low.
pp rit.
mu - sic of still - ness ho - ly and low, ho - ly and
pp rit.
mu - sic still - ness ho - ly and low, ho - ly and
pp rit.
mu - sic still - ness ho - ly and low, ho - ly and

Table 5.11 *Rest* melodic material redistribution charts bars 40 - 48

BARS 40 - 48										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
40	Fl. 1 Tpt. 1 (mute)	Unison	Cl. 1 A. Sax 1	Cl. 2 Cl. 3 A. Sax 2 Hn. 1	Bsn. 1 T. Sax	Unison	Cl. 3 B. Sax Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. Tba. Str. Bs.	
41	Fl. 1 Tpt. 1 (mute)	Unison	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2 Hn. 1	Bsn. 1 T. Sax	Unison	Cl. 3 B. Sax Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. Tba. Str. Bs.	
42	Ob. 1	Fl. 1	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2 Hn. 1	Bsn. 1 T. Sax	Unison	Cl. 3 B. Sax Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. Tba. Str. Bs.	
43	Fl. 1 Ob. 1	Unison	Cl. 1 A. Sax 1	Cl. 2 A. Sax 2 Hn. 1	Bsn. 1 T. Sax	Unison	Cl. 3 B. Sax Tbn. 2	Tbn. 3 Str. Bs.	B. Cl. Tba. Str. Bs.	
44	Cl. 1 Cl. 2 Tpt. 2	Unison	Cl. 3 A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 3	Bsn. 2 T. Sax Hn. 4	B. Cl. Bsn. 2 B. Sax Hn. 4 Tbn. 3 Euph.	Unison		
45	Cl. 1 Cl. 2 Tpt. 2	Unison	Cl. 3 A. Sax 1 Hn. 1		Bsn. 1 A. Sax 2 Hn. 3	Bsn. 2 T. Sax Hn. 4	B. Cl. Bsn. 2 B. Sax Hn. 4 Tbn. 3 Euph.	Unison		
46	Cl. 1 Cl. 2 Tpt. 2	Unison	A. Sax 1 Hn. 1	Cl. 3 A. Sax 2 Hn. 2	Unison with B1	Unison with B1	Bsn. 1 T. Sax Hn. 3 Hn. 4	B. Cl. Bsn. 2 B. Sax Tbn. 3 Euph.		
47	Cl. 1 Cl. 2 Tpt. 2	Unison	A. Sax 1	Cl. 3 T. Sax	A. Sax 2 Hn. 3 Hn. 4	Unison	Bsn. 1 B. Sax	B. Cl. Bsn. 2 Tbn. 3 Euph.		
48			Cl. 1 Hn. 3	Unison	Cl. 2 Hn. 4	Unison	Cl. 3 Euph.	B. Cl. Tbn. 3		

Bar 49 is the beginning of the B section of the work and is noticeable for its increase in tempo and change of character. The section revolves primarily around a canon-like motif incorporating three-part polyphony (bars 49 to 53), two-part polyphony (bars 54 to 59) and homophony at bar 59 (see figures 5.18 and 5.19).

Figure 5.18 *There Will Be Rest* B section canon motif piano reduction bars 49 - 60

(Ticheli, 2000)

The musical score is presented in three systems, each with a label in a box above the first measure:

- System 1 (Bars 49-53):** Labeled "Three-part Polyphony". It features three distinct melodic lines in the right hand and a supporting bass line in the left hand.
- System 2 (Bars 54-58):** Labeled "Two-part Polyphony". It features two melodic lines in the right hand and a supporting bass line in the left hand.
- System 3 (Bars 59-60):** Labeled "Homophony Polyphony". It features a homophonic texture with chords in both hands.

Instruments of contrasting pitch abilities are allocated to each part of the canon while supporting notes are held underneath to emulate the original bass line. Bars 49 to 53 mark a change in Ticheli's orchestration as he is not utilising the clarinets as a focal point. A number of suspensions and octave displacements allow for greater sustain and blend within this section, aiding the *legato* marked style (see figure 5.20). Clarinets are reintroduced in bar 54, however, they are performing the tenor line, underneath the saxophone and trumpet soprano lines. This deliberate orchestration is to allow for the bell like chimes of bar 56, where a short canon is introduced through the saxophone family, upper brass and euphonium marked *fp*. Ticheli gives further instruction not found in the original to the band performers here with the markings of *gently* and *no*

breath in order for the full phrase to be performed as intended and replicate the original text of “*dream*”. To emphasize the completion of the phrase, instrumentation is reduced for clarity and variation (see table 5.12).

Figure 5.19 *There Will Be Rest* choral score bars 49 - 58 (Ticheli, 2000)

10 $\text{♩} = \text{ca. } 60$

49 *p* *mp*

I will make this world of my de - vis - ing, of my de -

low. I will make this world of my de -

low.

51 *mf* *rit.* *a tempo* *p*

vis - ing, I will make this world of my de -

mf *rit.* *a tempo*

vis - ing, *rit.* *a tempo* *p*

I will make this world of my de - vis - ing, of my de -

rit. *a tempo*

53 *mp* *mf* *accel.* *cresc.*

vis - ing, Out of a dream out of a

p *mf* *cresc.*

I will make this world Out of a dream out of a

accel. *cresc.*

vis - ing, Out of a dream

accel. *cresc.*

Out of a dream

55 *rit.* *fp* $\text{♩} = \text{ca. } 60$ *(p)*

dream out of a dream(m) in my lone - ly

rit. *fp* *(p)*

dream out of a dream(m) in my lone - ly

rit. *fp* *(p)*

out of a dream dream(m) in my lone - ly

rit. *fp* *(p)*

out of a dream dream(m) in my lone - ly

mind, —

mind, —

mind, —

mind, —

Figure 5.20 Rest for concert band score bars 49 - 58 (Ticheli, 2010)

49 $\text{♩} = \text{ca. } 60$ rit. . . A Tempo 54 accel.

legato
Tutti (open)
p mp mf cresc.
pp mp p mf cresc.
a2 legato p mf cresc.
legato p mf cresc.
2. legato p mf cresc.

56 rit. . . . $\text{♩} = \text{ca. } 60$

(no breath)
f (gently) (no breath)
fp (gently) (no breath)
fp (gently) (no breath)
fp (gently)
fp (gently)
fp (gently) (no breath)
fp (gently)
fp (gently) (no breath)
fp (gently)
fp (gently) (no breath)
fp (gently)

Table 5.12 *Rest* melodic material redistribution charts bars 49 - 58

BARS 49 - 58										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
49	A. Sax 1 Tpt. 1	Unison	Cl. 1 Hn. 3	Unison	Cl. 2 Hn. 4	Unison	Cl. 3 B. Cl. Tpt. 3 ^ Tbn. 3 Euph.	Unison		
50	Tpt. 1	A. Sax 1 Tpt. 3	T. Sax Hn. 1 Hn. 2	Unison			Cl. 3 B. Cl. Euph.	Unison		
51	Tpt. 1	Unison	T. Sax Hn. 1 Hn. 2	Unison	Hn. 3 Tbn. 1	Hn. 4 Tbn. 2	Cl. 3 B. Cl. Euph.	Unison		
52	A. Sax 1 Tpt. 1	Unison			Hn. 3 Tbn. 1	Hn. 4 Tbn. 2	Cl. 3 B. Cl. Tpt. 3 ^ Euph.	Unison		
53	Tpt. 1	A. Sax 1 Tpt. 3	A. Sax 2 T. Sax Hn. 1 Hn. 2	Unison	Cl. 3 B. Cl. Tbn. 1 Euph.	Unison				
54	A. Sax 1 Tpt. 1	A. Sax 2 Tpt. 2	T. Sax Hn. 1 Hn. 2	Unison	Cl. 1 Cl. 2 Hn. 3 Hn. 4	Unison	Cl. 3 B. Cl. Euph.	Unison		
55	A. Sax 1 Tpt. 1	A. Sax 2 Tpt. 2 Hn. 3 Hn. 4	Hn. 1 Hn. 2 A. Sax 2 Tpt. 2	Unison	Cl. 1 Cl. 2 Hn. 3 Hn. 4	Unison	Cl. 3 B. Cl. Euph.	Unison		
56	A. Sax 1 Tpt. 1	Unison	A. Sax 2 Tpt. 2	Unison	T. Sax Hn. 1	Unison	B. Sax Euph.	Unison		
57	A. Sax 1	Unison	A. Sax 2	Unison	T. Sax Hn. 1	Unison	B. Sax Euph.	Unison		
58	A. Sax 1	Unison	A. Sax 2	Unison	Hn. 1	T. Sax	B. Sax Euph.	Unison		

The homophonic motif of “*I shall find the crystal of peace*” that follows in bars 59 to 64 sees Ticheli employ a simply layering effect in the orchestration. In order to replicate the increasing harmony within each stanza, the composer increases instrumentation to a near full ensemble (see figures 5.21 and 5.22). Melodic redistribution is primarily linear with the four voices allocated across instrument families for a full warm ensemble sound (see table 5.13).

Figure 5.21 *There Will Be Rest* choral score bars 59 - 64 (Ticheli, 2000)

59 *pp* *p cresc.*

I shall find the crys-tal of peace, — I shall find the crys-tal of

pp *p cresc.*

I shall find the crys-tal of peace, — I shall find the crys-tal of

pp *p cresc.*

I shall find the crys-tal of peace, — I shall find the crys-tal of

pp *p cresc.*

I shall find the crys-tal of peace, — I shall find the crys-tal of

62 *mf* I shall find — *f* peace, —

peace, — I shall find the crys-tal of peace, —

mf *f*

peace, — I shall find the crys-tal of peace, —

mf *f*

peace, — I shall find — peace, —

mf *f*

peace, — I shall find the crys-tal of peace, —

Figure 5.22 *Rest* for concert band score bars 59 - 64 (Ticheli, 2010)

59

Table 5.13 *Rest* melodic material redistribution charts bars 59 - 64

BARS 59 - 64										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
59	Cl. 1	Unison	Cl. 2 A. Sax 1	Unison	A. Sax 2	Cl. 3 T. Sax	B. Cl. Bsn. 1 B. Sax	Unison		
60	Cl. 1	Unison	Cl. 2	A. Sax 1	A. Sax 2	Cl. 3 T. Sax	B. Cl. B. Sax	Bsn. 1		
61	Cl. 1 Tpt. 1	Unison	Cl. 2 A. Sax 1 Hn. 1	Unison	A. Sax 2 Hn. 3	Cl. 3 T. Sax Hn. 2	B. Cl. Bsn. 1 B. Sax Hn. 4	Unison		
62	Cl. 1 Tpt. 1	Unison	Cl. 2 Hn. 1	A. Sax 1	A. Sax 2 Hn. 3	Cl. 3 T. Sax	B. Cl. B. Sax Hn. 2	Bsn. 1 Hn. 4		
63	Ob. 1 Cl. 1 Tpt. 1	Ob. 2 Tpt. 2	Cl. 2 A. Sax 1 Tpt. 3 Hn. 1 Hn. 2	A. Sax 2 Hn. 3 Hn. 4	Cl. 3 A. Sax 2 T. Sax Hn. 3 Hn. 4 Tbn. 1 Euph.	Bsn. 1 B. Sax Tbn. 2	Bsn. 1 T. Sax B. Sax Tbn. 1 Tbn. 2 Euph.	B. Cl. Bsn. 2 Tbn. 3		
64	Ob. 1 Ob. 2 Cl. 1 Tpt. 1 Tpt. 2	Unison	Cl. 2 A. Sax 1 Tpt. 3 Hn. 1 Hn. 2	A. Sax 2 Hn. 3 Hn. 4	Cl. 3	NO ASSIGNED VOICING	Bsn. 1 T. Sax B. Sax Tbn. 1 Tbn. 2 Euph.	B. Cl. Bsn. 2 Tbn. 3		

Material in bars 65 to 71 displays the most development from the original material thus far. Whilst retaining the original melodic and harmonic structure (see figure 5.23), Ticheli employs idiomatic writing for wind instruments. Initially commencing the phrase with a simple allocation to instruments (see table 5.14), Ticheli begins to add ornamentation to the predominantly crochet based motif with quavers in the latter half of the phrase (see figure 5.24). Newly added suspensions, such as those found in the 2nd alto saxophone line, increase the overall blend from that found in the original choral version. These combined with the different ornamented variations create a more complex version than that found in the choral version and serve as a transition into the return of a newly composed A section.

Figure 5.23 *There Will Be Rest* choral score bars 65 - 71 (Ticheli, 2000)

Musical score for 'There Will Be Rest' choral score bars 65-71. The score is in 4/4 time and begins with a tempo marking of *più mosso* (♩ = ca. 72). The lyrics are: "a - bove", "me a - bove", "a - bove", "bove me a - bove", "a - bove me a - bove", "me a - bove", "me a - bove", "me a - bove". The score features various dynamics including *p*, *mp*, *mf*, *cresc.*, and *f*.

Figure 5.24 *Rest* for concert band score bars 65 - 71 (Ticheli, 2010)

Musical score for 'Rest' for concert band score bars 65-71. The score is in 4/4 time and begins with a tempo marking of *Più mosso* (♩ = ca. 80). The score features various dynamics including *mp*, *mf*, *cresc.*, and *f*. The score includes first and second endings, marked with "1." and "2.".

Table 5.14 Rest melodic material redistribution charts bars 65 - 71

BARS 65 - 71										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
65	Fl. 1 Cl. 1	Unison	Cl. 2 A. Sax 1	Unison		Unison				Cl. 1 A. Sax 2
66	Fl. 1 Cl. 1	Unison	Cl. 2 A. Sax 1	Unison	Cl. 3 Hn. 1 Hn. 2	Unison	B. Cl. Tbn. 1 Euph.	Unison		A. Sax 2
67	Fl. 1 Cl. 1	Unison	Cl. 2 A. Sax 1	Unison	Cl. 3 Hn. 1 Hn. 2	Unison	B. Cl. Tbn. 1 Euph.	Unison		Cl. 2 A. Sax 1 A. Sax 2
68	Fl. 1 Cl. 1	Unison	Ob. 1 Cl. 2 A. Sax 1	Unison	Cl. 3 Hn. 1 Hn. 2	Unison	B. Cl. Tbn. 1 Euph.	Unison		Fl. 1 Ob. 1 Cl. 1 Cl. 2 B. Cl. A. Sax 1 Tbn. 1 Euph.
69	Fl. 1 Cl. 1	Unison	Ob. 1 Cl. 2 A. Sax 1	Unison	Cl. 3 Hn. 1 Hn. 2	Unison	B. Cl. Tbn. 1 Euph.	Unison		Fl. 1 Ob. 1 Cl. 1 Cl. 2 Cl. 3 B. Cl. A. Sax 1 Hn. 1 Hn. 2 Tbn. 1 Euph.
70	Fl. 1 Cl. 1	Unison	Ob. 1 Cl. 2 A. Sax 1	Unison	Cl. 3 Hn. 1 Hn. 2	Unison	B. Cl. Tbn. 1 Euph.	Unison		Ob. 1 Cl. 2 Cl. 3 B. Cl. A. Sax 1 Hn. 1 Hn. 2 Tbn. 1 Euph.
71	Fl. 1 Cl. 1 A. Sax 2 ^{v*} Hn. 3 ^{v*} Hn. 4 ^{v*}	Unison	Ob. 1 Cl. 2 A. Sax 1 T. Sax ^{v*} Tpt. 1 Tbn. 2 ^{v*}	Unison	Cl. 3 Tpt. 2 Hn. 1 Hn. 2 Tbn. 3	Unison	B. Cl. Tbn. 1 Euph.	Unison		Fl. 1 Ob. 1 Cl. 1 Cl. 2 Cl. 3 B. Cl. A. Sax 1 A. Sax 2 T. Sax Tpt. 1 Tpt. 2 Hn. 1 Hn. 2 Hn. 3 Hn. 4 Tbn. 1 Tbn. 2 Tbn. 3 Euph.

With this transcription, Ticheli sought to transcend the capabilities of the homogenous choral ensemble. Bars 72 to 93 see a newly composed extended climax for the work. Predominantly derived from material found in bars 7 to 21, Ticheli utilises the increased ranges of instruments to increase the sonic palate. Percussion (suspended cymbal and timpani) are introduced for additional emphasis of the climaxes. Heavily doubling of parts in octaves, added suspensions and new material differentiate this section for

previous statements of the A section and increase the overall texture when compared to that of a SATB chorus.

As material is conceivably newly composed with large amounts of variation from the original, it should not be considered feasible to chart melodic redistribution for this section. However, a piano reduction of the Concert Band scoring of this section can be found in Figure 5.25 and the expanded nature of the material can be compared to the original bars in Figures 5.4, 5.6 and 5.8. Ticheli utilises a technique that Percy Grainger incorporated in his composition of *Irish Tune from County Derry*, by presenting a second more dramatic climax at bar 80, after the initial bar 75, with an Eb major chord marked fff (Burrack, 2013).

Figure 5.25 Rest reduction of concert band score bars 72 - 93 (Ticheli, 2010)

The image displays a piano reduction of a concert band score for bars 72-93. The score is written in 4/4 time with a key signature of two flats. It is divided into four systems of piano reduction. The first system (bars 72-75) begins with a 'rit.' marking and dynamic markings of *f*, *dp*, and *ff*. The second system (bars 76-83) includes a 'pizziciss.' marking and a dynamic of *fff*. The third system (bars 84-87) features a box around the number 84 and a triplet of eighth notes. The fourth system (bars 88-93) ends with a 'rit.' marking and dynamic markings of *f* and *p*.

Figure 5.26 Rest concert band score bars 72 - 93 (Ticheli, 2010)

The musical score is presented in two systems. The first system, labeled with a box containing '75', covers bars 72 through 83. It begins with a tempo marking 'A Tempo (♩ = c. 80) Molto legato' and includes dynamics such as *rit.*, *ff*, *f*, and *mf*. A performance instruction states: "If only one player play top note." The second system, labeled with a box containing '84', covers bars 84 through 93. It continues the musical material with dynamics including *ff*, *f*, *mf*, *p*, and *Lx*. The score includes parts for a wide variety of instruments: Flute 1 & 2, Oboe 1 & 2, B♭ Clarinet 1-3, Bass Clarinet, Bassoon 1 & 2, Eb Alto Saxophone 1 & 2, B♭ Tenor Saxophone, Eb Baritone Saxophone, B♭ Trumpet 1 & 2, F Horn 1-4, Trombone 1-3, Euphonium, Tuba, Snare Drum, and Suspended Cymbal. The percussion parts include instructions like 'SUS. CYM. (varn)', 'Lx', and 'B♭ to A♭'.

87 rit. brief

Fl. 1
Fl. 2
Ob. 1
Ob. 2
Bb Cl. 1
Bb Cl. 2
Bb Cl. 3
Bb Bass Cl.
Bsn. 1
Bsn. 2
Eb Alto Sax. 1
Eb Alto Sax. 2
Bb Ten. Sax.
Eb Bari. Sax.
Bb Tpt. 1
Bb Tpt. 2
Bb Tpt. 3
F Hn. 1
F Hn. 2
F Hn. 3
F Hn. 4
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Str. Ba.
Timp.
Sus. Cymb.

Bar 84 onwards sees a thinning texture with softening dynamics yet retains the sustained style Ticheli has utilised throughout the work. An important implementation of Ticheli's orchestration in this section is incorporation of the original choral material (bars 73 and 74) into the band version in bars 90 through to 94. Utilising the original pitches, the SATB material is masked in the clarinet and saxophone families using different rhythms. An example of this is the original bass line now being found in the 2nd clarinet, bass clarinet and baritone saxophone lines presented in a crotchet, tied quavers syncopated rhythms, augmented over the four bars returning to the original harmony (see figure 5.26).

The work concludes with the ten bar coda found in the original choral work (see figure 5.27). Orchestration is based primarily around the homogenous clarinet family, with some supporting instruments for additional colour, such as the bassoon performing the 1st soprano line an octave lower (see figure 5.28). Surprisingly the 2nd and 3rd clarinets have their usual roles reversed in terms of pitch, with 2nd clarinet performing the lower pitches of the tenor doubling the horn (see table 5.15). The tenor line again is highlighted in the final three bars being assigned in the euphonium part (cross cued in horn), the only brass instrument performing at this time. This intentional decision by composer highlights the importance of this line and may be to anticipate weaker performers found in school and community based ensembles. The final moments of the work's sparse instrumentation, coupled with the sudden modulation from E \flat major to G major, pays homage to the original text and Ticheli's intention to display "a moment of reflection, a turning inward into prayer or meditation" (Ticheli, 2010).

Figure 5.27 *There Will Be Rest* choral score bars 75 - 84 (Ticheli, 2000)

Figure 5.27 shows the choral score for bars 75-84 of 'There Will Be Rest'. The score is in 4/4 time with a tempo marking of *ca. 60*. It features four vocal parts (Soprano, Alto, Tenor, Bass) and piano accompaniment. The lyrics are: "Stars, stars I shall find, stars I shall find, stars I shall find, stars I shall find. find the crystal of peace, stars I shall find." The score includes dynamic markings such as *pp* and *rit.*

Figure 5.28 *Rest* for concert band score bars 94 - 103 (Ticheli, 2010)

Figure 5.28 shows the concert band score for bars 94-103 of 'Rest'. The score is in 4/4 time with a tempo marking of *ca. 60*. It features a full concert band arrangement including Flutes (Fl. 1, 2), Oboes (Ob. 1, 2), Clarinets (Bb Cl. 1, 2, 3), Bass Clarinet (Bb Bass Cl.), Bassoon (Bsn. 1, 2), Saxophones (Eb Alto Sax. 1, 2, Eb Ten. Sax., Eb Bari. Sax.), Trumpets (Eb Tpt. 1, 2, 3), Horns (F Hn. 1, 2, 3, 4), Trombones (Tbn. 1, 2, 3), Euphonium (Euph.), Tuba (Tbn.), Str. Bsn., Snare Drum (Str. Dr.), and Cymbals (Cymb.). The score includes dynamic markings such as *pp* and *rit.*

Table 5.15 *Rest* melodic material redistribution charts bars 94 - 103

BARS 94 – 103										
	S1	S2	A1	A2	T1	T2	B1	B2	B3	New Material/ Harmony
94	Fl. 1 Cl. 1 Bsn. 1 **	Unison	Cl. 3	Unison	Cl. 2 Hn. 2	Unison	B. Cl.	Unison		
95	Fl. 1 Bsn. 1 **	Cl. 1	Cl. 3	Unison	Cl. 2 Hn. 2	Unison	B. Cl.	Unison		
96	Fl. 1 Bsn. 1 **	Cl. 1	Cl. 3	Unison	Cl. 2 Hn. 2	Unison	B. Cl.	Unison		
97	Fl. 1 Bsn. 1 **	Cl. 1	Cl. 3	Unison	Cl. 2 Hn. 2	Unison	B. Cl.	Unison		
98	Fl. 1 Bsn. 1 **	Cl. 1	Cl. 3	Unison	Cl. 2 Hn. 2	Unison	B. Cl.	Unison		
99	Fl. 1	Cl. 1	Cl. 3	Unison	Cl. 2 Hn. 1	Unison	B. Cl.	Unison		
100	Fl. 1	Cl. 1	Cl. 3	Unison	Cl. 2 Hn. 1	Unison	B. Cl.	Unison		
101	Cl. 1	Unison	Cl. 3	Unison	Euph.	Unison	Cl. 2	B. Cl. S. Bs.		
102	Cl. 1	Unison	Cl. 3	Unison	Euph.	Unison	Cl. 2	B. Cl. Str. Bs.		
103	Cl. 1	Unison	Cl. 3	Unison	Euph.	Unison	Cl. 2	B. Cl. Str. Bs.		

Use of Timbre

Ticheli's variety in instrumental selections and extension of the overall range of the work through development, leads *Rest* to be presented in a more complex heterogeneous setting than that of *There Will Be Rest*.

When likened to Lang's Vocal Register Classification of Wind Instruments (Lang, 1950), it is conceivable that Ticheli has attempted to retain much of the original registers of the four voice types with only minimal instances of octave displacement and utilisation of non-recommended instrument voices (see table 5.16).

Lang's vocal register classification of wind instruments is discussed at length in Chapter Three.

Table 5.16 Lang’s Vocal Register Classification of Wind Instruments in comparison to the melodic material redistribution of *Rest*

Chart Key	
A	Lang’s 1 st recommendation
B	Lang’s 2 nd recommendation
C	Lang’s 3 rd recommendation
✓	Assigned part at pitch
☑	Assigned part via octave displacement

Instrument	Soprano		Alto		Tenor		Bass	
	Lang	Ticheli	Lang	Ticheli	Lang	Ticheli	Lang	Ticheli
Flute	A	✓						
Oboe	A	✓		✓				
Bassoon		☑	C		B	✓	A	☑
Clarinet	A	✓	B	☑	C	✓		☑
Bass Clarinet			C	✓	B	✓	A	✓
Alto Saxophone	B	☑	A	✓	C	✓		
Tenor Saxophone			B	☑	A	✓	C	☑
Baritone Saxophone					B	✓	A	✓
Trumpet	A	✓	B	✓		✓		☑
Horn		☑	A	✓	B	✓		✓
Trombone			C	☑	A	✓	B	✓
Euphonium		☑	C		A	✓	B	✓
Tuba							A	✓

Whilst this practice is in line with early twentieth century transcriptions, Ticheli certainly expands on this during the development section of the piece, which would unquestionably create a larger deviation from Lang’s method of emulation.

The composer’s use of the clarinet family, horns and euphonium in particular is notable as a foundation for many of the sub ensembles created throughout the work (see table 5.17). Aside from the alto line in the euphonium, all instruments mentioned spread across the four vocal lines. Though not employed as often as the aforementioned instruments, the saxophone family too is capable of playing all vocal lines.

Table 5.17 Rest significant orchestration statistics

ORCHESTRATION	TOTAL OCCURRENCE WITHIN TIMBRAL VARIATIONS	PERCENTAGE OF VARIATIONS
Timbral Changes	43	100
Unique Instrumental Groupings	38	88.37
WOODWIND		
Flute	16	37.21
Oboe	10	23.26
Bassoon	23	53.49
Clarinet	41	95.35
Bass Clarinet	38	88.37
Alto Saxophone	29	67.44
Tenor Saxophone	24	55.81
Baritone Saxophone	13	30.23
BRASS		
Trumpet	13	30.23
Trumpet (cup mute)	3	6.98
Horn	35	81.40
Trombone	25	58.14
Euphonium	31	72.09
Tuba	9	20.93
STRINGS		
String Bass	10	23.26
PERCUSSION		
Timpani	1	2.33
Suspended Cymbal	1	2.33
SIGNIFICANT COMBINATIONS		
Clarinet, Horn and Euphonium	26	60.47
Clarinet and Horn	8	18.60
Horn and Euphonium	2	4.65
Clarinet and Euphonium	1	2.33
Two or more of the above	37	86.05
Clarinet Family	38	88.37
Saxophone Family	11	25.58
Woodwind Choir	5	11.63
Brass Choir	0	0.00

The original choral work sees five variations of timbral grouping being SATB, SAT, ATB, TB and AB, which a majority of the work being SATB (*divisi*). Ticheli's recreation of the work for wind band sees a much larger variety of colour combinations with 38 unique instrumental groups and 43 changes within ensemble setting. Sub ensembles such as instrument families, soloists and instrument type choirs present the original vocal material in contrasting and unique groupings with the full ensemble

engaged for the developed climax (see table 5.18). An appraisal of the two unique timbral settings can be heard on professional recordings of the works (Ticheli, 2012, track 4 & Ticheli, 2014, track 5).

Table 5.18 Rest variations of timbre and instrumental grouping in accordance with Arthur Lange's Spectrotone Chart

Bar Numbers	Choir Voicing	Wind Band Instrumentation	Number of instrument type utilised*	Number of unique timbre variations
1 to 2	TB	Clarinets and Brass	4	4
		Clarinet family, horn, euphonium		
3 to 4	SAT	Woodwinds and Brass	5	6
		Bassoon, clarinet family, horn, euphonium		
5 to 6	SATB	Woodwinds and Brass	6	11
		Bassoon, clarinet family, horn, trombone, euphonium		
7	AB	Woodwinds and Brass	7	7
		Bassoon, clarinet family, tenor saxophone, horn, trombone, euphonium		
8	ATB	Woodwinds and Brass	7	7
		Bassoon, clarinet family, tenor saxophone, horn, trombone, euphonium		
9 to 10	SATB	Woodwinds and Brass	8	12
		Bassoon, clarinet family, alto & tenor saxophone, horn, trombone, euphonium		
11 to 12	SATB	Woodwinds and Brass	6	10
		Bassoon, B \flat clarinet, alto & tenor saxophone, horn, euphonium		
13 to 16	SATB	Woodwinds, Brass and Strings	11	19
		Flute, oboe, bassoon, clarinet family, alto saxophone, horn, trombone, euphonium, tuba, string bass		
17 to 18	SATB	Woodwinds, Brass and Strings	7	8
		Clarinet family, alto saxophone, horn, trombone, tuba, string bass		
19 to 21	SATB	Woodwinds, Brass and Strings	8	11
		Clarinet family, alto saxophone, horn, trombone, euphonium, tuba, string bass		
22	AB	Woodwinds and Brass	7	7
		Bassoon, clarinet family, alto saxophone, horn, trombone, euphonium		
23	ATB	Woodwinds and Brass	8	9
		Flute, oboe, bassoon, clarinet family, alto & tenor saxophone, horn, trombone, euphonium		
24 to 27	SATB	Woodwinds and Brass	11	24
		Flute, oboe, bassoon, clarinet family, saxophone family, horn, trombone, euphonium		

Table 5.18 Rest variations of timbre and instrumental grouping in accordance with Arthur Lange's Spectrotone Chart (continued)

28 to 29	SATB	Woodwinds, Brass and Strings	12	19
		Flute, bassoon, clarinet family, alto & baritone saxophone, trumpet (cup mute), horn, trombone, euphonium, tuba, string bass		
30 to 31	SATB	Woodwinds, Brass and Strings	13	20
		Flute, oboe, bassoon, clarinet family, alto & baritone saxophone, trumpet (cup mute), horn, trombone, euphonium, tuba, string bass		
32 to 35	SATB	Woodwind Choir	5	8
		Bassoon, clarinet family, alto & tenor saxophone		
36 to 39	SATB	Woodwind Choir	3	5
		Bassoon, B \flat clarinet, alto saxophone		
40 to 41	SATB	Woodwinds, Brass and Strings	12	19
		Flute, bassoon, clarinet family, saxophone family, trumpet (cup mute), horn, trombone, tuba, string bass		
42 to 43	SATB	Woodwinds, Brass and Strings	12	20
		Flute, oboe, bassoon, clarinet family, saxophone family, horn, trombone, tuba, string bass		
44 to 47	SATB	Woodwinds and Brass	10	19
		Bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium		
48	ATB	Clarinets and Brass	5	5
		Clarinet family, horn, euphonium		
49	SATB	Woodwinds and Brass	7	9
		Clarinet family, alto saxophone, trumpet, horn, trombone, euphonium		
50	SAB	Woodwinds and Brass	7	8
		Clarinet family, alto & tenor saxophone, trumpet, horn, euphonium		
51	SATB	Woodwinds and Brass	7	8
		Clarinet family, tenor saxophone, trumpet, horn, trombone, euphonium		
52	STB	Woodwinds and Brass	7	9
		Clarinet family, alto saxophone, trumpet, horn, trombone, euphonium		
53	SAT	Woodwinds and Brass	8	9
		Clarinet family, alto & tenor saxophone, trumpet, horn, trombone, euphonium		
54 to 55	SATB	Woodwinds and Brass	7	10
		Clarinet family, alto & tenor saxophone, trumpet, horn, euphonium		
56 to 57	SATB	Saxophones and Brass	6	8
		Saxophone family, trumpet, horn, euphonium		

Table 5.18 Rest variations of timbre and instrumental grouping in accordance with Arthur Lange's Spectrotone Chart (continued)

58	SATB	Saxophones and Brass	5	5
		Saxophone family, horn, euphonium		
59 to 60	SATB	Woodwinds	6	10
		Bassoon, clarinet family, saxophone family		
61 to 62	SATB	Woodwinds and Brass	8	13
		Bassoon, clarinet family, saxophone family, trumpet, horn		
63 to 64	SATB	Woodwinds and Brass	11	20
		Oboe, clarinet family, alto & tenor saxophone, trumpet, horn, trombone, euphonium		
65	SAT	Woodwind Choir	3	7
		Flute, B \flat clarinet, alto saxophone		
66 to 67	SATB	Woodwinds and Brass	7	13
		Flute, clarinet family, alto saxophone, horn, trombone, euphonium		
68 to 70	SATB	Woodwinds and Brass	8	18
		Flute, oboe, clarinet family, alto saxophone, trumpet, horn, trombone, euphonium		
71	SATB	Woodwinds and Brass	10	21
		Flute, oboe, clarinet family, alto & tenor saxophone, trumpet, horn, trombone, euphonium		
72 to 90	New Material	Full Ensemble	16	39
		Flute, oboe, bassoon clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, string bass, timpani, suspended cymbal		
91	New Material	Woodwinds, Brass and Strings	12	18
		Flute, oboe, bassoon, clarinet family, saxophone family, trombone, euphonium, tuba, string bass		
92	New Material	Woodwind Choir	7	11
		Flute, bassoon, clarinet family, saxophone family		
93	New Material	Woodwind Choir	3	7
		Clarinet family, tenor saxophone		
94 to 98	SATB	Woodwinds and Brass	5	6
		Flute, bassoon, clarinet family, horn		
99 to 100	SATB	Woodwinds and Brass	4	6
		Flute, clarinet family, horn		
101 to 103	SATB	Clarinets, Brass and Strings	4	6
		Clarinet family, euphonium, string bass		

* based upon individual instrument types, not parts per instrument

Ticheli's use of variation presents the material in clearly defined sections and assist the story telling aspect of the work in the absence of text. The developed climax displays the most complex layers of timbre, engaging the listener to the intended emotional content of the work. Where the choral work displayed subtler melodic and harmonic lines, the transcription uses smaller ensembles with reduced timbral complexity.

Arthur Lange's Spectrotone Chart allows one to develop a graphic score of the work based on timbral variations of the selected instrumentation (see Appendix 4). From these findings, it is possible to see Ticheli's intentions of timbral blend and the increased complexity of the developed section. Whilst, a large majority of the work displays desirable combinations with aiming for "an ensemble sound" and blend, it is important to note that Ticheli generally links contrasting colours of higher and lower pitched instruments via combinations with mid-range alto and tenor based instruments.

CHAPTER FIVE: SERENITY

The Composer: Ola Gjeilo

Ola Gjeilo was born in Oslo, Norway on May 5, 1978 (Gjeilo, 2017). Predominantly known for his choral works, he is also an active composer of solo piano, mixed ensemble, orchestra and wind symphony mediums (Powell, 2013). In addition to solo piano performances, Gjeilo's compositions have been performed and recorded in over thirty countries worldwide by notable organisations such as VocalEssence, the Kansas City Chorale, BYU Singers, World Youth Choir and the Swedish Broadcasting Corporations' Radiokoren (Garrison, 2013; Powell, 2013; MainlyPiano.com, n.d.). Performances have been held in coveted venues such as New York City's Carnegie Hall, Washington DC's Kennedy Center and National Gallery and both the Oslo and Copenhagen Opera Houses (Singers.com, n.d.). His music has been featured on PBS and radio stations across the United States, the Danish and Swedish Broadcast Corporations and all major Norwegian TV and radio stations. Many of Gjeilo's compositions have been the result of numerous commissions from highly respected artists and organisations such as Barbara Bonney, Solveig Kringelborn, Phoenix Chorale and Voces Nordicae (MainlyPiano.com, n.d.).

Gjeilo was exposed to music at a young age. His father, an amateur jazz saxophonist and trombonist, encouraged Gjeilo to pursue music and provided the impressionable composer with "more insight on the spiritual aspect of composition" (Garrison, 2013). He initially improvised all music he performed and only formally began studying jazz, classical piano and composition at the age of seven (Powell, 2013; The Musicroom

Blog, 2013; MainlyPiano.com, n.d.). Whilst attending a specialty music high school in Norway, Gjeilo formally received training in music history and chord analysis (Garrison, 2013; The Musicroom Blog, 2013). It was also here in the school's choir that, combined with his parents love for sacred music, he was exposed to choral music and soon began studying a cappella works. Wolfgang Plagge was Gjeilo's first composition teacher. Plagge, a pianist who was also a composer of church music, would have significant influence on the young composer's stylistic characteristics in the future (Garrison, 2013).

Gjeilo initially attended the Royal Northern College of Music in Manchester in 1998, where he notes that the serene locations in England had a lasting impact on the initial stages of his compositional process. In 1999 Gjeilo transferred to the Norwegian Academy of Music in Oslo with an eventual return to the Royal College of Music in London, achieving his Bachelor's degree (Powell, 2013). In 2001 he relocated to New York City to commence his Master's degree in composition, which he completed in 2006 (Powell, 2013; MainlyPiano.com, n.d.). Whilst at Julliard, Gjeilo was influenced by the faculty's compositions and soon became familiar with American composers and their choral music. Composers such as Julliard professor John Corigliano (b. 1938), Morten Lauridsen (b. 1943) and contemporary Eric Whitacre (b. 1970) all provided early exposure to advanced choral writing (Garrison, 2013).

An emerging composer, Gjelio's music has being described as "well-crafted, singer-friendly and sensitive to text, and mindful of how it will touch a listener's ear" (Vernier, 2016). In a review for Gjelio's most recent album, David Vernier notes that the composer's music, however, is not to be considered innovative, and finds itself in

comfortable territory set out by composers such as John Rutter (b. 1945), Arvo Pärt (b. 1935) and Whitacre (Vernier, 2016). John Quinn notes that Gjeilo's unaccompanied choral works are "more effective" than his instrumental compositions with them being "well-crafted" with a "fine awareness of choral textures". In contrast he observes that to the listener his works involving "unoriginal" instrumental writing can sound "unashamedly commercial", commenting that some of his piano writing is "sub-Rachmaninov" (Quinn, 2012). Though the composer describes his own style as a "crossroads of classical, jazz, and popular music", much of the composer's output has been described as resembling Eastern European minimalists such as Pärt with its heavy reliance on homophonic textures with "soft-edged harmonic and melodic focus" (Vernier, 2016; Singers.com, n.d.; Eddins, n.d.). When comparing the accessibility of the repertoire of Morten Lauridsen and Whitacre, Gjeilo is said to be the "most conservative in his harmonic language and adherence to conventions of earlier eras" (Eddins, n.d.). His choral works are published by Walton Music, piano collections are distributed by Edition Peters and his wind band works from Boosey & Hawkes (Gjeilo, 2017).

Though mostly known for his choral output, Gjeilo has released four successful albums, entirely made up of his own original compositions. *Ola Gjeilo* (2016) and *Northern Lights* (2012) focus heavily on this choral repertoire while *Piano Improvisations* (2012) and *Stone Rose* (2007) are worthy representations of his solo piano works (Gjeilo, 2017). The piece *Ubi Caritas* (1999) has generated favourable publicity for the composer (Garrison, 2013). Gjeilo currently has three wind band works published. *The Spheres* (2012) is based upon the work *Sunrise Mass* (2008), a mass for choir and string orchestra whilst *Serenity* (2014) is a transcription from the original a cappella work of

the same name. *Meridian* (2012) is an original composition for wind band, piano and optional choir (Gjeilo, 2017). Major compositions include *Sunrise Mass*, *Dreamweaver* (2014) and *The River* (2016). The aforementioned *Northern Lights* album, was recorded by the Grammy award winning Phoenix Chorale, where Gjeilo held the position of the ensembles first ever artist in residence, and was awarded Best Classical Album of the Year by iTunes in 2012 (Planto Civic Chorus, 2013; Singers.com, n.d).

In 2006-2007, the composer studied film composition/scoring at the University of Southern California and notes the influence from composers such as John Williams (b. 1932) and Howard Shore (b. 1946) (The Musicroom Blog, 2013; San Francisco Lyric Chorus, 2011). Similar to Ticheli (having being employed as Professor of Composition at USC since 1991), it was here that Gjeilo was heavily influenced by the compositional style and music of Morten Lauridsen, also a Professor of Composition and founder of the Advanced Studies program in Film Scoring at the Thornton School of Music, USC. (May, 2017). Gjeilo currently resides in New York where is the composer in residence for Voces8 (Planto Civic Chorus, 2013; Voces8.com, 2017; Gjeilo, 2017).

The Co-Arranger: Dr. J. Eric Wilson

Dr. J. Eric Wilson is currently the Professor of Ensembles and Conducting at Baylor University, Texas USA. In addition to this, he is the Director of Bands, a position he has held since 2006. He holds both Doctor of Musical Arts and Master of Music degrees from the University of Michigan (Gjeilo, 2015). His undergraduate qualifications include a Bachelor of Music Education from Abilene Christian

University, where he served on the faculty for twelve years. In 2014 he was inducted into the American Bandmasters Association. An in demand conductor, clinician and adjudicator, Wilson taught in the public school system prior to his university appointments (Baylor University, 2017).

Serenity for Concert Band

Due to Gjeilo's relatively short career, there is limited published academic investigation into his compositions. Though there are numerous interviews, reviews and biographies, dissertations such as Ryan Derrick Garrison's doctorate dissertation entitled *A Selection of Choral Works by Ola Gjeilo for SATB Choir: Composition, Interpretation, and Recording of The Phoenix Chorale's Northern Lights: Choral Music by Ola Gjeilo*, offer valuable insight into his background, composition techniques and musical language (Garrison, 2013). The investigation, however, focuses solely on the works that appear on the *Northern Lights* album. Absent from its investigations is how the orchestration of a transcription of one of Gjeilo's original choral works can develop into a standalone work through the new medium's timbre variations and absence of text.

Originating from Gjeilo's choral work of the same name for SATB (*divisi*) chorus with violin or cello solo, the work was commissioned and dedicated to the Central Bucks High School-West Choir and director, Dr. Joseph Ohrt (Gjeilo, 2012). The work, with the subtitle *O Magnum Mysterium* (see Appendix 5), is a responsorial chant that incorporates the text from the fourth response of the Matins service for Christmas "celebrating the mystery of life with hopelessness and wonder" (Spangenberg, 2016;

Gjeilo, 2015; Garrison, 2013). It is designed to provoke in the listener “all the wonder and fascination of the incarnation of Christ” (Garrison, 2013). Other notable composers such as Giovanni Gabrieli (1554-1612), Giovanni Palestrina (1525-1594), Francis Poulenc (1899-1963), Javier Busto (1949-) and Lauridsen have also set this powerful passage to music (Paris, 2013; Garrison, 2013).

Transcribed for concert band in 2012 with the assistance of Dr. J. Eric Wilson, *Serenity* was premiered by the Baylor University Wind Ensemble with Dr. Wilson conducting in 2014 at the Midwest Clinic in Chicago (Gjeilo, 2015). It is not known how much assistance Dr. Wilson provided Gjeilo in creating the transcription.

In his transcription for concert band, Gjeilo employs the following instrumentation:

Piccolo
Flute 1st (*divisi*) and 2nd
Oboe 1st and 2nd
Bassoon 1st and 2nd
Bb Clarinet 1st, 2nd, 3rd and 4th
Bb Bass Clarinet
Eb Alto Saxophone 1st and 2nd
Bb Tenor Saxophone
Eb Baritone Saxophone
Bb Trumpet 1st, 2nd and 3rd
F Horn 1st, 2nd, 3rd and 4th
Trombone 1st, 2nd and 3rd
Euphonium
Tuba
String Bass
Crotales
Vibraphone
Suspended Cymbal
Timpani

This setting of instrumentation is considered standard for most wind bands with select percussion and will be further discussed below. In the program notes provided in the

front of the Concert Band score, Jake Wallace states: "...Dr. Eric Wilson and the composer, maintain all the wonder of the original despite the absence of text" (Gjeilo, 2015).

The original choral setting and the concert band transcription display many similarities, including form and melodic material, with the addition of more timbres and instrument capabilities. More than a simple note for note replication, the reimagined version of *Serenity* is capable of being considered a separate composition closely related to the original.

Analysis

Form and Structure

Serenity for concert band displays substantial similarities with *Serenity (O Magnum Mysterium)*, though Gjeilo has expanded upon the timbres, textures and harmonic structures of the original.

Serenity for concert band alters the original metre of *f*... and subsequent simple time signatures to their half time counterparts, such as " | . This deliberate alteration by the arranger may be the direct result of the commission being for a more capable university level ensemble, compared to that of a high school for the original. The new time signature also alters the original tempo of the work. The original metronome marking of minim equals 44 (or crotchet equals 88) beats per minute has been increased to minim equals 52 with an added marking of "Peacefully", possibly in response to the absence

of text, which may affect the listener’s attention. The transcription is pitched a semitone higher in order to be performed in a more comfortable key for wind players. Tempo markings and directions throughout the work remain comparatively the same as the original choral work with alterations discussed below.

When compared with the original choral setting, the transcription’s overarching form remains unchanged, with both versions presented in a ternary form. A featured soloist is present in both A sections, with the oboe predominantly replacing the original string instrument. At face value, *Serenity* is presented as a faithful replication of the original work, and therefore does not include new material or developments, thus retaining its original length of 107 bars (see table 6.1).

Table 6.1 *Serenity (O Magnum Mysterium)* and *Serenity* source material, form, key and bar numbers of original and transcription

Section	Choral Version		Concert Band Version	
	Bar Number	Key	Bar Number	Key
A	1 – 32	G major	1 – 32	A \flat major
A'	33 – 50	G major	33 – 50	A \flat major
B	51 – 76	D major	51 – 76	E \flat major
A	77 - 107	G major	77 - 107	A \flat major

Instrumentation and Range











The choice of orchestration for the transcription predominantly features the standard instrumentation from each family. This configuration, commonly found in high school level and community ensembles, thus increases its playability, by avoiding extended members of each instrument family such as contra bassoons. It is to be noted, however,

that Gjeilo and Wilson do make use of the augmented ranges of the piccolo, and bass instruments such as tuba and string bass for dramatic effect. In this work, the composer not only utilises small combinations of instruments, but treats instrument families on their own as sub choirs. For example, by utilising four different B \flat clarinet lines combined with a Bass Clarinet, a vast array of colours and ranges are readily available. This is similarly found in families such as the saxophones, horns and low brass. As you would expect, this leads the transcription to produce a larger number of timbral combinations than is possible in the original SATB work. In the program notes of the concert band score, Jake Wallace indicates that the orchestration and subsequent instrumental groupings have been selected for its unique timbre to represent the mood originally represented through text (Gjeilo, 2015).

This investigation has already noted the well documented practice of omitting percussion for chorale like works, due to their unique timbre possibly detracting from the desired sound palette (Hairel, 2009). Gjeilo, however, not only uses suspended cymbal and timpani to emphasis the climactic moments of the work, he employs bowed percussion. Through the use of bowed crotales and vibraphone, where there was originally silence and reflection on the text, the listener is presented with a setting that is “ethereal and somber” (Gjeilo, 2015).

As previously mentioned, the work has been rewritten up a semitone in order for a more suitable key for wind instruments. Whilst the form, key centres and the majority of the harmonic structure are retained from the original, (see table 6.1) Gjeilo makes extensive use of octave doubling and displacements, increasing the overall range of each vocal part and the work as a whole significantly (see table 6.2).

Table 6.2 Serenity (*O Magnum Mysterium*) and Serenity ranges

Voice	Choral Version Range	Concert Band Transcription Range (via orchestration)	Choral Version Range	Concert Band Range
Soprano	 C 4 – A 5	 E 3 – A 6	 F 2 – A 5	 D 2 – A 6
Alto	 A 3 – D 5	 D 3 – D 6		
Tenor	 D 3 – D 4	 B 1 – C 5		
Bass	 F 2 – B 3	 D 2 – E 5		

In similarity to other transcribed a cappella works for wind band, the arrangement displays many instances of linear writing for its reorchestration, due to instrument range and timbres (Popp, 2013). However, like the other works investigated in the report, Gjeilo utilises many instances of cross part writing, allowing for a unique presentation of the original material. These instances, combined with the increased range and

timbre, see the concert band transcription expand upon the sonic and emotional capabilities of the original SATB choral work.

Melodic Material Redistribution and Orchestration Techniques

The work opens with a repeated figure of triads, swelling in volume (see figure 6.1).

Figure 6.1 *Serenity (O Magnum Mysterium)* introduction piano reduction (Gjeilo, 2012)

O, O magnum

my - ste - ri - um,

The simple nature of the harmony and texture employed (see figure 6.2) is recreated via a simple orchestration within the clarinet family and trombone. The clarinet family represents all voice types with the trombones providing warmth on the alto, tenor and bass lines (see table 6.3). As the alto, tenor and bass lines in the clarinets are written in the upper chalumeau register, this may be a deliberate attempt to add support on the lower voices. Bowed percussion (crotales and vibraphone) are utilised as an echo effect not found in the choral version. The resulting sustained effect not only fills what was

once silence and reflection on text translated as “O great mystery”, but also adds a unique colour palette not found in the source material (see figure 6.3).

Figure 6.2 *Serenity (O Magnum Mysterium)* choral score bars 1 - 8 (Gjeilo, 2012)

SERENITY
(O Magnum Mysterium)
SSAATTBB Chorus with Violin or Cello*
OLA GJEILO

$\text{♩} = 44$ or $(\text{♩}) = 88$

Violin or cello

Soprano

Alto

Tenor

Bass

Vln.

S

A

T

B

num

num

num

num

Figure 6.3 *Serenity* for concert band score bars 1 - 8 (Gjeilo, 2015)

SERENITY

Duration: ca. 5 min. 15 sec.

Peacefully ($\text{♩} = 52$)

Piccolo

Flutes

Oboes

Bassoons

Clarinets

B♭

B♭ Bass

E♭ Alto

E♭ Tenor

E♭ Baritone

B♭ Trumpets

Horns in F

Trombones

Euphonium

Tuba

String Bass

Percussion

Timpani

Violaphone (Dowd (2 Playons))

Timps: A, C, E

Table 6.3 *Serenity* melodic material redistribution charts bars 1 - 8

BARS 1 - 8																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/ Harmony
1	Cl. 1			Cl. 2 Cl. 3 Tbn. 1			Cl. 4 B. Cl. Tbn. 2 Tbn. 3				Unison with Tenor					
2	Cl. 1 Vib. (div)			Cl. 2 Cl. 3 Tbn. 1 Crot.			Cl. 4 B. Cl. Tbn. 2 Tbn. 3 Vib. (div)				Unison with Tenor					
3	Cl. 1			Cl. 2 Cl. 3 Tbn. 1			Cl. 4 Tbn. 2				B. Cl. Tbn. 3					
4	Cl. 1 Vib. (div)			Cl. 2 Cl. 3 Tbn. 1 Crot.			Cl. 4 Tbn. 2 Vib. (div)				B. Cl. Tbn. 3					
5	Cl. 1			Cl. 2 Cl. 3 Tbn. 1			Cl. 4 Tbn. 2				B. Cl. Tbn. 3					
6	Cl. 1 Vib. (div)			Cl. 2 Cl. 3 Tbn. 1 Crot.			Cl. 4 Tbn. 2 Vib. (div)				B. Cl. Tbn. 3					
7	Cl. 1			Cl. 2 Cl. 3 Tbn. 1			Cl. 4 Tbn. 2				B. Cl. Tbn. 3					
8	Cl. 1 Vib. (div)			Cl. 2 Cl. 3 Tbn. 1 Crot.			Cl. 4 Tbn. 2 Vib. (div)				B. Cl. Tbn. 3					

Bars 9 through to 17 are a restatement of the opening theme (see figure 6.4). The four voice types are now spread across both the clarinet family, trombones and percussion (see table 6.4). This coupled with octave displacements for new voicing, creates a new sonic variation for the listener. The accompanying string solo is allocated to the first oboe chair (see figure 6.5). Utilising the oboe's unique timbre, its penetrating sound allows for the solo line to stand out. Had a flute or clarinet been selected, the solo line would have become lost from the blended sound of the accompaniment.

Figure 6.4 *Serenity (O Magnum Mysterium)* choral score bars 9 - 17 (Gjeilo, 2012)

cello sounds an octave lower

my - ste - ri - um

my - ste - ri - um

my - ste - ri - um

my - ste - ri - um

my - ste - ri - um

Vln. 15

S 15 um,

A um,

T um,

B um,

Figure 6.5 *Serenity* for concert band score bars 9 - 17 (Gjeilo, 2015)

9

12

Picc.

Fl.

Ob.

Bsn.

Clar.

B♭ Bass

1. Ob. Solo

9

1

B♭ Tpt. 2

3

Hn. in F

1

2

3

Tbn.

Euph.

Tuba

Bass

Perc.

Timp.

Table 6.4 *Serenity* melodic material redistribution charts bars 9 - 17

BARS 9 – 17																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/ Harmony
9	Cl. 1			Cl. 2 Cl. 3 Tbn. 1			Cl. 4 Tbn. 2				B. Cl. Tbn. 3					
10	Cl. 1 Crot.			Cl. 2 Cl. 3 Tbn. 1 Vib. (div)			Cl. 4 Tbn. 2 Vib. (div) ^*				B. Cl. Tbn. 3				Ob. 1	
11	Cl. 1			Cl. 2 Cl. 3 Tbn. 1			Cl. 4 Tbn. 2				B. Cl. Tbn. 3				Ob. 1	
12	Cl. 1 Crot.			Cl. 2 Cl. 3 Tbn. 1 Vib. (div)			Cl. 4 Tbn. 2 Vib. (div) ^*				B. Cl. Tbn. 3				Ob. 1	
13	Cl. 1 Tbn. 1			Cl. 2 Cl. 3 Tbn. 2			Cl. 4 Tbn. 3				B. Cl.				Ob. 1	
14	Cl. 1 Tbn. 1 Vib. (div)			Cl. 2 Cl. 3 Tbn. 2 Vib. (div) ^*			Cl. 4 Tbn. 3 Crot. ^*				B. Cl.				Ob. 1	
15	Cl. 2 Cl. 3 Tbn. 1			Unison with Soprano			Cl. 4 Tbn. 2				Cl. 1 ^* B. Cl. Tbn. 3				Ob. 1	
16	Cl. 2 Cl. 3 Tbn. 1 Vib. (div)			Unison with Soprano			Cl. 4 Tbn. 2 Vib. (div) ^*				Cl. 1 ^* B. Cl. Tbn. 3 Crot. ^*				Ob. 1	
17																

A third restatement of the initial theme is presented within bars 18 to 32 (see figure 6.6). The initial orchestration ideas are retained whilst the dynamics are increased to *mp*, diverting from the original. Where the vocal lines become *divisi* from bar 26 onwards, the saxophone family is introduced for the first time (see figure 6.7). Saxophones predominantly replicate the soprano, tenor and bass lines while the trombone covers the alto. This not only allows Gjeilo to cover the increased number of notes present in the harmony, but for an extension of colour and contrasting timbres. New suspensions are present in bars 30 and bar 31 creating a new harmonisation with the alto 1 line replicated as the new bass note via the bass clarinet and baritone saxophone (see table 6.5).

Figure 6.6 *Serenity (O Magnum Mysterium)* choral score bars 18 - 32 (Gjeilo, 2012)

Figure 6.6 shows the choral score for bars 18-32 of *Serenity (O Magnum Mysterium)*. The score is in 4/4 time and features a piano introduction and vocal entries.

Bars 18-21: The piano introduction begins with a *p* dynamic and a *poco a poco cresc.* marking. The vocal parts enter with the word "mag" on a long note.

Bar 22: The vocal parts enter with the word "num" on a long note. The piano accompaniment is marked *f*. The vocal parts are marked *p* and *mp*.

Bars 23-32: The vocal parts continue with the words "my" and "ste" on long notes. The piano accompaniment continues with a *p* dynamic. The vocal parts are marked *p* and *mp*.

Figure 6.6 shows the choral score for bars 28-32 of *Serenity (O Magnum Mysterium)*. The score is in 4/4 time and features a piano introduction and vocal entries.

Bar 28: The vocal parts enter with the word "ri" on a long note. The piano accompaniment is marked *p*. The vocal parts are marked *p* and *mp*.

Bars 29-32: The vocal parts continue with the words "um," on long notes. The piano accompaniment continues with a *p* dynamic. The vocal parts are marked *p* and *mp*.

Figure 6.7 *Serenity* for concert band score bars 18 - 32 (Gjeilo, 2015)

18

19

20

21

Table 6.5 *Serenity* melodic material redistribution charts bars 18 - 32

BARS 18 - 32																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/Harmony
18	Cl. 2			Cl. 3 Tbn. 1			Cl. 1 ^ Cl. 4 Tbn. 2				B. Cl. Tbn. 3					
19	Cl. 2 Crot.			Cl. 3 Tbn. 1 Vib. (div)			Cl. 1 ^ Cl. 4 Tbn. 2 Vib. (div) ^*				B. Cl. Tbn. 3				Ob. 1	
20	Cl. 2 Tbn.3 v*			Cl. 3 Tbn. 1			Cl. 1 ^ Cl. 4 Tbn. 2				B. Cl.				Ob. 1	
21	Cl. 2 Tbn.3 v* Crot.			Cl. 3 Tbn. 1 Vib. (div)			Cl. 1 ^ Cl. 4 Tbn. 2 Vib. (div) ^*				B. Cl.				Ob. 1	
22	Cl. 2			Cl. 3 Tbn. 1			Cl. 1 ^ Cl. 4 Tbn. 2				B. Cl. Tbn. 3				Ob. 1	
23	Cl. 2 Crot.			Cl. 3 Tbn. 1 Vib. (div)			Cl. 1 ^ Cl. 4 Tbn. 2 Vib. (div) ^*				B. Cl. Tbn. 3				Ob. 1	
24	Cl. 2			Cl. 3 Tbn. 1			Cl. 1 ^ Cl. 4 Tbn. 2				B. Cl. Tbn. 3				Ob. 1	
25	Cl. 2 Crot.			Cl. 3 Tbn. 1 Vib. (div)			Cl. 1 ^ Cl. 4 Tbn. 2 Vib. (div) ^*				B. Cl. Tbn. 3				Ob. 1	
26	Cl. 1	Cl. 2 A. Sax 2		Cl. 3 Tbn. 1			Cl. 4 T. Sax Tbn. 2				Tbn. 3		B. Cl. B. Sax		Ob. 1	
27	Cl. 1 Vib. (div)	Cl. 2 A. Sax 2 Crot.		Unison with S2		Cl. 3 Tbn. 1 Vib. (div)	Cl. 4 T. Sax Tbn. 2				Tbn. 3		B. Cl. B. Sax		Ob. 1	
28	Cl. 2 A. Sax 2	Unison		Cl. 3 Tbn. 1	Unison	Unison	Cl. 1 ^ T. Sax Tbn. 2		Unison		Cl. 4 Tbn. 3	B. Cl. B. Sax	Unison with B1a	Unison with B1b	Ob. 1	
29	Cl. 2 A. Sax 2 Crot.	SHARES HARMONIC MATERIAL WITH S1		Cl. 3 Tbn. 1 Vib. (div)	Unison	Unison	Cl. 1 ^ T. Sax Tbn. 2 Vib. (div) ^*		SHARES HARMONIC MATERIAL WITH T1a		Cl. 4	SHARES HARMONIC MATERIAL WITH B2b	Tbn. 3	B. Cl. B. Sax	Ob. 1	

Table 6.5 *Serenity* melodic material redistribution charts bars 18 - 32 (continued)

30	Cl. 2 A. Sax 2	SHARES HARMONIC MATERIAL WITH S1		Cl. 3 Tbn. 1	Unison	Unison	SHARES HARMONIC MATERIAL WITH T2a		Cl. 1 \wedge^* T. Sax Tbn. 2		Cl. 4	Unison	Tbn. 3	B. Cl. B. Sax	Ob. 1	Cl. 1 Cl. 2 B. Cl. A. Sax 2 T. Sax B. Sax Tbn. 2 Tbn. 3
31	Cl. 2 A. Sax 2 Vib. (div)	Unison		Cl. 3 B. Cl. \vee^* B. Sax \vee^* Tbn. 1 Vib. (div) \wedge^*	Unison	Unison	Cl. 1 \wedge^* T. Sax Tbn. 2 Crot. \wedge^*		Unison		Cl. 4 Tbn. 3	Unison	Unison	Unison	Ob. 1	B. Cl. B. Sax
32		Unison			Unison	Unison			Unison			Unison	Unison	Unison		

Bar 33 originally begins with an alto solo line accompanied by the string solo (see figure 6.8). Gjeilo has orchestrated this via the first horn replicating the soft tones of the alto voice with the flute now providing the string solo line with the oboe an octave below. This allows the solo to stay in the original octave of the violin, while still retaining its now familiar sound of the oboe, but in a comfortable register for the instrument. This octave duet continues until bar 50, where the string solo ends with the first section of the work. This doubling also permits the line to be audible against a larger supporting ensemble. The previously stated bowed percussion is subtracted as its effect no longer lends itself to the new texture.

The composer creates an ‘overlapping’ effect in the supporting lines of the semibreves versus tied minim movements (bassoons, clarinet family, saxophone family, horns, low brass and string bass). This is achieved by allocating the divisi voice parts amongst all families with octave displacements (see table 6.6). This generates blend over the ensemble via the use of similar timbres and strengthens the texture and harmony. The lighter colours of the alto saxophone are added to the ensemble to represent the text “*admirabile sacramentum*” (*wonderful sacrament*) (see figure 6.9).

While it could be argued these techniques are attempts to recreate the homogeneous timbre, the many different sounds of the wind ensemble are still prevalent in this orchestration. It should be noted that trumpets are still absent from of the ensemble, possibly due to their penetrating timbre, implying they don’t lend themselves to the desired sound or the replication of the meaning of the original text.

Figure 6.8 Serenity (O Magnum Mysterium) choral score bars 33 - 50 (Gjeilo, 2012)

Violin I and II parts (Vln. I, Vln. II) with dynamic markings *p* and *f*.

Soprano 1 (S1) and Soprano 2 (S2) parts with lyrics: *magnum mysterium*

Alto 1 (A1) and Alto 2 (A2) parts with lyrics: *Magnum, magnum mysterium*

Tenor 1 (T1) and Tenor 2 (T2) parts with lyrics: *admirabile*

Bass 1 (B1) and Bass 2 (B2) parts with lyrics: *admirabile*

Violin I and II parts (Vln. I, Vln. II) with dynamic markings *mp* and *mf*.

Soprano 1 (S1) and Soprano 2 (S2) parts with lyrics: *ri - um et ad - mi - ra -*

Alto 1 (A1) and Alto 2 (A2) parts with lyrics: *ste - ri - um et ad - mi - ra -*

Tenor 1 (T1) and Tenor 2 (T2) parts with lyrics: *bi - le sac -*

Bass 1 (B1) and Bass 2 (B2) parts with lyrics: *bi - le sac -*

45

Vln.

Vlc.

S1

bi - le sac - ra - men - tum

S2

bi - le sac - ra - men - tum

A1

ra - men - tum

A2

bi - le sac - ra - men - tum

T1

ra - men - tum

T2

ra - men - tum

B1

ra - men - tum

B2

ra - men - tum

Figure 6.9 *Serenity* for concert band score bars 33 - 50 (Gjeilo, 2015)

This musical score page covers bars 33 to 50. It features a variety of instruments including Piccolo, Flute (1 and 2), Oboe (1 and 2), Bassoon (1 and 2), Clarinet in Bb (1, 2, 3, 4), Bass Clarinet, Bassoon Bass, Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Trumpet (1, 2, 3), Horn in F (1, 2, 3, 4), Trombone (1, 2, 3), Euphonium, Tuba, Bass, Percussion, and Timpani. The score includes dynamic markings such as *p*, *mf*, *f*, *mp*, and *fz*. Performance instructions include *Solo*, *(Solo cont.)*, *All. Feroce*, and *1. Solo*. The key signature is one flat and the time signature is 4/4.

This page continues the musical score for bars 33 to 50. It includes staves for Piccolo, Flute (1 and 2), Oboe (1 and 2), Bassoon (1 and 2), Clarinet in Bb (1, 2, 3, 4), Bass Clarinet, Bassoon Bass, Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Trumpet (1, 2, 3), Horn in F (1, 2, 3, 4), Trombone (1, 2, 3), Euphonium, Tuba, Bass, Percussion, and Timpani. The score contains dynamic markings like *p*, *mf*, *f*, *mp*, and *fz*. Performance instructions include *All. Feroce*. The key signature is one flat and the time signature is 4/4.

Table 6.6 *Serenity* melodic material redistribution charts bars 33 - 50

BARS 33 - 50																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/ Harmony
33				Hn. 1	Unison	Unison									Fl. 1 Ob. 1 v*	
34	Cl. 1	Unison		Cl. 4 Hn. 1	Unison	Unison	Bsn. 1 Cl. 2 ^* T. Sax Hn. 4 Tbn. 1		Unison		Hn. 3 ^* Tbn. 2 Euph.	Bsn. 2 B. Cl. B. Sax Hn. 2 ^** Tbn. 3 Tba. Str. Bs.	Unison with B1a	Unison with B1b	Fl. 1 Ob. 1 v*	
35	Cl. 1	Cl. 3		Hn. 1 Hn. 2	Unison	Unison	Bsn. 1 Cl. 4 ^* T. Sax Hn. 4		Cl. 2 ^* Tbn. 1		Hn. 3 ^* Euph.	Bsn. 2 Hn. 1 ^* Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
36	Cl. 1 Cl. 2	Cl. 4		Hn. 1 Hn. 2	Unison	Unison	Bsn. 1 Cl. 3 ^* T. Sax Hn. 3		Cl. 1 ^* Cl. 2 ^* Tbn. 1		Euph.	Bsn. 2 Hn. 4 ^* Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
37	Cl. 2	Cl. 4		Cl. 1 Cl. 2 Hn. 1 Hn. 2	Unison	Unison	Bsn. 1 Cl. 3 ^* T. Sax Hn. 3		Cl. 1 ^* Tbn. 1		Hn. 2 ^* Euph.	Bsn. 2 Hn. 4 ^* Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
38	Cl. 1	Cl. 3		Cl. 1 Cl. 2 Hn. 1	Unison	Unison	Bsn. 1 Cl. 4 ^* T. Sax Hn. 4		Tbn. 1		Hn. 3 ^* Euph.	Bsn. 2 Hn. 2 ^** Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
39	Cl. 1 Cl. 2	Cl. 3		Cl. 2 Hn. 1 Hn. 2	Unison	Unison	Cl. 4 ^*	Bsn. 1 T. Sax Hn. 4	Tbn. 1		Hn. 3 ^* Euph.	Bsn. 2 Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
40	Cl. 1 Cl. 2	Cl. 4		Hn. 1	Unison	Unison	Hn. 3	Bsn. 1 T. Sax Hn. 4 Euph.	Tbn. 1 Tbn. 2		Bsn. 2 Cl. 3 ^** Tbn. 2 Tba. Str. Bs.	Unison	B. Cl. B. Sax Tbn. 1 ^* Tbn. 3	Unison	Fl. 1 Ob. 1 v*	
41	Cl. 1 Cl. 2	Cl. 4		Hn. 1 Hn. 2	Unison	SHARES HARMONIC MATERIAL WITH A1a	Bsn. 1 T. Sax Hn. 4 Euph.	Unison	Tbn. 2		Bsn. 2 Cl. 3 ^** Hn. 3 ^* Tba. Str. Bs.	Unison	B. Cl. B. Sax Tbn. 1 ^* Tbn. 3	Unison	Fl. 1 Ob. 1 v*	
42	Cl. 1 A. Sax 1	SHARES HARMONIC MATERIAL WITH A1a and T2	Cl. 4 A. Sax 2	Cl. 2	SHARES HARMONIC MATERIAL WITH T1a	Hn. 1 Hn. 2	Bsn. 1 Cl. 3 ^* Hn. 3 Tbn. 1	T. Sax Hn. 4	Tbn. 2		Cl. 3 ^** Euph.	Bsn. 2 Tba. Str. Bs.	Tbn. 1 ^* Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	Hn. 4
43	Cl. 1 A. Sax 1 Hn. 3 v*	A. Sax 2	Cl. 4	Cl. 2	SHARES HARMONIC MATERIAL WITH S2b, B1a and B2a	Bsn. 1 Hn. 2	Bsn. 1 Cl. 3 ^* Hn. 3 Tbn. 1	T. Sax			Hn. 1 ^* Euph.	Bsn. 2 Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	Hn. 4 Tbn. 1

Table 6.6 *Serenity* melodic material redistribution charts bars 33 - 50 (continued)

44	Cl. 1 A. Sax 1	Cl. 3 Cl. 4		SHARES HARMONIC MATERIAL WITH B2a	SHARES HARMONIC MATERIAL WITH B1b	Hn. 2 Tbn. 1	Bsn. 1 Cl. 2 ^* A. Sax 2 ^* T. Sax Hn. 3	Unison	Tbn. 1		Hn. 1 ^* Hn. 4 Euph.	Bsn. 2 Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
45	Cl. 1	Unison				Hn. 2	Bsn. 1 Cl. 3 Cl. 4	Unison	Hn. 3 Tbn. 1		Hn. 1 ^* Hn. 4 Euph.	Bsn. 2 Tba. Str. Bs.	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
46	Cl. 1	Unison				Cl. 3 Hn. 1 Hn. 2	Bsn. 1 Cl. 4 Hn. 3	Unison	Tbn. 1 Tbn. 2		Bsn. 2 Cl. 2 ^* Hn. 4 Euph. Tba. Str. Bs.	Unison	Tbn. 2	B. Cl. B. Sax Tbn. 3	Fl. 1 Ob. 1 v*	
47	Cl. 1 Hn. 1	Unison				Cl. 2 Cl. 3 Hn. 2	Bsn. 1 Cl. 4 Hn. 3	Unison	Tbn. 2		Bsn. 2 Hn. 4 Euph. Tba. Str. Bs.	Unison	B. Cl. B. Sax Tbn. 3	Unison	Fl. 1 Ob. 1 v*	
48	Cl. 1 Hn. 1	Unison				Cl. 2 Cl. 3 Hn. 2 Tbn. 1	Bsn. 1 Cl. 4 Hn. 3 Tbn. 2	Unison			Bsn. 2 Hn. 4 Euph. Tba. Str. Bs.	Unison	B. Cl. B. Sax Tbn. 3	Unison	Fl. 1 Ob. 1 v*	Cl. 2 Cl. 3 B. Cl. B. Sax Hn. 2 Tbn. 1 Tbn. 3
49	Cl. 1 Hn. 1	Unison				Cl. 2 Cl. 3 Hn. 2 Tbn. 1	Bsn. 1 Cl. 4 Hn. 3	Unison	Tbn. 2		Bsn. 2 B. Cl. B. Sax Hn. 4 Tbn. 3 Euph. Tba. Str. Bs.	Unison	Unison	Unison	Fl. 1 Ob. 1 v*	
50	Cl. 1 Hn. 1	Unison				Cl. 2 Cl. 3 Hn. 2 Tbn. 1	Bsn. 1 Cl. 4 Hn. 3	Unison	Tbn. 2		Bsn. 2 B. Cl. B. Sax Hn. 4 Tbn. 3 Euph. Tba. Str. Bs.	Unison	Unison	Unison	Fl. 1 Ob. 1 v*	

The marking of “Sonorous” at bar 51 dictates the beginning of the B section of the work. This is, however, different from the choral work, subtracting the word “symphonic”, most likely as the band does not require this direction. A reduction in tempo is marked for minim equals 48, though this is not present in the original.

This section and the following segment of the work is continually building up to the initial statement of text referring to the Lord. A key musical figure of this passage is the ascending melody found in the female voices and replicated in the upper woodwinds (flutes and clarinets) (see figure 6.10).

Figure 6.10 *Serenity (O Magnum Mysterium)* soprano and alto theme bars 51 - 62 reduction (Gjeilo, 2012)

ut a - ni - ma - - - - - li - a - - - - - vi -
 ut a - ni - ma - - - - - li - a - vi -
 de - rent Do - mi - num na - tum, ia -
 de - rent Do - - - - - mi - num,

By splitting the voice parts across both instruments and displacing the flutes by an octave, Gjeilo has achieved the desired blurring effect of the original homogenous voices, whilst allowing for the distinct timbres of each instrument and their respective timbres to be heard.

Lower woodwinds, low brass and string bass are now accompanied by timpani replicating the lower male voices. The dynamic indicator marking of '*cresc poco a poco*', also not found in the original, coupled with the timpani roll creates a sense of direction and moves the piece towards its climax, which the text originally supported (see figure 6.11 and 6.12).

These bass line instruments displace the original harmony in bars 55 to 58 with the tenor 2 line performed an octave lower. This is similar to bars 59 to 62, where the bass 1 line is performed an octave lower. In both instances, however, the bass clarinet is performing the bass 2 vocal line an octave lower than originally written, retaining the original harmonic structure, whilst adding new voicings to the choral versions harmony (see table 6.7).

Figure 6.11 *Serenity (O Magnum Mysterium)* choral score bars 51 - 62 (Gjeilo, 2012)

B
51 Sonorous, symphonic

Vln.

Vlc.

S1
51 *mf*
ut a - ni - ma - - - li - a vi -

S2
mf
ut a - ni - ma - - - li - a vi -

A1
mf
ut a - ni - ma - - - li - a vi -

A2
mf
ut a - ni - ma - - - li - a vi -

T1
mf
ut a -

T2
mf
ut a -

B1
mf
ut a -

B2
mf
ut a -

57

Vln.

Vlc.

S1
57
de - rent Do - mi - num na - tum, ia -

S2
de - rent Do - mi - num na - tum, ia -

A1
de - rent Do - mi - num,

A2
de - rent Do - mi - num,

T1
- - ni - ma - - - li -

T2
- - ni - ma - - - li -

B1
- - ni - ma - - - li -

B2
- - ni - ma - - - li -

Figure 6.12 *Serenity* for concert band score bars 51 - 62 (Gjeilo, 2015)

51 Sonorous (♩ = 48)

This section of the score covers bars 51 to 62. It features woodwind and string parts. The woodwinds include Flute 1 and 2, Oboe 1 and 2, Clarinet 1, 2, 3, and 4, Bassoon 1 and 2, and Contrabass. The strings include Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Eb Trumpet 1, 2, and 3, Horn in F 1, 2, 3, and 4, Trombone 1, 2, and 3, Euphonium, Tuba, and Bass. The percussion includes Percussion and Timpani. The tempo is marked as Sonorous with a quarter note equal to 48 beats (♩ = 48). The dynamic marking is *mp* (mezzo-piano).

This section of the score covers bars 51 to 62. It features brass and percussion parts. The brass includes Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Eb Trumpet 1, 2, and 3, Horn in F 1, 2, 3, and 4, Trombone 1, 2, and 3, Euphonium, Tuba, and Bass. The percussion includes Percussion and Timpani. The dynamic marking is *mp* (mezzo-piano). The tempo is marked as Sonorous with a quarter note equal to 48 beats (♩ = 48).

Table 6.7 *Serenity* melodic material redistribution charts bars 51 - 62

BARS 51 – 62																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/ Harmony
51	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 1		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* B. Sax Hn. 4 Tbn. 3 Euph. Tba. Str. Bs. Timp.	Unison		
52	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 1		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* B. Sax Hn. 4 Tbn. 3 Euph. Tba. Str. Bs. Timp.	Unison		
53	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 1		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* B. Sax Hn. 4 Tbn. 3 Euph. Tba. Str. Bs. Timp.	Unison		
54	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 1		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* B. Sax Hn. 4 Tbn. 3 Euph. Tba. Str. Bs. Timp.	Unison		
55	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 B. Sax v* Hn. 2 Tbn. 1 Euph. v* Tba. v* Str. Bs. v* Timp. v*		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* Hn. 4 Tbn. 3	Unison		

Table 6.7 *Serenity* melodic material redistribution charts bars 51 - 62 (continued)

56	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 B. Sax v* Hn. 2 Tbn. 1 Euph. v* Tba. v* Str. Bs. v* Timp. v*		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* Hn. 4 Tbn. 3	Unison		
57	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 B. Sax v* Hn. 2 Tbn. 1 Euph. v* Tba. v* Str. Bs. v* Timp. v*		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* Hn. 4 Tbn. 3	Unison		
58	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1	Unison	Bsn. 1 A. Sax 2 B. Sax v* Hn. 2 Tbn. 1 Euph. v* Tba. v* Str. Bs. v* Timp. v*		Bsn. 2 T. Sax Hn. 3 Tbn. 2	Unison	B. Cl. v* Hn. 4 Tbn. 3	Unison		
59	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1 Tbn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 2		Bsn. 2 T. Sax B. Sax v* Hn. 3 Tbn. 3 Euph. v* Tba. v* Str. Bs. v* Timp. v*	Unison	B. Cl. v* Hn. 4	Unison		
60	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1 Tbn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 2		Bsn. 2 T. Sax B. Sax v* Hn. 3 Tbn. 3 Euph. v* Tba. v* Str. Bs. v* Timp. v*	Unison	B. Cl. v* Hn. 4	Unison		

Table 6.7 *Serenity* melodic material redistribution charts bars 51 - 62 (continued)

61	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4		Unison	A. Sax 1 Hn. 1 Tbn. 1	Unison	Bsn. 1 A. Sax 2 Hn. 2 Tbn. 2		Bsn. 2 T. Sax B. Sax v* Hn. 3 Euph. v* Tba. v* Str. Bs. v* Timp. v* Tbn. 3	Unison	B. Cl. v* Hn. 4	Unison		
62	Fl. 1 ^ Cl. 1 Cl. 2	Unison		Fl. 2 ^ Cl. 3 Cl. 4 A. Sax 1		Unison	Cl. 1 ^ Cl. 4 A. Sax 1 A. Sax 2 Hn. 1 Tbn. 1	Unison	Bsn. 1 Cl. 2 ^ T. Sax Hn. 2 Tbn. 2		Bsn. 2 T. Sax B. Sax v* Hn. 3 Tbn. 3 Euph. v* Tba. v* Str. Bs. v* Timp. v*	Unison	B. Cl. v* Hn. 4	Unison		

Marked “*poco allargando*” and later “*broadly*”, bars 63 through to 76 of *Serenity* represent the build-up and climax of the work. Given the original states a slower tempo (crochet equals 69), it is conceivable that these altered directions are due to the wind ensemble’s capabilities in sound and phrase lengths.

Trumpets are utilised for the first time in the work at bar 63. While the third trumpet is used as a supporting instrument, both the first and second chairs double the flute and oboe, replicating the soprano and alto vocal lines. Paired with the piercing colours of the piccolo, these ascending lines gradually build up towards the work’s apex at bar 68, utilising each instrument’s bright colours in the upper registers, giving clarity against the large supporting ensemble.

Tremolos in the clarinets, alto and tenor saxophones create a shimmer effect, similar to that of a vocal vibrato and orchestral strings. These parts continually cross the tenor and bass voice lines at octave displacements, creating tension and new colours while further supporting the harmonic structure of the build up towards bar 68. Suspended cymbal and timpani also provide ample backing, with the cymbal’s penetrating timbre and sustain.

With the use of the full ensemble for the first time (including low reeds, brass and bass), Gjeilo delivers an emotional build up leading to the aforementioned climax at bar 68 with a significantly expanded range compared to the choral composition (see figures 6.13 and 6.14). Originally representing the text “*Beata Virgo, cujus viscera*” (Blessed is the Virgin whose womb) coupled with a restatement of “*Dominium*” (Christ), the melodic material resolves the tension of the preceding phrase and is a prime example

of word painting, a common technique found in religious texts set to music. The choral version holds the fermata on beat one of bar 68, though it has been shifted to beat 3 and 4 of bar 67 in the wind band transcription. This move by Gjeilo is conceivably a deliberate attempt to utilise the wind player's capabilities of breath control, further tension of colours and harmony and to gain full effect from the suspended cymbals crescendo.

Tremolos in the woodwinds cease at the pinnacle of the phrase (bar 69) with the texture becoming predominantly homophonic for the dying moments of the second section of the piece. Many octave displacements continue throughout, expanding on the limited vocal ranges in the original interpretation. Bars 74 to 76 see a revoicing of the vocal lines compared to the linear approach of bars 70 to 73, providing new colours and voicings for the closure of the section (see table 6.8).

Figure 6.13 *Serenity (O Magnum Mysterium)* choral score bars 63 - 76 (Gjeilo, 2012)

♩ = 69

64 (very short fermata)

Vln. *ff*

Vlc. *ff*

S1 *ff*
cen - tem in prae - se - pi - o Be - a - ta

S2 *ff*
cen - tem in prae - se - pi - o Be - a - ta

A1 *ff*
na - tum Do - mi - num, Be - a - ta

A2 *ff*
na - tum Do - mi - num, Be - a - ta

T1 *ff*
a vi - de - rent Do -

T2 *ff*
a vi - de - rent Do -

B1 *ff*
a vi - de - rent Do -

B2 *ff*
a vi - de - rent Do -

70

Vln.

Vlc.

S1 *mp* *mf*
Vir - go, cu - jus vis - ce - ra me - ru - e - runt,

S2 *mp* *mf*
Vir - go, cu - jus vis - ce - ra me - ru - e - runt,

A1 *mp* *mf*
Vir - go, cu - jus vis - ce - ra me - ru - e - runt,

A2 *mp* *mf*
Vir - go, cu - jus vis - ce - ra me - ru - e - runt,

T1 *mp* *mf*
- mi - num na - tum.

T2 *mp* *mf*
- mi - num na - tum.

B1 *mp* *mf*
- mi - num na - tum.

B2 *mp* *mf*
- mi - num na - tum.

Figure 6.14 *Serenity* for concert band score bars 63 - 76 (Gjeilo, 2015)

Musical score for bars 63-76 of *Serenity*. The score is divided into two systems. The first system (bars 63-76) includes parts for Piccolo, Flute 1 and 2, Oboe 1 and 2, Bassoon 1 and 2, Clarinet in Bb 2 and 4, Bassoon Bass, Saxophone Alto 1 and 2, Saxophone Tenor, Saxophone Baritone, and Snare Cymbal. The second system (bars 77-90) includes parts for Flute 1 and 2, Oboe 1 and 2, Bassoon 1 and 2, Clarinet in Bb 2 and 4, Bassoon Bass, Saxophone Alto 1 and 2, Saxophone Tenor, Saxophone Baritone, and Snare Cymbal. The tempo markings are *poco allargando* and *broadly*. The score features complex rhythmic patterns and dynamic markings such as *ff*, *mf*, and *p*.

Musical score for bars 63-76 of *Serenity*. The score is divided into two systems. The first system (bars 63-76) includes parts for Piccolo, Flute 1 and 2, Oboe 1 and 2, Bassoon 1 and 2, Clarinet in Bb 2 and 4, Bassoon Bass, Saxophone Alto 1 and 2, Saxophone Tenor, Saxophone Baritone, and Snare Cymbal. The second system (bars 77-90) includes parts for Flute 1 and 2, Oboe 1 and 2, Bassoon 1 and 2, Clarinet in Bb 2 and 4, Bassoon Bass, Saxophone Alto 1 and 2, Saxophone Tenor, Saxophone Baritone, and Snare Cymbal. The tempo markings are *a tempo*. The score features complex rhythmic patterns and dynamic markings such as *ff*, *mf*, and *p*. The percussion part includes Snare, Cymbal, and Tom-tom.

Table 6.8 *Serenity* melodic material redistribution charts bars 63 - 76

BARS 63 – 76																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/Harmony
63	Picc. ^ Fl. 1 ^ Ob. 1 Tpt. 1	Unison		Fl. 2 ^ Ob. 2 Tpt. 2		Unison	Bsn. 1 Cl. 1 ^ (T) Cl. 4 (T) A. Sax 2 Tpt. 3 Hn. 2 Tbn. 1	Unison	Bsn. 2 Cl. 2 ^ (T) Cl. 3 ^ (T) A. Sax1 ^ (T) T. Sax (T) Hn. 3 Tbn. 2		Cl. 1 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) A. Sax1 ^ (T) A. Sax2 ^ (T) Hn. 1 ^ Hn. 4 Tbn. 3	Unison	Cl. 2 ^ (T) B. Cl. v ⁺ T. Sax (T) B. Sax v ⁺ Euph. Tba. v ⁺ Str. Bs. v ⁺ Timp.	Unison		
64	Picc. ^ Fl. 1 ^ Ob. 1 Tpt. 1	Unison		Fl. 2 ^ Ob. 2 A. Sax 1 (T) A. Sax 2 (T) Tpt. 2		Unison	Bsn. 1 Cl. 1 ^ (T) Cl. 2 ^ (T) Cl. 4 T. Sax (T) Hn. 2 Tbn. 1	Unison	Bsn. 2 Cl. 2 ^ (T) Cl. 3 ^ (T) A. Sax 2 (T) T. Sax (T) Hn. 3 Tbn. 2		Cl. 1 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) Tpt. 3 ^ Hn. 1 ^ Hn. 4 Tbn. 3	Unison	B. Cl. v ⁺ B. Sax v ⁺ Tpt. 3 ^ Euph. Tba. v ⁺ Str. Bs. v ⁺ Timp.	Unison		
65	Picc. ^ Fl. 1 ^ Ob. 1 Tpt. 1	Unison		Fl. 2 ^ Ob. 2 A. Sax 1 (T) A. Sax 2 (T) Tpt. 2		Unison	Cl. 1 ^ (T) Cl. 2 ^ (T) Cl. 4 A. Sax 2 (T) T. Sax (T) Hn. 2 Tbn. 1	Unison	Bsn. 1 Cl. 2 ^ (T) Cl. 3 ^ (T) T. Sax (T) Hn. 3 Tbn. 2		Bsn. 2 Cl. 1 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) A. Sax2 ^ (T) T. Sax ^ (T) Tpt. 3 ^ Hn. 1 ^ Hn. 4 Tbn. 3	Unison	B. Cl. v ⁺ B. Sax v ⁺ Euph. Tba. v ⁺ Str. Bs. v ⁺ Timp.	Unison		Tpt. 3
66	Picc. ^ Fl. 1 ^ Ob. 1 A. Sax 1 (T) Tpt. 1	Unison		Fl. 2 ^ Ob. 2 A. Sax 1 (T) A. Sax 2 (T) Tpt. 2		Unison	Cl. 2 ^ (T) Cl. 3 ^ (T) T. Sax (T) Hn. 2 Tbn. 1	Unison	Bsn. 1 Cl. 1 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) Hn. 3 Tbn. 2		Bsn. 2 Cl. 1 ^ (T) Cl. 2 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) T. Sax ^ (T) Tpt. 3 ^ Hn. 1 ^ Hn. 4 Tbn. 3	Unison	B. Cl. v ⁺ B. Sax v ⁺ Euph. Tba. v ⁺ Str. Bs. v ⁺ Timp.	Unison		
67	Picc. ^ Fl. 1 ^ Ob. 1 Tpt. 1	Unison		Fl. 2 ^ Ob. 2 A. Sax1 ^ (T) Tpt. 2		Unison	Cl. 2 ^ (T) Cl. 3 ^ (T) T. Sax (T) Tbn. 1	Unison	Bsn. 1 Cl. 1 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) A. Sax1 ^ (T) A. Sax2 ^ (T) Tpt. 3 ^ Hn. 3 ^ Tbn. 2		Bsn. 2 Cl. 1 ^ (T) Cl. 2 ^ (T) Cl. 3 ^ (T) Cl. 4 ^ (T) A. Sax2 ^ (T) T. Sax ^ (T) Hn. 1 ^ Hn. 4 Tbn. 3 Euph.	Unison	B. Cl. v ⁺ B. Sax v ⁺ Hn. 2 ^ Euph. Tba. v ⁺ Str. Bs. v ⁺ Timp.	Unison		

Table 6.8 *Serenity* melodic material redistribution charts bars 63 - 76 (continued)

68	Picc. \wedge^* Fl. 1 \wedge^* Ob. 1 Tpt. 1	Fl. 2 \wedge^* Ob. 2 Tpt. 2		SHARES HARMONIC MATERIAL WITH S1, S2, T1, T2 and B2		Unison	Bsn. 1 Cl. 2 \wedge^* (T) Cl. 3 \wedge^* (T) A.Sax1 \wedge^* (T) T. Sax (T) Hn. 3 Tbn. 2	Unison	Bsn. 2 Cl. 1 \wedge^{**} (T) Cl. 2 \wedge^* (T) Cl. 3 \wedge^* (T) Cl. 4 \wedge^* (T) A.Sax1 \wedge^* (T) A.Sax2 \wedge^* (T) Hn. 1 \wedge^* Hn. 4 Tbn. 3		Cl. 1 \wedge^{**} (T) Cl. 2 \wedge^{**} (T) Cl. 3 \wedge^* (T) Cl. 4 \wedge^* (T) A.Sax2 \wedge^* (T) T. Sax \wedge^* (T) Tpt. 3 \wedge^* Hn. 2 \wedge^* Tbn. 1 \wedge^* Euph.	Unison	B. Cl. \vee^* B. Sax \vee^* Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
69	Picc. \wedge^* Fl. 1 \wedge^* Ob. 1 Tpt. 1	Fl. 2 \wedge^* Ob. 2 Tpt. 2		Fl. 2 \wedge^* A. Sax 1 (T)		Unison	Bsn. 1 A.Sax2 \wedge^* (T) Tpt. 3 Hn. 3 Tbn. 2	Unison	Bsn. 2 Cl. 2 \wedge^* (T) Cl. 3 \wedge^* (T) T. Sax (T) Hn. 1 \wedge^* Hn. 4 Tbn. 3		Cl. 1 \wedge^{**} (T) Cl. 3 \wedge^* (T) Cl. 4 \wedge^* (T) A.Sax1 \wedge^* (T) A.Sax2 \wedge^* (T) Hn. 2 \wedge^* Tbn. 1 \wedge^* Euph.	Unison	Cl. 1 \wedge^{**} (T) Cl. 2 \wedge^{**} (T) Cl. 4 \wedge^* (T) B. Cl. \vee^* T. Sax \wedge^* (T) B. Sax \vee^* Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
70	Picc. \wedge^* Fl. 1 \wedge^* Ob. 1 Cl. 1 Cl. 2 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 Cl. 4 Tpt. 2		Unison	T. Sax Tpt. 3 Hn. 2 Tbn. 2	Unison	Bsn. 1 A. Sax 1 \wedge^* Hn. 3 Tbn. 3		Bsn. 2 A. Sax 2 \wedge^* Hn. 1 \wedge^* Hn. 4 Tbn. 1 \wedge^* Euph.	Unison	B. Cl. \vee^* B. Sax \vee^* Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
71	Picc. \wedge^* Fl. 1 \wedge^* Ob. 1 Cl. 1 Cl. 2 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 Cl. 4 Tpt. 2		Unison	T. Sax Tpt. 3 Hn. 2 Tbn. 2	Unison	Bsn. 1 A. Sax 1 \wedge^* Hn. 3 Tbn. 3		Bsn. 2 A. Sax 2 \wedge^* Hn. 1 \wedge^* Hn. 4 Tbn. 1 \wedge^* Euph.	Unison	B. Cl. \vee^* B. Sax \vee^* Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
72	Picc. \wedge^* Fl. 1 \wedge^* Ob. 1 Cl. 1 Cl. 2 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 Cl. 4 Tpt. 2		Unison	T. Sax Tpt. 3 Hn. 2 Tbn. 2	Unison	Bsn. 1 A. Sax 1 \wedge^* Hn. 3 Tbn. 3		Bsn. 2 A. Sax 2 \wedge^* Hn. 1 \wedge^* Hn. 4 Tbn. 1 \wedge^* Euph.	Unison	B. Cl. \vee^* B. Sax \vee^* Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
73	Picc. \wedge^* Fl. 1 \wedge^* Ob. 1 Cl. 1 Cl. 2 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 Cl. 4 Tpt. 2 Tpt. 3		Unison	T. Sax Tpt. 3 Hn. 2 Tbn. 2	Unison	Bsn. 1 A. Sax 1 \wedge^* Hn. 3 Tbn. 3		Bsn. 2 A. Sax 2 \wedge^* Hn. 1 \wedge^* Hn. 4 Tbn. 1 \wedge^* Euph.	Unison	B. Cl. \vee^* B. Sax \vee^* Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
74	Picc. \wedge^* Fl. 1 (div) \wedge^* Ob. 1 Cl. 1 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 A. Sax 2 Tpt. 3		Cl. 4 T. Sax Hn. 1 Tbn. 1	Fl. 1 (div) \wedge^{**} Bsn. 1 Cl. 2 \wedge^* A. Sax 1 \wedge^* Tpt. 2 \wedge^* Hn. 2 Tbn. 2	Unison	Unison		Bsn. 2 Hn. 3 Tbn. 3	Unison	B. Cl. \vee^* B. Sax \vee^* Hn. 4 Euph. Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		

Table 6.8 *Serenity* melodic material redistribution charts bars 63 - 76 (continued)

75	Picc. \wedge^* Fl. 1 (div) \wedge^* Ob. 1 Cl. 1 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 A. Sax 2 Tpt. 3		Cl. 4 T. Sax Hn. 1 Tbn. 1	Fl. 1 (div) \wedge^{**} Bsn. 1 Cl. 2 \wedge^* A. Sax 1 \wedge^* Tpt. 2 \wedge^* Hn. 2 Tbn. 2	Unison	Unison		Bsn. 2 Hn. 3 Tbn. 3	Unison	B. Cl. \vee^* B. Sax \vee^* Hn. 4 Euph. Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		
76	Picc. \wedge^* Fl. 1 (div) \wedge^* Ob. 1 Cl. 1 Tpt. 1	Unison		Fl. 2 \wedge^* Ob. 2 Cl. 3 A. Sax 2 Tpt. 3		Cl. 4 T. Sax Hn. 1 Tbn. 1	Fl. 1 (div) \wedge^{**} Bsn. 1 Cl. 2 \wedge^* A. Sax 1 \wedge^* Tpt. 2 \wedge^* Hn. 2 Tbn. 2	Unison	Unison		Bsn. 2 Hn. 3 Tbn. 3	Unison	B. Cl. \vee^* B. Sax \vee^* Hn. 4 Euph. Tba. \vee^* Str. Bs. \vee^* Timp.	Unison		

Upon returning to the A section material, Gjeilo retains the original flute and oboe soloist lines (at an octave lower). 1st alto saxophone replaces the horn for the initial statement of the alto line and the ensemble is fuller than before. The overall colour of this restatement is lighter, conceivably due to the text of the original representing the arrival of Christ (see figures 6.15 and 6.16).

The ‘overlapping’ technique is reprised, utilising similar orchestration concepts as before. Trumpets provide strength to the harmony by being assigned the tenor and bass vocal lines at octave displacements. Horns are given similar treatment, with the composer making use of the fourth line, having both the 1st and 4th horn play in octaves (see table 6.9).

The final two bars of this sub section of the work conclude with the upper winds (piccolo, flute and oboe) marked ‘*niente*’, leading to a gradual diminution of texture and instrumentation. Gjeilo reintroduces the bowed percussion as a precursor to the final phrase of the piece, the ‘Alleluia’.

Figure 6.15 *Serenity (O Magnum Mysterium)* choral score bars 77 - 96 (Gjeilo, 2012)

$\text{♩} = 44$ or $(\text{♩} = 88)$
 Tempo I
 Melody carriers: A1/A2
 Everyone: Gradually louder up to m. 87

Vln. *p* *mp*
 Vlc. *p* *mp*
 S1 *pp* *p* *pp* *mp*
 S2 *pp* *p* *pp* *mp*
 A1 *pp* *mp* *f*
 A2 *pp* *mp* *f*
 T1 *pp* *p* *pp* *mp*
 T2 *pp* *p* *pp* *mp*
 B1 *pp* *mp* *pp* *mp*
 B2 *pp* *p* *pp* *mp*

My - ste - ri -
 My - ste - ri -
 Mag - num, mag -
 Mag - num, mag -
 por - ta - re
 por - ta - re
 por - ta - re
 por - ta - re

Vln. *f* *ff*
 Vlc. *f* *ff*
 S1 *p* *mf* *mp* *f*
 S2 *p* *mf* *mp* *f*
 A1 *p* *mf* *mp* *f*
 A2 *p* *mf* *mp* *f*
 T1 *p* *mf* *mp* *f*
 T2 *p* *mf* *mp* *f*
 B1 *p* *mf* *mp* *f*
 B2 *p* *mf* *mp* *f*

um, por - ta - re
 um, por - ta - re
 num my - ste - ri - um, por - ta - re
 num my - ste - ri - um, por - ta - re
 re Do - mi -
 re Do mi -
 re Do - mi -
 re Do mi -

89

Vln. *f* *p*

Vlc. *f*

S1 *mf*
Do - mi - num Chris - tum.

S2 *mf*
Do - mi - num Chris - tum.

A1 *mf* *f* *mp* *mf* *p* *mp*
Do - mi - num.

A2 *mf* *f* *mp* *mf* *p* *mp*
Do - mi - num.

T1 *mp* *mf* *p* *mp*
num. Chris - tum.

T2 *mf* *f* *mp* *mf* *p* *mp*
num. Chris - tum.

B1 *mf* *f* *mp* *mf* *p* *mp*
num. Chris - tum.

B2 *mf* *f* *mp* *mf* *p* *mp*
num. Chris - tum.

95

Vln. *p*

Vlc. *p*

S1 *p*
Al -

S2 *p*

A1 *p*

A2 *p*

T1 *p*

T2 *p*

B1 *p*

B2 *p*

Figure 6.16 *Serenity* for concert band score bars 77 - 96 (Gjeilo, 2015)

77 Tempo I (♩ = 52)

This page of the concert band score covers measures 77 through 96. It features a variety of instruments including Piccolo, Flute (1 and 2), Oboe (1 and 2), Bassoon (1 and 2), Clarinet in B-flat (1, 2, 3, 4), Bassoon in Alto (1 and 2), Bassoon in Tenor, Bassoon in Baritone, Euphonium (1, 2, 3), Horn in F (1, 2, 3, 4), Trombone (1, 2, 3), Euphonium, Tuba, Bass, Percussion, and Timpani. The score includes dynamic markings such as *pp*, *p*, *mp*, *f*, and *sf*. A 'Solo' marking is present for the Piccolo and Oboe parts. A 'Cresc.' (Crescendo) marking is indicated for the Bassoon in Alto part. The tempo is marked as 'Tempo I' with a quarter note equal to 52 beats per minute.

87

This page of the concert band score covers measures 87 through 96. It features the same instrumentation as the previous page. The score includes dynamic markings such as *pp*, *p*, *mp*, *f*, and *sf*. A 'Solo' marking is present for the Oboe part. A 'Cresc.' (Crescendo) marking is indicated for the Bassoon in Alto part. The tempo is marked as 'Tempo I' with a quarter note equal to 52 beats per minute. At the end of the page, there are markings for 'Cresc. (Horn)', 'pp Vibra. (Horn)', and 'pp'.

Table 6.9 *Serenity* melodic material redistribution charts bars 77 - 96

BARS 77 – 96																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/Harmony
77		Unison		A. Sax 1		Unison		Unison				Unison		Unison	Fl. 1 Ob. 1	
78		Unison		A. Sax 1		Unison		Unison				Unison		Unison	Fl. 1 Ob. 1	
79	Fl. 2 Ob. 2 Cl. 1 Cl. 3	Unison		A. Sax 1		Unison	Bsn. 1 Cl. 4 [^] T. Sax Hn. 3 Cl. 2 [^] Tpt. 1 [^] Tbn. 1	Unison	Unison		Tpt. 3 [^] Hn. 2 [^] Tbn. 2 Euph.	Bsn. 2 B. Cl. B. Sax Tpt. 2 [^] Hn. 1 [^] Hn. 4 [^] Tbn. 3 Tba. Str. Bs.	Unison with B1a	Unison with B1b	Fl. 1 Ob. 1	
80	Fl. 2 Ob. 2 Cl. 1	Cl. 3		A. Sax 1		Unison	Bsn. 1 Cl. 4 [^] T. Sax Hn. 3	Unison	Cl. 2 [^] Tpt. 1 [^] Tbn. 1		Hn. 2 [^] Euph.	Bsn. 2 Hn. 1 [^] Hn. 4 [^] Tba. Str. Bs.	Tpt. 3 [^] Tbn. 2	B. Cl. B. Sax Tpt. 2 [^] Tbn. 3	Fl. 1 Ob. 1	
81	Fl. 2 Ob. 2 Cl. 1 Cl. 2	Cl. 4		A. Sax 1		Unison	Bsn. 1 Cl. 3 [^] T. Sax Hn. 2	Unison	Fl. 2 [^] Ob. 2 [^] Cl. 1 [^] Cl. 2 [^] Tpt. 1 [^] Tpt. 3 Tbn. 1		Hn. 1 [^] Hn. 4 Euph.	Bsn. 2 Hn. 3 [^] Tba. Str. Bs.	Tpt. 2 [^] Tpt. 3 [^] Tbn. 2	B. Cl. B. Sax Tpt. 1 [^] Tpt. 2 [^] Tbn. 3	Fl. 1 Ob. 1	
82	Cl. 1 Cl. 2	Cl. 4		A. Sax 1 A. Sax 2		Unison	Bsn. 1 Cl. 3 [^] T. Sax Hn. 2	Unison	Fl. 2 [^] Ob. 2 [^] Cl. 1 [^] Tpt. 3 Tbn. 1		Hn. 1 [^] Hn. 4 Euph.	Bsn. 2 Hn. 3 [^] Tba. Str. Bs.	Tpt. 2 [^] Tbn. 2	B. Cl. B. Sax Tpt. 1 [^] Tbn. 3	Picc. Fl. 1 Ob. 1	
83	Fl. 2 Ob. 2 Cl. 1 Cl. 2	Cl. 3		A. Sax 1 A. Sax 2		Unison	Bsn. 1 Cl. 4 [^] T. Sax Hn. 3	Unison	Fl. 2 [^] Ob. 2 [^] Cl. 2 [^] Tpt. 1 [^] Tpt. 3 Tbn. 1		Hn. 2 [^] Euph.	Bsn. 2 Hn. 1 [^] Hn. 4 [^] Tba. Str. Bs.	Tpt. 2 [^] Tpt. 3 [^] Tbn. 2	B. Cl. B. Sax Tpt. 1 [^] Tpt. 2 [^] Tbn. 3	Picc. Fl. 1 Ob. 1	
84	Fl. 2 Ob. 2 Cl. 1 Cl. 2	Cl. 3		A. Sax 1 A. Sax 2		Unison	SHARES HARMONIC MATERIAL WITH S2 and B1a	Bsn. 1 Cl. 4 [^] T. Sax Hn. 3 [^]	Cl. 2 [^] Tpt. 1 [^] Tbn. 1		Hn. 2 [^] Euph.	Bsn. 2 Hn. 1 [^] Hn. 4 [^] Tba. Str. Bs.	Tpt. 3 [^] Tbn. 2	B. Cl. B. Sax Tpt. 2 [^] Tbn. 3	Picc. Fl. 1 Ob. 1	
85	Fl. 2 Ob. 2 Cl. 1	Cl. 3		A. Sax 1 A. Sax 2		Unison	Hn. 3	Cl. 4 [^] Hn. 1 [^] Hn. 4	Cl. 2 [^] Tpt. 1 [^] Tbn. 3 ^v	Tpt. 2 [^] Tbn. 1 Tbn. 2	Bsn. 1 [^] T. Sax [^] Hn. 2 [^] Euph.	Bsn. 2 Tba. Str. Bs.	Tpt. 3 [^] Tbn. 1 [^] Tbn. 2	B. Cl. B. Sax Tpt. 2 [^] Tbn. 3	Picc. Fl. 1 Ob. 1	

Table 6.9 *Serenity* melodic material redistribution charts bars 77 - 96 (continued)

86	Ob. 2 Cl. 1 Cl. 3 A. Sax 2	Unison		Fl. 2 [^] Ob. 2 [^] A. Sax 1 A. Sax 2		A. Sax 1 [^]	Hn. 3	Cl. 4 [^] Hn. 1 [^] Hn. 4	Cl. 2 [^] Tpt. 1 [^] Tbn. 3 ^v	Tpt. 2 [^] Tbn. 2	Bsn. 1 [^] T. Sax [^] Hn. 2 [^] Euph.	Bsn. 2 B. Cl. B. Sax Tba. Str. Bs.	Tpt. 3 [^] Tbn. 1 [^]	Unison with B1b	Picc. Fl. 1 Fl. 2 ^v Ob. 1	
87	Fl. 2 Ob. 1 Cl. 1 A. Sax 1	Ob. 2 Cl. 2 A. Sax 2		SHARES HARMONIC MATERIAL WITH T2, B1b and B2b		SHARES HARMONIC MATERIAL WITH B1b and B2b	Tpt. 1 [^]	Unison	T. Sax Tpt. 1 [^] Tpt. 1 [^] Hn. 3 Tbn. 1 Tbn. 3 ^v	Tpt. 2 [^] Tbn. 2	Bsn. 1 [^] Hn. 2 [^] Euph.	Bsn. 2 Cl. 3 [^] Cl. 4 [^] Hn. 1 [^] Hn. 4 [^] Tba. Str. Bs.	Tpt. 3 [^] Tbn. 1 [^] Tbn. 2	B. Cl. B. Sax Tpt. 2 [^] Tbn. 3	Picc. Fl. 1	
88	Fl. 2 Ob. 1 Cl. 1 A. Sax 1	Ob. 2 Cl. 2 A. Sax 2		SHARES HARMONIC MATERIAL WITH B1a, B1b B2a and B2b		SHARES HARMONIC MATERIAL WITH B1a, B1b B2a and B2b	T. Sax Tpt. 1 [^] Hn. 3 Tbn. 1	Unison	T. Sax Tpt. 1 [^] Hn. 3 Tbn. 1	Unison	Bsn. 1 [^] Hn. 2 [^] Euph.	Bsn. 2 Cl. 3 [^] Cl. 4 [^] Hn. 1 [^] Hn. 4 [^] Tba. Str. Bs.	Tpt. 3 [^] Tbn. 2	B. Cl. B. Sax Tpt. 2 [^] Tbn. 3	Picc. Fl. 1	
89	Fl. 2 Ob. 1 Cl. 1	Unison		Tpt. 3 Hn. 2		Cl. 3 Cl. 4	Cl. 2 [^] Tpt. 1 [^] Hn. 3 Tbn. 1	Ob. 2 [^] Bsn. 1 A. Sax 2 [^] T. Sax Tpt. 1 [^] Hn. 1 [^] Hn. 4	Tbn. 1	Tpt. 2 [^] Tbn. 2	Euph.	Bsn. 2 Tba. Str. Bs.	B. Cl. B. Sax Tpt. 3 [^] Tbn. 2 Tbn. 3	B. Cl. B. Sax Tpt. 2 [^] Tbn. 3	Picc. Fl. 1	
90	Fl. 2 Ob. 1 Cl. 1 A. Sax 1	Unison		Ob. 2 Cl. 2 Cl. 3 Cl. 4 A. Sax 2 Tpt. 3 Hn. 2		SHARES HARMONIC MATERIAL WITH A1	Cl. 3 Cl. 4 Hn. 3	Ob. 2 [^] Bsn. 1 Cl. 2 [^] A. Sax 2 [^] T. Sax Hn. 1 [^] Hn. 4	Tpt. 1 [^] Tbn. 1	Tpt. 2 [^] Tbn. 2	Euph.	Bsn. 2 Tba. Str. Bs.	B. Cl. B. Sax Tbn. 3	SHARES HARMONIC MATERIAL WITH B1b	Picc. Fl. 1	Ob. 2 Cl. 2 A. Sax 2
91	Fl. 2 Ob. 1 Cl. 1 A. Sax 1	Unison		Tpt. 1 [^] Tpt. 3 Tbn. 1		Hn. 3	Bsn. 1 Cl. 2 [^] T. Sax Hn. 1 [^] Hn. 4		Tpt. 1 [^] Tbn. 1	Tpt. 2 [^] Tbn. 2	Ob. 2 [^] Bsn. 2 Cl. 3 [^] Cl. 4 [^] A. Sax 2 [^] Hn. 2 [^] Euph. Tba. Str. Bs.		B. Cl. B. Sax Tpt. 3 [^] Tbn. 3	SHARES HARMONIC MATERIAL WITH S1, S2, A2, T2a and B1	Picc. Fl. 1	
92	Cl. 1 A. Sax 1	Unison		Fl. 2 [^] Cl. 2 Tpt. 1 [^] Tbn. 1		Cl. 3 A. Sax 2 Hn. 3	Bsn. 1 Cl. 4 T. Sax Hn. 1 [^] Hn. 4		Tpt. 2 [^] Tbn. 2		Bsn. 2 Hn. 2 [^] Euph. Tba. Str. Bs.		B. Cl. B. Sax Tpt. 3 [^] Tbn. 3	Picc. [^] Fl. 1 Ob. 1		

Table 6.9 *Serenity* melodic material redistribution charts bars 77 - 96 (continued)

93	Cl. 1 A. Sax 1	Unison		Fl. 2 [^] * Cl. 2 Cl. 3 A. Sax 2 Tpt. 1 [^] * Tbn. 1		Hn. 3	Bsn. 1 Cl. 4 T. Sax Hn. 1 [^] * Hn. 4		Tpt. 2 [^] * Tbn. 2		Bsn. 2 Hn. 2 [^] * Euph. Tba. Str. Bs.		B. Cl. B. Sax Tpt. 3 [^] * Tbn. 3		Picc. [^] * Fl. 1 Ob. 1	Fl. 2 Cl. 2 Cl. 3 B. Cl. A. Sax 2 B. Sax Tpt. 1 Tbn. 1 Tbn. 3
94	Cl. 1 A. Sax 1			Fl. 2 [^] * Cl. 2 Cl. 3 A. Sax 2 Tpt. 1 [^] * Tbn. 1		Hn. 3	Bsn. 1 Cl. 4 T. Sax Hn. 1 [^] * Hn. 4		Tpt. 2 [^] * Tbn. 2		B. Cl. B. Sax Tpt. 3 [^] * Hn. 2 [^] * Tbn. 3 Euph. Tba. Str. Bs.		Unison		Picc. [^] * Fl. 1 Ob. 1	
95	Cl. 1 A. Sax 1 Tpt. 1 Crot. Vib. (div) Vib. (div) ^v *	Cl. 3 Tpt. 3		Cl. 4 Tbn. 1		Cl. 2 A. Sax 2 Hn. 3	Hn. 1 [^] * Hn. 4		T. Sax Tpt. 2 [^] * Tbn. 2		B. Cl. B. Sax Hn. 2 [^] * Tbn. 3 Euph. Tba. Str. Bs.		Unison			
96	Cl. 1 A. Sax 1 Tpt. 1 Crot. Vib. (div) Vib. (div) ^v *	Cl. 3 Tpt. 3		Cl. 4 Tbn. 1		Cl. 2 A. Sax 2 Hn. 3	Hn. 1 [^] * Hn. 4		T. Sax Tpt. 2 [^] * Tbn. 2		Hn. 2 [^] * Euph. Tba. Str. Bs.		B. Cl. B. Sax Tbn. 3			

A continuation of the previous subsection, Gjeilo concludes the work with a seeming linear approach to the melodic redistribution (see table 6.10). Female voices are generally assigned to higher pitched instruments, with male voices replicated in lower pitched. While the ‘over lapping’ technique is still present, this reduction in texture gives clarity to the ensemble sound and the original texts liturgical purpose (see figure 6.17). As per the original, the composer retains moments of dissonance, sustaining the fourth and sixth degrees of A \flat major, before arriving at an A \flat major chord at bar 103 for a clear and serene ending to this work designed to praise Christ.

As with the flutes and oboes in the previous phrase, the dynamic effect of ‘*niente*’ is utilised to decrease the instrumentation gently, similar to that of a voice becoming a whisper. The final chord, originally sung by the full SATB chorus, is now solely represented in the clarinet family (see figure 6.18). Surprisingly, the soprano voicing is orchestrated down an octave, perhaps to avoid the weaker throat notes of the instrument, instead allowing all voices to be performed in the rich chalumeau register. This homogenous group of instruments, having been integral to the overall sound of the work, are capable of effortlessly achieving the ‘*niente*’ effect, and retaining the essence of the works origins.

Figure 6.17 *Serenity (O Magnum Mysterium)* choral score bars 97 - 107 (Gjeilo, 2012)

This image shows the vocal parts of a choral score for bars 97-107. It includes two parts: Alto (Al) and Soprano (S). The music is written in 4/4 time and features a melodic line with dynamic markings of *mp* (mezzo-piano), *p* (piano), and *pp* (pianissimo). The lyrics are "Al - le - le". The score consists of nine staves, with the first two being empty and the remaining seven containing the vocal lines.

This image shows the instrumental and vocal parts of a choral score for bars 102-107. It includes Violin (Vln.), Viola (Vlc.), Soprano 1 (S1), Soprano 2 (S2), Alto 1 (A1), Alto 2 (A2), Tenor 1 (T1), Tenor 2 (T2), Bass 1 (B1), and Bass 2 (B2). The music is written in 4/4 time and features a melodic line with dynamic markings of *pp* (pianissimo), *p* (piano), and *mp* (mezzo-piano). The lyrics are "lu - ia.". The score consists of ten staves, with the first two being empty and the remaining eight containing the instrumental and vocal lines.

Figure 6.18 *Serenity* for concert band score bars 97 - 107 (Gjeilo, 2015)

This image shows a page of a concert band score for the piece "Serenity" by Gjeilo, covering bars 97 to 107. The score is arranged in a standard concert band layout with multiple staves for each instrument family. The instruments listed on the left include Piccolo, Flutes (1 and 2), Oboes (1 and 2), Bassoons (1 and 2), Clarinets in Bb (1, 2, 3, and 4), Bass Clarinet, Bassoon Bass, Saxophones (Soprano Alto, Tenor, and Baritone), Trumpets (1, 2, and 3), Horns in F (1, 2, 3, and 4), Trombones (1, 2, and 3), Euphonium, Tuba, Bass, Percussion (snare, tom-toms, and cymbals), and Timpani. The score features a variety of musical notations, including dynamics such as *p*, *mp*, *f*, *pp*, and *mf*, and articulation marks like accents and slurs. The key signature is one flat, and the time signature is 4/4. The music is written in a clear, professional notation style.

Table 6.10 *Serenity* melodic material redistribution charts bars 97 - 107

BARS 97 – 107																
	S1	S2a	S2b	A1a	A1b	A2	T1a	T1b	T2a	T2b	B1a	B1b	B2a	B2b	String Solo	New Material/ Harmony
97	Cl. 1 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v*	Cl. 3 Tpt. 1 Tpt. 3		Cl. 4 T. Sax Tpt. 3 Tbn. 1		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Hn. 2 ^*		T. Sax Tpt. 2 ^* Tbn. 2		Bsn. 2 ^* Euph. Tba. Str. Bs.		B. Cl. B. Sax Tbn. 3			
98	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v* Crot.	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1 Vib. (div)		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Hn. 2 ^* Vib. (div) ^*		Tpt. 2 ^* Tbn. 2		Bsn. 2 ^* B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.		Unison			
99	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v*	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Hn. 2 ^*		Tpt. 2 ^* Tbn. 2		Bsn. 2 ^* B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.		Unison			
100	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v* Crot.	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1 Vib. (div)		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Hn. 2 ^* Vib. (div) ^*		Tpt. 2 ^* Tbn. 2		Bsn. 2 ^* B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.		Unison			
101	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v* Crot.	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1 Vib. (div)		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Hn. 2 ^* Vib. (div) ^*		Tpt. 2 ^* Tbn. 2		Bsn. 2 ^* B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.		Unison			
102	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v*	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Bsn. 2 Hn. 2 ^*		Tpt. 2 ^* Tbn. 2		B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.		Unison			

Table 6.10 *Serenity* melodic material redistribution charts bars 97 – 107 (continued)

103	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v*	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Bsn. 2 Hn. 2 ^*		Tpt. 2 ^* Tbn. 2		B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.	Unison		Unison with Bass	
104	Cl. 1 Cl. 3 A. Sax 1 Tpt. 1 Hn. 1 Hn. 4 v* Crot.	Unison		Cl. 4 T. Sax Tpt. 3 Tbn. 1 Vib. (div)		Bsn. 1 Cl. 2 A. Sax 2 Hn. 3	Bsn. 2 Vib. (div) ^*		Tpt. 2 ^* Tbn. 2		B. Cl. B. Sax Tbn. 3 Euph. Tba. Str. Bs.	Unison		Unison with Bass	
105	Cl. 2 v* Cl. 3 v* A.Sax2v* Hn. 3 v* Crot.	Unison		Bsn. 2 v* Cl. 1 A. Sax 1 Hn. 1 Hn. 2 Vib. (div)		Unison	Cl. 4 T. Sax Hn. 4 Tbn. 2 Vib. (div) ^*		Unison		Bsn. 1 ^* B. Cl. B. Sax Tbn. 1 ^* Tbn. 3 Euph. Tba. Str. Bs.	Unison		Unison with Bass	
106	Cl. 2 v* Cl. 3 v* A.Sax2v* Hn. 3 v*	Unison		Bsn. 2 v* Cl. 1 A. Sax 1 Hn. 1 Hn. 2		Unison	Cl. 4 T. Sax Hn. 4 Tbn. 2		Unison		Bsn. 1 ^* B. Cl. B. Sax Tbn. 1 ^* Tbn. 3 Euph. Tba. Str. Bs.	Unison		Unison with Bass	
107	Cl. 2 v* Cl. 3 v*	Unison		Cl. 1		Unison	Cl. 4		Unison		B. Cl.	Unison		Unison with Bass	

Use of Timbre

Gjeilo and Wilson's choice of instrumentation in the reorchestration process greatly alters the original range and timbre of the work. Through utilising multiple instrument types and families (with their respective capabilities and timbres), *Serenity* has been reproduced in a more intricate representation than that of its choral counterpart.

When compared to Lang's Vocal Register Classification of Wind Instruments (Lang, 1950), it is to be noted that in addition to many octave displacements throughout the work over all voice types, *Serenity* utilises many instruments not recommended to simply replicate the original choral sound (see table 6.11).

Table 6.11 Lang’s Vocal Register Classification of Wind Instruments in comparison to the melodic material redistribution of *Serenity*

Chart Key	
A	Lang’s 1 st recommendation
B	Lang’s 2 nd recommendation
C	Lang’s 3 rd recommendation
✓	Assigned part at pitch
✓☑	Assigned part via octave displacement

Instrument	Soprano		Alto		Tenor		Bass	
	Lang	Gjeilo	Lang	Gjeilo	Lang	Gjeilo	Lang	Gjeilo
Piccolo	A	✓☑						
Flute	A	✓☑		✓☑		☑		
Oboe	A	✓☑		✓☑		☑		
Bassoon			C	✓☑	B	✓	A	✓☑
Clarinet	A	✓☑	B	✓	C	✓☑		✓☑
Bass Clarinet			C	☑	B		A	✓☑
Alto Saxophone	B	✓	A	✓	C	✓☑		✓☑
Tenor Saxophone			B	✓	A	✓	C	✓☑
Baritone Saxophone				✓☑	B	✓☑	A	✓☑
Trumpet	A	✓	B	✓☑		✓☑		✓☑
Horn		✓☑	A	✓	B	✓☑		✓☑
Trombone		✓☑	C	✓	A	✓☑	B	✓☑
Euphonium			C		A	✓☑	B	✓☑
Tuba						✓☑	A	✓☑

By deviating from traditional recommendations of voice assignment, Gjeilo and Wilson have been able to produce new colours and ensemble capabilities not found in the original, and not simply a straight forward replication.

The use of the clarinet family is of most significance. Through the capabilities of its large range, the family crosses all voices parts and frequently extends these through octave displacement. Repeatedly supported by tenor instruments such as trombones and the saxophone family (also capable of cross part performance), the wind band is able to produce rich, full sounds even with a reduced ensemble. The original string solo lines are consistently replicated via the oboe and the flute, employing their piercing tones. Gjeilo and Wilson’s exploration of bowed percussion is unique to the

transcription and adds an element of sustain not found in the original choral work. A breakdown of the usage of each instrument and significant sub ensembles is displayed in table 6.12.

Table 6.12 *Serenity* significant orchestration statistics

ORCHESTRATION	TOTAL OCCURRENCE WITHIN TIMBRAL VARIATIONS	PERCENTAGE OF VARIATIONS
Timbral Changes	17	100.00
Unique Instrumental Groupings	15	88.24
WOODWIND		
Piccolo	2	11.76
Flute	7	41.18
Oboe	9	52.94
Bassoon	12	70.59
Clarinet	15	88.24
Bass Clarinet	15	88.24
Alto Saxophone	11	64.71
Tenor Saxophone	11	64.71
Baritone Saxophone	11	64.71
BRASS		
Trumpet	6	35.29
Horn	12	70.59
Trombone	14	82.35
Euphonium	11	64.71
Tuba	11	64.71
STRINGS		
String Bass	11	64.71
PERCUSSION		
Timpani	2	11.76
Suspended Cymbal	1	5.88
Vibraphone (bowed)	7	41.18
Crotales (bowed)	7	41.18
SIGNIFICANT COMBINATIONS		
Clarinet and Saxophone	12	70.69
Clarinet and Horn	10	58.82
Saxophone and Horn	11	64.71
Horn and Trombone	11	64.71
Clarinet and Trombone	14	82.35
Saxophone and Trombone	12	70.69
Two or more of the above	15	88.24
Clarinet Family	15	88.24
Saxophone Family	11	64.71
Woodwind Choir	2	11.76
Brass Choir	0	0.00

The choral work utilises three different variations of timbral grouping, SATB, SATB with string solo, and A with string solo. This small amount of deviation leads the original choral piece to be limited in its voicing capabilities. Gjeilo's recreation of the work for wind ensemble sees greater variation and experimentation with colour combinations. Fifteen unique instrumental groupings with seventeen changes of instrumental setting allow for a grander representation of the original material (see table 6.13). The individual settings can be compared via professional recordings of both the choral and wind band versions (Gjeilo, 2011, track 2 & Gjeilo, 2015, track 2).

Table 6.13 Serenity variations of timbre and instrumental grouping in accordance with Arthur Lange's Spectrotone Chart

Bar Numbers	Choir Voicing	Wind Band Instrumentation	Number of instrument type utilised*	Number of unique timbre variations
1 to 9	SATB	Clarinets, Brass and Percussion	5	7
		Clarinet family, trombone, crotales (bowed), vibraphone (bowed)		
10 to 25	SATB with String Solo	Woodwinds, Brass and Percussion	6	15
		Oboe, clarinet family, trombone, crotales (bowed), vibraphone (bowed)		
26 to 32	SATB with String Solo	Woodwinds, Brass and Percussion	9	17
		Oboe, clarinet family, saxophone family, trombone, crotales (bowed), vibraphone (bowed)		
33	A with String Solo	Woodwinds and Brass	3	3
		Flute, oboe, horn		
34 to 41	SATB with String Solo	Woodwinds, Brass and Strings	12	19
		Flute, oboe, bassoon, clarinet family, tenor & baritone saxophone, horn, trombone, euphonium, tuba, double bass		
42 - 50	SATB with String Solo	Woodwinds, Brass and Strings	13	25
		Flute, oboe, bassoon, clarinet family, saxophone family, horn, trombone, euphonium, tuba, double bass		
51 to 62	SATB	Woodwinds, Brass, Strings and Percussion	13	22
		Flute, bassoon, clarinet family, saxophone family, horn, trombone, euphonium, tuba, double bass, timpani		
63 to 76	SATB	Full Ensemble	16	32
		Piccolo, flute, oboe, bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, double bass, suspended cymbal, timpani		
77 to 78	A with String Solo	Woodwind Choir	3	3
		Oboe, bassoon, alto saxophone		
79 to 81	SATB with String Solo	Woodwinds, Brass and Strings	14	22
		Flute, oboe, bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, double bass		
82 to 94	SATB with String Solo	Woodwinds, Brass and Strings	15	29
		Piccolo, flute, oboe, bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, double bass		

Table 6.13 *Serenity* variations of timbre and instrumental grouping in accordance with Arthur Lange’s Spectrotone Chart (continued)

95 to 96	SATB with String Solo	Woodwinds, Brass, Strings and Percussion	14	19
		Bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, double bass, crotales (bowed), vibraphone (bowed)		
97 – 102	SATB	Woodwinds, Brass, Strings and Percussion	14	20
		Bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, double bass, crotales (bowed), vibraphone (bowed)		
103 – 104	SATB with String Solo	Woodwinds, Brass, Strings and Percussion	14	19
		Bassoon, clarinet family, saxophone family, trumpet, horn, trombone, euphonium, tuba, double bass, crotales (bowed), vibraphone (bowed)		
105	SATB with String Solo	Woodwinds, Brass, Strings and Percussion	13	16
		Bassoon, clarinet family, saxophone family, horn, trombone, euphonium, tuba, double bass, crotales (bowed), vibraphone (bowed)		
106	SATB with String Solo	Woodwinds, Brass and Strings	12	14
		Bassoon, clarinet family, saxophone family, horn, trombone, euphonium, tuba, double bass		
107	SATB with String Solo	Woodwind Choir	2	2
		Clarinet family		

* based upon individual instrument types, not parts per instrument

The three sections of the work are defined not only by their material but also via their instrumentation. Whilst the B section and the reprise of A share elements, it is the employment of various percussion instruments that assist with this defined separation. The smaller ensemble settings, with their varying instrumentation when compared to the full ensemble, have a greater impact in their dissimilarities than that of the original SATB setting.

By utilising Arthur Lange’s Spectrotone Chart, it allows the representation of *Serenity* in a graphic score format displaying the timbral variations of the reorchestration (see

Appendix 6). For a general discussion on Langes' Spectrotone Chart, see Chapter Three.

From studying this score, it is conceivable to see Gjeilo and Wilson's intentions when reorchestrating the work. Timbral blend is evident throughout the work, with all colours being perfect or close combinations. Where conflicting colour combinations occur, these are at distance within the ensemble pitch setting, and are balanced via voices between the two instruments in question. Whilst the timbral palette employed varies greatly from that of the choral version, Gjeilo and Wilson engage a smaller amount of variation of sub ensembles, timbral combinations and addition of new material. What is presented is a piece that conceivably does not utilise the full capabilities of the wind orchestra compared to its contemporaries and is therefore a less successful attempt at developing the work into a stand-alone work.

CONCLUSION

Transcriptions of composer's own works from one medium to another can be produced for numerous reasons, and have been part of the arsenal of composers for hundreds of years. Mozart often reused his musical ideas in different media, and Schubert famously scored *The Trout* as both a lieder and a movement of a string quartet.

With *Lux Aurumque*, *Rest* and *Serenity*, their respective composers have scored the works for two quite different ensembles. In doing so, they have not created a single work in two versions. Rather, two distinct works now exist using strongly related material.

In its choral setting, a work explores homogenous sonority. The blend of human voices can be seamless. However, in a wind band setting, composers and arrangers have explored more than a simple transcription.

The form of a work, for example, is extremely similar; however, it has obvious difference with the possible inclusion of new material. Whitacre utilises motifs from his musical *Paradise Lost: Shadows and Wings* and the unpublished work *Lux Aurorum*, expanding the length of the work and creating a climactic middle section. Similarly, Ticheli develops existing material from his choral work for a more dramatic climax, not possible with the limitations of the human voice. Gjeilo's decision to not deviate from the existing material hinders the work's ability to convincingly separate itself from its choral counterpart.

In transcribing the work, composers have used instruments in different ways. Utilising the wind band's instrument families as sub families, the full SATB melodic material is reassigned over the unique instrumentation with ease. Combining the sub families with others, creating a significant amount of variation of combinations, a composer is able produce many timbres not present in the original choral work.

All three composers favour the use of versatile families such as the clarinet and saxophone, combined with the tenor voicings of horn, trombone and euphonium. In addition, all three works have dramatically widened the range of the setting, creating a much darker, deeper and complex texture. Idiomatic writing is employed in order to effectively represent the absence of text, for example, Whitacre employs tremolos in the woodwinds to represent the essence of "pure" and use of low pitched instruments to word paint "heavy". Ticheli utilises the soft yet versatile timbres of the clarinet family to represent text as "*sure stars shining over the rooftops crowned with snow*". Similarly, Gjeilo replicates "*admirabile sacramentum*" (*wonderful sacrament*) via soft sounding woodwinds. Both Ticheli and Gjeilo employ percussion instruments sporadically but to great effect. This is not an uncommon practice from frequently performed composers such as Percy Grainger and Alfred Reed, who also utilise this effect in their settings of *Irish Tune from County Derry* and *Greensleeves* respectively, for example.

At times, the transcriptions often eschew the easy solution to create a specific timbre. There are instances where difficult passages on select instruments are required in order for balance and blend and the desired effect of timbre.

Inevitably, the reorganisation and new instrumentation will have a different affect for the listener. The original choral works were devised using four variations of a single instrument, voice. The wind band transcriptions employs numerous different instruments (with many parts further dividing amongst players) all with unique timbres and capabilities, providing the opportunity to create a grander sound scape for the work's climax. With the absence of text, the works see the inclusion of more complex melodic lines that continually pass from once voice to another. From this expanded palette of colour and range, the listener would respond to the overall sound of the work differently to that of one with a homogenous sound and text. There is no doubt that new colours of the transcription and the associations that our subconscious carry would be markedly different for each of the versions. The absence of text in the wind band version necessarily means that the musical response is more abstract, and the affect will be different.

There are two conceivable outcomes. Either these are two singular works that share musical materials; or that this a single work in two versions. The differences outlined above create quite different responses, and the new material creates a different balance for the listener. Both versions of the works have proved to be popular, and both have entered the canon of literature for choir and band, respectively.

Whilst Gjeilo and Wilson have sought to replicate *Serenity* in terms of form, they have created a distinct version of the work via the increase of timbral complexity, range and instrumentation. By not adding additional material, Gjeilo has failed to capitalise on the options presented to him. In addition to the work's form, he has kept the amount of timbral variations simple and similar to the original.

In approaching a completed work for transcription, Whitacre and Ticheli have not just “transcribed” the work for wind band. With both transcriptions utilising new material, a high level of unique instrumental combinations, numerous timbral variations and expanded climactic points not possible in a choral setting (via extended ranges, harmony and developed material), both composers indeed reimagined *Lux Aurumque* and *Rest* as new works for the wind band respectively.

All three works studied have sought to replicate the initial warmth of a choral setting whilst utilising the complimentary timbres of different instruments. The implementation of techniques such as melodic redistribution across multiple instruments, word painting, a large variety of timbral combinations, octave displacements and expanded ranges sees the initial limited soundscape expanded on. Whilst conflicting timbres are utilised, they are implemented at the extremes of the ensemble for dramatic effect during climactic moments and never to purposely distort the original setting.

All three works display deliberate attempts to avoid simple replication of the original SATB lines with significant deviations from methods such as the widely acknowledged vocal register classification of wind instruments developed by Lang. The addition of new material, a kaleidoscope of tone colours and a true heterogeneous texture expands upon the initial sound palette of the original regardless of there being no text to accompany the music.

By far the easiest way to transcribe a work for wind band is a note for note representation of the original and Gjeilo has created a new version of *Serenity* with this method. Whitacre and Ticheli, in applying their imagination to the new versions for a heterogeneous ensemble, have forged a new identity for their respective works. Transcriptions of this ilk will always find a place in the wind band repertoire.

Possible Further Study:

It may be useful to apply the same analysis to additional transcribed choral works by Whitacre, Ticheli and Gjeilo. For instance, has Whitacre applied the same ideas when transcribing his other works from Choir to Band, such as *Sleep*, *The Seal Lullaby* and *Cloudburst*? Has Gjeilo incorporated more variation of timbral groups and material in his transcriptions of *Sunrise Mass/The Spheres*?

Although outside the scope of this study, a further comparison of techniques employed by other contemporaneous composers whose works have been similarly successful, for example, Steven Bryant (b. 1972), would be highly beneficial to the research. The examination of similar and different techniques used in works by these composers may be useful to both conductors and composers. A comparison of similar works from the same source material can also give further insight to successful orchestration such as Morten Lauridsen's arrangement of *O Magnum Mysterium*.

Timbral research into the wind band is an area that is quite underexplored. More research could be undertaken which looks at timbre as a compositional device for

arrangers and composers, as well as directors. Ultimately, this may be an area in which the effect on the audience can also be explored.

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REFERENCES CITED

- The Academy of American Poets. (2008). *Sara Teasdale*. Retrieved from <https://www.poets.org/poetsorg/poet/sara-teasdale>
- Ades, H. (1966). *Choral arranging* (2nd ed.). Milwaukee, WI: Shawnee Press, Inc. & Hal Leonard Corporation
- Adkins, H. E. (1931). *Treatise on the Military Band*. Surbiton, Surrey: Boosey & Co., Ltd.
- Adler, S. (1989). *A Study of Orchestration* (2nd ed.). New York, NY: W. W. Norton & Company.
- Allison, J. (2015, August 10). Prom 32: Eric Whitacre, review: 'overstayed its welcome'. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/music/classical-music/prom-32-eric-whitacre-review/> (accessed September 15. 2016).
- Banddirector.com. (2008) *An Interview with Frank Ticheli*. Retrieved from <http://www.banddirector.com/article/rl-interviews/an-interview-with-frank-ticheli>
- Battisti, F. L. (2002). *The winds of change: The evolution of the contemporary American wind band/ensemble and its conductor*. Galesville, MD: Meredith Music Publications.
- Baylor University. (2017). *Dr. Eric Wilson*. Retrieved from <https://www.baylor.edu/music/index.php?id=859393> (accessed May 13, 2017)
- Besse, J. A. (2012). An analysis and an historical contextualization of Frank Ticheli's *Cajun Folk Songs*. (Doctoral Dissertation, The University of Southern Mississippi). <http://search.proquest.com.proxy.lib.fsu.edu/pqdtft/docview/1021724359/13A568DDFB03C5BC542/2?accountid=4840>
- Berlioz, H. & Macdonald, H. (Ed.) (2002). *Berlioz's orchestration treatise: A translation and commentary*. Cambridge, England: Cambridge University Press.
- Bigand, E., Vieillard, S., Madurell, F. Mazozeau J. & Dacquet, A. (2005). Multidimensional scaling of emotional responses to music: The effect of musical expertise and of the duration of the excerpts. *Cognition and Emotion*. Psychology Press, Taylor & Francis Group. <http://leadserv.ubourgogne.fr/files/publications/000103-multidimensional-scaling-of-emotional-responses-to-music-the-effect-of-musical-expertise-and-of-the-duration-of-the-excerpts.pdf> (accessed September 23. 2016).
- Bird, J. (1999). *Percy Grainger (2nd illustrated, revised ed.)*. Oxford; New York. Oxford University Press.

Boldin, J (2011, December 17). Midwest Clinic Update, Part 4. [Blog Post]. Retrieved from <https://jamesboldin.com/tag/kunitachi-college-of-music-blasorchester/> (accessed September 7, 2017).

Brinkman, D. (2009) How to Orchestrate and Arrange Music. Retrieved from <https://forum.makemusic.com/attach.aspx/16594/How%20to%20Orchestrate%20and%20Arrange%20Music.pdf> (accessed July 10, 2016).

Budmen, L. (2014, October 19). Review: Seraphic Fire keeps it pure for season opening. *Miami Herald*. Retrieved from <http://miamiherald.com/entertainment/performing-arts/article3074129.html> (accessed April 18, 2017).

Burrack, F. (2013). *Rest: Frank Ticheli*. In Miles, R. B. (Ed.), *Teaching Music through Performance in Band* (Vol. 9). Chicago, IL: GIA Publications, Inc.

Butterworth, A. (n.d.). Transcriptions – A Change of Colour? Retrieved from <http://www.musicweb-international.com/Butterworthwrites/transcriptions.htm> (accessed September 10, 2016).

Cacavas, J. (1975). *Music Arranging and Orchestration*. Melville, NY: Belwin-Mills Publishing Corporation and Alfred Publishing Company, Inc

Cariaga, D. (1994, October 21). Music Review: Pacific Symphony Shows Strength, Vitality. *Los Angeles Times*. Retrieved from articles.latimes.com/1994-10-21/entertainment/ca-52847_1_pacific-chorale-aural-horizon-frank-ticheli (accessed April 18, 2017).

The Choral Stream. (2015, May 5). Eric Whitacre's "Deep Field": Creative Connections in Science and Music [Video file]. Retrieved from <https://www.youtube.com/watch?v=9jkJbkF9qSw>

Clappé, A. (1921). *The principles of wind-band transcription*. New York, NY: Carl Fischer Music

Composer Tools. (2005). Talking About Music - A Dictionary. Retrieved from <http://composertools.com/Dictionary/MusicWords.htm> (accessed April 4, 2017).

Corozine, V. (2002). *Arranging Music for the Real World: Classical and Commercial Aspects*. Missouri, USA: Mel Bay Publications.

Craddock, N (2011, October 18). John Mackey Bothered [Web log post]. Retrieved from <http://mus702musiccriticism.blogspot.com.au/2011/10/john-mackey-bothered.html>

Eddins, S. (n.d.). Review: Northern Lights: Choral Works by Ola Gjeilo. *AllMusic*. Retrieved from <http://www.allmusic.com/album/northern-lights-choral-works-by-ola-gjeilo-mw0002290827> (accessed May 31, 2017).

- Eight, Arizona PBS. (2014, Jan 3). Pianist Lang Lang & Composer Eric Whitacre [Video file]. Retrieved from <https://www.youtube.com/watch?v=TCNWsoczKDw>
- Erickson, F. (1983). *Arranging for the concert band*. Van Nuys, CA: Belwin-Mills Publishing Corporation and Alfred Publishing Company, Inc.
- Fairfax, B. (1981). "Orchestral Music". In Foreman, Lewis (ed.). *The Percy Grainger Companion*. London: Thames Publishing.
- Farkas, P. (1962). *The Art of Brass Playing*. Rotchester, NY: Wind Music Inc.
- Fein, E. (2014). Alumni Spotlight: Eric Whitacre, Virtual Choir Creator on the Crucible of Juilliard. *The Juilliard Journal*. Retrieved from <http://www.juilliard.edu/journal/1402/eric-whitacre> (accessed August 8, 2016).
- Fennell, F. (1954). *Time and the Winds*. Kenosha, Wisconsin: G. LeBlanc Corp.
- Fisher, D. (2004). *October: Eric Whitacre*. In Miles, R. B. (Ed.), *Teaching music through performance in band* (Vol. 5). Chicago, IL: GIA Publications, Inc.
- Frank Ticheli Music Now in SmartMusic* (2016) Retrieved from www.smartmusic.com/blog/frank-ticheli-music-now-in-smartmusic/
- Gale, B (2010, January 9). Balance and Blend [Blog Post]. Retrieved from www.theconcertband.com/index.php/band-training/balance-and-blend (accessed April 12, 2017)
- Garrison, R. D. (2013). *A Selection of Choral Works by Ola Gjeilo for SATB Choir: Composition, Interpretation, and Recording of The Phoenix Chorale's Northern Lights: Choral Music by Ola Gjeilo* (Doctorate dissertation). Retrieved from http://repository.asu.edu/attachments/110475/content/Garrison_asu_0010E_12876.pdf (accessed May 30, 2017)
- Gershman, J. (2012). *Frank Ticheli: Rest*. In Ruddy, N. (Ed.), *Manhattan Beach Magazine* (Issue 6). Pg 46-49
https://issuu.com/manhattanbeachmusic/docs/mbm_times_issue_6/6
- Gilles, M., & Clunies Ross, B. (Eds.). (1999). *Grainger On Music*. Oxford; New York: Oxford University Press
- Gjeilo, O. (2011). *Serenity (O magnum mysterium)* [Recorded by Phoenix Chorale; CD]. On *Northern Lights: Choral Works by Ola Gjeilo*. USA; Chandos.
- Gjeilo, O. (2012). *Serenity (O Magnum Mysterium)*. [Choral musical score]. Chapel Hill, NC: Walton Music, Inc.
- Gjeilo, O. (2015). *Serenity* [Recorded by Baylor University Wind Ensemble; CD]. On *2014 Midwest Clinic: Baylor University Wind Ensemble (Live)*. USA; Mark Records.
- Gjeilo, O. (2015). *Serenity*. [Band musical score]. Milwaukee, WI: Bossey & Hawkes.

Gjeilo, O. (2017). Official Site. *About*. Retrieved from <http://olagjeilo.com/about/> (accessed May 28, 2017).

Glover, J. & Ward, S. (Eds.). (1998). *Teaching Music in the Primary School (2nd Ed)*. London, UK: Continuum

Goldman, E. F., & Smith, W. M. (Eds.). (1982). *Arban's Complete Conservatory Method for Trumpet (Cornet)*. New York, USA: Carl Fischer, Inc.

Goldman, R. F. (1946) *The Concert Band*. New York, USA: Rinehart & Co., Inc.

Goldman, R. F. (1961) *The Wind Band*. Boston, USA: Allyn and Bacon Inc.

Grames, R. E. (2013). Landscapes – Torke, Ticheli, Copland/Popiel, University of Kansas Wind Ensemble. *ArkivMusic*. Retrieved from http://www.arkivmusic.com/classical/album.jsp?album_id=871518 (accessed September 7, 2017).

Grassi, D. J. (2010). An analysis of three choral transcriptions for winds by Eric Whitacre. (Masters Thesis, San Jose State University). Retrieved from ProQuest Dissertations and Theses. (AAT 1477314) (accessed April 17, 2017).

Hall, A. (2012). *Added-Tone Sonorities in the Choral Music of Eric Whitacre* (Masters thesis). Retrieved from <http://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1736&context=etd> (accessed April 20, 2017).

Hairel, J. E. (2009). *The wind band music of Eric Whitacre with an analysis and discussion of three choral works adapted for wind band*. (Doctoral Dissertation, The University of Kentucky). Retrieved from ProQuest Dissertations and Theses. (Proquest 3471549) (accessed April 17. 2017).

Hansen, R. K. (2005). *The American Wind Band: A Cultural History*. Chicago, Illinois: GIA Publications

Hartmann, M., Saari, P., Toiciainen, P. & Lartillot, O (2013). *Comparing Timbre-based Features for Music Genre Classification*. Retrieved from <http://smcnetwork.org/system/files/Comparing%20Timbre-based%20Features%20for%20Musical%20Genre%20Classification.pdf> (accessed September 3. 2016).

Holland, B. (1989, December 13). Review/Music; Re-enacting the Conflict Of Brahms vs. Wagner. *The New York Times*. Retrieved from <http://www.nytimes.com/1989/12/13/arts/reviews-music-re-enacting-the-conflict-of-brhams-vs-wagner.html> (accessed April 18. 2017).

Hollinger, D. M. (2004). *Ghost Train Triptuch: Eric Whitacre*. In Miles, R. B. (Ed.), *Teaching music through performance in band* (Vol. 5). Chicago, IL: GIA Publications, Inc.

Houser, J. R. (2008). *An examination of wind band transcriptions*. (Masters Thesis, The University of Texas-El Paso). Retrieved from ProQuest Dissertations and Theses. (Proquest 1461132) (accessed April 17. 2017).

Jagow, S. (2007). *Teaching Instrumental Music: Developing the Complete Band Program*. Galesville, MD: Meredith Music Publications.

Jeffers, Ron. Translations and annotations of Choral Repertoire. Vol. 1, Sacred Latin texts (Corvallis: earthsongs, 1988), 175.

Johnson, N. F. (2005). Creation of historically informed transcriptions for chorus and winds of Franz Shubert's *Mass in G* and Gabriel Faure's *Requiem*. (Doctoral Dissertation, The University of Northern Colorado). Retrieved from ProQuest Dissertations and Theses. (AAT 305431394) (accessed April 17. 2017).

Kennan, K. & Grantham, D. (1998). *The Techniques of Orchestration* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.

Kennan, K. & Grantham, D. (2002). *The technique of orchestration* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Kob. M, Henrich, N, Herzel. H, Howard. D, Tokuda. I & Wolfe J. (2011). *Analysing and Understand the Singing Voice: Recent Progress and Open Question*. Retrieved from <http://phys.unsw.edu.au/jw/reprints/Kobetel.pdf>

Lang, P. J. (1950). *Scoring for the band*. New York, NY: Mills Music, Inc.

Lange, A. (2012). *Professional Orchestration: Spectrotone Instrumental Tone-Color Chart (70th Anniversary Edition)*, Retrieved from http://alexanderpublishing.com/Products/Spectrotone-Chart-Download__Spec-01-Download.aspx (accessed July 4. 2016).

Lange, S. (2013). Eric Whitacre, Sleep: Detailed Elements Analysis By Section. Retrieved from <https://stephenlange.wordpress.com/music-education-resources/music-works-study-guides/eric-whitacre-sleep-study-guide/> (accessed September 29. 2016).

MainlyPiano.com. (n.d.). *Ola Gjeilo*. Retrieved from http://www.mainlypiano.com/Artisit_Pages/Ola_Gjeilo.html (accessed May 28, 2017).

May, T. (2017, June 1). *Morton Lauridsen and His Illuminating Impact*. Retrieved from <https://www.chorusamerica.org/node/7581> (accessed September 7, 2017)

McBeth, W. F. (1972). *Effective performance of band music: Solutions to specific problems in the performance of 20th century band music*. San Antonio, TX: Southern Music Company.

The Midwest Clinic. (2014). *2014 Performers and Concert Programs*. Retrieved from <https://www.midwestclinic.org/2014-Midwest-Clinic-Performers.html> (accessed April 14 2017).

Miller, R. J. (2014) *Contemporary Orchestration: A Practical Guide to Instruments, Ensembles, and Musicians*. London, UK: Routledge

Moorhouse, L. R. (2006). A study of the wind band writing of two contemporary composers: Libby Larson and Frank Ticheli. (Doctoral Dissertation, The University of Washington).

<http://search.proquest.com.proxy.lib.fsu.edu/pqdtft/docview/304964644/13A55F150C441EF5DC7/4?accountid=4840>

Music Sales Classical (2010, March 5.) *News – Eric Whitacre’s Virtual Choir*. Retrieved from www.musicsalesclassical.com/news/news?newsid=1951 (accessed May 15, 2017).

The Musicroom Blog (2013). *An exclusive interview with Ola Gjeilo*. Retrieved from <http://www.musicroom.com/blog/an-exclusive-interview-with-ola-gjeilo-19828> (accessed May 29, 2016).

Nestico, S. (1993). *The complete arranger*. Carlsbad, CA: Fenwood Music Company, Inc.

Nielzen, S. & Olsson, O. (1989). *Why is Musical Timbre so hard to understand?*

Retrieved from

http://music.psych.cornell.edu/articles/timbre/Why_Is_Musical_Timbre_so%20hard_to_understand.pdf (accessed September 13, 2015).

O’Neal, T. J. (1993). *Timbre as a compositional device in selected band repertoire since 1950* (Masters thesis). Retrieved from ProQuest Dissertations and Theses. (AAT 9322666) (accessed April 20, 2015).

Padova, A., Santoboni, R. & Belardinelli, M. O (2005). *Influence of timbre on emotions and recognition memory for music*. Retrieved from http://oicrm.org/wp-content/uploads/2012/03/PADOVA_A_CIM05.pdf (accessed October 2, 2015).

Paris, B. (2013). *A Comparative Analysis of Morten Lauridsens’s O Magnum Mysterium and H. Robert Reynolds’ Setting for Wind Band* (Masters dissertation). Retrieved from

http://surface.syr.edu/cgi/viewcontent.cgi?article=1000&context=setnor_thesis (accessed June 14, 2016)

Peretz, I., Gagnon, L., & Bouchard, B. (1998). Music and Emotion: Perceptual Determinants, Immediacy, and Isolation after Brain Damage. *Cognition*, vol. 68, no. 2, 111–141

Pitcher, J. (2016, January 8). Review: Nashville Symphony and Chorus Find Poignancy and Pathos in Mozart’s *Requiem*. *Nashville Scene*. Retrieved from <http://www.nashvillescene.com/countrylife/archives/2016/01/08/review-nashville-symphony-and-chorus-find-poignancy-and-pathos-in-mozarts-requiem> (accessed March 28, 2017).

Plano Civic Chorus (2013). *Ola Gjeilo*. Retrieved from <http://www.planocivicchorus.org/2-uncaterorised/242-ola-gjeilo> (accessed May 31, 2017).

Popp, S. (2013). *An examination of orchestration techniques used in wind band transcriptions of a cappella choral works* (Doctorate dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI 3596564) (accessed April 20, 2017).

Powell, E. (2013). *The Spheres: Ola Gjeilo*. In Miles, R. B. (Ed.), *Teaching Music through Performance in Band* (Vol. 9). Chicago, IL: GIA Publications, Inc.

Quinn, J. (2012, April 12). Review: Northern Lights: Choral Works by Ola Gjeilo. *MusicWeb-International.com*. Retrieved from http://www.musicweb-international.com/classrev/2012/Apr12/Gjeilo_Northern_Lights_CHSA5100.htm (accessed May 31, 2017).

Rager, D. (2013). *In Search of the Wind-Band: An International Expedition (1st Edition)* [Wind-Band Music]. Retrieved from http://engagedscholarship.scuohio.edu/clmusic_bks/3/

Rhodes, S. L. (n.d) *A History of the Wind Band*. Retrieved from <http://www.lipscomb.edu/windbandhistory> (accessed April 02, 2017).

Rimsky-Korsakov, N., Steinberg, M. (Ed.), & Agate, E. (Trans.) (1891/1912). *Principles of orchestration: With musical examples drawn from his own works*. Scarsdale, NY: E. F. Kalmus Orchestra Scores, Inc.

Robinson, J. (2000, May 9). Pacific Chorale Builds to a Big Season Finale. *The Los Angeles Times*. Retrieved from <http://articles.latimes.com/2000/may/09/local/me-28288> (accessed August 3, 2016).

San Francisco Lyric Chorus (2011). *A Choral Christmas: Featuring Prelude, A Spotless Rose, and The Ground by Ola Gjeil (1978-)*. Retrieved from <http://www.sflc.org/concerts/composers/ola-gjeilo.html> (accessed June 1, 2017).

Schoenherr, S. (1998). John Philip Sousa. Retrieved from <http://sunnycv.com/steve/ar/d8/sousa.html> (accessed October 12, 2016).

Shrock, D. (2009). *Choral Repertoire*. Oxford; New York: Oxford University Press

Silvestri, C. A. (2017). Official Site. *Lux Aurumque*. Retrieved from www.charlesanthony-silvestri.com/lux-aurumque.html (accessed April 10 2017).

Singers.com. (n.d.) *Ola Gjeilo*. Retrieved from <http://www.singers.com/composers/Ola-Gjeilo> (accessed May 28, 2017).

Smith, N. (2002). *March Music Notes*. Chicago, Illinois: GIA Publications, Inc

Sputnik Music. (2009). Review: Frank Ticheli Wild Nights! EP. Retrieved from www.sputnikmusic.com/review/33943/Frank-Ticheli-Wild-Nights%21-EP/ (accessed September 7, 2017).

- Spangenberg, L. (2016, December 24). Celtic Studies Resources. *O Magnum Mysterium*. Retrieved from www.digitalmedievalist.com/2016/12/24/o-magnum-mysterium/ (accessed January 21, 2017)
- Steane, J. B. (1992) Fach. In *The New Grove Dictionary of Opera*. London: Stanley Sadie
- Stewart, S. A. (2007). *Lux Aurumque*: Eric Whitacre. In Miles, R. B. (Ed.), *Teaching music through performance in band* (Vol. 6). Chicago, IL: GIA Publications, Inc.
- Schwartz, S. (2008). Eternal Rest. *Classical Net*. Retrieved from <http://www.classical.net/music/recs/reviews/c/cha05045a.php> (accessed September 7, 2017).
- Teasdale, S. (1933). *Strange Victory*. USA: Macmillan.
- Thomas, P. L. (1991). *A Source Guide to the Music of Percy Grainger*. The University of Michigan USA: Pro/Am Music Resources.
- Ticheli, F. (2000). *There Will Be Rest*. [Choral musical score]. Chapel Hill, NC: Hindon Publications, Inc.
- Ticheli, F. (2010). *Rest*. [Band musical score]. Brooklyn, NY: Manhattan Beach Music.
- Ticheli, F. (2012). *Rest* [Recorded by Dallas Wind Symphony; CD]. On *Playing With Fire*. USA; Reference Recordings.
- Ticheli, F. (2015). *There Will Be Rest* [Recorded by Pacific Chorale; CD]. On *Frank Ticheli: The Shore and other choral works*. USA; Delos.
- Ticheli, F. (2017). Official Site. *Biography*. Retrieved from http://www.manhattanbeachmusiconline.com/frank_ticheli/biocal.html (accessed March 2, 2017).
- USI Events. (2014, June 20). Creativity and Connection: The Humanism of Technology - Eric Whitacre, at USI [Video file]. Retrieved from https://www.youtube.com/watch?v=4BaF__rxarI
- Vernier, D. (2012). Whitacre's Watery Night. [Review of the album *Water Night*, by Eric Whitacre]. Retrieved from <http://www.classicstoday.com/review/whitacres-watery-night> (accessed October 13, 2016).
- Vernier, D. (2016, April 6). Review: Gjelio (Pronounced "Yay-lo"). *ClassicsToday.com*. Retrieved from <http://www.classicstoday.com/review/gjeilo-pronounced-yay-lo/> (accessed October 31, 2016).
- Voces8.com (2017). Official Site. *About*. Retrieved from <http://www.voces8.com/about/> (accessed May 28, 2017).

What Is A Wind Symphony? (1998). Retrieved from www.ccwindsymphony.org/what-is-a-wind-symphony.html (accessed April 12 2017).

Whitacre, E. (2001). *Lux Aurumque*. [Choral musical score]. Chapel Hill, NC: Walton Music, Inc.

Whitacre, E. (2004) "Eric Whitacre." In Camphouse, M. (Ed.). (2002). *Composers on Composing for Band*, vol. 2. Chicago, IL: GIA Publications, Inc.

Whitacre, E. (2005). *Lux Aurumque*. [Band musical score]. North Hollywood, CA: Eric Whitacre & Carpe Ranam Productions.

Whitacre, E. (2010). *Lux Aurumque* [Recorded by The Eric Whitacre Singers]. *On Light and Gold* [CD]. Australia: Decca.

Whitacre, E. (2012). *Lux Aurumque* [Recorded by 2012 Gary Green and the Florida All-State Symphonic Band]. On *2012 Florida Music Educators Association (FMEA): All-State Concert Band & All-State Symphonic Band* [CD]. USA: Mark Records.

Whitacre, E. (2017). Official Site. *Biography*. Retrieved from <http://ericwhitacre.com/biography> (accessed April 3, 2017).

Whitacre, E. (2017). Official Site. *Lux Aurumque*. Retrieved from <http://ericwhitacre.com/music-catalog/satb-choral/lux-aurumque> (accessed April 3, 2017).

Whitacre, E. (2014). *Lux Nova – 'Lux Aurumque' Reimagined*. [Choral musical score]. Chapel Hill, NC: Walton Music, Inc.

The Wind Repertory Project. (2014) *Frank Ticheli*. Retrieved from http://www.windrep.org/Frank_Ticheli

Wu, B., Horner, H., & Lee, C. (2014). Musical Timbre and Emotion: The Identification of Salient Timbral Features in Sustained Musical Instrument Tones Equalized in Attack Time and Spectral Centroid. *Speech and Accessibility Laboratory* http://speech.di.uoa.gr/ICMC-SMC-2014/images/VOL_2/0928.pdf (accessed September 23, 2016).

APPENDIX ONE

Lux Aurumque

Text and Translation

*Lux,
calida gravisque pura velut aurum
et canunt angeli molliter
modo natum.*

Light,
warm and heavy as pure gold
and the angels sing softly
to the new-born baby.

(Whitacre, 2001)

APPENDIX TWO

***Lux Aurumque* for Wind Band**

Timbre Score

	1	2	3	4	5	6	7	8	
Fl. 1		■	■		■	■		■	■
Fl. 2		■	■		■	■		■	■
Fl. 3	■	■	■	■	■	■	■	■	■
Fl. 4	■	■	■	■	■	■	■	■	■
Ob. 1		■	■		■	■	■	■	■
Ob. 2		■	■		■	■	■	■	■
Bsn. 1	■	■	■	■	■	■	■	■	■
Bsn. 2	■	■	■	■	■	■	■	■	■
Cbsn.									
Cl. 1		■	■		■	■		■	■
Cl. 2	■	■	■	■	■	■	■	■	■
Cl. 3	■	■	■	■	■	■	■	■	■
B. Cl.		■		■		■		■	
A. Sax. 1	■	■	■	■	■	■	■	■	■
A. Sax. 2	■	■	■	■	■	■	■	■	■
T. Sax.	■	■	■	■	■	■	■	■	■
B. Sax.		■		■		■		■	
DYNAMIC MARKING	<i>p</i> <	<i>mp</i> >	<i>p</i> <	<i>mp</i> >	<i>p</i> <	<i>mp</i> >	<i>p</i> <	<i>mp</i> >	
Tpt. 1									
Tpt. 2									
Tpt. 3									
Tpt. 4									
Hn. 1									
Hn. 2									
Hn. 3									
Hn. 4									
Tbn. 1									
Tbn. 2									
B. Tbn.									
Euph.									
Tba.									

	9	10	11	12	13	14	15	16	17
Fl. 1	Green		Green	Blue					
Fl. 2	Green		Blue	Blue					
Fl. 3	Green	Blue	Blue	Blue					
Fl. 4	Blue	Blue	Blue	Blue					
Ob. 1									
Ob. 2									
Bsn. 1					Green	Green	Green		
Bsn. 2					Green	Green	Green		
Cbsn.									
Cl. 1	Green	Green	Green	Green	Green	Grey	Grey	Blue	Blue
Cl. 2	Green	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cl. 3					Blue	Blue	Blue	Blue	Blue
B. Cl.					Blue	Blue	Blue	Blue	Blue
A. Sax 1	Red	Red	Red	Red	Orange	Orange	Orange	Red	
A. Sax 2	Red	Red	Red	Red	Red	Red	Red	Red	
T. Sax.	Red	Red	Red	Red	Red	Red	Red	Red	
B. Sax.					Brown	Brown	Brown		
DYNAMIC MARKING	<i>mf</i>	<i>f</i>	<i>mf</i>	<i>f</i>	<i>mf</i>	<i>mp</i>	<i>p</i>	<i>mp</i>	<i>p</i>
Tpt. 1	Orange	Orange	Orange	Orange	Red	Red	Red		
Tpt. 2	Orange	Orange	Red	Red	Red	Red	Red		
Tpt. 3	Orange	Orange	Red	Red	Red	Brown	Brown		
Tpt. 4	Red	Red	Red	Brown	Brown	Grey	Grey		
Hn. 1		Brown	Brown	Brown			Brown	Brown	Solo
Hn. 2		Brown	Brown	Brown			Brown	Brown	
Hn. 3		Brown	Brown	Brown			Brown	Brown	
Hn. 4		Brown	Brown	Brown			Brown	Brown	Grey
Tbn. 1	Orange	Red	Red	Red	Red	Red	Brown		
Tbn. 2	Red	Red	Red	Red	Brown	Brown	Brown		
B. Ton.	Orange	Red	Red	Red	Red	Red	Red		
Euph.							Red	Red	Red
Tba.							Grey	Grey	Grey

	18	19	20	21	22	23	24	25
Fl. 1	Blue	Blue	Green	Green	Yellow	Yellow	Yellow	Yellow
Fl. 2		Blue	Green	Green	Yellow	Yellow	Yellow	Yellow
Fl. 3		Blue	Blue	Green	Yellow	Yellow	Yellow	Yellow
Fl. 4		Blue	Blue	Green	Yellow	Yellow	Yellow	Yellow
Ob. 1					Yellow	Orange	Orange	Orange
Ob. 2					Orange	Orange	Orange	Orange
Bsn. 1				Green	Green	Green	Green	Green
Bsn. 2				Green	Green	Green	Green	Green
Cbsn.					Brown	Brown	Brown	Brown
Cl. 1	Green	Green	Green	Green	White	White	Yellow	Yellow
Cl. 2		Blue	Blue	Green	Yellow	Yellow	Yellow	Yellow
Cl. 3		Blue	Blue	Blue	Yellow	Green	Green	Green
B. Cl.			Green	Green	Blue	Green	Blue	Blue
A. Sax 1			Orange	Orange	Orange	Orange	Orange	Orange
A. Sax 2			Orange	Orange	Orange	Orange	Orange	Orange
T. Sax.			Red	Red	Orange	Orange	Orange	Red
B. Sax.			Red	Red	Red	Red	Brown	Red
DYNAMIC MARKING	<i>p</i> <<	<i>mf</i> >>	<i>p</i>	<i>mp</i>	<i>mf</i> > <i>mp</i> <	<i>f</i>		
Tpt. 1	Red	Orange	Orange	Orange	Orange	Yellow	Orange	Orange
Tpt. 2	Red	Red	Red	Orange	Orange	Orange	Orange	Orange
Tpt. 3		Brown	Red	Red	Orange	Red	Red	Red
Tpt. 4		Grey	Brown	Brown	Red	Red	Brown	Red
Hn. 1	Red	Red	Red	Red	Red	Red	Red	Red
Hn. 2	Brown	Brown	Brown	Brown	Red	Red	Brown	Brown
Hn. 3		Brown	Brown	Brown	Brown	Red	Brown	Brown
Hn. 4		Brown	Brown	Brown	Brown	Brown	Brown	Brown
Tbn. 1		Red	Red	Red	Red	Red	Red	Red
Tbn. 2		Red	Red	Red	Red	Red	Brown	Red
B. Tbn.			Red	Red	Red	Red	Red	Red
Euph.			Red	Red	Red	Red	Red	Red
Tba.					Grey	Purple	Purple	Purple

	26	27	28	29	30	31	32	33	34	35
Fl. 1	Yellow	Yellow	Yellow	Yellow	Yellow	Green				
Fl. 2	Yellow	Yellow	Yellow	Yellow	Yellow	Green				
Fl. 3	Yellow	Yellow	Yellow	Yellow	Yellow	Green				
Fl. 4	Yellow	Yellow	Yellow	Yellow	Green	Blue				
Ob. 1	Orange	Orange	Orange	Orange	Orange	Yellow	Orange			
Ob. 2	Orange	Orange	Orange	Orange	Orange	Yellow	Orange			
Bsn. 1	Green	Green	Green	Green	Green	Green	Green	Green		
Bsn. 2	Green	Green	Green	Green	Green	Green	Green	Green		
Cbsn.	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown		
Cl. 1	White	White	Yellow	Yellow	Yellow	Green	Green	Yellow	Grey	Blue
Cl. 2	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow	Blue	Blue
Cl. 3	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Blue	Blue
B. Cl.	Blue	Green	Blue	Green	Blue	Blue	Blue	Blue	Blue	Blue
A. Sax 1	Orange	Orange	Orange	Orange	Orange	Red	Orange	Orange		
A. Sax 2	Orange	Orange	Orange	Orange	Orange	Red	Orange	Red		
T. Sax.	Orange	Orange	Orange	Red	Orange	Red	Orange	Red		
B. Sax.	Red	Red	Brown	Red	Red	Red	Brown	Brown		
DYNAMIC MARKING						<i>mf</i>	>	<i>mp</i>	>	
Tpt. 1	Orange	Yellow	Orange	Yellow	Orange	Brown	Orange	Red		
Tpt. 2	Orange	Orange	Orange	Orange	Orange	Red	Brown	Red		
Tpt. 3	Red	Orange	Red	Red	Orange	Red	Red	Red		
Tpt. 4	Red	Brown	Red	Red	Red	Brown	Brown	Red		
Hn. 1	Red	Red	Red	Red	Red	Red	Red	Red	Brown	Purple
Hn. 2	Red	Red	Brown	Brown	Brown	Red	Red	Red	Brown	Purple
Hn. 3	Brown	Red	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Purple
Hn. 4	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Purple
Tbn. 1	Red	Orange	Red	Red	Red	Red	Red	Red	Brown	Red
Tbn. 2	Red	Red	Brown	Red	Red	Brown	Brown	Red	Brown	Brown
B. Tbn.	Red	Orange	Red	Orange	Red	Red	Red	Red	Red	Red
Euph.	Orange	Orange	Red	Orange	Red	Orange	Orange	Orange		
Tba.	Grey	Purple	Purple	Purple	Purple	Purple	Grey	Purple	Grey	Purple

	36	37	38	39	40	41	42	43
Fl. 1								
Fl. 2								
Fl. 3								
Fl. 4								
Ob. 1								
Ob. 2								
Bsn. 1	■	■	■	■	■	■	■	■
Bsn. 2	■	■	■	■	■	■	■	■
Cbsn.								
Cl. 1		■	■	■	■	■	■	■
Cl. 2		■	■	■	■	■	■	■
Cl. 3	■	■	■	■	■	■	■	■
B. Cl.	■	■	■	■	■	■	■	■
A. Sax 1		■	■	■	■	■	■	■
A. Sax 2		■	■	■	■	■	■	■
T. Sax.	■	■	■	■	■	■	■	■
B. Sax.	■	■	■	■	■	■	■	■
DYNAMIC MARKING	<i>p</i> <<	<i>mp</i> >>	<i>p</i> <<	<i>mp</i> >>	<i>p</i> <<	<i>mp</i> >>	<i>p</i>	
Tpt. 1								
Tpt. 2								
Tpt. 3								
Tpt. 4								
Hn. 1								
Hn. 2								
Hn. 3								
Hn. 4								
Tbn. 1								
Tbn. 2								
B. Tbn.								
Euph.								
Tba.								

	44	45	46	47	48	49	50	51	52	53	54
Fl. 1	Blue		Blue		Blue		Blue	Blue	Blue		
Fl. 2	Blue		Blue		Blue		Blue	Blue	Blue		
Fl. 3											
Fl. 4											
Ob. 1											
Ob. 2											
Bsn. 1	Green		Green		Green		Green	Green	Green		
Bsn. 2	Green		Green		Green		Green	Green	Green		
Cbsn.											
Cl. 1	Green										
Cl. 2	Blue		Blue		Blue		Blue	Blue	Blue		
Cl. 3	Blue		Blue		Blue		Blue	Blue	Blue		
BCl	Grey		Grey		Grey		Grey	Grey	Grey		
A. Sax 1	Red		Red		Red		Red	Red	Red		
A. Sax 2	Red		Red		Red		Red	Red	Red		
T. Sax.	Orange		Orange		Orange		Orange	Orange	Orange		
B. Sax.	Red		Red		Red		Red	Red	Red		
DYNAMIC MARKING	<i>pp</i> <	<i>p</i> >	<i>pp</i> <	<i>p</i> >	<i>pp</i> <	<i>p</i> >	<i>pp</i>		<i>ppp</i>		
Tpt. 1											
Tpt. 2											
Tpt. 3											
Tpt. 4											
Hn. 1	Brown		Brown		Brown		Brown	Brown	Brown		
Hn. 2	Brown		Brown		Brown		Brown	Brown	Brown		
Hn. 3	Brown		Brown		Brown		Brown	Brown	Brown		
Hn. 4	Brown		Brown		Brown		Brown	Brown	Brown		
Tbn. 1	Brown		Brown		Brown		Brown	Brown	Brown		
Tbn. 2	Brown		Brown		Brown		Brown	Brown	Brown		
B. Tbn.	Red		Red		Red		Red	Red	Red		
Euph.	Red		Red		Red		Red	Red	Red		
Tba.	Purple		Purple		Purple		Purple	Purple	Purple		

COLOUR KEY		
Chart Colour	Tone Colour	Timbre
	Brilliant	Resonant, thin, brittle, metallic, iridescent, glassy, delicate, piercing, shrill
Yellow	Bright	Resonant, brittle, metallic, nasal, strident
Green	Pleasant	Resonant, delicate, iridescent
Blue	Rich	Resonant, vibrant, iridescent, hollow
Orange	Golden	Nasal, strident, pinched, brittle, tense
Red	Glowing	Resonant, nasal, tense, sonorous
Purple	Mellow	Vibrant, resonant, sonorous
Brown	Warm	Hollow, resonant, sonorous
Grey	Dull	Hollow, loose, thin, veiled, tense
Black	Indefinite	Indefinite
Red/Black Hatched	*Suspended Cymbal	Resonant, sonorous
PERFECT COLOUR COMBINATIONS		
		Yellow Yellow
Green Green		Blue Blue
Orange Orange		Red Red
Purple Purple		Brown Brown
CLOSE COLOUR COMBINATIONS		
	Yellow	Yellow Green
Green	Blue	Blue Purple
Yellow	Orange	Orange Red
Red	Brown	Brown Purple

APPENDIX THREE

There Will Be Rest

Text

*There will be rest, and sure stars shining
Over the roof-tops crowned with snow,
A reign of rest, serene forgetting,
The music of stillness holy and low,*

*I will make this world of my devising
Out of a dream in my lonely mind.
I shall find the crystal of peace of peace, - above me
Stars I shall find.*

(Teasdale, 1933)

APPENDIX FOUR

Rest for Concert Band

Timbre Score

	1	2	3	4	5	6	7	8	9	10	
Fl. 1											
Fl. 2											
Ob. 1											
Ob. 2											
Cl. 1	Blue	Blue	Blue	Grey	Blue	Green	Grey	Blue	Blue	Grey	Green
Cl. 2	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Green
Cl. 3	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
B. Cl.	Green	Green	Green	Green	Green	Blue	Green	Green	Blue	Blue	Blue
Bsn. 1		Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Bsn. 2								Green	Green	Green	Green
A. Sax. 1										Orange	Orange
A. Sax. 2											
T. Sax.							Red	Red	Orange	Orange	Orange
B. Sax.											
DYNAMIC MARKING	<i>pp</i>				<i>p</i>	<	>				<
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1	Brown	Brown	Brown	Brown	Brown	Red	Brown	Brown	Brown	Brown	Brown
Hn. 2	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 3	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 4					Brown	Brown	Brown	Brown	Brown	Brown	Brown
Tbn. 1					Red	Red	Red	Red	Red	Red	Red
Tbn. 2							Red	Red	Red	Red	Brown
Tbn. 3											
Euph.	Orange	Orange	Orange	Orange	Orange	Red	Orange	Orange	Red	Red	Red
Tba.											
Str. Bs.											
Timp.											
Sus. Cymb.											

	11	12	13	14	15	16	17	18	19	20
Fl. 1			■	■	■	■				
Fl. 2										
Ob. 1			■	■	■	■				
Ob. 2										
Cl. 1	■	■	■	■	■	■	■	■	■	■
Cl. 2	■	■	■	■	■	■	■	■	■	■
Cl. 3	■	■	■	■	■	■	■	■	■	■
B. Cl.			■	■	■	■	■	■	■	■
Bsn. 1	■	■	■	■	■	■				
Bsn. 2	■	■								
A. Sax. 1	■	■	■	■	■	■	■	■	■	■
A. Sax. 2			■	■	■	■				
T. Sax.	■	■								
B. Sax.										
DYNAMIC MARKING	<i>mf</i>	>	<i>p</i>				<i>pp</i>			
Tpt. 1										
Tpt. 2										
Tpt. 3										
Hn. 1	■	■	■	■	■	■	■	■	■	■
Hn. 2	■	■	■	■	■	■				
Hn. 3	■	■					■	■	■	■
Hn. 4	■	■								
Tbn. 1										
Tbn. 2										
Tbn. 3			■	■	■	■	■	■	■	■
Euph.	■	■	■	■	■	■			■	■
Tba.			■	■	■	■	■	■	■	■
Str. Bs.			■	■	■	■	■	■	■	■
Timp.			■	■	■	■	■	■	■	■
Sus. Cymb.										

	21	22	23	24	25	26	27	28	29
Fl. 1								Blue	Green
Fl. 2				Blue	Green	Green	Green		
Ob. 1				Red	Green	Green	Green		Red
Ob. 2									
Cl. 1	Blue	Blue	Blue	Grey	Green	Green	Green	Blue	Green
Cl. 2	Blue	Blue	Blue	Grey	Green	Green	Green	Blue	Blue
Cl. 3	Blue		Blue	Blue	Grey	Green	Blue	Blue	Blue
B. Cl.	Blue	Green	Blue	Blue	Green	Green	Green	Blue	Blue
Bsn. 1		Green	Green	Green	Green	Green	Green	Green	Green
Bsn. 2		Green	Green	Green	Green	Green	Green	Green	Green
A. Sax. 1	Red		Orange	Orange	Orange	Orange	Orange	Red	Orange
A. Sax. 2		Red	Red	Orange	Red	Orange	Orange	Red	Red
T. Sax.			Red	Red	Red	Orange	Orange		
B. Sax.				Brown	Red	Red	Red	Red	Red
DYNAMIC MARKING		<i>p</i>		<i>mp</i>	<	<i>mf</i>	>	<i>p</i>	
Tpt. 1								Blue	Green
Tpt. 2									
Tpt. 3									
Hn. 1	Brown	Brown	Brown	Brown	Brown	Brown	Red	Brown	Brown
Hn. 2		Brown	Brown	Brown	Brown	Brown	Red		
Hn. 3	Brown		Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 4			Brown	Brown	Brown	Brown	Brown		
Tbn. 1			Red	Red	Red	Red	Red		
Tbn. 2		Red	Red	Red	Grey	Brown	Red	Brown	Brown
Tbn. 3	Brown	Red	Brown	Brown	Grey	Brown	Red	Grey	Grey
Euph.	Orange	Orange	Red	Red	Red	Orange	Orange	Orange	Orange
Tba.	Purple							Purple	Purple
Str. Bs.	Purple							Green	Green
Timp.								Blue	Blue
Sus. Cymb.									

	30	31	32	33	34	35	36	37	38
Fl. 1	[Green]								
Fl. 2									
Ob. 1	[Orange]								
Ob. 2									
Cl. 1	[Blue, Green, Grey, Green, Blue, Green, Blue, Green, Grey, Green]								
Cl. 2	[Blue]								
Cl. 3	[Blue]								
B. Cl.	[Blue]								
Bsn. 1	[Green]						[Green]		
Bsn. 2			[Green]						
A. Sax. 1	[Red, Orange]	[Orange]	[Orange]	[Orange]	[Orange]	[Orange]		[Orange]	[Orange, Red]
A. Sax. 2	[Red]								
T. Sax.			[Red]						
B. Sax.	[Red]								
DYNAMIC MARKING		<i>pp</i>					<i>p</i>		
Tpt. 1	[Green]								
Tpt. 2									
Tpt. 3									
Hn. 1	[Brown]								
Hn. 2									
Hn. 3	[Brown]								
Hn. 4									
Tbn. 1									
Tbn. 2	[Brown]	[Brown]							
Tbn. 3	[Grey]	[Grey]							
Euph.	[Orange]	[Orange]							
Tba.	[Purple]	[Purple]							
Str. Bs.	[Green]	[Green]							
Timp.	[Blue]	[Blue]							
Sus. Cymb.									

	39	40	41	42	43	44	45	46	47
Fl. 1		■	■	■	■				
Fl. 2									
Ob. 1				■	■				
Ob. 2									
Cl. 1	■	■	■	■	■	■	■	■	■
Cl. 2	■	■	■	■	■	■	■	■	■
Cl. 3		■	■	■	■	■	■	■	■
B. Cl.		■	■	■	■	■	■	■	■
Bsn. 1	■	■	■	■	■	■	■	■	■
Bsn. 2									
A. Sax. 1	■	■	■	■	■	■	■	■	■
A. Sax. 2		■	■	■	■	■	■	■	■
T. Sax.		■	■	■	■	■	■	■	■
B. Sax.		■	■	■	■	■	■	■	■
DYNAMIC MARKING						<i>mf</i>			≧
Tpt. 1		■	■						
Tpt. 2						■	■	■	■
Tpt. 3									
Hn. 1		■	■	■	■	■	■	■	■
Hn. 2									
Hn. 3						■	■	■	■
Hn. 4						■	■	■	■
Tbn. 1									
Tbn. 2		■	■	■	■				
Tbn. 3		■	■	■	■	■	■	■	■
Euph.						■	■	■	■
Tba.		■	■	■	■				
Str. Bs.		■	■	■	■				
Timp.		■	■	■	■				
Sus. Cymb.									

	48	49	50	51	52	53	54	55
Fl. 1								
Fl. 2								
Ob. 1								
Ob. 2								
Cl. 1	Blue	Blue					Blue	Blue
Cl. 2	Blue	Blue					Blue	Blue
Cl. 3	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
B. Cl.	Blue	Blue	Green	Blue	Blue	Green	Green	Green
Bsn. 1								
Bsn. 2								
A. Sax. 1		Red	Orange			Red	Orange	Orange
A. Sax. 2							Orange	Orange
T. Sax.			Orange	Orange		Orange	Orange	
B. Sax.								
DYNAMIC MARKING	<i>p</i>	<i><</i>	<i>mp</i>	<i>mf</i>	<i><</i>	<i>mp</i>	<i>mf</i>	<i><</i>
Tpt. 1		Brown	Red	Orange	Brown	Red	Orange	Orange
Tpt. 2								Orange
Tpt. 3		Brown	Red		Brown	Red	Red	Orange
Hn. 1			Brown	Brown		Brown	Brown	
Hn. 2			Brown	Brown		Brown	Brown	
Hn. 3	Brown	Brown		Brown	Brown		Brown	Brown
Hn. 4	Brown	Brown		Brown	Brown		Brown	Brown
Tbn. 1				Red	Red	Red		
Tbn. 2				Red	Red			
Tbn. 3	Brown	Brown						
Euph.	Red	Red	Orange	Red	Red	Orange	Orange	Orange
Tba.								
Str. Bs.								
Timp.								
Sus. Cymb.								

	56	57	58	59	60	61	62	63
Fl. 1								
Fl. 2								
Ob. 1								Orange
Ob. 2								Orange
Cl. 1				Green	Green	Green	Green	Green
Cl. 2				Green	Green	Green	Green	Green
Cl. 3				Blue	Blue	Blue	Blue	Blue
B. Cl.				Green	Green	Green	Green	Green
Bsn. 1				Green	Green	Green	Green	Green
Bsn. 2								Green
A. Sax. 1	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
A. Sax. 2		Yellow	Yellow	Red	Red	Red	Red	Red
T. Sax.	Red	Red	Red	Red	Red	Red	Red	Red
B. Sax.		Red	Red	Red	Red	Red	Red	Red
DYNAMIC MARKING								
Tpt. 1	Orange	Orange				Orange	Orange	Orange
Tpt. 2		Red	Red					Orange
Tpt. 3								Red
Hn. 1	Brown	Brown	Brown			Brown	Red	Brown
Hn. 2						Brown	Brown	Brown
Hn. 3						Brown	Brown	Brown
Hn. 4						Brown	Brown	Brown
Tbn. 1								Red
Tbn. 2								Red
Tbn. 3								Red
Euph.		Red	Orange					Yellow
Tba.								
Str. Bs.								
Timp.								
Sus. Cymb.								

	64	65	66	67	68	69	70	71
Fl. 1		■	■	■	■	■	■	■
Fl. 2								
Ob. 1	■				■	■	■	■
Ob. 2	■							
Cl. 1	■	■	■	■	■	■	■	■
Cl. 2	■	■	■	■	■	■	■	■
Cl. 3	■	■	■	■	■	■	■	■
B. Cl.	■	■	■	■	■	■	■	■
Bsn. 1	■							
Bsn. 2	■							
A. Sax 1	■	■	■	■	■	■	■	■
A. Sax 2	■	■	■	■				■
T. Sax.	■							■
B. Sax.	■							
DYNAMIC MARKING								
Tpt. 1	■							■
Tpt. 2	■							■
Tpt. 3	■							
Hn. 1	■	■	■	■	■	■	■	■
Hn. 2	■	■	■	■	■	■	■	■
Hn. 3	■	■	■	■	■	■	■	■
Hn. 4	■	■	■	■	■	■	■	■
Tbn. 1	■	■	■	■	■	■	■	■
Tbn. 2	■	■	■	■	■	■	■	■
Tbn. 3	■	■	■	■	■	■	■	■
Euph.	■	■	■	■	■	■	■	■
Tba.								
Str. Bs.								
Timp.								
Sus. Cymb.								

	72	73	74	75	76	77	78
Fl. 1	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Fl. 2	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Ob. 1	Orange	Orange	Orange	Orange	Orange	Yellow	Orange
Ob. 2	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Cl. 1	White	Yellow	Yellow	White	White	White	White
Cl. 2	Green	Green	Green	Yellow	Yellow	Yellow	Yellow
Cl. 3	Green	Green	Green	Green	Green	Green	Green
B. Cl.	Grey	Blue	White	Blue	Blue	Blue	Blue
Bsn. 1	Green	Green	Green	Green	Green	Green	Green
Bsn. 2	Green	Green	Green	Green	Green	Green	Green
A. Sax. 1	Orange	Orange	Orange	Orange	Yellow	Yellow	Orange
A. Sax. 2	Orange	Orange	Orange	Orange	Orange	Orange	Orange
T. Sax.	Orange	Orange	Yellow	Orange	Orange	Orange	Red
B. Sax.	Red	Red	Red	Red	Red	Brown	Brown
DYNAMIC MARKING							
Tpt. 1	Orange	Orange	Orange	Orange	Orange	Yellow	Orange
Tpt. 2	Red	Orange	Red	White	Orange	Orange	Orange
Tpt. 3	Red	Red	Red	Red	Red	Red	Red
Hn. 1	Brown	Brown	Brown	Red	Red	Brown	Brown
Hn. 2	Brown	Brown	Brown	Red	Red	Brown	Brown
Hn. 3	Brown	Brown	Brown	Red	Red	Brown	Brown
Hn. 4	Brown	Brown	Brown	Red	Red	Brown	Brown
Tbn. 1	Red	Red	Orange	Red	Orange	Red	Red
Tbn. 2	Red	Red	Orange	Orange	White	Red	Red
Tbn. 3	Red	Red	Red	Brown	Brown	Brown	Brown
Euph.	Red	Orange	Orange	Orange	White	Orange	Red
Tba.	Purple	White	Purple	Purple	Purple	Purple	Purple
Str. Bs.	Blue	White	Purple	Purple	Purple	Purple	Purple
Timp.		Blue	Blue	Blue			Blue
Sus. Cymb.		Red	Red	Red			

	79	80	81	82	83	84	85	86
Fl. 1	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Fl. 2	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Ob. 1	Yellow	Orange	Orange	Yellow	Orange	Yellow	Orange	Yellow
Ob. 2	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Cl. 1	White	White	White	White	White	White	White	White
Cl. 2	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Cl. 3	Green	Green	Green	Green	Green	Green	Green	Green
B. Cl.	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Bsn. 1	Green	Green	Green	Green	Green	Green	Green	Green
Bsn. 2	Green	Green	Green	Green	Green	Green	Green	Green
A. Sax. 1	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
A. Sax. 2	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
T. Sax.	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
B. Sax.	Red	Red	Red	Red	Red	Red	Red	Red
DYNAMIC MARKING								
Tpt. 1	Orange	Yellow	Orange	Orange	Orange	Orange	Orange	Orange
Tpt. 2	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Tpt. 3	Red	Red	Red	Red	Red	Red	Red	Red
Hn. 1	Brown	Red	Red	Red	Red	Red	Red	Red
Hn. 2	Brown	Red	Red	Red	Red	Red	Red	Red
Hn. 3	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 4	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Tbn. 1	Red	Red	Red	Red	Red	Red	Red	Red
Tbn. 2	Red	Red	Red	Red	Red	Red	Red	Red
Tbn. 3	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Euph.	Red	Red	Red	Red	Red	Red	Red	Red
Tba.	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Str. Bs.	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Timp.	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Sus. Cymb.	Red	Red	Red	Red	Red	Red	Red	Red

	87	88	89	90	91	92	93
Fl. 1	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green
Fl. 2	Yellow	Green	Yellow	Yellow	Green	Green	Green
Ob. 1	Yellow	Orange	Orange	Yellow	Orange	Orange	Orange
Ob. 2	Orange	Red	Orange	Orange	Orange	Orange	Orange
Cl. 1	Yellow	Green	Green	Green	Green	Green	Green
Cl. 2	Green	Green	Green	Green	Green	Green	Blue
Cl. 3	Green	Green	Green	Green	Green	Green	Blue
B. Cl.	Blue	Blue	Blue	Blue	White	Green	Green
Bsn. 1	Green	Green	Green	Green	Green	Green	Green
Bsn. 2	Green	Green	Green	Green	Green	Green	Green
A. Sax. 1	Orange	Orange	Orange	Orange	Orange	Red	Red
A. Sax. 2	Orange	Red	Red	Red	Orange	Orange	Orange
T. Sax.	Orange	Red	Red	Red	Orange	Orange	Red
B. Sax.	Red	Red	Red	Red	Red	Red	Red
DYNAMIC MARKING							
Tpt. 1	Orange	Orange	Red	Red	Brown	Brown	Brown
Tpt. 2	Orange	Red	Brown	Brown	Brown	Brown	Brown
Tpt. 3	Red	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 1	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 2	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 3	Brown	Brown	Brown	Purple	Purple	Purple	Purple
Hn. 4	Brown	Brown	Brown	Purple	Purple	Purple	Purple
Tbn. 1	Red	Red	Red	Red	Red	Red	Red
Tbn. 2	Red	Red	Red	Red	Red	Red	Red
Tbn. 3	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Euph.	White	Red	Red	Red	Red	Red	Red
Tba.	Grey	Purple	Purple	Purple	Purple	Purple	Purple
Str. Bs.	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Timp.							
Sus. Cymb.							

	94	95	96	97	98	99	100	101	102	103
Fl. 1	Green	Green	Green	Green	Green	Blue	Green	Green		
Fl. 2										
Ob. 1										
Ob. 2										
Cl. 1	Green	Green	Green	Green	Green	Blue	Green	Green	Blue	Blue
Cl. 2	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cl. 3	Green	Green	Green	Green	Green	Blue	Blue	Blue	Blue	Blue
B. Cl.	Blue	Blue	Blue	Green	Green	Green	Green	Blue	Blue	Blue
Bsn. 1	Green	Green	Green	Green	Green					
Bsn. 2										
A. Sax. 1										
A. Sax. 2										
T. Sax.										
B. Sax.										
DYNAMIC MARKING										
Tpt. 1										
Tpt. 2										
Tpt. 3										
Hn. 1						Brown	Brown	Brown		
Hn. 2	Brown	Brown	Brown	Brown	Brown					
Hn. 3										
Hn. 4										
Tbn. 1										
Tbn. 2										
Tbn. 3										
Euph.								Orange	Orange	Orange
Tba.										
Str. Bs.								Green	Green	Purple
Timp.										
Sus. Cymb.										

COLOUR KEY			
Chart Colour	Tone Colour	Timbre	
	Brilliant	Resonant, thin, brittle, metallic, iridescent, glassy, delicate, piercing, shrill	
	Bright	Resonant, brittle, metallic, nasal, strident	
	Pleasant	Resonant, delicate, iridescent	
	Rich	Resonant, vibrant, iridescent, hollow	
	Golden	Nasal, strident, pinched, brittle, tense	
	Glowing	Resonant, nasal, tense, sonorous	
	Mellow	Vibrant, resonant, sonorous	
	Warm	Hollow, resonant, sonorous	
	Dull	Hollow, loose, thin, veiled, tense	
	Indefinite	Indefinite	
	*Suspended Cymbal	Resonant, sonorous	
PERFECT COLOUR COMBINATIONS			
CLOSE COLOUR COMBINATIONS			

APPENDIX FIVE

Serenity (O Magnum Mysterium)

Text and Translation

*O magnum mysterium,
et admirabile sacramentum,*

*ut animalia viderent Dominum natum,
jacentem in praeseptio!*

*Beata Virgo, cujus viscera
meruerunt portare
Dominum Christum.
Alleluia.*

O great mystery,
and wonderful sacrament,

that animals should see the
newborn
Lord,
lying in a manger!

Blessed is the Virgin whose womb
was worthy to bear
Christ the Lord.
Alleluia.

(Jeffers, 1998)

APPENDIX SIX

***Serenity* for Concert Band**

Timbre Score

	1	2	3	4	5	6	7	8	9	10	11
Picc.											
Fl. 1											
Fl. 2											
Ob. 1										Solo	
Ob. 2											
Bsn. 1											
Bsn. 2											
Cl. 1	Green	Green	Green	Green	Green	Green	Grey	Grey	Grey	Grey	Blue
Cl. 2	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cl. 3	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cl. 4	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
B. Cl.	Green	Green	Green	Green	Green	Green	Grey	Grey	Grey	Grey	Blue
A. Sax. 1											
A. Sax. 2											
T. Sax.											
B. Sax.											
DYNAMIC MARKING	<i>pp</i> <<	<i>p</i> >	<i>sim.</i>						<i>mp</i> <<	<i>p</i> >	<i>sim.</i>
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1											
Hn. 2											
Hn. 3											
Hn. 4											
Ton. 1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Ton. 2	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Ton. 3	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Brown
Euph.											
Toa.											
Str. Bs.											
Sus. Cymb.											
Crot.		Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Vibe.		Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Timp.		Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple

	12	13	14	15	16	17	18	19	20	21	22
Picc.											
Fl. 1											
Fl. 2											
Ob. 1	Orange	Orange	Orange	Red	Red			Orange	Orange	Orange	Orange
Ob. 2											
Bsn. 1											
Bsn. 2											
Cl. 1	Blue	Blue	Blue	Grey	Grey		Green	Green	Green	Green	Green
Cl. 2	Blue	Blue	Blue	Blue	Blue		Grey	Grey	Grey	Grey	Green
Cl. 3	Blue	Blue	Blue	Blue	Blue		Blue	Blue	Blue	Blue	Grey
Cl. 4	Blue	Blue	Blue	Blue	Blue		Blue	Blue	Blue	Blue	Blue
B. Cl.	Blue	Blue	Blue	Grey	Grey		Grey	Grey	Blue	Blue	Green
A. Sax. 1											
A. Sax. 2											
T. Sax.											
B. Sax.											
DYNAMIC MARKING							<i>mp</i> << <i>mf</i> >>	<i>sim.</i>			
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1											
Hn. 2											
Hn. 3											
Hn. 4											
Tbn. 1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Orange
Tbn. 2	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Tbn. 3	Brown	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Euph.											
Tba.											
Str. Bs.											
Sus. Cymb.											
Crot.	Purple	Purple	Purple	Purple	Purple		Purple	Purple	Purple	Purple	
Vibe.	Purple	Purple	Purple	Purple	Purple		Purple	Purple	Purple	Purple	
Timp.											

	23	24	25	26	27	28	29	30	31	32	33
Picc.											
Fl. 1										<i>Solo</i>	
Fl. 2											
Ob. 1										<i>Solo</i>	
Ob. 2											
Bsn. 1											
Bsn. 2											
Cl. 1											
Cl. 2											
Cl. 3											
Cl. 4											
B. Cl.											
A. Sax. 1											
A. Sax. 2											
T. Sax.											
B. Sax.											
DYNAMIC MARKING						<i>mp</i>	<i><</i>	<i>mf</i>	<i>></i>		
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1										<i>Solo</i>	
Hn. 2											
Hn. 3											
Hn. 4											
Tbn. 1											
Tbn. 2											
Tbn. 3											
Euph.											
Toa.											
Str. Bs.											
Sus. Cymb.											
Crot.											
Vibe.											
Timp.											

	34	35	36	37	38	39	40	41	42	43	44
Picc.											
Fl. 1	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Green	Green	Yellow	Yellow
Fl. 2											
Ob. 1	Orange	Orange	Red	Red	Red	Orange	Orange	Red	Red	Orange	Orange
Ob. 2											
Bsn. 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Bsn. 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Cl. 1	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green
Cl. 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Cl. 3	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Grey
Cl. 4	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Grey
B. Cl.	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
A. Sax. 1									Yellow	Orange	Orange
A. Sax. 2									Orange	Orange	Orange
T. Sax.	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
B. Sax.	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
DYNAMIC MARKING	<i>p</i>	<i>p</i>	<i>mp</i>	<i>mp</i>	<i>sim.</i>						
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1	Red	Brown	Brown	Brown	Red	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 2	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 3	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 4	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Purple
Tbn. 1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Tbn. 2	Brown	Brown	Brown	Brown	Brown	Brown	Red	Red	Red	Red	Red
Tbn. 3	Grey	Grey	Grey	Grey	Grey	Grey	Brown	Brown	Grey	Grey	Brown
Euph.	Red	Red	Red	Red	Red	Red	Orange	Orange	Red	Red	Red
Tba.	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Str. Bs.	Blue	Blue	Purple	Purple	Blue	Blue	Blue	Blue	Green	Green	Blue
Sus. Cymb.											
Crot.											
Vibe.											
Timp.											


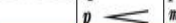

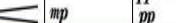

	45	46	47	48	49	50	51	52	53	54	55
Picc.											
Fl. 1	Yellow	Yellow	Green	Green	Green		Green	Yellow	Yellow	Yellow	Yellow
Fl. 2							Green	Yellow	Yellow	Yellow	Yellow
Ob. 1	Orange	Orange	Red	Red	Red	Red					
Ob. 2											
Bsn. 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Bsn. 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Cl. 1	Green	Green	Grey	Blue	Blue	Blue	Blue	Green	Green	Yellow	Yellow
Cl. 2	Grey	Grey	Blue	Blue	Blue	Blue	Blue	Green	Green	Yellow	Yellow
Cl. 3	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Green	Green	Green	Green
Cl. 4	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Green	Green	Green	Green
B. Cl.	Blue	Blue	Grey	Grey	Grey	Blue	Blue	Blue	Blue	Blue	Blue
A. Sax. 1	Orange	Orange	Orange	Red	Red	Red	Red	Red	Red	Red	Red
A. Sax. 2	Orange	Orange	Red	Red	Red	Red	Red	Red	Red	Red	Red
T. Sax.	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
B. Sax.											
DYNAMIC MARKING							<i>mf</i>				
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 2	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 3	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Hn. 4	Brown	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Tbn. 1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Tbn. 2	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Tbn. 3	Brown	Brown	Red	Red	Red	Brown	Brown	Brown	Brown	Brown	Brown
Euph.	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Tba.	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Str. Bs.	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Green
Sus. Cymb.											
Crot.											
Vibe.											
Timp.							Blue	Blue	Blue	Blue	Blue

	56	57	58	59	60	61	62	63	64	65	66	
Picc.								Yellow				
Fl. 1	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
Fl. 2	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow	
Ob. 1								Orange	Orange	Orange	Orange	
Ob. 2								Red	Orange	Orange	Orange	
Bsn. 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
Bsn. 2	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
Cl. 1	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Yellow	Yellow	White	
Cl. 2	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Yellow	
Cl. 3	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
Cl. 4	Green	Green	Green	Green	Green	Blue	Green	Blue	Blue	Blue	Blue	
B. Cl.	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	
A. Sax. 1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Orange	
A. Sax. 2	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Orange	
T. Sax.	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Orange	
B. Sax.	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	
DYNAMIC MARKING				\triangleleft <i>mf</i> <i>cresc. a poco a poco</i>				<i>f</i>	—————			
Tpt. 1								Orange	Orange	Orange	Yellow	
Tpt. 2								Brown	Red	Orange	Orange	
Tpt. 3								Brown	Red	Red	Red	
Hn. 1	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	
Hn. 2	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	
Hn. 3	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	
Hn. 4	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Brown	Brown	Brown	Brown	
Tbn. 1	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	
Tbn. 2	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	
Tbn. 3	Brown	Brown	Brown	Red	Red	Red	Red	Red	Red	Red	Red	
Euph.	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	
Tba.	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	
Str. Bs.	Green	Green	Green	Purple	Purple	Purple	Purple	Blue	Blue	Blue	Blue	
Sus. Cymb.								Red Hatched	Red Hatched	Red Hatched	Red Hatched	
Crot.												
Vibe.												
Timp.	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	

	67	68	69	70	71	72	73	74	75	76
Picc.										
Fl. 1										
Fl. 2										
Ob. 1										
Ob. 2										
Bsn. 1										
Bsn. 2										
Cl. 1										
Cl. 2										
Cl. 3										
Cl. 4										
B. Cl.										
A. Sax. 1										
A. Sax. 2										
T. Sax.										
B. Sax.										
DYNAMIC MARKING	=		<i>ff</i>			=		<i>mp</i> <	<i>mf</i> >	<i>p</i>
Tpt. 1										
Tpt. 2										
Tpt. 3										
Hn. 1										
Hn. 2										
Hn. 3										
Hn. 4										
Tbn. 1										
Tbn. 2										
Tbn. 3										
Euph.										
Tba.										
Str. Bs.										
Sus. Cymb.										
Crot.										
Vibe.										
Timp.										

	77	78	79	80	81	82	83	84	85	86
Picc.										
Fl. 1										
Fl. 2	<i>Solo</i>									
Ob. 1										
Ob. 2	<i>Solo</i>									
Bsn. 1										
Bsn. 2										
Cl. 1										
Cl. 2										
Cl. 3										
Cl. 4										
B. Cl.										
A. Sax. 1										
A. Sax. 2										
T. Sax.										
B. Sax.										
DYNAMIC MARKING	<i>p</i>	<i>pp</i>	<i>p</i>	<i>pp</i>	<i>mp</i>	<i>p</i>	<i>mf</i>	<i>mp</i>	<i>f</i>	
Tpt. 1										
Tpt. 2										
Tpt. 3										
Hn. 1										
Hn. 2										
Hn. 3										
Hn. 4										
Tbn. 1										
Tbn. 2										
Tbn. 3										
Euph.										
Tba.										
Str. Bs.										
Sus. Cymb.										
Crot.										
Vibe.										
Timp.										

	87	88	89	90	91	92	93	94	95	96
Picc.										
Fl. 1										
Fl. 2										
Ob. 1										
Ob. 2										
Bsn. 1										
Bsn. 2										
Cl. 1										
Cl. 2										
Cl. 3										
Cl. 4										
B. Cl.										
A. Sax. 1										
A. Sax. 2										
T. Sax.										
B. Sax.										
DYNAMIC MARKING	<i>f</i>	<i>mf</i>	<i>f</i>	<i>mf</i>	<i>f</i>	<i>mp</i>	<i>mf</i>	<i>p</i>	<i>mp</i>	<i>p</i>
Tpt. 1										
Tpt. 2										
Tpt. 3										
Hn. 1										
Hn. 2										
Hn. 3										
Hn. 4										
Tbn. 1										
Tbn. 2										
Tbn. 3										
Euph.										
Tba.										
Str. Bs.										
Sus. Cymb.										
Crot.										
Vibe.										
Timp.										

	97	98	99	100	101	102	103	104	105	106	107
Picc.											
Fl. 1											
Fl. 2											
Ob. 1											
Ob. 2											
Bsn. 1											
Bsn. 2											
Cl. 1											
Cl. 2											
Cl. 3											
Cl. 4											
B. Cl.											
A. Sax. 1											
A. Sax. 2											
T. Sax.											
B. Sax.											
DYNAMIC MARKING	<i>p</i>	<i>p</i> 	<i>mp</i>	<i>mp</i> 	<i>p</i>	<i>p</i> 	<i>mp</i>	<i>mp</i> 	<i>pp</i>	<i>pp</i> 	
Tpt. 1											
Tpt. 2											
Tpt. 3											
Hn. 1											
Hn. 2											
Hn. 3											
Hn. 4											
Tbn. 1											
Tbn. 2											
Tbn. 3											
Euph.											
Toa.											
Str. Bs.											
Sus. Cymb.											
Crot.											
Vibe.											
Timp.											

COLOUR KEY		
Chart Colour	Tone Colour	Timbre
	Brilliant	Resonant, thin, brittle, metallic, iridescent, glassy, delicate, piercing, shrill
Yellow	Bright	Resonant, brittle, metallic, nasal, strident
Green	Pleasant	Resonant, delicate, iridescent
Blue	Rich	Resonant, vibrant, iridescent, hollow
Orange	Golden	Nasal, strident, pinched, brittle, tense
Red	Glowing	Resonant, nasal, tense, sonorous
Purple	Mellow	Vibrant, resonant, sonorous
Brown	Warm	Hollow, resonant, sonorous
Grey	Dull	Hollow, loose, thin, veiled, tense
Black	Indefinite	Indefinite
Red with diagonal lines	*Suspended Cymbal	Resonant, sonorous
PERFECT COLOUR COMBINATIONS		
		Yellow Yellow
Green	Green	Blue Blue
Orange	Orange	Red Red
Purple	Purple	Brown Brown
CLOSE COLOUR COMBINATIONS		
	Yellow	Yellow Green
Green	Blue	Blue Purple
Yellow	Orange	Orange Red
Red	Brown	Brown Purple