PRAYER CYCLE

AN ORIGINAL COMPOSITION FOR MEDIUM-VOICE SOLOIST, SATB QUARTET,

ADULT CHOIR WITH SOLOISTS, CHILDREN'S CHOIR, STRING QUARTET, PIANO,

AND ELECTRONICS, WITH AN ANALYTICAL STUDY

by

ALLYSON LEIGH MCINTYRE

(Under the Direction of Leonard V. Ball, Jr.)

ABSTRACT

This document consists of two parts: an original composition for medium-voice soloist, SATB quartet, adult choir with soloists, children's choir, string quartet, piano, and electronics, and an analysis of that work with critical commentary on its formal design as well as harmonic and melodic structure. The original composition is a seven-movement prayer cycle comprised of varying combinations of the aforementioned forces, and it has a duration of approximately forty minutes. The electronic elements consist of Max/MSP patches which record, alter, and playback sections of the piece in real and delayed time, as well as fixed playback of an electronic track. Each prayer, and the cycle as a whole, becomes increasingly complex throughout the performance. The analysis portion uses Jan LaRue's categorical guidelines for style analysis supplemented with theories found in Joseph Straus's *Introduction To Post-Tonal Theory*, and Brian Hyre's "Reimag(in)ing Riemann" from The Journal of Music Theory 39:1 (1995). The study details and supports the composer's overall scheme of increasing complexity on a number

of levels, while the work, itself, takes the listener on an emotional journey from enlightenment; through redemption, peace, helplessness, strength, and hope; to celebration.

INDEX WORDS: Original Composition, Prayer Cycle, Song Cycle, Voice, Choir, String Quartet, Piano, Electronics, Max/MSP, Real-time Processing, Categorical Analysis

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1. INTRODUCTION

In accordance with the requirements for completion of the degree Doctor of Musical Arts in composition, this document consists of two parts: an original composition for medium-voice soloist, SATB quartet, adult choir with soloists, children's choir, string quartet, piano, and electronics, and an analysis of that work with critical commentary on its formal design as well as harmonic and melodic structure.

The original composition is a seven-movement prayer cycle for voices, strings, piano, and electronics lasting approximately forty minutes. The instrumentation comprises combinations of medium-voice soloist, SATB quartet, adult choir with soloists, children's choir, string quartet and individual strings, piano, and electronics. The electronic elements consist of Max/MSP[1] patches[2] which record, alter, and playback sections of the piece in real and delayed time, as well as playback an electronic track. Each prayer, and the cycle as a whole, becomes increasingly complex throughout the performance.

The text consists of original poems by the composer, direct quotations from *The Holy Bible*, New International Version (NIV), and popular hymn texts. Quoted verses from the NIV include selections from Psalms 33, 46, 54, and 62. All prayers contain original texts. Prayers six and seven include biblical texts, and prayers four and seven contain hymn quotations.

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[1] Max/MSP, a software application designed and distributed by Cycling74, allows the user to create his/her own environment for sound and media manipulation through an interactive object-based programming language. The Max environment provides a user interface, timing, communications, and MIDI support, while MSP allows real-time audio synthesis and digital signal processing.

[2] A Max/MSP patch is the individual file containing a graphic user interface, processing operation(s) and information, as well as links to additional parameters which may alter the resulting sound.

Permission for use of *The Holy Bible* is not necessary as fewer than five hundred verses and less than 25 percent of the total text is taken from this source.[3]

Three main goals drove the construction of the *Prayer Cycle*. Texts were written and chosen to take the listener on a journey from enlightenment; through redemption, peace, helplessness, strength, and hope; to celebration. Varied instrumental and vocal combinations, formal structures, pitch collections, and harmonies reinforce this textual progression. While the emotions projected by the text evolve, musical parameters and formal structures expand as well, creating a macro-design of increasing complexity.

The first prayer in the cycle, "There Is a Garden," is a prayer of enlightenment. The movement is scored for SATB quartet, viola, cello, and electronics. The viola and cello provide minimal accompaniment, as well as contrasting transitioning material, to the more traditional quartet passages. A Max/MSP patch is incorporated for real-time recording, processing,[4] and playback of particular phrases throughout this movement. The electronics parallel the macro-design of increasing complexity through more complex changes to the sound-files as well as layering their presentations.

The second prayer in the cycle is a prayer of redemption titled "And So I Fall." The six-part choir is separated into three-part male and three-part female sections, with full presentations only at important moments. Harmonically, this prayer is based on the pentatonic collection with chromatic layering occurring when different transpositions of the collection are used for each voice. For most of the movement, the strings and piano alternate singly between transition and accompaniment, but these instruments join the choir at heightened moments.

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[3] *The Holy Bible*, New International Version. Grand Rapids: Zondervan, 1995.

[4] Process or processing typically describes sending something through a set of established parameters or procedures which convert or change the initial signal. In *Prayer Cycle*, process or processing means to digitally alter the initial audio's characteristics.

"We Ask," a prayer of peace, is the third prayer in the cycle. It is scored for two-part children's choir and piano with an optional preparation, and includes an optional Max/MSP patch for recording and playback in the seventh movement should the children's choir not be available to perform during the final prayer of the cycle. The children's choir parts use traditional tonality and simpler rhythms than the previous voice parts. The piano is optionally minimally prepared in the top two octaves for this movement only, and the part consists of contrasting functional harmonic chord progressions in the accompaniment lines with additional passing harmonies for color without functional intent.

"Waiting," a prayer of helplessness, is the center of the prayer cycle and focuses on electronic manipulation. An electronic track, piano, strings, and a Max/MSP patch for real-time recording, processing, and playback of interactive elements, support the soloists and adult choir. The soloist line contains fragments of popular hymn tunes, which are then manipulated by the Max/MSP patch. Extended techniques are used in all voices and instruments. Vocal techniques include spoken dialogue and whispers.

A prayer for strength, "Heavy," is the fifth song in the cycle. It is scored for medium-voice solo and string quartet. The alternation between rhythmic complexity and moments of repose reflect a two-part formal construction indicative of this movement and the cycle as a whole. Glissandi in the less complex rhythmic passages, as well as more exposed individual melodic lines in the strings, add to the continuing development and increasing complexity within the prayer and the cycle.

The sixth prayer, "I Find Hope," is, as the title suggests, a prayer of hope. The text consists of biblical quotations from Psalms 33:20-22 and 62:5, as well as original text by the composer. An eight-part adult choir with soloists is supported by the string quartet and piano.

Traditional melodic and accompaniment boundaries are crossed as repeated passages utilize voice exchange between the vocal and instrumental parts.

The final prayer, "Find the Light," is a prayer of celebration. This movement is scored for medium-voice soloist, SATB quartet, adult choir, children's choir (if practical), string quartet, piano, and electronics. The text includes quotations from Psalms 46:4-6 and 54:6-7, as well as original text by the composer. This prayer combines elements from the previous six prayers. A Max/MSP patch is used to alter and playback sound-files[5] archived earlier in the piece. Combined melodic figures, electronic repetition, and repetition of characteristic elements from the previous prayers combine to bring the prayer cycle to a close.

The analysis portion of the document consists of three parts. The first section is a survey of related literature. The included pieces were deemed significant to the evolution of *Prayer Cycle* through electronic development, instrumentation, techniques, and/or large-scale formal structures. The second part of the analysis portion consists of seven chapters, one for each prayer. Jan LaRue's analytical method of SHMRG (Sound, Harmony, Melody, Rhythm, and Growth), as found in his *Guidelines for Style Analysis*, is used as an overall guideline for each chapter's discussion, supplemented with an analysis of the formal structure.[6] The techniques found in Joseph N. Straus's *Introduction to Post-Tonal Theory* are used to discuss specific analytical techniques regarding pitch collections and structures.[7] Additionally, Brian Hyer's article, "Reimag(in)ing Riemann[8]," is used to discuss third relationships found in the third prayer. The third part of the analysis portion and the final chapters of the document utilize

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[5] Sound-files are sections of recorded audio used in a MSP environment.
[6] Jan LaRue, *Guidelines for Style Analysis* 2nd Edition, ed. J. Bunker Clark. Michigan: Harmonie Park Press, 1992.
[7] Joseph N. Straus. *Introduction to Post-Tonal Theory* 3rd Edition. New Jersey: Pearson Prentice Hall, 2005.
[8] Brian Hyer. "Reimag(in)ing Riemann." Journal of Music Theory 39.1 (1995): 101-38.

LaRue's analytical method to outline the macro-design and development, characteristic elements,

and over-arching formal structure found throughout the entire prayer cycle. These chapters

function as a summary of the composer's approach to *Prayer Cycle*.

2.   SURVEY OF RELATED LITERATURE

Preliminary research revealed many characteristic pieces utilizing similar techniques or

forces as found in *Prayer Cycle*: instrumentation, extended techniques, formal structures, and/or

the inclusion of electronic elements. David Bedford's *into thy wondrous house*, Ralph Vaughan

Williams's *On Wenlock Edge,* Carlisle Floyd's *A Time to Dance,* Ronald Corp's *A New Song,*

John Rutter's *The Sprig of Thyme*, Kaija Saariaho's *Tag des Jahrs,* Leonard Bernstein's *Songfest,*

Richard Feliciano's *The Angels of Turtle Island,* Jonathan Harvey's *Ashes Dance Back,* Anthony

Cornicello's *...turns and turns into night*, and Donald Freund's *Passion with Tropes* are

discussed in this chapter.

David Bedford's *into thy wondrous house* explores the relationships possible between

choir, children's choir, and soprano solo, while also using biblical text.[9] Bedford expands the

voicing in both of the choirs: the children's choir beginning with one voice and expanding to

four voices, and the adult choir beginning with four voices and expanding to eight voices.

Movements two, three, and six of *Prayer Cycle* use similar expansions to the Bedford work.

Prayer Cycle contains similar instrumentation to Ralph Vaughan Williams's *On Wenlock

Edge*.[10] Although an orchestral arrangement exists, the original arrangement incorporates three

basic sonorities: piano, strings, and voice. Smaller accompaniment groupings, such as piano and

cello, and piano only, are also used. The varied instrumentation used for accompaniment in

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[9] David Bedford, *into thy wondrous house*. London: Universal Edition Ltd., 1987.

[10] Ralph Vaughan Williams, *On Wenlock Edge*. New York: Boosey & Hawkes, 1946.

Prayer Cycle employs similar groupings to those found in Vaughan Williams's *On Wenlock Edge.*

Written for tenor voice, *On Wenlock Edge* combines melodic and recitative-like passages. The interplay between the two vocal techniques in the first two movements of the piece is indicative of the technique used in the second movement of *Prayer Cycle,* measures 12-15. Two voices provide repeated pitches in varying rhythms while a top voice follows with a melodic phrase. This technique is used again in measures 58-61, this time to emphasize the phrase "humbly at your feet." The held tones in measures 85 to the end of the second movement of *Prayer Cycle* are also indicative of the contrast Vaughan Williams used so effectively between repeated tones and melodic passages in *On Wenlock Edge.*

The second, fourth, sixth, and seventh pieces of *Prayer Cycle* are structurally similar to Carlisle Floyd's approach to vocal lines in *A Time to Dance* in that both alternate two-voice and four-voice passages throughout.[11] Floyd's piece is a ten-song cycle, which integrates solo and vocal ensemble work within movements as well. The sixth movement of *Prayer Cycle* is structured similarly to Floyd's "Movement I. Great Nature's Voice." In this movement, Floyd alternates a four- to six-part choir with a more difficult solo passage, while in the sixth movement of *Prayer Cycle,* a four- to eight-part choir alternates with an easier solo passage. Floyd also incorporates a similar structure in the his eighth movement, "Interview with Lazarus." The most important difference between Floyd's piece and the sixth movement of *Prayer Cycle* is that Floyd uses the solo passage as a cohesive thread, whereas the soloist in "I Find Hope" functions to break away from octatonic sonorities and present a more individualized tonal version of hope.

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[11] Carlisle Floyd, *A Time To Dance*. New York: Boosey & Hawkes, 1996.

Floyd's fourth movement, "Death Be Not Proud," alternates two-voice passages from rehearsal marking 18 through 21. This technique is used several times in the second movement of *Prayer Cycle,* although in a larger format as the movement employs a six-part choir. Measures 12-15 of *Prayer Cycle* alternate two-voice against one-voice passages followed by three-voice against three-voice passages in measures 16-20. Three against three textures continue to occur until measure 67. A major difference between the works is that Floyd changes voice parts within groupings, whereas the groupings remain the same in *Prayer Cycle*.

"We Ask" from *Prayer Cycle* uses a similar treatment of the children's choir as Ronald Corp's *A New Song* in "No. 3: Bright is the ring of words."[12] Relatively simple vocal lines, with minimal accompaniment, are present in both pieces and each spans a minor 10th in range, although "We Ask" from *Prayer Cycle* does contain a lower neighboring tone that expands the range to an eleventh. The pieces use minimal accompaniment while voices are present, and the instrumentation expands slightly during transitional material. Although both pieces utilize minimal support, the accompaniment provided in "We Ask" is more substantial than that found in *A New Song*.

The inclusion of the children's choir in the seventh movement of *Prayer Cycle*, is also similar to Corp, who inserts the children's choir between presentations of the adult choir in the final piece, "No. 8: Make a joyful noise unto God."[13] The children's choir enters about halfway into both pieces with similar accompaniment styles. Corp does expand the accompaniment lines to make them more substantial, while the accompaniment in "We Ask" remains the same.

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[12] Ronald Corp, *A New Song*. New York: Oxford University Press, 2001, *No. 3: Bright is the ring of words,* 22-24.
[13] Corp, *No. 8: Make a joyful noise unto God*, 50-67.

Textually, Corp juxtaposes secular poetry with biblical passages, alternating between the two for each movement. Movements six and seven of *Prayer Cycle* also combine Psalms and secular texts.

In several movements of *The Sprig of Thyme*, John Rutter uses voices as additional accompaniment lines. The use of vocal forces in the second song of *Prayer Cycle* is similar in approach to the Rutter work's in movements one, three, and six.[14] In the first movement of the Rutter, "The bold grenadier," two-part accompanying voices hum from measure 85 to measure 88. Voices as accompaniment are also used in the third movement, "The willow tree." From measure 11 through 18, Rutter uses a combined two-voice vocal and piano texture as the accompaniment to the main melody. A similar accompaniment line is used later in the same movement from measures 49 through 56. In the sixth movement, "The cuckoo," Rutter uses four-voice accompaniment lines from measure 20 through 40. Although not as complex or as prominent as in Rutter's piece, vocal parts used as accompaniment are found in the second movement of *Prayer Cycle*. In measure 18 through 20 the extension of "rise" is used as accompaniment as well as the "aahs" found in measures 32 through 34.

Whispered and spoken vocal techniques are found in Kaija Saariaho's *Tag des Jahrs*.[15] An interesting feature in this work is found in movements one and four. The spoken and whispered segments occur in the same rhythm and on the same syllables as a sung melodic line in another voice. The whispers and spoken segments in the fourth and seventh movement of *Prayer Cycle* do not occur simultaneously with a sung phrase of the same syllables, but are instead layered and altered for playback through a Max/MSP patch.

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[14] John Rutter, *The Sprig of Thyme*. New York: Oxford University Press, 1994, "No. 1; The bold grenadier" 1-4, "No. 3; The willow tree" 12-15, "No. 6; The cuckoo" 22-28, "No. 8; Willow song" 32-33, and "No. 11; Afton water" 41-46.

[15] Kaija Saariaho, *Tag des Jahrs*. London: Chester Music, 2001.

Leonard Bernstein's *Songfest* is a cycle of twelve American poems for six singers and orchestra.[16] Bernstein's overall format involves varying instrumentation including small ensembles for accompaniment, as well as solos and small groups of vocalists. *Prayer Cycle* similarly varies its ensembles, both instrumental and vocal. In song "IV. To What You Said…," Bernstein incorporates voices as accompaniment, which is similar to Rutter in *The Sprig of Thyme*. *Prayer Cycle's* second movement also uses this technique.

In the last movement of *Songfest*, "XII. Closing Hymn: Israfel," Bernstein incorporates six-part vocal work with piano accompaniment. *Prayer Cycle* uses similar techniques of line separation and continuation. Both pieces subdivide the six-part vocal line into smaller sections that play against one another and interrupt each other to provide continual motion through the phrases. The sixth movement of *Prayer Cycle* also contains a solo section within the larger structure, much like Bernstein's final movement. The solo sections in both pieces are followed by building vocal lines that climax in the full strength of the vocal forces.

Each of the twelve poems Bernstein sets is individually realized and utilizes different tonalities, rhythmic references, and small-scale formal structures. Donald Freund utilizes a similar formal structure to that of Bernstein in *Passion with Tropes*.[17] The work is divided into two parts, each with multiple sections and unique structures. Freund also uses a variety of vocal ensembles, including a children's choir, with a variety of texts including biblical passages. *Prayer Cycle* contains a similar overall structure of varying forms, ensemble, and mixed texts to that of Freund.

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[16] Leonard Bernstein, *Songfest*. New York: Amberson Enterprises Inc., Publisher, Boosey & Hawkes, Inc., Sole Selling Agent, 1977.

[17] Donald Freund, *Passion with Tropes*. ASCAP, 1983, introductory notes, 7.

Richard Feliciano's *The Angels of Turtle Island* includes extensive electronic elements.[18] Most important to the correlations between the two works are the complex pre-performance setup with the electronics and freedom within, and from, the given score. The first, fourth, and seventh movements of *Prayer Cycle* use similar guidelines to his extensive performance and recording instructions, electronic setup map, and use of vocal spoken sounds.

One idea behind Feliciano's *The Angels of Turtle Island* is what Feliciano calls "…an affirmation of universal constancies" in which sound as space is always growing and existing even if the sound is not always heard.[19] This idea is also found in Don Freund's *Passion with Tropes*. In his introductory notes Freund states, "There are 5 bodies of performing forces. The illusion should be that they all exist simultaneously, disappearing and re-appearing in various degrees of intersection and interaction."[20] *Prayer Cycle* continues this idea with the electronic elements in movements one, four, and seven.

Jonathan Harvey's *Ashes Dance Back,* for choir and electronics, utilizes real-time recording and processing of individuals within a choir setting.[21] Harvey provides a CD for playback and requires a CD player, 2 E64 Digital Samplers (or comparable E-MU models), a 5-octave keyboard, a ZIP drive (cartridge supplied with score), an effects processor with preset parameters, microphones, a mixer, and loudspeakers. Harvey's electronic set, in a work composed in 1997, definitely shows the progression of electronic tools available since the 1994 introduction of Feliciano's *Angels of Turtle Island.*

Harvey also uses extended vocal techniques such as spoken words, shouts, and whispers on syllables. Although syllables only are not used in *Prayer Cycle*, many of the other vocal

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[18] Richard Feliciano, *The Angels of Turtle Island*. Massachusetts; E. C. Schirmer Music Company, 1984.
[19] Feliciano, *The Angels of Turtle Island*, performance notes.
[20] Freund, 4.
[21] Jonathan Harvey, *Ashes Dance Back*. London: Faber Music Ltd, 1997.

techniques found in *Ashes Dance Back* are used and expanded. Harvey specifically asks the vocalists to "chant in even rhythm, but each singer in a slightly different tempo."[22] This idea is expanded in the seventh movement of *Prayer Cycle,* where the vocalists are asked to speak the given passage at varying tempos and dynamics, resulting in a cacophony of sounds that are similar in pattern but constantly changing and evolving.

Harvey's electronic elements are designed to promote this idea through multiple tape delays and aleatoric elements, allowing the performer to make repetitions at will. This provides the probability of overlapping with the recorded sections of the same material. *Prayer Cycle* movements one, four, and seven utilize a similar idea to the electronic manipulations found in Harvey's piece. The advancements in technology have, however, expanded the options of live manipulation from tape delay to preset parameters provided by a Max/MSP patch.

Although the instrumentation is quite different, *Prayer Cycle* contains a few important similarities to Anthony Cornicello's *...turns and turns into night*, for voice, chamber ensemble, and live electronics.[23] Cornicello uses multiple Max/MSP patches, and sets the volume so that the electronics will be slightly louder than the ensemble at key moments. The volume between the electronics and the Max/MSP patch in *Prayer Cycle* is set so that the balance between the electronic elements change depending on the layering of the recorded materials. The balance between the ensemble and the electronics will also change according to the number of layers of real-time recording.

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[22] Harvey, 3.

[23] Anthony Cornicello, *...turns and turns into the night.* New York: W. W. Norton & Company, Inc., 2001.

3.   *PRAYER CYCLE: I. THERE IS A GARDEN*

There is a garden in darkness lies
Cloistered behind walls, within the silence sighs
No breath, no breeze, no sun to feed
Only rain, only freeze, to wither the seeds

There is a garden with watchful eyes
Awake and waiting, it vigilantly spies
No light to break the darkness still
Feel the mold, feel the damp, in every corner it builds

There is a garden with stones of gray
Inside and out lost souls come to pray
Each word, each date, there'll be no wait for their fate
For the light, shines too bright, outside the old garden's gate.

"There Is a Garden," is a prayer of enlightenment. Imagery contrasting earthly versus spiritual properties, and the shadows in-between, are used to clarify and obscure the theme of realizing the enormity of the universe. The original text expands the definition of "garden" to include and subsequently describe a cemetery and a soul void of fulfillment and hope. Certain words were chosen specifically to have multiple meanings, and the true connotations of which would be determined through musical representation. Words indicating life and breath were also chosen to further the idea of the garden as a soul. The malevolence implied by the words "lies," "sighs," and "watchful" and the phrase "vigilantly spies," as well as the image of mold growing out of control in dark corners, hint at the desire to remain in the darkness unfulfilled and unenlightened. The desire is fueled by the realization that entering the light means accepting universal truths and understandings which will be at times overwhelming and beyond true comprehension.

The poem is divided into three stanzas of four lines each. The first three lines of each stanza are similar while the last line of each stanza is increasingly more complex, including additional syllables upon each presentation. The similarity of the first phrase of each section of text was chosen to intentionally emphasize a repeated melody. The second lines of the stanzas are comparable but are allowed more freedom both rhythmically and musically. The tempo of the language speeds up on the third line and is firmly seated in two-syllable groupings, implying duple meter, while the last line shifts to three-syllable groupings to imply triple meter. The longer groupings intentionally slow down the language and music, and the increasing complexity added at the last line of each stanza contributes to the macro-design of escalating intricacy throughout each movement and the cycle as a whole. These intentional factors drove the compositional process as the text setting remains the central goal and idea.

The movement is scored for SATB quartet, viola, cello, and electronics. Four voice parts were chosen for three reasons: to provide a wide vocal range and texture, to adhere to the most likely voice parts found in the average choir or choral group, and, specifically, for the individual voices to have a wide enough vocal range to allow some passages to float and others to sink, while others emphasize the text through full chord voicing. The ranges of the voice parts are relatively conservative, and they contain alternate pitches provided in the soprano to make the movement more accessible to a variety of performers. The voice parts are straightforward and simplistic in their representation of the text.

The viola and cello provide minimal accompaniment during vocal passages and contrasting transitional material between the vocal passages. The cello was chosen to extend the bottom range of the voices, and it often starts softly after the voices to give the illusion of a sub-tone that gains in timbre to the cello's full tone. The viola functions in five capacities. It is used

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as counterpoint to the cello line, for blending with both the voices and cello, to extend the chordal possibilities, to provide additional layers for melodic lines in the accompaniment figures, and to support the vocalists with pitch preparation.

When the vocal lines are more melodically and harmonically challenging, the viola and cello lines require some extended techniques and alternate bowings. The viola line calls for pizzicato, snap pizzicato, natural harmonics, two-voice melodic passages, double stops, and on-the-bridge bowing. The cello line uses on-the-bridge bowing, double and triple stops, two-voice melodic passages, pizzicato, and a fingernail pizzicato in the last measure. These techniques are used for coloristic effects and to provide contrast in the transitional sections.

A Max/MSP patch is provided for real-time recording, processing, and playback of particular phrases throughout the movement. Recorded sound-files are processed by doubling the length of the file, therefore lowering the pitch an octave, or shortening the file to half the length of the original, thereby raising the pitch an octave. An additional calculation is used to randomly determine the placement of the sound-file in the sonic field. These sound-files add layers of melodic fragments for texture, and they parallel the macro-design of increasing complexity as the movement progresses.

Dynamically, the movement is conservative staying within *piano* to *forte* levels. A single exception would be the decrescendo to *pianissimo* in the strings at measure 89. Additionally, the recorded sound-files dominate the sonic field from time to time. Softer moments with higher pitches in the soprano are given an alternate pitch to keep the dynamic designation dominant over pitch content. The alteration should be used in the event the dynamic called for is not easily achieved at the desired pitch, or if multiple sopranos are present. In the latter instance, a split on those pitches would be desirable to keep the top voice light and soft.

The vocal texture remains full throughout and it contains staggered entrances to provide an echo effect. The viola and cello join with the voices in two capacities. The first is to prepare for and supply transitional material through melodic expansion, while the second is to provide a more comprehensive accompaniment to emphasize the change in stanza from the first to the second stanzas. The Max/MSP patch also adds texture during the presentation of the second stanza. The third stanza utilizes a combination of the two approaches. In construction, the transitional textures are similar to the vocal textures. The introductory material contains the viola and cello only, while subsequent transitions include some sound-file playback. This type of layered construction creates a correlation between vocal and instrumental sections, establishing similar textures and blurring definition between the two forces.

The melody and harmony in the vocal lines were written to complement one another as well as to stand independently. The rhythms closely follow spoken rhythmic patterns. Transitional material provided by the viola and cello consists mainly of expanded melodic fragments from the vocal lines with similar shape, texture, and smaller note values to create intensity between vocal presentations. Generally, the vocal lines move together melodically, harmonically, and rhythmically, varying to provide aural interest and complexity. Although each topic warrants separate discussion, some overlap will naturally occur due to the compositional process.

"There is a garden" is an important melodic line that, although altered slightly upon repetition, retains its essential melodic shape. The line descends a fifth on each presentation always omitting the second scale degree of the descent (Examples 1-4, on page 17).
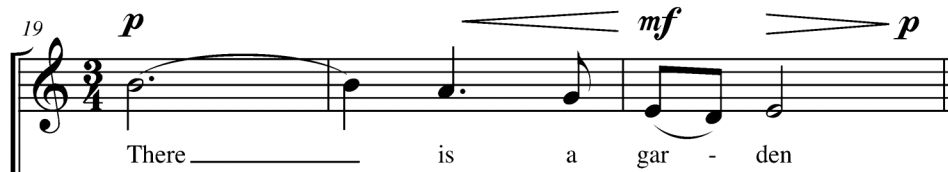
Example 1, *Prayer Cycle:* "I. There Is a Garden," measures 19-21
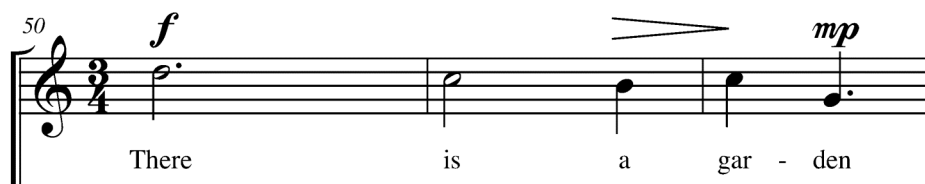
Example 2, *Prayer Cycle:* "I. There Is a Garden," measures 50-52
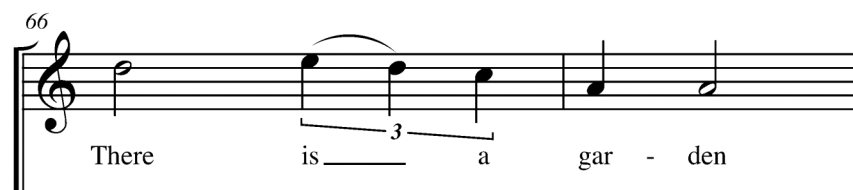
Example 3, *Prayer Cycle:* "I. There Is a Garden," measures 66-67
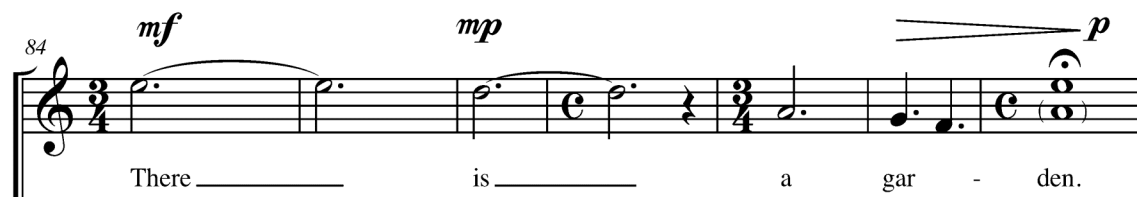
Example 4, *Prayer Cycle:* "I. There Is a Garden," measure 84-90

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Melody lines also emphasize words with ambiguous meanings and those that imply life. In measure 23, the word "lies" initially suggests a location or place. When using lie as location, stillness is expected, therefore the motion in the alto and tenor lines suggest the word "lies" to mean deceit or falsehood. This implies that the garden itself can not only be an entity capable of projecting thought, but moreover, it has the capacity to impart dishonest thoughts on others (Example 5).

Example 5, *Prayer Cycle:* "I. There Is a Garden," measures 23-24

This definition is reinforced in measure 61 with the word "still." The statis on the word "still" validates the stagnate quality of darkness and contrasts with the setting of the word "lies" (Example 6, on page 19).

Example 6, *Prayer Cycle:* "I. There Is a Garden," measure 61

Adding to the living qualities suggested by the poetic language are the phrases "silence sighs" and "watchful eyes." Musically, the melody line on "silence sighs" descends as a sigh and is echoed immediately. The instruments answer with similar motion in measures 31-33 (Example 7, on page 20). In measure 53, the staggered entrances on "watchful" allude to an eye watching for movement in the darkness (Example 8, on page 20).

Minor 2nds are used in measure 38 to emphasize the decay in the garden that is illustrated by the text "No breath, no breeze, no sun to feed." The descent on "no breath" and "no sun" emphasize the necessity of breathing and light, whereas the ascent on "no breeze" and "to feed" highlight desire rather than the essential need to breathe and grow. The slight change in pitch also adds an intensity that remains until a true melody line reappears with the pickup to measure 41 (Example 9, on page 21).

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Example 7, *Prayer Cycle:* "I. There Is a Garden," measures 28-33

Example 8, *Prayer Cycle:* "I. There Is a Garden," measures 53-54

Example 9, *Prayer Cycle:* "I. There Is a Garden," measures 38-42

Quintal chords, added-tone chords, seventh chords, and clusters provide unconventional harmonies that allude to tonal areas through melodic emphasis, while maintaining unique "progressions" devoid of any true tonal pull. The harmonies found in the movement are non-functional and are intended to provide color and tension. Moments of stability and instability are gained through individual resolutions within melodic lines instead of large-scale functional chord progressions.

The melodic descent of a fifth found on the first line of the movement suggests an E-minor tonal center, while the next segment ends on an A-minor chord. Phrase endings continue to promote A minor and E minor along with G major. Traditional harmonic cadences are avoided throughout the movement. At the end of the movement, an E-major chord moving to an A-minor chord would tonally complete the ending cadence. In measures 89-90 this motion is avoided by including a G-natural instead of G-sharp for the E chord, and by omitting a B on the downbeat of measure 89. This evasion is further signified through the shift to a B-diminished

chord, then to an A minor-minor seventh chord as the last chord of the piece. The A is emphasized through the doubled pitch in the bass and cello as well as the optional pitch, if used, in the soprano line (Example 10).

Example 10, *Prayer Cycle:* "I. There Is a Garden," measures 88-90

Rhythmically, the movement follows a similar formula for each stanza with expansion on the last two lines. There is some differentiation and development between the first two lines of each stanza, but the additive syllabic formula, as well as the duple/triple implication of the text, allows for greater growth and rhythmic diversity within the last two lines of each stanza. The

overall rhythmic intensity builds and culminates in measures 62-64 (Example 11) where the last line of the second stanza emphasizes, both melodically and rhythmically, the word "builds."

Example 11, *Prayer Cycle:* "I. There Is a Garden," measures 62-64

The same general pattern of short/long, triplet figures or short three-syllable gestures, as well as the two-voice groupings as found earlier, is evidenced in measures 40-42 (Example 12, on page 24). A simpler rhythmic pattern is employed in these measures, and again in measures 80-83 (Example 13, on page 25), in a slower, more syncopated, rhythm.

Example 12, *Prayer Cycle:* "I. There Is a Garden," measures 40-42

This movement follows the form of the poetry with three major sections corresponding to the three stanzas. The viola and cello provide an introduction, transitions between stanzas, and interruptions between the second and third lines of the first and third stanzas. Sound-file playback is also present during transitions and interruptions.

The first interruption, emphasizing the word "silence," occurs in measures 30-38 between the second and third lines of the first stanza. In this manner, the voices are silent while motion continues through the accompanying instruments. The silence in the voices is interrupted by an altered version of the sound-file archive "within the silence sighs" in measures 32-34 (Example

Example 13, *Prayer Cycle:* "I. There Is a Garden," measures 80-83

14), and 35-38 (Example 15). This sound archive was recording by the Max/MSP patch during the performance of measures 28-31.

Example 14, *Prayer Cycle:* "I. There Is a Garden," measures 30-34

Example 15, *Prayer Cycle:* "I. There Is a Garden," measures 35-38

Another interruption occurs in measures 72-76 (Example 16, on page 27), between the second and third lines of the third stanza. This interruption again serves the text giving the "lost

souls" a few measures to pray before their entrance on the anacrusis to measure 77. The music

in measure 76 also prepares the vocal entry in the new meter.

Example 16, *Prayer Cycle:* "I. There Is a Garden," measures 72-76

"There Is a Garden" follows a typical arch form, with an introduction and short codetta.

The three stanzas are joined by two transitions and the first and third stanzas contain

interruptions at the same location within the text. The rhythms mimic natural speaking patterns

and provide more formal structure than the harmonies. The harmonies are coloristic and textural

without providing traditional progressions or tonal implications. The melody line most often

hints at tonal areas with endings that imply A minor and E minor without providing traditional

cadences. Important words and phrases are emphasized through staggered entrances, repeated

melodic shapes, and text painting. The inclusion and increasing frequency of electronic

elements, combined with the aforementioned processes, promote the idea of increasing

complexity over time, and this parallels the overall textural design of the entire piece.

4. *PRAYER CYCLE: II. AND SO I FALL*

I fall to my knees and bow my head
The path is overgrown, the fog, so gray and dense
I dare not rise or even lift my eyes, my shame, oh so great, I've sinned

And so I fall knowing you will save me
The sins that have restrained me shattering
Littering the ground beneath me like autumn's wilted leaves

And so I fall humbly at your feet
In awe of your creation, forgiveness and absolution
In no way worthy of the gifts that you have given, redemption, salvation

And so I fall knowing you will save me
The sins that have restrained me
And so I fall, I fall

The second prayer in the cycle is a prayer of redemption titled "And So I Fall." The original text for this movement builds on the previous text. The text depicts an understanding that becomes truly overwhelming. "I fall" means literally to break and fall to one's knees under the weight and pressure of finally realizing all that cannot be comprehended. The path symbolizes the means to redemption, which, at the onset, is still confusing and unclear. As the sins are shattered and forgiven, the path is illuminated by the fragments of sins or wrongs that can now be crushed as easily as brittle leaves. The partial repetition of the second stanza at the end of the text should reassure the listeners, as well as the vocalists, that the result of the fall will not be harm but redemption.

A more complex scoring strategy is employed in this movement. A six-part choir, divided into three-part female (soprano, mezzo-soprano, alto) and three-part male (tenor, baritone, bass) sections, is used to highlight the duality of certain phrases in the text. Both sections of the choir are often used to complete a melody line or provide tension and/or emphasis

on certain textual passages. Textual passages that occur simultaneously in all six parts are rare, and therefore they are accentuated by their infrequent occurrence.

The female voices, subordinate parts in measures 17-20 (Example 17) and measures 32-34 (Example 18, page), add another texture to the piano or string accompaniment. The extension on the word "rise" will be discussed further regarding melodic structure and pitch content. Example 18 presents a clearer instance of vocal accompaniment with the upper voices singing "Ah" instead of an extended syllable. The upper voices in measures 32-34 also double the top three string lines, in the same register for the soprano/violin II and the alto/viola with the violin I playing an octave higher than the sung pitch in the mezzo-soprano line.

Example 17, *Prayer Cycle:* "II. And So I Fall," measures 17-20

In example 18 on page 32, the string quartet and piano add to the complex presentation of the vocal material's two-part line, emphasizing a layered melody through the three-part male grouping and the three-part female accompaniment. To further separate the two qualities of the men's and women's sections, the piano and string quartet provide accompaniment only to their assigned voice parts. In the example below, the string quartet is paired with the women's voices. For most of the movement, the strings and piano alternate singly between short transitional and accompanimental material. These instruments, however, join the choir for pitch support when needed, and they are scored with the choir to add texture at important moments.

Extended techniques are applied to emphasize text, for coloristic effects, or to add to the texture. Descending glissandi in the voice parts are used to represent the word "fall." Often similar passages are found in one or more string parts (Example 18, on page 32).

The strings provide color through natural and artificial harmonics, alternate bowings (with the wood, at the point, or at the frog), tremolo in conjunction with alternate bowings or on a single instrument, pizzicato, and snap pizzicato. Textural effects include tremolo on multiple instruments with or without alternate bowings, as seen in measures 29-31 (Example 19, on page 33).

The piano is used, at times, for vocal support in this movement, but its main function is to provide color and texture. It contrasts the voices through the use of extreme ranges and inside-the-piano work with a depressed sustain pedal. The inside-the-piano passages call for the performer to pluck the approximate shape and rhythm. Measures 17-20 (Example 20, on page 33) also indicates to the performer to avoid duplicating pitches and to slowly brush the strings within a certain range without dampening them at completion.

Example 18, *Prayer Cycle:* "II. And So I Fall," measures 32-36

Example 19, *Prayer Cycle:* "II. And So I Fall," strings, measures 29-31

Example 20, *Prayer Cycle:* "II. And So I Fall," measures 17-20

Dynamically, the second movement is much more diverse than the first. Markings from *pianissimo* to *fortissimo* are used. Quick crescendos and decrescendos, as well as some unusual dynamics for the written ranges, increase the difficulty of the movement. Pitches in difficult dynamic areas may be taken down an octave as seen in measures 90-93 (Example 21, on page 34).

Example 21, *Prayer Cycle:* "II. And So I Fall," measures 90-93

One dynamically significant moment is found in measures 79-82 (Example 22, on page 35). The dynamic push in the voices, as well as the presence of melodic half steps, reinforces the enormity of the moment. When combined with the decrescendi in the strings, a bursting effect results as the voices overtake the strings as if the restraints have been broken by the intensity of the voices.

The second movement pitch content is based on the pentatonic collection consisting of three major seconds and two minor thirds. Assembled in crossword puzzle fashion, the collections are often found vertically and horizontally. Transpositions of the collection were chosen based on the desire for multiple common tones between the voices or the desire for the greatest number of differences between the voices. Intensely chromatic motion most often

occurs when different transpositions of the collection are used for each voice. These choices
were often based on the text, adding more dissonance during heightened moments of imagery
and more common tones during reflective passages.

Example 22, *Prayer Cycle:* "II. And So I Fall," measures 79-82

An interesting harmonic moment occurs on "I've sinned," measures 29-31 (Example 23, on page 37). The horizontal presentations of the pentatonic collection surrender to the vertical allowing for multiple minor seconds. The minor second descents found in the soprano, mezzo-soprano, and tenor lines are amplified by the entrances arranged from highest to lowest in the voices and instruments. Cross-voicing between the string and vocal parts also enhance these measures. The first violin, soprano, and piano parts are the exception. These parts correspond to a combination of pitches used in the three transpositions of the pentatonic collection: G A C D E, C-sharp D-sharp F-sharp G-sharp A-sharp, and D E G A B. The outlying pitch F, found in both the piano and cello lines, completes the chromatic scale and further emphasizes the significance of the musical and textual moment. The falling pitch also references the previous descent on "fall," and provides further text painting for "shame." The dynamics here are increased to create a depth of emotion and to punctuate the text and implied hopelessness.

An important instance of variation from the pentatonic collection occurs in measures 17-20 (Example 17 on page 30). The tentative half step up, in measure 18, as well as the dynamic inflection on the return to the original pitch, in measure 19, along with the continued half step descent and the decrescendo from measures 19-20, exemplifies the text of "I dare not rise." Although the men's vocal lines do not waver from the intended pitch collection, it is important to mention that as the upper voices stray from that collection, the tenor and baritone voices cross. As a result, the baritone performs the highest ending pitch of the phrase. While the baritone continues the upward motion on "my eyes," the effect is obscured by the tenor crossing underneath. The tenor's C-sharp would most likely be heard moving to the B in the baritone line.

Example 23, *Prayer Cycle:* "II. And So I Fall," measures 29-31

To add to the puzzle-like quality of this movement, it often takes all voices or a section of voices to complete one melodic thought. The first melodic line begins in the tenor line, is

continued in the baritone, and finally completed in the bass line. This technique is used throughout the movement to emphasize the text and create layered melodic lines, which require a group or all of the voices to complete. Example 24 illustrates one instance of this technique, showing the full melodic line (Example 24a) as well as the scored version for measures 8-11 (Example 24b).

Example 24a, *Prayer Cycle:* "II. And So I Fall," combined melody from 8-11

Example 24b, *Prayer Cycle:* "II. And So I Fall," measures 8-11

Another example of this melodic technique is found in the treble voices in measures 12-16 (Example 25, on page 39). The split melodic line is fairly apparent.

Example 25, *Prayer Cycle:* "II. And So I Fall," measures 12-16

In measures 8-11(Example 24b on page 38), common-tone pentatonic collections were intentionally used to promote unity between the lines, whereas example 26 demonstrates the more dissonant choices used to support the text. Four transpositions are used in example 24b: F G B-flat C D, C D F G A, B-flat C E-flat F G, and A-flat B-flat D-flat E-flat F. The first presentation follows the melody line in reverse, D C B-flat G F, while the other three are used in each voice respectively. The tenor line begins with the first three pitches of the reversed first collection, D C B-flat. The last three pitches, A G F, are found in the second transposition. The B-flat and A pitches are the only differences between the two, and the minor second descent emphasizes the word "bow" in measure 11. The baritone contains the pitches B-flat, G, F, C, which are common tones between the first and third transpositions, along with E-flat from the third transposition. The bass line features only the F from the original collection as a common tone to the retrograde of the final transposition, F, E-flat, D-flat, B-flat, A-flat, which coincidently contains the least number of common tones.

Measure 50 (Example 26, on page 40) uses all pitches of all transpositions except D-sharp and G-sharp on the word "shattering," with those two pitches present in the following word

Example 26, *Prayer Cycle:* "II. And So I Fall," measure 50

"littering." There are more common tones found in the transpositions used for "littering" since "shattering" is a more expressive and evocative word. "Shattering" is the height of pitch

complexity, so, once that moment has passed, a gradual influx of additional common tones between transpositions is desired.

Rhythmic complexity is also evident in example 26. The intricate interweaving of pitches to create the desired melody line inherently creates vocal entrances that are rhythmically more difficult. Entrances on off-beats emphasize the overall devastating and overpowering intention of the text.

Example 27 on pages 42 and 43 illustrates the frenetic energy that builds to the word "salvation." Overlapping text, melodic ideas, repetition of text and patterns, as well as dynamic extremes add to the frantic jumbling of ideas that become clear with the shared triplet half-note rhythms found in the male voices and lower piano lines on "salvation."

The second movement lacks the clear sectional division of the first movement. The phrase "And so I fall" acts as a connector between the stanzas and is used as a recurring motive to provide a structural starting point for each succeeding section. This eliminates the need for extensive transitional material between stanzas. Often a short one-or-two measure repeated harmonic, melodic, and/or rhythmic fragment serves as a transition to tie the lines and stanzas together (Example 28, on page 44).

Instrumental interruptions occur within, instead of between, stanzas to obscure traditional motion and divisions. The first interruption occurs in the strings on the last line of the first stanza to emphasize "I've sinned." In measures 20-26 (Example 29, on page 45), increased linear motion, dynamic motion, and the alternation between pizzicato fragments and arco tremolo pitches reinforce the anxious and frenzied emotions the text evokes.

Example 27, *Prayer Cycle:* "II. And So I Fall," measures 61-66

(Example 27, *Prayer Cycle:* "II. And So I Fall," measures 61-66, continued)

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Example 28, *Prayer Cycle:* "II. And So I Fall," measures 72-74

Example 29, *Prayer Cycle:* "II. And So I Fall," measures 20-26

The second interruption is four measures long and it consists of two string and two piano measures. Pitches in the string lines sink, moving away from the established pentatonic collection and allowing minor seconds to occur. Returning to a stricter formula, the piano re-establishes the pentatonic collection, although it occurred with a more fluid system of pitch presentation. A new transposition is chosen for each chord containing common tones between both chord and collection, as well as introducing new notes not heard in the previous chord (Example 30, on page 46).

The final interruption occurs between the second and third lines of the last stanza. This interruption allows the intensity from "restrained me" to fade and establishes a new sense of calm and peace in the final presentation of "And so I fall." The descent in the piano, measures 83-85, represents collapsing in relief. The final vocal statement ascends from bass to tenor before descending from soprano to alto, which reinforces the text and the main melodic and structural elements of the piece (Example 31, on page 47).

Example 30, *Prayer Cycle:* "II. And So I Fall," measures 35-38

The pervading element of this movement is the pentatonic pitch collection. Minor

seconds are used judiciously and only to illustrate the text or provide additional anxiety. The

text and its musical setting provide stability to the formal structure through the repeated phrase,

"And so I fall," much like the initial phrase in the first movement, "There is a garden." Without

significant transitions or cadences, the text dominates the formal division while the pitch

collection negates the desire for harmonic function. Rhythmic complexity is used to reinforce

the text. Additive melodic structures are found throughout the song and add to the intricate

rhythmic features, while also reinforcing the horizontal and vertical presentations of the

pentatonic collection.

Example 31, *Prayer Cycle:* "II. And So I Fall," measures 82-89

5. PRAYER CYCLE: III. WE ASK

We ask You Lord to give us peace
before we lay our heads to sleep.

We ask for health for those we love,
we ask it from You Lord above.

We ask for dreams of sun and rain,
dreams meant to soothe away all pain.

O Lord please take and hold me tight,
keep me safe all through the night.

"We Ask," a prayer of peace, is the third prayer in the cycle. The goal for this movement was to achieve a juxtaposition of child-like simplicity in both the text and music with more sophisticated contrasting sections for piano only. Written for children's choir, and with these goals in mind, the original text incorporates simplicity in language and imagery, and it is structurally a single verse of four couplets. This basic poetic form was chosen, expressly with a children's choir piece and prayer in mind, to support a simple melody line.

The elements used in this movement were specifically chosen to highlight its place within the cycle. Surface level simplicity allows the listener a moment of peace before the fourth movement which is a prayer of helplessness. Sweetness dominates the overall sound as well as the text, creating a unique listening experience, especially when heard as a movement of the cycle instead of an independent piece.

A simple preparation is optional in the piano part to further the macro-design of increasing complexity. The top two octaves of the piano may be prepared with empty drinking glasses of varying sizes and substances. Glass or crystal is the most effective, with varying sizes

and shapes including tumbler, goblet, and wineglasses. A dense chink-like sound is highly

desirable. Layering sizes of glasses or staggering shapes will create more unique sounds.

Structurally complex and implying many types of formal constructions simultaneously,

this movement is most simply understood as a highly developed and ornamented two-part form.

The music box sections, consisting of only the piano, contrast with the simple vocal passages. It

is important to discuss not only how the repetitions of each grow similarly, but also how the

individual repetitions transform as the movement progresses. The analysis of this movement will

therefore be discussed primarily in terms of formal development rather than individual categories

referencing the whole.

There are five occurrences of the opening piano figure, hereafter referred to as the music

box figure, first found in measures 1-6 (Example 32).
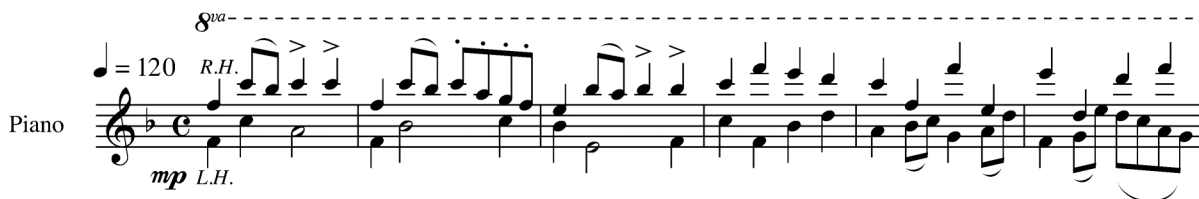
Example 32, *Prayer Cycle:* "III. We Ask," measures 1-6

The conventional chord progressions, steady lilting rhythms, and singable melody line contribute

to the music box sound. Staccati, ties, and accents further provide textures that are increasingly

complex throughout the movement. The final music box figure, however, becomes more lyrical

and less punctuated by staccato and accents. More traditionally phrased than previous melodies

found in the cycle, this section is comprised of a two-bar phrase repeated sequentially. Alterations, along with a two-bar addition, create a melodic motion back to the original key. Although not as conventional, this six-bar phrase is repeated again with slight alterations including a slight cadential extension in preparation for the children's entrance on measure 13.

  The second occurrence of the music box figure, measures 19-22 (Example 33), is a shortened, four-bar interruption between the first and second couplets. The presence of dotted eighth-sixteenth note figures adds to the highly rhythmic quality of the movement, while it indicates a slight breakdown of the more traditional elements. A two-beat shift of the figure also perpetuates the developmental feel between vocal entrances.
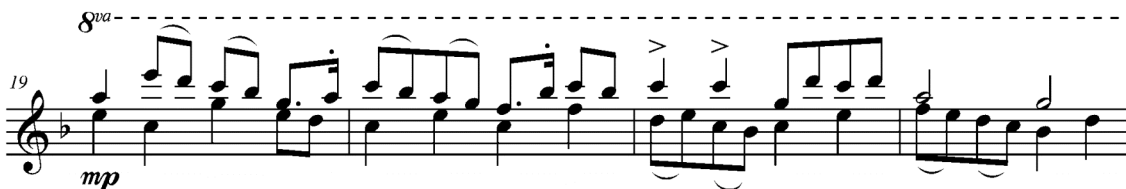
Example 33, *Prayer Cycle:* "III. We Ask," measures 19-22

  The third example of the music box figure functions as a modulating transition between couplets two and three. Harmonically, this presentation moves from the original key, F major, to the chromatic-third related key of A-flat major. The shape and rhythm of this repetition is further embellished by more complex triplet groupings. The main motive, as shown below (Example 34, on page 51), is developed through sequential repetitions that begin before the final note of the motive is struck (Example 35, on page 51).
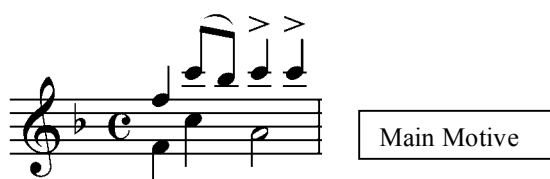
Example 34, *Prayer Cycle:* "III. We Ask," main motive, measure 1

Example 35, *Prayer Cycle:* "III. We Ask," measures 28-35

The fourth replication of the music box figure includes the first instance of four sixteenth-note groupings, further obscuring the original structure while maintaining the overall feel of the music box figure. The chromatic-third relationship is again important as A-flat major moves back to the original key of F major. The accidentals found in measures 47-50 (Example 36, on page 52), smooth the transition by creating secondary dominant motion through leading tones to the dominant, as well as a scalar descent from scale degree 5 to 1 in F. The D-naturals complete a B-flat major chord in measure 48, which in A-flat is a V/V. The chord does not resolve to V,

but it repeats a similar structure in measure 49 in which the V/V chord preceeds a direct

modulation that passes through an F-minor chord, vi in A-flat, before the return of the original

tonic, F major, in measure 50. The melodic descent from the dominant to tonic scale degrees is

paramount to the return to F major. The original motive, although slightly altered, returns in

measure 53 (Example 37). This repetition is found in the original key, and this is important since

the motive is only implied in the modulated passage.

Example 36, *Prayer Cycle:* "III. We Ask," measures 47-50

Example 37, *Prayer Cycle:* "III. We Ask," measure 53

The A-flat and A-natural, both present in measure 55 (Example 38), are reminiscent of the third relationship motion from F major to A-flat major or its inverse. A parallel and relative relationship exists between these chords, identified as PR by Riemannian theorists, it is necessary to move through F minor using the parallel function found in measure 55.[24] This motion is noteworthy as the lines between F major, A-flat major, and F minor are crossed, implied, and re-established, creating another level of harmonic complexity between the two transformations between F and A-flat, first parallel, then relative motion.
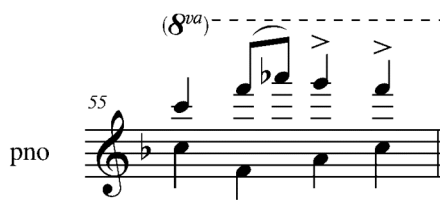
Example 38, *Prayer Cycle:* "III. We Ask," measure 55

The final presentation of the music box figure occurs as a coda. Beginning as a direct repetition of the original figure, accidentals are introduced to imply the previously developed tonal area A-flat without sacrificing the driving rhythmic force. Harmonically, this passage by ending on an F-minor harmony heightens the ambiguity between F and A-flat. The main motive is found in the original presentation at measure 65 and 71, along with the sequenced repetition at measure 67 (Example 39, on page 54).

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[24] Hyer, 107.

Example 39, *Prayer Cycle:* "III. We Ask," measures 65-74

The vocal melody spans an octave and emphasizes the leap of a fifth. The first couplet is repeated at the end of the movement with the second line of the couplet augmented to half notes instead of quarter notes. Although the melody lines are similarly shaped, some measures are varied for melodic interest in an otherwise repetitious melodic line. Harmonically only tonic and dominant chords accompany the first couplet (Example 40).

Example 40, *Prayer Cycle:* "III. We Ask," measures 13-18

Rhythmically identical, the second couplet begins in the same way, but it is altered to end on the tonic while keeping a similar shape. The accompaniment is slightly more interesting due to ornamentation, and joins the two phrases, without the music box figure, and it creates a closing motion for the resulting period (Example 41).

Example 41, *Prayer Cycle:* "III. We Ask," measures 23-28

The third and fourth couplets are presented seamlessly and in A-flat major instead of F major. The melodic shapes are similar to the previous appearances, and are similar to the first two harmonically, in that the third aligns most closely with the more traditional harmonic progressions found in the first couplet. The fourth couplet expands those harmonies to include more colorful and transitional harmonies, as well as quicker chord changes due to the divided rhythms. Perhaps the most significant change is the addition of a lower voice as seen in Example 42 on page 56.

The two-part vocal approach continues through the first line of the repeated couplet, while the second line is rhythmically augmented to emphasize the word sleep and reach the

cadence. The harmonies remain simple, as they are in the initial statement of the first couplet. Although there is no repetition of the original text, it is musically necessary to complete the return to the original key and give harmonic closure to the movement as evidenced in measures 57-64 (Example 43, on page 57).

Example 42, *Prayer Cycle:* "III. We Ask," measures 36-47

Example 43, *Prayer Cycle:* "III. We Ask," measures 57-64

The dynamics were chosen to allow continued shaping in the vocal while maintaining a solid sound in the piano lines. Each couplet is increased by one dynamic level until a crescendo to *forte* in measure 43. A decrescendo to *piano* is found at the end of the same couplet, and it is followed by *mezzo piano* to *piano* in the last couplet. The flat dynamic presentation of the piano lines further signify the correlation between the music box figure and a child's wind up music box which has little to no dynamic changes.

Although aurally simple, this movement does contain many interesting possibilities for further study. The evolutionary process of development allows for increasingly complex rhythms in the piano part as well as an added harmony in the vocal line. Third relationships are extremely important and the second half of the movement modulates to the flat third major triad of the original major key. The third relationship is expanded through the ambiguous tonality found in the latter half of the movement where parallel keys F major and minor are sounded simultaneously.

6. *PRAYER CYCLE: IV. WAITING*

Please help her heal
Please help her live
Please make her whole
Please make her well again

Piece back her bones
Piece back her body
Piece back our hearts
Piece back our souls

God give us strength
To face uncertain days
God give us peace
When all that's left is a haze

from **What A Friend We Have In Jesus**: *in his arms he'll take and shield thee*
from **It Is Well**: *when sorrows like sea billows roll*
from **In The Garden**: *but he bids me go; through the voice of woe*

"Waiting," a prayer of helplessness, is the center of the prayer cycle. The movement focuses on electronic manipulation, and it represents the exhaustion and confusion that follows a major catastrophe. "Waiting" is found in the blur between reality-based sounds and dream like sounds that represent the state of mind while waiting for days, often weeks, in an Intensive Care Unit waiting room. It also utilizes sounds from inside a trauma unit.

The original texts are written as three separate segments. Each section should be presented differently. The first is scored as whispered texts repeated at will. The second and third sections are prayers, the first of which may be split between two or more performers and the last recited by one person.

Popular hymn fragments are used to add to the building cacophony of sound. The soloist is encouraged to choose any key for ease of performance. These fragments do not require permission since all three are in public domain. Written prior to 1923, the three hymns quoted

are: *What a Friend We Have in Jesus,* music by Charles Crozat Converse in 1868 with words by
Joseph Medlicott Scriven circa 1885;[25] *In the Garden* by Charles Austin Miles in 1913;[26] and *It
is Well with My Soul* with music by Philip Paul Bliss in 1876 and words by Horatio Gates
Spafford in 1873.[27]

   Short melodies and extended techniques are found in the piano and string lines. Inside-
the-piano passages (Examples 44 and 46, on page 60), as well as varying unmeasured tremoli on
harmonics (Example 45), are designated in the score. The techniques are notated with short
explanations as to the desired sound (Example 44-46).
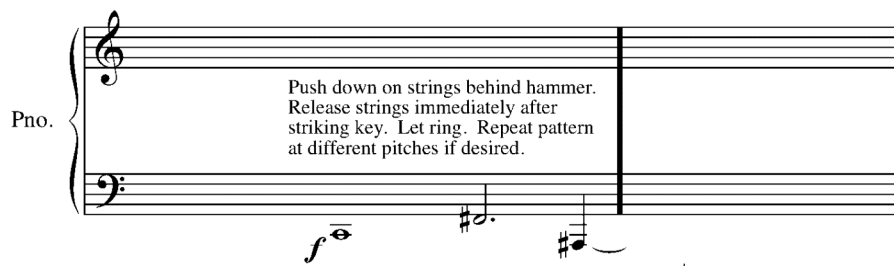
Example 44, *Prayer Cycle:* "IV. Waiting," :13-1:11
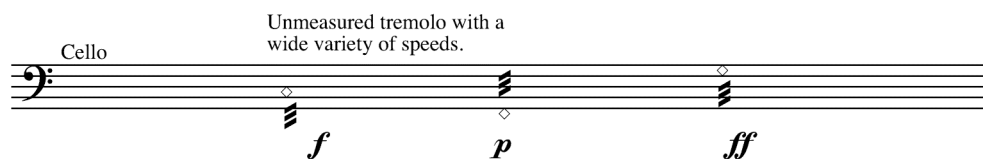
Example 45, *Prayer Cycle:* "IV. Waiting," 1:29-2:31

[25] Robert J. Morgan. *Then Sings My Soul: 150 of the World's Greatest Hymn Stories.* Nashville: Thomas Nelson Inc., 2003, 131.

[26] Morgan, 271.

[27] Morgan, 185.
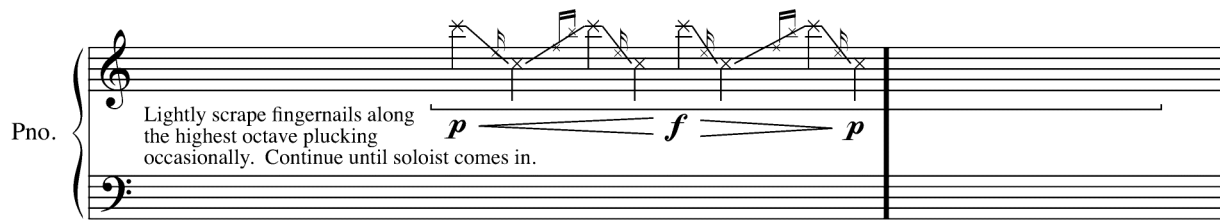
Example 46, *Prayer Cycle:* "IV. Waiting," 2:31-2:45

A Max/MSP patch supports real-time recording, processing, and playback of interactive elements involving the strings, piano, soloists and adult choir. Textures are layered over an electronic track, which was the first completed element of the piece. Initial sound sources include car and hospital noises, piano pitches, and bell sounds, all processed and combined in Avid's ProTools[28].

The Max/MSP patch is crucial to every aspect of the piece, particularly including its construction and formal design. The most important role of the patch is to construct overlapping layers to create sound mass sections and perpetual motion. A technician records certain sounds within an approximate time frame using the graphic user interface.[29] The instructions are given in the patch window along with the user interface (Example 47, on page 61).

The electronic track was designed around a formal outline that includes the desired interactive elements. Segments are divided into major sections and transitional material. Electronic sounds that imply real life are used in transitional sections, while more dream-like sounds are used for sectional material. Major sections record prayers and instrumental figures, while transitions contain song segments as well as short instrumental lines. A breakdown of the

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[28] Avid's ProTools is a digital audio workstation that provides an environment for audio recording and editing.

[29] A graphic user interface allows the user to interact and control certain parameters within an interactive program environment.

formal divisions can be found in Table 1, showing the sounds on the electronic track and the

sound-files to be processed for playback during the section. The recapitulation layers all of the

sounds within the movement to create continuing waves of repeated sound and a slow

withdrawal as the sounds evaporate out of the mix.
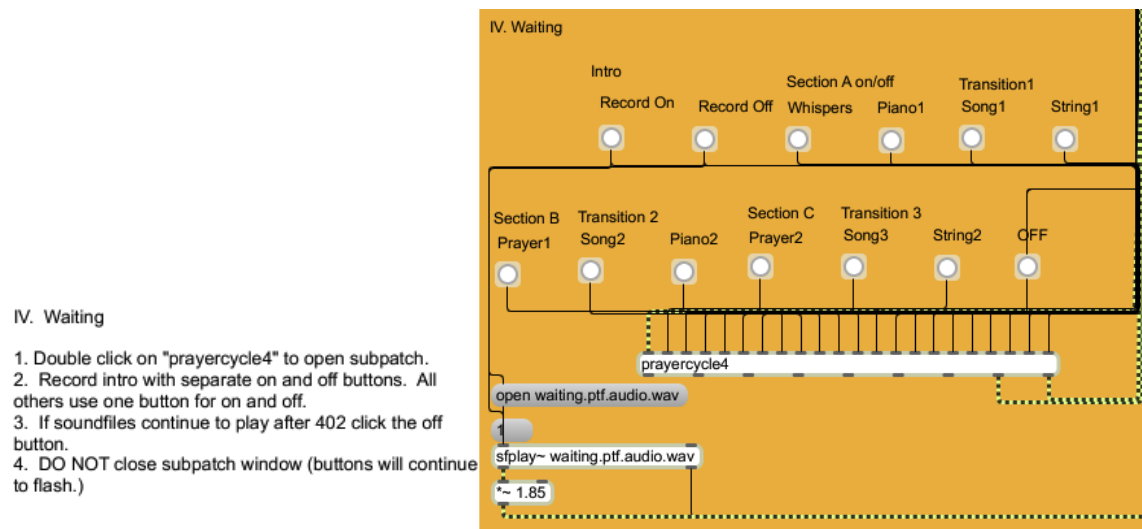
Example 47, *Prayer Cycle Mater Patch*, section IV

Table 1, *Prayer Cycle: IV. Waiting*, formal divisions

Segment	Time	Recorded	Process/Playback	Electronic Track
Intro	:00-:13	Soloist "hello?"	Hello at 9 seconds	Car/Hospital
A	:13-1:11	Whispers Piano1	Hello at 14 Whispers Piano1	Longer dream-like sounds
Transition 1	1:11-1:29	Song1	Hello Song1	Car/Hospital
B	1:29-2:31	Prayer1 String1	Whispers Piano1 Prayer1 String1	Longer dream-like sounds

Transition 2	2:31-2:45	Song2 Piano2	Hello Song1 Song2 Piano2	Car/Hospital
C	2:45-3:47	Prayer2 String2	Whispers Piano1 Prayer1 String1 Prayer2 String2	Longer dream- like sounds
Transition 3	3:47-4:03	Song3	Hello Song1 Song2 Piano2 Song3	Car/Hospital
D	4:03-5:48		All except Hello	All
Recap	5:48-6:42		Slowly weed out all	Car/Hospital

Once triggered, the sound-files continue to fire, randomly changing the direction and speed of each individual sound-file. The [select] function is used along with a [metro] and [counter] to stop the repeating sound-files (Example 48).


```
select 243 348 352 360 370 380 390 400 402
```

243 starts whispers
348 starts hello
352 stops prayer1
360 stops prayer2
370 stops song 1 and piano2
380 stops song 2 and string2
390 stops song 3 and string1
400 stops whispers and piano1
402 stops hello and stops metro
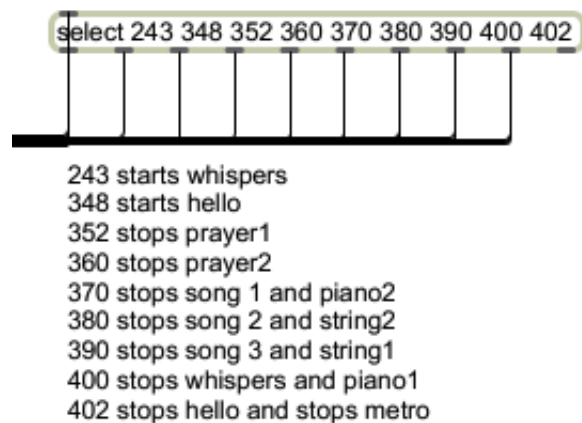
Example 48, subpatch *prayercycle4*, [select] object sound-file controls

Three different subpatches[30] process the sound-files. The first subpatch, *variable4*, is only used to process "hello." Six different processes are available to alter the file and are chosen randomly: forward at original tempo, backward at original tempo, forward at half speed, backward at half speed, forward at double speed, and backward at double speed. When the subpatch is triggered, a [gate] opens and the sound-file is processed repeatedly with random delays to create varied spaces between playbacks (Example 49).
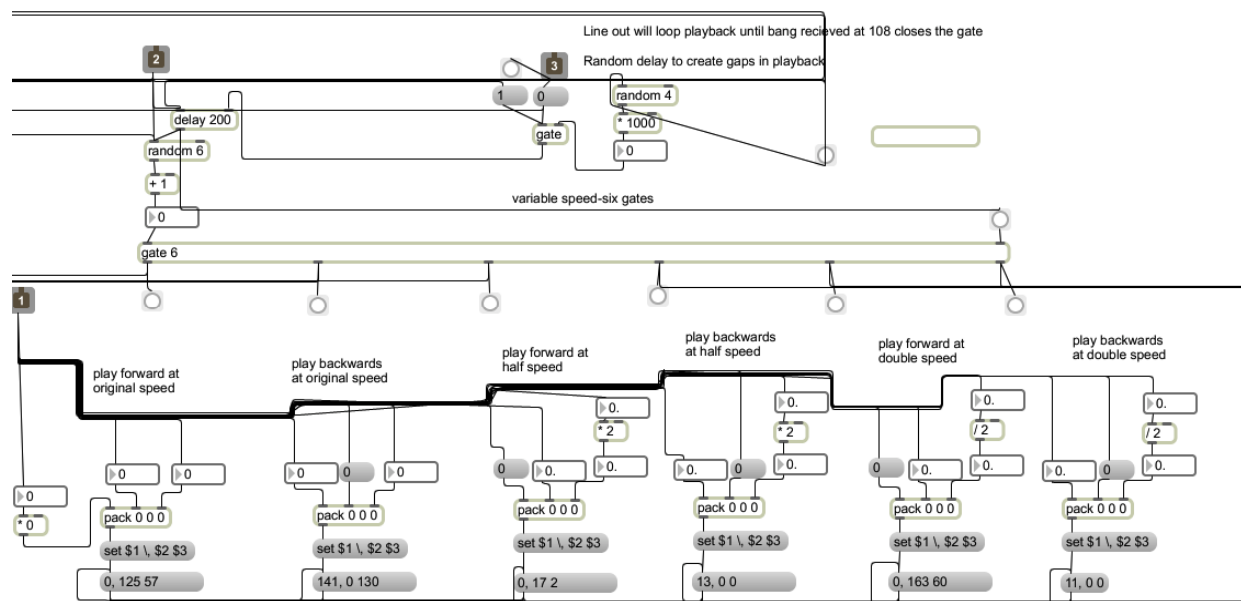
Example 49, subpatch *variable4*, alteration operations

The second subpatch, *variable4-1*, reduces the operations to four possibilities: forward and backward at the original speed, and forward and backward at half speed. The third sub-

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[30] In Max/MSP, subpatches allow for secondary operations outside the primary patch window. In Prayer Cycle, subpatches are used to change the length and direction of the sound-file.

patch, *variable4-2* (Example 50), expands the processing possibilities. The first six gates remain

the same as in *variable4*, with additional file length processing providing more randomly chosen

processing options. The last two gates use the random object along with the [select] object to

choose one of the previous processes, resulting in more random activity and less human control

over the activated sounds.
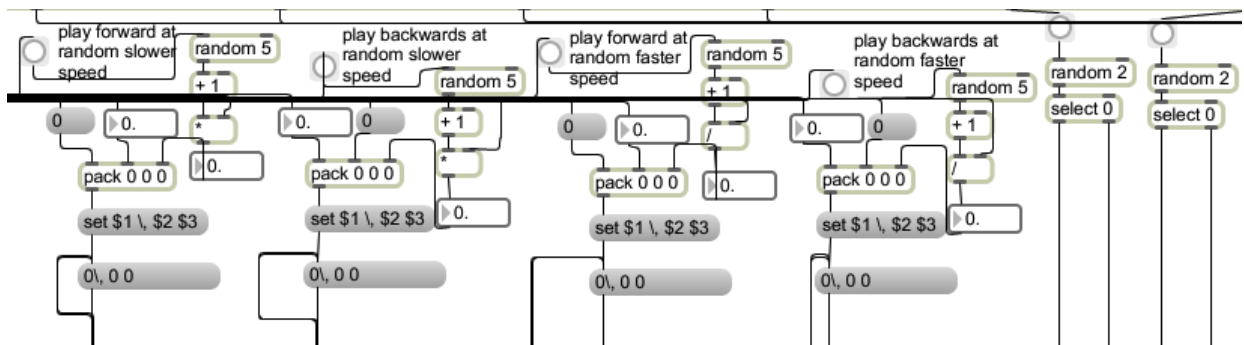
Example 50, subpatch *variable4-2*, gates 6-12 alteration operations

An operation is included in the Max/MSP patch to control panning[31], while the

stereophonic electronic track contains much more active panning to fully utilize the performance

space. The live acoustic instruments and voices also contribute to spatial complexity of the piece

through their stationary position within the sound field, while the respective recorded sound-files

enter the sound field in random positions due to the panning operation (Example 51, on page 65).

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[31] Panning refers to the placement of a particular sound at a specific location within the available sound field.
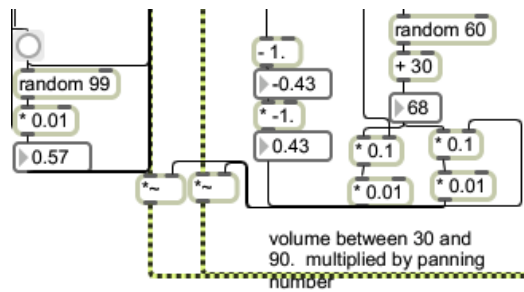
Example 51, subpatch *prayercycle4*, panning operation

The complexity of the sound in this movement is also found in the formal structure, acoustic materials, and Max/MSP processing. Real-time recording is preferred over a standardized format to allow a unique performance each time the piece is performed. The benefits of real-time recording and playback are unified sound quality, including the language and accent of the performers. Creating larger and larger motions and volume of sound, to an overwhelming degree, is highly desired. Louder volumes, pushing to the edge of too loud, are preferred over softer settings. The large-scale push to the culminating section D, and then to the recapitulation, correspond to the macro-design of increasing complexity throughout the piece.

7. PRAYER CYCLE: V. HEAVY

Heavy eyes and heavy hearts,
alone with my heavy thoughts.
I lift her up as I sink down.
The weight of the world
I give to your blood-soaked crown.

There are no words,
coherent thoughts or prayers.
I sit alone, oh, deep despair.

I need your dam to stop my tears
before I drown in all my fears.

A prayer for strength, "Heavy" is the fifth song in the cycle. Although the movement can stand alone as a separate prayer, if desired, the true impact of the piece is only felt when it follows the previous movement(s). The text was written during the pre-dawn hours at Wake Forest University Baptist Medical Center, while the composer was in the Intensive Care Unit waiting room. There comes a moment, after days of intense emotional trial without any significant rest, when the body is drained of all energy and the mind is so scattered and cluttered that the soul has to give up fighting. It was in such a moment, somewhere in the all too quiet hours, lying across two unyielding chairs in a room perpetually lit by overheard fluorescent lighting, that the text was written. Heavy, sink, weight, despair, and drown were all words specifically chosen to recreate the utter depletion of that moment, and the desperate cry in the night for the strength to face the next day.

The movement is scored for medium-voice solo and string quartet. The abrupt texture change between this and the previous movement reinforces the emotional change from a prayer

of helplessness to a prayer for strength. Glissandi in the vocal line, as well as extreme dynamic changes, reinforce the emotion portrayed in the text.

The string parts stand in direct contrast to the vocal lines. Spiccato bowings and pizzicato passages contrast with the long melodic vocal passages. Glissandi in the string parts, however, provide continuity and connection.

Rhythmic motion is the most important feature of this movement. Distinct rhythmic changes in the strings control formal divisions, while the vocal rhythms remain constant throughout. The basic formal structure is determined by a quick-slow-quick-slow rhythmic pattern with changing tempi. The first section, through measure 24, is comprised of eighth-and sixteenth-note patterns at quarter note equals 100. A ritard in measure 24 slows the tempo to quarter note equals 60, with the micro rhythms expanding to longer note values and more fluid lines.   Beginning in measure 48, the rhythms again speed up within the given tempo, becoming more complex and frenzied again with the inclusion of eighth-note triplet figures. An accelerando in measure 54 and a return to the original tempo of quarter note equals 100 follows in measure 55. The tempo slows yet again to quarter note equals 60 in measure 61 with the rhythms expanding to mainly quarter-note values or longer.

Large-scale sound changes correspond to the formal divisions. The initial quick spiccato rhythms are combined with sets emphasizing the minor second. A massive sound change occurs in the second segment where more fluid lines hint toward many small-scale roving tonal areas. The third segment, which returns to faster rhythmic activity, is more texturally complex due to multiple, simultaneous rhythmic and melodic patterns. These patterns emphasize minor seconds and tritones before returning to melodic structures reminiscent of the first section. The final slow section emphasizes continual motion and constantly changing harmonies that are more polytonal

than tonal. Glissandi found in measures 63-66 reorient the ear to the voice part, which returns in measure 68.

For most of the movement, melodic content and motion are given preference over harmonic consideration. The vocal line is designed around the text. There are three forms of melodic content: the first based on the set [016], the second projecting small-scale tonal areas, and the third containing step-wise collections separated registrally, through octave displacement. The first line of text (Example 52) is scored using a melody that is constructed of the set [016].[32]

Example 52, *Prayer Cycle:* "V. Heavy," measures 1-2

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[32] Straus, 52.

The second line of text also uses [016] along with a similar melodic shape (Example 53). More importantly, the set is reinforced following the text in measures 12-14 in the longer values of the string parts (Example 54, on page 70).

Example 53, *Prayer Cycle:* "V. Heavy," measures 3-5

The second melodic structure, found in the second formal division, is signified by slower string rhythms. Tonal areas are projected through leading tone motion and phrase shape (Example 55 on page 70 and Example 56 on page 71). The melodic lines most often imply C major or G major tonal areas through arpeggiation or leading tone motion on significant pitches. This idea continues to the final couplet. The fourth line projects G major most succinctly, with the first phrase winding around G and the second phrase outlining D major with inverse melodic contours.

Example 54, *Prayer Cycle:* "V. Heavy," measures 12-14

Example 55, *Prayer Cycle:* "V. Heavy," measures 38-41

Example 56, *Prayer Cycle:* "V. Heavy," measures 42-45

The final couplet of the text emphasizes major and minor seconds. The first phrase contains the pitches D, C, B, E, and the second continues in similar fashion with A, B, G, F-sharp. While both are forms of the set [0,1,3,5], the set is not developed as the [0,1,6] set discussed previously. Contrasting melodic shapes, first an arch then a zigzag, further disguise the pitch relationships through octave displacement (Example 57, on page 72).

While there are no proper functional harmonic progressions, there are moments where harmonic motion is more significant than any implied melodic motion. Two specific areas occur, the first in measure 32-38 (Example 58, on page 72) and a similar passage from measure 77 to the end of the movement. These harmonies imply polychordality through quartal and quintal structures, which, at times, contain tritones instead of perfect intervals.

Figure 57, *Prayer Cycle:* "V. Heavy," measures 68-72

Figure 58, *Prayer Cycle:* "V. Heavy," measures 32-38

Harmonic ambiguity, changing melodic and pitch structures, and intense rhythmic motion are used in this movement as structural delineation for formal division. Additional rhythmic complexity is achieved through contrasting durations in the vocal line. This is reflected through slower rhythmic motion in the faster sections and faster rhythms in the slower sections. Glissandi in the less complex rhythmic passages, as well as more exposed individual melodic lines in the strings, add to the continuing development and increasing complexity within the prayer and the cycle.

8. *PRAYER CYCLE: VI. I FIND HOPE*

Psalm 62:5
Find rest, O my soul, in God alone;
My hope comes from him.
He alone is my rock, my salvation.

Psalm 33:20-22
We wait in hope for the Lord;
He is our help, our shield.
In Him our hearts rejoice,
May Your unfailing love rest upon us, O Lord,
as we put our hope in You.

Original Text
I find hope in the light from the woods.
In the sunlight after the rain,
In the quiet empty spaces,
I find hope.

The sixth prayer, "I Find Hope," is, as the title suggests, a prayer of hope. The text consists of biblical quotations and paraphrases from Psalm 62:5 and Psalm 33:20-22, as well as original text by the composer. Juxtaposition between biblical passages and secular imagery creates a dichotomy that is paralleled by the musical settings. Musical similarities and borrowings from the previous prayers also play an important role in the development of the movement and its placement within the cycle.

An eight-part adult choir with soloists is supported by the string quartet and piano. The choir expands from a unison pitch, to four-, six-, and finally an eight-part choir as the lines gain independence. Similarly, the original text is initially set with solo lines, which, through repetition, expand to full choir.

Piano textures range from lush constructions of multi-voiced lines to single-note passages. Recurring tremolo sections in the strings and piano are added for texture to the more

traditional accompaniment figures. The string section is used in both transitional and accompaniment figures, employing pizzicato, snap pizzicato, tremolo, bowings such as *sul tasto*, and natural and artificial harmonics. Transitional material is presented both by individual instrumental groups as well as various combinations.

The musical setting of the phrase "I find hope" provides a motive that is found throughout the movement. This three-note motive is taken from the first three notes of the melody for the original text found at measure 17 (Example 59). This melody is structurally similar to the children's melody from the third prayer (Example 60), as well as the music box figure in Example 36 on page 52, which is a slightly embellished form of the "I find hope" motive. Found throughout the movement, its presence continually reiterates and refocuses the musical material of hope even in the most dissonant choral sections (Example 61, on page 76).
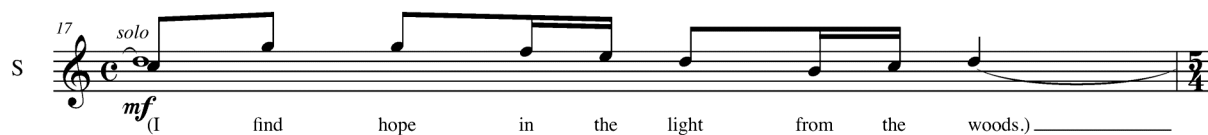
Example 59, *Prayer Cycle:* "VI. I Find Hope," measure 17

Example 60, *Prayer Cycle:* "III. We Ask," measures 13-14

Example 61, *Prayer Cycle:* "VI. I Find Hope," measures 39-40

The perfect fifth leap is the first interval heard in the movement. A layered melodic structure reinforces the perfect fifth through B-flat-F, F-C, C-G, and finally G-D (Example 62, on page 77). Layering is originally found in the first movement, measures 48-49, and is used six times in the sixth movement (Example 63, on page 77). The opening piano structure of perfect fifth additive motion is repeated five times as transitional material and once, in measures 33-36, as a layered constructional technique without intervallic repetition. The latter instance serves as pitch preparation for the first full octatonic presentation by the six-part choir (Example 64, on page 78).

Example 62, *Prayer Cycle:* "VI. I Find Hope," measures 1-5

Example 63, *Prayer Cycle:* "I. There Is a Garden," measures 48-49

Two key transitional passages, measures 12-14 (Example 65, on page 79) and measures 57-61 (Example 66, on page 79), rely on a repeated string motive. This segment contrasts sharply with surrounding material due to the inclusion of pizzicato and more rhythmically

complex passages. The "I find hope" motive is built into the structure and is more prominent in the second repetition, which is joined by the fifth occurrence of the multi-voiced piano material.

Example 64, *Prayer Cycle:* "VI. I Find Hope," measures 33-36

Example 65, *Prayer Cycle:* "VI. I Find Hope," measures 12-14

Example 66, *Prayer Cycle:* "VI. I Find Hope," measures 57-61

The biblical text in this song is divided into six sections as well: three segments for Psalm 62:5, and three segments for Psalm 33:20-22. The biblical settings and original text are contrasted using pitch collections and more tonal material. To further delineate between the biblical settings, the number of voices and the collections assigned for each biblical passage expand throughout each passage. The first quotation, Psalm 62:5, employs a traditional four-part choir and uses the pitch collection [0167], which is a subset of the octatonic scale. The second quotation, Psalm 33:20-22, expands to a six-tone pitch collection, [013467], which is also a subset of the octatonic collection. The full octatonic collection is found when the choir size increases to eight parts, [0134679t].

The first vocal entrance in measure seven (Example 67, on page 81) includes two transpositions a perfect fourth apart. There are two common tones between the transpositions, C and F-sharp. The tritone, perfect fourth, and perfect fifth are emphasized throughout the vocal lines. The soprano line contains a large-scale motion from C up to F-sharp, then back down to C-sharp, emphasizing the tritone and perfect fourth. The soprano line is also comprised of the three prevailing intervals. The small-scale structure of the melody line contains three perfect fifths, a perfect fourth, and a tritone. This is similar to the outside arch of all of the lines, which emphasize the tritone, perfect fifth, and perfect fourth.

The set [0167] is expanded in the piano and first violin lines in measure 33 (Example 64 on page 78), before the voices enter on the same pitches in measure 34. While the rhythms are different for each of the six voice parts, the pitch content remains the singular prime form of an expanded subset from the original collection. This structure, [013467], is presented in prime form built on C. As each voice enters, the starting pitch is determined by its location within the

structure. The alto line, therefore, joins the soprano, tenor, and bass beginning on the D-sharp

instead of the C.

Example 67, *Prayer Cycle:* "VI. I Find Hope," measures 7-11

There is a two-measure interruption in measures 41-42 (Example 68, on page 82) which

connects the six-part and eight-part choir passages. This interruption contains modified versions

of the "I find hope" motive. The rhythm remains the same, but the pitches are altered. There are

three repetitions of two-voiced presentations of the text "I find hope." The first presentation

contains the set [013467] when the soprano and alto lines are combined. The second references

both the original subset [016] in the bass 2 line and the expansion [013467] with the subset [014]

in the bass 1 line. The third repetition contains the same pitch set as the bass voices.

An eight-part choir and the full octatonic scale are found in measures 43-48. All three

possible transpositions for the octatonic scale are used: prime form in measures 43-44, the first

transposition in measures 46-48, and the second in measure 48. Example 69 on page 83 shows

the prime form octatonic collection in the voice parts at measures 43-44.

Example 68, *Prayer Cycle:* "VI. I Find Hope," measures 41-42

As stated, the T1 of the octatonic's prime form is found in measures 46-48 (Example 70,

on page 84). This passage also includes the melodic voice transfer that was first seen in the

second movement. Using this technique often takes all or a section of voices to complete one

melodic thought (Example 24b on page 38). T2 is quickly realized in the last beat of measure

48, which is shown as part of the T1 in example 70 on page 84.

Example 69, *Prayer Cycle:* 'VI. I Find Hope," measures 43-44

Example 70, *Prayer Cycle:* "VI. I Find Hope," measures 46-48

A modified pitch collection follows in measures 49-51 (Example 71, on page 86). The A-flat found in the T2 transposition of the octatonic collection is altered to A-natural. This alteration allows for a descending perfect fifth line in the first soprano line from A to D. Although many tonal structures are possible with the octatonic collection, the vertical harmonies created through the modified collection imply D phrygian through the outlying melodic pitches, the predominant E-flat, and the inclusion of multiple D-minor chords. The minor sonorities act as a return to hope as the "I find hope" motive implies by the perfect fifths. This idea is further developed through the "I find hope" motive in both the strings and piano. Structurally, this break from octatonic motion found in measures 43-48 is guiding the ear to the more tonal passages found in the contrasting vocal sections.

The original text is initially stated by four soloists, one voice per line of text. Upon repetition, the choir joins the soloists and the vocal sections are combined. While the text is repeated in some form or fragment four times, the first statement contains the soprano section only (Example 72, on page 87). The third statement uses three parts (Example 73, on page 87), but is interrupted by the layered material in the strings and piano (not shown). Although the bass part is only implied, the truest form of the original line is found in the second presentation, measures 26-33, with the second violin finishing the line in measure 32 (Example 74, on page 88). The final repetition occurs in measures 70-79, stated as a full four-part choir (Example 75, on page 89-90).

This melody implies C major, an implication reinforced by the supporting harmony. The initial soprano melody ascends the perfect fifth like the "I find hope" motive. The ending chord in measure 79 (Example 75), references the starting vocal pitch, where, in measure seven, the soprano, alto, and tenor begin on a unison C (Example 76, on page 91). Further, the half cadence

85

on a G major chord in measure 77 reinforces the eventual C major resolution with an A in the

tenor to provide color to the otherwise dominant-tonic motion.

Example 71, *Prayer Cycle:* "VI. I Find Hope," measures 49-51

Example 72, *Prayer Cycle:* "VI. I Find Hope," measures 17-18

Example 73, *Prayer Cycle:* "VI. I Find Hope," measures 61-63

There are four basic textures that create the shape and form of this movement. The beginning compound melody found in the piano, the pizzicato string material, pitch collection vocal passages on biblical text, and tonal vocal passages used to set the original text. Formally ambiguous, the block sections provide guidelines for performance and analysis. The contrasting vocal segments, more tonally stacked at the end of the piece, emphasize the "I find hope" motive as well as the emotional evolution in the cycle as a whole. One way of analyzing this movement reveals a swell of dissonance that is interrupted and eventually overtaken by the tonal vocal passages. The tonal moments can be viewed as moments of repose before the final movement.

Example 74, *Prayer Cycle:* "VI. I Find Hope," measures 26-33

Example 75, *Prayer Cycle:* "VI. I Find Hope," measures 70-79

(Example 75, *Prayer Cycle:* "VI. I Find Hope," measures 70-79, continued)

Example 76, *Prayer Cycle:* "VI. I Find Hope," measures 7-8

9. *PRAYER CYCLE: VII. FIND THE LIGHT*

The stars and moon were sent
to guide me from the night
to find the morning, to find the light.
I will celebrate the sun, so holy so bright.
I will reach for the morning,
the breaking of light.

Psalm 54:6-7
I will praise Your name, O Lord, for it is good.
For He has delivered me from all my troubles,
and my eyes have looked in triumph on my foes.

We ask for dreams of sun and rain,
dreams meant to soothe away all pain.

Psalm 46:4-6
There is a river whose streams make glad the city of God,
the holy place where the Most High dwells.
God is within her, she will not fall;
God will help her at break of day.
Nations are in uproar, kingdoms fall;
He lifts his voice, the earth melts.

The final prayer, "Find the Light," is one of celebration. The original text includes a newly composed hymn tune that is performed by the soloist at the beginning and end of the movement. A short segment from the third movement involving the children's choir, or a recording of the children's choir, is found between the two biblical passages. Psalm 54:6-7 was chosen for its triumphant tone, as well as the emphasis on words "praise," "delivered," and "triumph." Psalm 46:4-6 was chosen as much for the imagery that corresponds to the imagery found in the original text from the sixth movement, as for the enormity of the power it projects.

This movement is scored for medium-voice soloist, SATB choir, children's choir (or recording, if not practical), string quartet, piano, and electronics. This prayer combines elements

from all of the previous prayers. A Max/MSP patch alters and plays back sound-files archived earlier in the piece.

The texts are each presented in a unique way. The soloist is encouraged to choose his/her own starting pitches, and the newly composed hymn tune is centered on the natural minor, which is D natural minor as written (Example 77).

Example 77, *Prayer Cycle:* "VII. Find the Light," :30-2:00

The setting of Psalm 54:6-7 references a section from the first prayer of the cycle, "There is a Garden" (Example 78, on page 94). The repeat of the music in measures 66-83 is combined with the new text (Example 79, on page 94).

The children's choir section begins at 4 minutes and 30 seconds into the final movement. This section is an exact replica of measures 28-41 in the third movement, except that the piano continues for eight-bars without the children in the seventh movement. In the event a children's choir is present for the third movement of the cycle, but not available for the last movement, there is a section on the master patch to record the selected phrases (Example 80, on page 95). If the movement is performed individually from the other movements, a pianist may play the children's choir section without vocalists.

Example 78, *Prayer Cycle:* "I. There Is a Garden," measures 65-69

Example 79, *Prayer Cycle:* "VII. Find the Light," 3:00-4:00

Example 80, *Prayer Cycle Master Patch*, section III.

The second biblical passage of the movement, Psalm 46:4-6, is spoken, not sung. The score indicates that the passage should first be spoken once, either in unison or by a soloist. The second time the passage is spoken, the choir should stagger entrances while increasing the tempo of the recitation to fit within the given time frame (Example 81).

Example 81, *Prayer Cycle:* "VII. Find the Light," 6:00-7:00

Although structurally similar to the fourth movement, a denser sound is achieved in this movement by layering the stereophonic electronic track, previously recorded material from the first, third, and fourth movements, and live acoustic performances. Divided into nine sections,

the movement alternates electronic-only passages with live and previously recorded electronic passages layered over the pre-recorded electronic track.

Similar sounds as the fourth movement are used in the electronics. The major differences between the two are the absence of car and hospital noises and the introduction of lower frequencies. The lower frequencies are allowed to overwhelm the other sounds at times. The dream-like sounds from the fourth movement are further developed and processed creating layers of shimmery bell-like sounds, deep hollow tones, and gravelly lows that move freely through the sound field. High and low tones were preferred over middle frequencies as the sound-files and live acoustics fill in that range.

By clicking on the "1" under the word "start," the technician initiates the patch and electronic playback (Example 82, on page 97). The technician is then responsible for watching the number box connected to the [counter] controlled by the master [metro] in the top left-hand corner of the *prayercycle7* subpatch. At appropriate counts, he/she signals the section changes listed in the score (Example 83, on page 97). Once started in the main window, the subpatch runs itself, triggering sound-files archived in the previous movements. Groups of sound-files are layered through constant repetition, at random intervals, as discussed in the patch explanation for the fourth movement.

Recorded sections from the first movement are triggered through the overlapping playback function in the *prayercycle1* subpatch (Example 84, on page 98). The playbacks of the three sound-files are continually randomly delayed after they are initially triggered. The operation on the far right of subpatch *prayercycle7* contains an additional step to insure that a delay occurs, even if the random number chosen is a "0." This function is similar to what is found in the other subpatches.

VII. Find the Light

loadbang

open VII.ptf.audio.wav

1   0

sfplay~ VII.ptf.audio.wav

Start/Stop

1   0
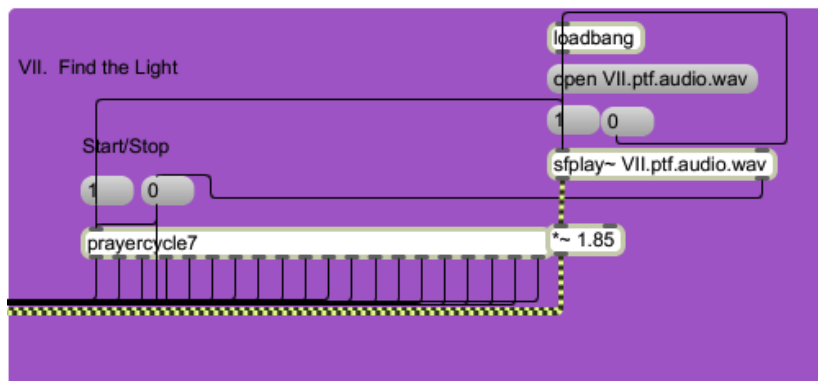
prayercycle7   *~ 1.85

Example 82, *Prayer Cycle Master Patch*, section VII

1

0-30
30-120
120-180
180-240
Master metro controls sections   metro 1000   240-270
through select parameters.   270-300
                            0   300-330
                                      330-360
counter   360-420
                                      420-450
0

select 3 30 120 150 180 240 270 330 360 405 435

120 -bang starts metro every   150 stops playback   240 playback whispers strings
2 seconds begins a random   operations
soundfile   270 playback recording from 3

metro 2000   metro 3000   metro 2000

                                        counter 5   metro 4500
urn 9   urn 9   20
                                        0   0
3   1   select 0 2 4   8

38 sent to prayercycle4 will   counter 17
turn on piano/227 sent to
pc4 will turn on piano2   9   17
                                                            16   select 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Intro 0-:30 track playback
piano1 and piano2   select 0 1 2 3 4 5 6 7 8   select 0 1 2 3 4 5 6 7 8

0-piano1 on
1-whispers on
2-string2 on
3-string1 on
4-piano2 on
5-1 on
6-song1 on
7-song2 on
8-song3 on
9-string2 off
10-song1 off
11-piano1 off
12-song3 off
13-whispers off
14-string1 off
15-1 off
16-song2 off
17piano2 off

360 resets counter max to 9
so all soundfiles are in

piano1 piano2 string1 string2 whispers song1 song2 song3 (overlapping playback from 1)

38   147   89   165   38   71   147   227

2   3   5   8   10   12   13   16   18   19

71   165   151   227   71   89   165   243

1   4   6   7   9   11   14   15   17

405 resets counter max to
17 and uses 9 as reset
counter to number

435 is used as a complete
turn off if somehow a
soundfile is still playing

Example 83, subpatch *prayercycle7*

97
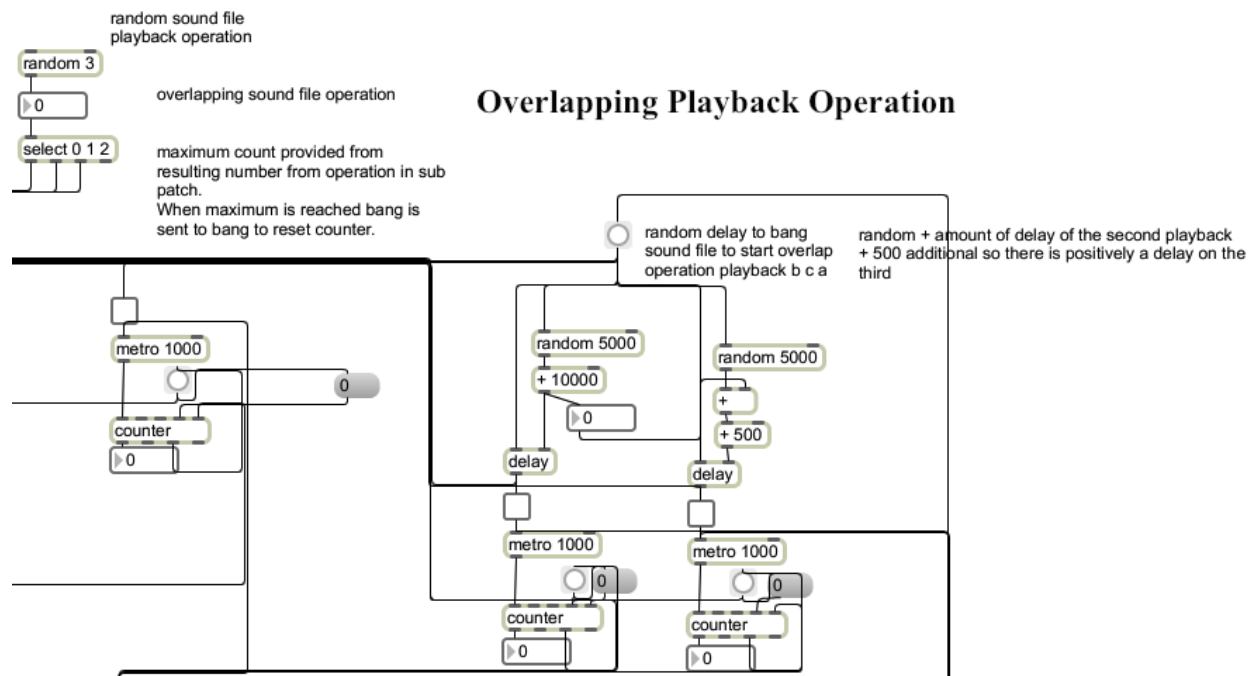
Example 84, subpatch *prayercycle1*, overlapping playback operation

The sound should be overwhelming at times with the low frequencies as loud as the ear can handle. Sound-files are continually layered creating a dense wall of sound that should be the culmination of all the previous prayers in the cycle. By increasing the vertical layer of sound-files, along with more complex and layered programming, the seventh movement expands to the fullest sound before ending *Prayer Cycle* with a section of the newly composed hymn tune. This statement contains an altered melody line in the medium voice solo over the remaining electronic elements. The intense ending exemplifies the large-scale design of the entire cycle, as combined melodic figures, electronic repetition, and repetition of characteristic elements from the previous prayers, combine to bring the cycle to a close.

10. Macro-Design

The macro-design of *Prayer Cycle* is one of increasing complexity throughout the piece. This goal is achieved on every level. Each movement in the piece expands one or more of LaRue's categories for analysis and pushes the overall design and intricacy of the piece to a more conscious level.

Textual choices exemplify this technique on the macro level. The texts become more complex by combining original texts, hymns, biblical passages, and prayers. Beginning with only one text per movement, the layering of texts is found in the fourth, sixth, and seventh prayers. Using only one text in the fifth movement provides a respite after the sonic intensity of the fourth movement, and begins the build to the final movement of the cycle.

The first movement expands with melody and texture. Added syllables at the last line of each stanza develop the melodic structures, while escalating electronic playback toward the end of the movement increases the textural fabric.

Additive melodic structures, limited pitch collection, and additional vocals are representative features from the second movement that add complexity to the piece as a whole. The additive melodic structures are found when a melodic line moves between voices and is a characteristic technique found throughout the piece. A limited pentatonic pitch collection is used which, while seeming constrained, actually becomes more complicated as melodies and harmonies apply the pitches in a crossword puzzle fashion, completing presentations both vertically and harmonically. Finally, a six-part choir is used, and this provides the opportunity to

divide the vocal forces into two, three-part choirs, which are separated into the traditional female and male sections.

The third movement emphasizes unconventional large-scale harmonic motion within the scope of children's literature. Third relationships are extremely important throughout the movement, and the second half of the movement modulates to the flat third major key of the original tonic major. The third relationship is further expanded through the ambiguous tonality found in the latter half of the movement, where the original major key and its parallel minor are featured simultaneously.

Electronic manipulation and building textures are the fourth movement's main contributions to the overall goal of increasing complexity. Sound-file processing in the subpatches includes a large number of possible alterations. The subpatch is designed to randomly choose a numerical value by which to multiply or divide the original sound-file, thereby decreasing or increasing the length of the file. Such processes allow more random activity and less human control over the sounds produced. Additionally, increasing sound-file layers through the D section and the culminating recapitulation corresponds to the macro-design of the piece.

Contrasting rhythmic figures and the inclusion of glissandi at opportune moments are the additional complex features of the fifth movement. The contrasting durations in the vocal line that make slower rhythmic motion in the faster sections and faster rhythms in the slower section create an interesting conflict between the driving rhythms in the strings and the more fluid rhythms in the vocal line. Glissandi in the less complex rhythmic passages add an additional texture and continuity to the development and increasing complexity within this particular prayer and the cycle, as a whole.

Much like the second movement, the sixth movement increases voice parts and pitch structures. The choir begins on a unison pitch and expands to four-part, then six-part, and finally eight-part choir. Pitch structures expand as well, starting with the set [0167], then set [013467], and finally to the full octatonic set [0134679t]. This growth in pitch availability is linked to growth in the vocal parts. Additionally, the tonal setting of the original text contrasts sharply with the octatonic and octatonic-implied melodies and harmonies of the biblical passages. All of these elements support the increased complexity required of the penultimate movement.

The final movement, while basically a layered, two-part form, contains nine sections that alternate electronic-only passages with sections scored for live performers and previously recorded electronic sounds. The sections are supported by a constant electronic track. By increasing the vertical layers of sound-files and allowing more randomness in the programming, the seventh movement closes *Prayer Cycle* with its most complex and forceful movement.

The over-arching formal structure of the piece follows the macro-design of increasing complexity. Without adhering to a single particular large-scale form, this piece simultaneously projects multiple formal structures. Most movements are built on contrasting two-part forms. Similarly, the piece as a whole can be grouped into pairs of increasing complexity. For example, movements one, three, and five are much simpler in design, voicing, and musical development than movements two, four, and six, and the seventh movement is the most complex. This alternating pattern of complexity presents a large-scale, repeated, two-part form with an ending finale. Initially, only instrumentation groupings state the form, but upon closer investigation, many of LaRue's analytical categories[33] reinforce the over-arching framework.

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[33] LaRue, Jan. *Guidelines for Style Analysis,* 2nd Edition, ed. J. Bunker Clark. Michigan: Harmonie Park Press, 1992.

Each prayer has an independent form, but most are related through alternating two-part sections. Movements three, four, five, and seven contain two-part structures divided by contrasting instrumental and vocal passages. Although the first movement is classified as an arch form with an introduction and short codetta, the contrast is present between the instrumental and vocal passages. Additional textures expand in the sixth movement, increasing the major divisions to four based on complex pitch collections, tonal divisions, and individual, as well as combined, instrument groupings.

The instrumentation of the movements most clearly represents the complex design of two-part expanding forms. The last song contributes to this design as part of a wedge-like expansion from movement five through movement seven. The inclusion of electronics in the first, fourth, and seventh movements, however, creates a unique relationship between those three movements.

The electronic elements provide unity to the beginning, middle, and ending movements of *Prayer Cycle*, and might be recognized on a secondary level as part of a connecting arch form. Relationships between the second and sixth movements, and the third and fifth movements, reinforce this large-scale arch form concept. The second and sixth movements contain six and eight-part choirs respectively and both piano and string accompaniment. Additionally, the third and fifth movements are comprised of a new vocal sonority: in the third movement it is a children's choir, and in the fifth movement, a soloist. Both the third and fifth movements are also accompanied by only one instrument or instrument group: the third uses the piano, and the fifth, string quartet.

Melody and harmony found throughout the movements oscillate between implied tonality in the first and third movements and more complex pitch collections in the second and sixth

movements. The fourth, fifth, and seventh movements contain a combination of semi-functional tonal areas and pitch collections. This undulating melodic tonal/atonal motion is exemplified in the sixth movement, where the dichotomous pitch material is very clearly defined and combined within an autonomous movement.

A multi-layered formal design is further revealed when examining the combinations of the text choices throughout the piece. Textual choices included original text, hymns, biblical passages, and prayers. Layering in the text, as well as biblical additions in the fourth, sixth, and seventh movements, reinforce the small-scale, two-part expansion structure.

Rhythmic choices provide continuity throughout the cycle. Overwhelmingly, rhythmic motion is subservient to the text, and it expands on natural speaking patterns. Rhythms in the accompaniment figures are almost always more complex, and they even signal formal structural changes in the fifth movement. The electronic manipulations also become more complex, as subpatches in the first, fourth and seventh movements add rhythmic interest and variation through random fluctuations in the speed of sound-file playback.

11. Conclusions

Prayer Cycle is a seven-part song cycle that uses a variety of texts, formal structures, pitch collections, harmonies, and instrumentations to guide the listener through representations of enlightenment, redemption, peace, helplessness, strength, hope, and celebration. Each prayer is autonomous and can be performed independently, but the highest level of understanding is achieved through listening to a complete performance of the cycle.

The large-scale formal structure is cyclical, with the more complex instrumentation found in the outer movements and in the center of the cycle. Small-scale structures guide the movements from one to another, emphasizing binary constructions referencing traditional roles of vocal melody and instrumental accompaniment. The forms are expanded throughout the piece to highlight contrasting thematic material, textures, and textual ambiguity contributing to the macro-design of increasing complexity throughout *Prayer Cycle*.

Characteristic elements are found in multiple movements and provide continuity between and through those movements. This idea exists on two levels, acoustic and electronic. Acoustic elements, such as a melody that requires multiple voice parts to complete (Example 24b on page 37), a repeated motive whose leap of a perfect fifth implies tonal motion (Example 34 on page 50), and a multi-layered melodic line found most clearly in the piano as a perfect fifth additive motion (Example 62 on page 77). Electronic continuity is achieved through similar, yet increasingly complex, changes to recorded sound-files, as well as layered sound-files from multiple movements. One of the most important moments of the piece is found in the seventh

movement where a repeated musical passage from the first movement is performed live with new text. Simultaneously, recorded sounds from the first movement are triggered by the subpatch to provide part of the accompaniment.

In *Prayer Cycle*, additive qualities exist in each of LaRue's analytical categories with a large-scale design based on increasing complexity. The macro-design is achieved through interesting layers of texts, varying instrumental combinations, contrasting pitch collections, non-functional harmonic progressions, increasingly complex and layered rhythms, and independent formal structures for each movement.

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Appendix

Prayer Cycle

for medium-voice soloist, SATB quartet, adult choir with soloists,
children's choir, string quartet, piano, and electronics

I. *There Is a Garden*
II. *And So I Fall*
III. *We Ask*
IV. *Waiting*
V. *Heavy*
VI. *I Find Hope*
VII. *Find the Light*

Approximately 40 minutes

by
Allyson L. McIntyre

CONTENTS

PERFORMANCE NOTES

I. *There Is a Garden*

There is a garden in darkness lies
Cloistered behind walls, within the silence sighs
No breath, no breeze, no sun to feed
Only rain, only freeze, to wither the seeds

There is a garden with watchful eyes
Awake and waiting, it vigilantly spies
No light to break the darkness still
Feel the mold, feel the damp in every corner it builds

There is a garden with stones of gray
Inside and out lost souls come to pray
Each word, each date, there'll be no wait for their fate
For the light, shines too bright, outside the old garden's gate.

"There Is a Garden," is a prayer of enlightenment. The movement is scored for SATB choir, viola, cello, and electronics. While the electronics are important to the cycle as a whole and this movement individually, the exclusion of the electronics would not be detrimental to a performance of the work. The viola and cello provide minimal accompaniment as well as contrasting transitioning material to the more traditional quartet passages. A Max patch is incorporated for real-time recording, processing, and playback of particular phrases throughout the piece. The electronics make complex changes to the sound files as well as layer their presentations.

Choir Notes:
An alternate pitch is given for the last note of the soprano line. Dynamics should be emphasized, and, in the event the desired pitch cannot be sung at the given dynamic, the alternate pitch should be used.

Viola Notes:
Techniques required are: pizzicato, snap pizzicato, natural harmonics as indicated with a diamond shaped notehead, two-voice melodic passages, double stops, and on-the-bridge bowing.

Cello Notes:
Techniques required are: on-the-bridge bowing, double and triple stops, two-voice melodic passages, pizzicato, and a fingernail pizzicato in the last measure that should occur simultaneously with the cutoff.

Technician Notes:
Specific instructions to the patch are found on the *PrayerCycleMasterPatch*. Playback volume should blend with the acoustic instruments. The levels should be rigorously controlled on either the computer volume or mixer volume, depending on the chosen setup.

II. *And So I Fall*

I fall to my knees and bow my head
The path is overgrown, the fog, so gray and dense
I dare not rise or even lift my eyes, my shame, oh so great, I've sinned

And so I fall knowing you will save me
The sins that have restrained me shattering
Littering the ground beneath me like autumn's wilted leaves

And so I fall humbly at your feet
In awe of your creation, forgiveness and absolution
In no way worthy of the gifts that you have given, redemption, salvation

And so I fall knowing you will save me
The sins that have restrained me
And so I fall, I fall

The second prayer in the cycle is a prayer of redemption titled "And So I Fall." The six-part choir is separated into a three-voice male and a three-voice female choir with full presentations only at important moments. This work is based on the pentatonic collection with chromatic motion occurring when different transpositions of the collection are used for each voice.

Choir Notes:
It often takes all voices or a section of voices to complete one melodic thought. For instance, the first melodic line begins in the tenor line, is continued in the baritone, and is completed in the bass line. This technique is used throughout the movement to emphasize the text and create layered melodic lines, which require a group or all of the voices to complete. Glissandi should be sung as sighs.

String Quartet Notes:
Techniques required are: natural and artificial harmonics, alternate bowings (with the wood, at the point, or at the frog), tremolo in conjunction with alternate bowings or on a single instrument, pizzicato, and snap pizzicato

Piano Notes:
Techniques required are: inside the piano passages call for the performer to pluck the approximate shape and rhythm, avoid duplicating pitches, and slowly brush the strings within a certain range without dampening them at completion.

III. *We Ask*

We ask You Lord to give us peace
before we lay our heads to sleep.

We ask for health for those we love,
we ask it from You Lord above.

We ask for dreams of sun and rain,
dreams meant to soothe away all pain.

O Lord please take and hold me tight,
keep me safe all through the night.

"We Ask," a prayer of peace, is the third work in the cycle. It is scored for two-part children's choir and prepared piano, and includes an optional Max patch for recording and playback in the seventh prayer in the event a children's choir can not perform during the final movement of the cycle. The simplicity of the lyrics is juxtaposed by a music box like accompaniment in the piano.

Choir Notes:
Children's choir is desired for optimal effect, although treble choir may be substituted.

Piano Notes:
The top two octaves of the piano may be prepared with empty drinking glasses of varying sizes and substances. Glass or crystal is the most effective with sizes and shapes including tumbler, goblet, and wineglasses. A dense chink-like sound is highly desirable. Layering sizes of glasses or staggering shapes will create more unique sounds.

Technician Notes:
Instructions for recording the selections for playback in the seventh movement can be found on the *PrayerCycleMasterPatch.*

IV. *Waiting*

Please help her heal
Please help her live
Please make her whole
Please make her well again

Piece back her bones
Piece back her body
Piece back our hearts
Piece back our souls

God give us strength
To face uncertain days
God give us peace
When all that's left is a haze

from **What A Friend We Have In Jesus**, *in his arms he'll take and shield thee*
from **It Is Well**, *when sorrows like sea billows roll*
from **In The Garden**, *but he bids me go; through the voice of woe*

"Waiting ," a prayer of helplessness, is the center of the prayer cycle and focuses on electronic manipulation. An electronic track, piano, strings, and a Max patch for real-time recording, processing, and playback of interactive elements support the soloists and adult choir. This movement represents the exhaustion and confusion following a major catastrophe. "Waiting" is found in the blur between reality based sounds and dream like sounds that represent the state of mind while waiting for days, often weeks, for an end to the helplessness. The direct influence for this movement was the weeks spent in the Trauma ICU following a car accident as well as the memories of that time.

Soloist Notes:
The Max/MSP technician will cue all entrances. Song fragments can occur in any key, while the prayer sections may be given to the choir if desired.

Choir Notes:
:13-1:11 When cued, the choir should whisper the first group of phrases at will, begin softly but upon repetition allow sound to swell without becoming forte.
2:45-3:47 When cued, the choir should recite the given text without feeling, chant-like.

Piano Notes:
Perform the given techniques when cued by the technician.
:13-1:11 Push down on strings behind hammer. Release strings immediately after striking key. Let ring. Repeat pattern at different pitches if desired until the soloist begins with the first song fragment.
2:31-2:45 Lightly scrape fingernails along the highest octave plucking occasionally. Continue until soloist comes in.

String Notes:
1:29-2:31 When cued, the cellist should play unmeasured tremolo with a wide variety of speeds on the strings designated.
All entrances are cued by the technician.

Technician Notes:
Full directions for patch operation are found on the *PrayerCycleMasterPatch*. The technician cues all entrances. Coordination between the score and patch is complex, so individual study prior to rehearsals is strongly recommended. The technician also controls volume on either the mixer or computer. The volume should be loud

but not allowed to get overwhelming. Additionally, a list of possible sound-files heard during the section are found parenthetically above the staff.

Max/MSP Patch notes:
The patch is designed to run independently once triggered by the technician. The graph below illustrates the sound-files and their occurrences.

Segment	Time	Recorded	Process/Playback	Electronic Track
Intro	:00-:13	Soloist "hello?"	Hello at 9 seconds	Car/Hospital
A	:13-1:11	Whispers Piano1	Hello at 14 Whispers Piano1	Longer dream-like sounds
Transition 1	1:11-1:29	Song1	Hello Song1	Car/Hospital
B	1:29-2:31	Prayer1 String1	Whispers Piano1 Prayer1 String1	Longer dream-like sounds
Transition 2	2:31-2:45	Song2 Piano2	Hello Song1 Song2 Piano2	Car/Hospital
C	2:45-3:47	Prayer2 String2	Whispers Piano1 Prayer1 String1 Prayer2 String2	Longer dream-like sounds
Transition 3	3:47-4:03	Song3	Hello Song1 Song2 Piano2 Song3	Car/Hospital
D	4:03-5:48		All except Hello	All
Recap	5:48-6:42		Slowly weed out all	End on Car/Hospital

V. *Heavy*

Heavy eyes and heavy hearts,
alone with my heavy thoughts.
I lift her up as I sink down.
The weight of the world
I give to your blood-soaked crown.

There are no words,
coherent thoughts or prayers.
I sit alone, oh, deep despair.

I need your dam to stop my tears
before I drown in all my fears.

A prayer for strength, "Heavy," is the fifth song in the cycle. It is scored for medium-voice solo and string quartet. The alternation between rhythmic complexity and moments of repose reflect its position in the cycle.

Vocal Notes:
Through much of the movement the vocal line is independent of the strings and longer vocal lines against quick string passages are allowed some freedom and breath. Glissandi should fall as a pitched sigh. In measure 52, the "x" note head with slur should be spoken at an approximate pitch with a smooth falling breath instead of a glissando that ends on a particular pitch.

String Quartet Notes:
Techniques used in this movement are spiccato, pizzicato, and glissando. The spiccato passages should emphasize rhythm, motion, and frenetic energy over pitch accuracy. If necessary, a slightly slower tempo is acceptable. Pitch and rhythmic precision is essential at building rhythmic passages found in the measures immediately preceding tempo changes. Glissandi should imitate the vocalist's previous interpretation of glissando passages.

VI. *I Find Hope*

Psalms 62:5
Find rest, O my soul, in God alone;
My hope comes from Him.
He alone is my rock, my salvation.

Psalm 33:20-22
We wait in hope for the Lord;
He is our help, our shield.
In Him our hearts rejoice,
May Your unfailing love rest upon us, O Lord,
as we put our hope in You.

Original Text
I find hope in the light from the woods.
In the sunlight after the rain,
In the quiet empty spaces,
I find hope.

The sixth prayer, as the title suggests, is a prayer of hope. The text consists of biblical paraphrases and quotations from Psalms 33:20-22 and 62:5, as well as original text by the composer. Pitch collections building to octatonic melodies are used for the biblical sections while more tonal melodies are found with the original text. An eight-part adult choir with soloists is supported by the string quartet and piano.

Choir Notes:
Melodic voice transfer, a technique that often takes all voices or a section of voices to complete one melodic thought, is used throughout this movement. Melodic consistency is favored and straight tones on held pitches are preferred. Allow the voice to float on the original lines of contrasting text, highlighting the move towards tonality.

String Quartet Notes:
Techniques used in this movement are; pizzicato, snap pizzicato, tremolo, bowings such as *sul tasto*, and natural and artificial harmonics.

Piano Notes:
The opening compound melody is found throughout. Separate layers should be emphasized. Tremolo passages are used for texture and volume.

VII. *Find the Light*

The stars and moon were sent
to guide me from the night
to find the morning, to find the light.
I will celebrate the sun, so holy so bright.

Psalms 54:6-7
I will praise Your name, O Lord, for it is good.
For He has delivered me from all my troubles,
and my eyes have looked in triumph on my foes.

We ask for dreams of sun and rain,
dreams meant to soothe away all pain.

Psalms 46:4-6
There is a river whose streams make glad the city of God,
the holy place where the Most High dwells.
God is within her, she will not fall;
God will help her at break of day.
Nations are in uproar, kingdoms fall;
He lifts his voice, the earth melts.

The final prayer, "Find the Light," is a prayer of celebration. This movement is scored for medium-voice soloist, adult choir, children's choir (if practical), string quartet, piano, and electronics. The text includes quotations from Psalms 46:4-6 and 54:6-7, as well as original text by the composer. This prayer combines elements from the previous six prayers. A Max patch alters and plays back sound files archived earlier in the piece.

Soloist Notes:
The soloist is encouraged to choose his/her own starting pitches, and the original hymn tune is centered on the natural minor. The tempo is approximate and the soloist should take liberties between phrases.

Adult Choir Notes:
The second biblical passage of the movement, Psalm 46:4-6, is spoken, not sung. The score indicates that the passage should be spoken first either in unison or by a soloist. The second time the passage is spoken, the choir should stagger entrances increasing the tempo of the recitation to fit within the given time.

Children Choir Notes:
The Children's choir section is an exact replica of measures 28-41 in the third movement. The piano part is extended in the score of the seventh movement. In the event a children's choir is present for the third movement of the cycle, but not available for the last movement, there is a section on the master patch to record the selected phrases during the third movement. If the movement is performed individually from the other movements, a pianist may play the children's choir section without vocalists.

String Notes:
The viola and cello parts are taken from the first movement and should be performed in a similar fashion.

Piano Notes:
The piano part from the third movement is extended in the score of the seventh movement. In the event a children's choir is present for the third movement of the cycle, but not available for the last movement, there is a section on the master patch to record the selected phrases during the third movement. In the event pre-recorded sound files are used, the piano will not be needed for this movement. If the movement is performed individually from the other movements, a pianist may play the children's choir section without vocalists.

Technician Notes:
By clicking on the "1" in the seventh section of the *PrayerCycleMasterPatch*, the technician starts the patch and electronic playback. The technician is then responsible for watching the metro in the *prayercycle7* sub-patch and signaling the section changes. The volume of electronic sounds is controlled with either the mixer or the computer with the technician controlling the levels. The sound should be overwhelming at times with the low frequencies as loud as the ear can handle.

I.

There Is a Garden

<div style="text-align:right">**Allyson L. McIntyre**</div>

I. There Is a Garden

I. There Is a Garden

120

I. There Is a Garden

122

I. There Is a Garden

123

I. There Is a Garden

I. There Is a Garden

125

I. There Is a Garden

126

II.
And So I Fall

128

129

II. And So I Fall

135

144

III.

We Ask

The choir text reads: We ask for health for those we love we ask it from you Lord a-bove.

Choir: We ask for dreams of sun and rain. Dreams meant to soothe a - way all pain.

O Lord please take and hold me tight keep me safe all through the night.

Choir: We ask you Lord to give us peace be - fore we lay our heads to sleep.

IV.
Waiting

Solo Voices

Choir

Piano

Strings

Max/MSP Patch

:00   *mf*

:13

Hello?

Please help her heal
Please let her live
Please make her whole
p Please make her well again

Choir whispers assigned phrases at will,
begin softly but upon repetition allow
sound to swell without becoming forte.

Push down on strings behind hammer.
Release strings immediately after
striking key. Let ring. Repeat pattern
at different pitches if desired.

f

Cue all entrances

(Hello, whispers, piano1)

Introduction: Record "hello"

Section A: Record chosen
selection of whispers and piano
hit.

149

IV. Waiting

Solo

1:11

p soloist may choose any key

in his arms he'll take and shield thee

1:29

mf Prayer 1 Pleading with anguish

2:31

Piece back her bones. Piece back her body.
Piece back our hearts. Piece back our souls.

Choir

Pno.

Strings

Cello

Unmeasured tremolo with a
wide variety of speeds.

f   *p*   *ff*

Max

(Hello, song1)

Trans 1: Record song segment

(Whispers, prayer1, piano1, string1)

Section B: Record Prayer 1
Record Cello

2:31   Soloist may choose any key

Solo

14

mf

when sor - rows like sea bil - lows roll

Choir

Pno.

Lightly scrape fingernails along
the highest octave plucking
occasionally. Continue until soloist comes in.

p ———————— *f* ———————— *p*

Strings

Viola

3   3

f

Max

(Hello, song1, song2, piano2)

Trans 2: Record song segment
Record Piano2

150

IV. Waiting

2:45

Solo

f Prayer 2

God give us strength to face uncertain days.
God give us peace when all that's left is a haze.

Choir

f Recite without feeling, chant-like.

Piece back her bones. Piece back her body.
Piece back our hearts. Piece backour souls.

Pno.

Strings

Violin II

f   *p* —————— *f*

Max

(Whispers, piano1, prayer1, prayer2, string1, string2)

Section C: Record Prayer 2   Record String 2

3:47   Soloist may choose any key

Solo

f

but   he   bids   me   go;   through the   voice   of   woe

Choir

Pno.

Strings

8va-------------------------

Violin I

ff

Max

(Hello, piano2, song1, song2, song3)

Transition 3: Record song segment

151

IV. Waiting

V.

Heavy

V. Heavy

V. Heavy

V. Heavy

I lift her up,   as I sink down.

158

Oh, deep dis - pair.

VI.
I Find Hope

VI. I Find Hope

VII.
Find the Light

A

$\bullet$ = 100

0-:30   :30-2:00

Max/MSP

Signal section changes

Soloist may choose any key.

p

Soloist

The stars and moon____ were sent to guide me from the night.____

Choir Spoken

Soprano

Alto

Tenor

Bass

Viola

Cello

Children

Piano

VII. Find The Light

To find the morn - ing, to find the light.____ I will ce - le - brate____ the sun so ho -

ly so bright.____ I will reach for the morn-ing, the break - ing of light.

I will ce - le - brate____ I will ce - le - brate____ the break - ing of light.

(Random sound-file chosen
from movement IV every
two seconds and will repeat
at random intervals.)

B (Randomly stops playback, except whispers and strings)

2:00-3:00   3:00-4:00

193

VII. Find The Light

(Sound-files enter randomly)

D

5:30-6:00

6:00-7:00

MP

CH/sp

The text is spoken through twice. The first time in
unison or by a soloist. The second time stagger
entrances speeding up to fit within the designated
time. Speak with conviction.

There is a river whose streams make glad the city
of God, the holy place where the Most high dwells.
God is within her, she will not fall; God will help
her at break of day, Nations are in uproar,
kingdoms fall; he lifts his voice, the earth melts.

E (Sound-files will gradually fade out)

75   76

7:00-7:30

MP

Solo

mp

The   stars and   moon_____ were sent   to   guide me   from   the   night.___

MP

Solo

f   *mp*

__   To   find   the   morn - ing,_____   to   find   the   light.

Master Patch

Master Patch for Prayer Cycle

I. There is A Garden

Prayer Cycle
1. There is A Garden

Record on/off   Playback   Random   Overlapping   Stop all
1   2   3   1   2   3   Playback   Playback

prayercycle1

III. We Ask

1. Click on toggle to record. An "X" will appear inside the box. Click again to stop recording.
2. Double click on "buffer~ weask" object to make sure it recorded.

III. We Ask   clear

buffer~ weask 30000

record~ weask   metro 1000   0

counter   * 0

0   pipe 50   pack 0 0 0

* 1000   set $1 \, $2 $3

                 0,
                 30000   play~ weask
                 30000

IV. Waiting

1. Double click on "prayercycle4" to open subpatch.
2. Record intro with separate on and off buttons. All others use one button for on and off.
3. If soundfiles continue to play after 402 click the off button.
4. DO NOT close subpatch window (buttons will continue to flash.)

IV. Waiting

Intro
                    Section A on/off   Transition1
Record On   Record Off   Whispers   Piano1   Song1   String1

Section B   Transition 2   Section C   Transition 3
Prayer1   Song2   Piano2   Prayer2   Song3   String2   OFF

prayercycle4

open waiting.ptf.audio.wav

1
sfplay~ waiting.ptf.audio.wav

*~ 1.85

VII. Find the Light

1. Double click on "prayercycle7" to open subpatch.
2. Click the start button "1."

VII. Find the Light   loadbang

                                        open VII.ptf.audio.wav

Start/Stop   1   0

0   sfplay~ VII.ptf.audio.wav

prayercycle7   *~ 1.85

stop

prayercycle1

buffer~ a1 10000   a1=strings

buffer~ b1 10000   b1=there is a garden

buffer~ c1 10000   c1= silence sighs

random sound file
playback operation

random 3

▷ 0

overlapping sound file operation

select 0 1 2

reset counter a b c

0   0   0

Hit to playback at random speed
and forwards or backwards a b c

maximum count provided from
resulting number from operation in sub
patch.
When maximum is reached bang is
sent to bang to reset counter.

random delay to bang
sound file to start overlap
operation playback b c a

random + amount of delay of the second playback
+ 500 additional so there is positively a delay on the
third

Record by
turning on
toggle

record~ a1

metro 1000

counter

▷ 0

* 1000

Toggle starts recording
and turns on the metro.
The counter is used to
determine the length of
the recorded sound file.

when counter is going all
open number boxes in the
subpatch should be
loading.

record~ b1

metro 1000

counter

▷ 0

* 1000

record~ c1

metro 1000

counter

▷ 0

* 1000

variablespeeds

play~ a1

variablespeeds

play~ b1

variablespeeds

play~ c1

▷ 0

/ 1000

▷ 0

▷ 0

/ 1000

▷ 0

▷ 0

/ 1000

▷ 0

metro 1000

counter

▷ 0

0

random 5000

+ 10000

▷ 0

delay

metro 1000

counter

▷ 0

random 5000

+

+ 500

delay

metro 1000

0

counter

▷ 0

random 99

* 0.01

▷ 0.

random 60

+ 30

▷ 0

-1.

▷ 0.

▷ -1.

▷ 0.

random 99

* 0.01

▷ 0.

random 60

+ 30

▷ 0

-1.

▷ 0.

▷ 0.

random 99

* 0.01

▷ 0.

random 60

+ 30

▷ 0

-1.

▷ 0.

▷ -1.

volume between 30 and
90. multiplied by panning
number

0.1

* 0.1

0.01

* 0.01

*~   ~

▷ 0.

0.1

* 0.1

0.01

* 0.01

*~   ~

▷ 0.

0.1

* 0.1

0.01

* 0.01

*~   ~

▷ 0.

▷ 0.

Prayer Cycle
1. There is A Garden

Audio In

Record on/off
1   2   3

Playback
1   2   3

Random
Playback

Overlapping
Playback

stop

Audio Out L/R

199

variablespeeds

variable speed-six gates

delay

random 6

+ 1

0

gate 6

incoming number to
control length of sound file

play forward at
original speed

play backwards
at original speed

play forward at
half speed

play backwards
at half speed

play forward at
double speed

play backwards
at double speed

* 0.5

* 0.5

* 2

* 2

* 0

* 0

* 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

0\, 0 0

0\, 0 0

0, 36 20

11, 0 175

0, 1 17

0\, 149 149

line~

unpack 0 0

0

0

200

prayercycle4

This patch needs to have section controls.
Intro-alter recorded Hello before starting track
  0--10 (add 3 seconds for hello)
A-whispers, record/alter/playback
  :10-1:08 (:13-1:11)
Trans 1-hello sparse +song segment recorded
  1:08-1:26 (1:11-1:29)
B-whispers altered/prayer recorded/altered/
  1:26-2:28 (1:29-2:31)
Transition2-hello/song 1/song2
  2:24-2:42 (2:27-2:45)
C-Prayer 2/Prayer 1 altered/whispers/
  2:42-3:44 (2:45-3:47)
Transition 3-Song 3/1 and 2/hello
  3:44-4 (3:47-4:03)
D-Allbut hello
  4-5:45 (4:03-5:48)
Recap-everything
  5:45-6:15 (5:48-6:18)

buffer~ hello 5000   buffer~ piano1 20000   intro   stop recording
buffer~ whispers 10000   buffer~ string1 20000
buffer~ song1 20000   buffer~ piano2 20000
buffer~ prayer1 20000   buffer~ string2 20000
buffer~ song2 20000
buffer~ prayer2 20000
buffer~ song3 20000

metro 1000
counter
i 0

Master Metro

operation 1 establishes
length of original source
file.

after initial bang put a dleay
for sound file (3)

Intro records
sound file and
begins
alter/playback

record~ hello   metro 1000
                 counter
                 i 0   * 1000

record~ whispers   metro 1000
                    counter
                    i 0   * 1000

record~ song1   metro 1000
                 counter
                 i 0   * 1000

record~ prayer1   metro 1000
                   counter
                   i 0   * 1000

record~ song2   metro 1000
                 counter
                 i 0   * 1000

record~ prayer2   metro 1000
                   counter
                   i 0   * 1000

record~ song3   metro 1000
                 counter
                 i 0   * 1000

record~ piano1   metro 1000
                  counter
                  i 0   * 1000

record~ string1   metro 1000
                   counter
                   i 0   * 1000

record~ piano2   metro 1000
                  counter
                  i 0   * 1000

record~ string2   metro 1000
                   counter
                   i 0   * 1000

metro 1000
counter
i 0

metro 1000
counter
i 0   select 9 14 15

0, 3000 3000   3000, 0 3000

play~ hello
play~ whispers
play~ song1
play~ prayer1
play~ song2
play~ prayer2
play~ song3
play~ piano1
play~ piano2
play~ string1
play~ string2

select 11

select 38 71

2. Section A   3. Transition 1   4. Section B 1:29-2:31   5. Transition 2   6. Section C   7. Transition 3   8. Section D   9. Recap

record and stop recording whispers   record and stop recording   recording whisper   record and stop recording   record and stop recording   record and stop recording   eliminate possibilities
record and stop recording piano1   song   prayer2   song 3
                                      record and stop recording
                                      string1   record and stop recording
                                                                                string2

select 72 89   select 89 151   select 147 165   select 165 227   select 227 243   select 243 348 352 360 370 380 390 400 402

243 starts whispers
348 starts hello
352 stops prayer1
360 stops prayer2
370 stops song 1 and piano2
380 stops song 2 and string2
390 stops song 3 and string1
400 stops whispers and piano1
402 stops hello and stops metro

Control panel

select 147 165   select 38 71   select 347 403
select 38 71   select 165 227   select 147 165
select 89 151   select 72 89

variable4-1 limits options to
4

variable4   variable4-1
variable4   variable4-1
variable4-1
variable4-2   variable4-1
variable4-2
variable4-2

string1   piano2   string2
random 60   random 60   random 60
+ 30   + 30   + 30
random 99   random 99   random 99
* 0.01   * 0.01   * 0.01

hello   whispers   song1   prayer1   song2   prayer2   song3   piano1
random 60   random 60   random 60   random 60   random 60   random 60   random 60   random 60
+ 30   + 30   + 30   + 30   + 30   + 30   + 30   + 30
random 99   random 99   random 99   random 99   random 99   random 99   random 99   random 99
* 0.01   * 0.01   * 0.01   * 0.01   * 0.01   * 0.01   * 0.01   * 0.01

volume between 30 and
90. multiplied by panning
number

variable4

Line out will loop playback until bang recieved at 108 closes the gate

Random delay to create gaps in playback

random 4

* 1000

1   0

▷ 0

delay 200

gate

random 6

+ 1

variable speed-six gates

▷ 0

gate 6

incoming number to
control length of sound file

play forward at
original speed

play backwards
at original speed

play forward at
half speed

play backwards
at half speed

play forward at
double speed

play backwards
at double speed

▷ 0.

* 2

▷ 0.

* 2

▷ 0.

/ 2

▷ 0.

/ 2

use this one

▷ 0

* 0

▷ 0   ▷ 0

pack 0 0 0

set $1 \, $2 $3

0, 125 57

▷ 0   0   ▷ 0

pack 0 0 0

set $1 \, $2 $3

141, 0 130

0   ▷ 0.   ▷ 0.

pack 0 0 0

set $1 \, $2 $3

0, 17 2

▷ 0.   0   ▷ 0.

pack 0 0 0

set $1 \, $2 $3

13, 0 0

0   ▷ 0.   ▷ 0.

pack 0 0 0

set $1 \, $2 $3

0, 163 60

▷ 0.   0   ▷ 0.

pack 0 0 0

set $1 \, $2 $3

11, 0 0

line~

1   0   1   0

gate~   gate

unpack 0 0 0

▷ 0

202

Line out will loop playback until bang recieved at 108 closes the gate

Random delay to create gaps in playback

`1` `0`

`random 8`

`delay 200`

`gate`

`* 1000`

`random 4`

`0`

`+ 1`

variable speed-six gates

`0`

`gate 4`

incoming number to
control length of sound file

play forward at
original speed

play backwards
at original speed

play forward at
half speed

play backwards
at half speed

`0.`

`* 2.9`

`0.`

`* 2.6`

`0` `0` `0`

`0` `0` `0`

`0` `0.` `0.`

`0.` `0` `0.`

`pack 0 0 0`

`pack 0 0 0`

`pack 0 0 0`

`pack 0 0 0`

`set $1 \, $2 $3`

`set $1 \, $2 $3`

`set $1 \, $2 $3`

`set $1 \, $2 $3`

`0\, 0 0`

`0\, 0 0`

`0\, 0 0`

`0\, 0 0`

`line~`

`1` `0`

`1` `0`

`gate~`

`gate`

`unpack 0 0 0`

`0`

203

variable4-2

Line out will loop playback until bang recieved at 108 closes the gate

Random delay to create gaps in playback

random 8

* 1000

1

0

delay 200

gate

random 12

+ 1

0

gate 12

variable speed-12 gates

incoming number to
control length of sound file

play forward at
original speed

play backwards
at original speed

play forward at
half speed

play backwards
at half speed

play forward at
double speed

play backwards
at double speed

play forward at
random slower
speed

random 5

play backwards at
random slower
speed

random 5

play forward at
random faster
speed

random 5

play backwards at
random faster
speed

random 5

random 2

select 0

random 2

select 0

0   0   0

0   0   0

0   0   0

* 2
0.

* 2
0.

* 2
0.

+ 1

+ 1

+ 1

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

pack 0 0 0

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

set $1 \, $2 $3

0 \, 0 0

0 \, 0 0

0 \, 0 0

0 \, 0 0

0 \, 0 0

0 \, 149 149

0 \, 0 0

0 \, 0 0

0 \, 0 0

0 \, 0 0

line~

1   0

gate~

1   0

gate

unpack 0 0 0

0

204

prayercycle7

recall previous buffers and soundfiles for playback.

0-30
30-120
120-180
180-240
240-270
270-300
300-330
330-360
360-420
420-450

0-:30 lean in shimmers from track/playback piano1 and piano2
:30-2:00 solo/playback string hits/played piano work
2:00-3:00 transition and transform using previous sound files
3:00-4;00 quartet Psalm
4:00-4:30 transition to children's choir
4:30-5:30 Children's choir playback
5:30-6:00 transition to choir
6:00-7:00 both choirs
7:00-7:30 Soloist and fade

no action from 300-400

0-piano1 on
1-whispers on
2-string2 on
3-string1 on
4-piano2 on
5-1 on
6-song1 on
7-song2 on
8-song3 on
9-string2 off
10-song1 off
11-piano1 off
12-song3 off
13-whispers off
14-string1 off
15-1 off
16-song2 off
17piano2 off

Master metro controls sections
through select parameters.

metro 1000

0

counter

0

select 3 30 120 150 180 240 270 330 360 405 435

120 -bang starts metro every
2 seconds begins a random
soundfile

150 stops playback
operations

240 playback whispers strings

270 playback recording from 3

metro 2000

metro 3000

metro 2000

metro 4500

0

8

urn 9

urn 9

counter 5

0

360 resets counter max to 9
so all soundfiles are in

0

0

select 0 2 4

counter 17

0

9   17

38 sent to prayercycle4 will
turn on piano/227 sent to
pc4 will turn on piano2

Intro 0-:30 track playback
piano1 and piano2

select 0 1 2 3 4 5 6 7 8

select 0 1 2 3 4 5 6 7 8

0

select 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

405 resets counter max to
17 and uses 9 as reset
counter to number

piano1 piano2 string1 string2 whispers song1 song2 song3 (overlapping playback from 1)

38   147   89   165   38   71   147   227

71   165   151   227   71   89   165   243

435 is used as a complete
turn off if somehow a
soundfile is still playing

205