

A RINGING EVOLUTION:
AN INTERNATIONAL GRADUATE COMPOSITION RECITAL

A Document

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Master of Music in Music Technology

Composition Track

By

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Phoenixville, Pennsylvania

August 2014

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ABSTRACT

This thesis documents my graduate composition recital, from the initial planning stages on Facebook in 2011, to the eighty-minute performance in Tallinn, Estonia, on October 15, 2013. The program consists of thirteen handbell compositions and represents a wide variety of musical styles. Eight of the selections employ additional instruments. A musical analysis is included, along with historic research on handbells, their notation, articulations and composition techniques specific to the instrument. The role of music in Estonia's cultural identity is explored.

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Dedicated to my sister Cecilia Gilligo, who managed our household, which allowed me the freedom to concentrate on my studies.

Dr. William F. DeSanto, Dr. Floyd Richmond, and the music faculty of Valley Forge Christian College, for designing this groundbreaking program, and for their dedication and support.

and

Inna Lai, who organized and conducted the performance in Tallinn, Estonia.

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Purpose

The purpose of this thesis is to document my graduate composition recital, from the initial planning stages via Facebook on August 27, 2011, to the eighty-minute performance at Mustpeade Maja in Tallinn, Estonia, on October 15, 2013 at 7:00 pm. The program consists of thirteen handbell works: nine original compositions and four arrangements, representing a wide variety of musical styles. Eight of the selections employ additional instruments. A detailed musical analysis and scores are provided for each of the selections. A DVD video recording of the concert is also included.

Change and ensemble ringing are the two predominant methods of ringing performers have used to make music with handbells throughout history. They are distinctly different art forms. Change ringing is an elaborate ringing of the hour, in which all possible variations of a series of single notes are played without repeating any of the previous patterns, whereas ensemble music consists of a melody with accompaniment.

While change ringing can be traced back the late 1600's, ensemble ringing did not fully emerge in the United States until the last half of the 20th Century. In order to obtain a more clear view of the practices of ensemble ringing, historic research on handbells, their notation, articulations and instrument-specific techniques used in the compositions is necessary. Additional information will be collected through interviews with or about early innovators in the field, whose contributions furthered the development of handbell composition.

This paper would not be complete without some discussion of music in Estonia, as it is an integral part of their cultural identity. Vocal music was their refuge through centuries of foreign occupation, the vehicle that preserved their history, and the impetus

behind their peaceful revolt against the Soviet Union. “We sang ourselves free” as the Estonian adage goes (I. Lai).

Background

Handbell tune ringing in the United States has come a long way from its humble beginnings in Beacon Hill, Boston, in the 1920’s. There are numerous church and community choirs, in addition to a few professional groups. Small ensembles and professional soloists have become popular in recent years as well. Handbell recordings can be purchased on Amazon and hundreds of videos have been uploaded to YouTube. Bells have made inroads on national TV with the Christmas Hershey Kiss commercial and a cameo appearance on The Big Bang Theory. Clearly, they have “arrived.”

Handbell Musicians of America, formerly the American Guild of English Handbell Ringers, offers workshops and festival conferences on the state, regional and national level. They are also involved the International Handbell Symposium, which is held in a different country every two years. It is a major event, organized by the International Handbell Committee and representatives from eight national handbell associations from around the world. Repertoire is drawn from eight to ten different composers and arrangers, each of which is directed by a different conductor (IHC).

My modest concert represents a milestone in the handbell community for several reasons. It was the first international graduate handbell composition recital to be sanctioned by an institution of higher education. It was the first international concert to feature the works of a single composer, led by one conductor. Unlike the International Symposium, two individuals and a handful of their colleagues organized the event. It was also the first Facebook collaboration that resulted in an event of this kind.

The Guild lists seventy-one higher education institutions that have handbell choirs, with links to their websites (College Programs). Currently, there are only two institutions in the United States with degree programs in handbells. Concordia University Irvine, CA offers undergraduate degrees in Church Music, Music Performance and Music Education, with handbells as a major instrument (CUI). Concordia University, Wisconsin offers a Master of Church Music with an organ, choral, or handbell emphasis (CUW).

Students who cannot attend these institutions due to distance, time, work or financial constraints have two options: 1. they can study a different major instrument at a school that meets their needs; or 2. find a college that will permit them to substitute handbells as their major instrument. The latter option normally requires the student to design their course of study and find an appropriate, qualified applied music professor. To date, only four such self-starters have pursued alternate options to attain a degree in music with handbells as their major instrument. P.L. Grove and Michèle Sharik earned a B.A. in handbell performance from Mills College, Oakland, CA; and California State University, San Marcos, respectively (Sharik). Kimberlee Strepka did her thesis on handbell pedagogy in fulfillment of the requirements for her M.M. degree from the University of Massachusetts (Strepka). Thus, Valley Forge Christian College has the distinction of being the first institution in the United States to allow a composition track student to perform a graduate recital consisting solely of their handbell works; and the first college in the world to sanction a handbell recital abroad.

There is a need for more colleges to institute programs. The two aforementioned colleges that presently have curriculums do not offer a distance education option. Church musicians and handbell professionals yearn for an opportunity to study at colleges or

universities, particularly at the graduate level. They are an untapped resource that could prove financially beneficial for institutions willing to take the plunge. Hopefully, more schools will implement such programs in the future.

Deficiencies in the Literature

Handbell ensemble ringing is still a relatively new art form in comparison to other traditional western music disciplines. It did not really take hold until the late 1950's, so it is still in its infancy. These are exciting times for handbell professionals, as they are on the forefront of the development of the instrument. Conversely, it can be frustrating due to the lack of opportunities in higher education, performance, and employment, along with insufficient formal repertoire and research resources.

From what resources are available, "Musical Handbells" is the most comprehensive treatise written thus far. It is the definitive text on British handbell foundries, written by the world's foremost expert in the field. William Butler garnered the information through careful examination of countless specimens, interviews with knowledgeable individuals, fieldwork and extensive research. This treatise chronicles the development of bells, from the indefinite pitched idiophones of antiquity, to their evolution into the refined musical instruments of today (Butler). It serves as a shining example for future researchers in the field to emulate.

Unfortunately, much of the other literature is not nearly as detailed. Many books such as "The Bell Ringers' Handbook," by Nancy Poore Tufts, "Handbells," by Trevor Jennings, and Campbell Bunting's "Introduction to Handchimes" contain less than one hundred pages, and deal with a variety of issues rather than focusing on one topic. There is considerable overlap between books from the same and different authors, so those

volumes fail to present new information. Many are over thirty-five years old and were written before performance practices became standardized; hence they contain conflicting or outdated information.

The number of books devoted to handbell composition is woefully lacking, with only two texts in print. Both are very short. Douglas Wagner's "Scoring for English Handbells" contains twenty pages and Donald Allured's "Handbell Composition and Arranging" has twenty-one pages. Although both have invaluable information, essentially, they are an overview of the process. An experienced composer will find them handy as a quick reference guide, but fledgling composers will welcome a text that provides more direction.

In general, there are not enough scholarly handbell resources in print. "Overtones," published by Handbell Musicians of America, is the only professional handbell journal issued in the United States. While it is an indispensable resource, most of the articles only average two pages in length. Scholarly articles sometimes find their way into music education or church music journals, but their inclusion is sporadic.

These shortcomings do not pose a problem for those writing a thesis, as they expect to sift through many resources in the course of their research. It is difficult, however, for the overburdened church musician who does not have time to search through a lot of materials to find an answer to a question. They need convenient but comprehensive sources to fill their needs.

Large, extended works for handbells are virtually nonexistent. Very few non-handbell composers have written for the instrument thus far. More major works such as Vähi's "Handbell Symphony," Britten's "Noye's Fludde," Viira's "Niguliste Kellad" and

Tavener's "The Last Sleep of the Virgin" must be written if handbells are to be recognized by classical aficionados as a viable instrument. In addition to enhancing the repertoire, analysis of such offerings could serve as a tool when teaching handbell composition.

Individuals through large organizations have made great strides, but there is still much work to be done. More research needs to be addressed in all areas, from education to repertoire, and beyond. Greater promotion of the instrument is vital to ensure its future and acceptance into the mainstream.

History of Ensemble Ringing in America

Tuned cup bells, which were invented during the Medieval Period, are the forerunners of modern musical handbells. These clapperless bells were hung on a rack and struck with wooden hammers (Tuned Musical Cup Bells). Biblical King David is often depicted playing them in that manner in artwork from the Middle Ages through the Renaissance (North 74). They were normally used to intone pitches, punctuate cadences, or on a single melodic line in broken consorts. The Whitechapel Foundry still makes four full chromatic octaves of cup bells (Hughes).



Change ringing on tower bells was a popular pastime in England during the 17th century. All ringing sequences begin with a descending scale consisting of at least four notes. Mathematical permutations then ensue until all variations are played without repeating any of the previous patterns. The sequence ends with the original descending scale (Phelps). Change ringing patterns are written in numeric notation and frequently learned by rote (Appendix A).

Unfortunately for the townsfolk, the ringers had nowhere else to practice except in the bell tower. Rehearsals often lasted all night and the people could not sleep (Cowan). In the late 1600's, the Cor Foundry came to the rescue with a portable instrument, and handbells were born (Butler 137). Thereafter, rehearsals moved indoors to private houses or the local pub, thus ringing began largely as a secular activity.



Tune ringing became popular and Americans got their first taste of ensemble ringing when the Peak Family Ringers toured the country in the 1830's (Shull 123). Technically, they introduced handbells to the USA, but P.T. Barnum made them popular. He first heard the instrument in the 1840's while attending a performance by the Lancashire Handbell Ringers in England. The consummate salesman, he convinced the group to don traditional Swiss dress and tour the United States as the "Swiss Bell Ringers" (Shull 72). They delighted American audiences, and ensemble ringing grew in popularity as other Vaudeville groups incorporated handbells into their acts. Even J.C. Deagan, Inc. billed them as Swiss bells during their production years from the late 1880's to the early 1900's (Deagan Catalogues). The fact that handbells had nothing whatsoever to do with Switzerland did not concern Barnum, but it led to a century of misinformation that has not yet been rectified.

Ringling shifted from the Vaudeville stage to the church sanctuary via Margaret Shurcliff, of Boston, Massachusetts, who re-introduced handbells to the United States in 1926 (Shull 112). Margaret was the first female change ringer in America. A gifted performer, she was awarded a small set of Whitechapel handbells while studying change ringing in England (Watson 76). She founded the Beacon Hill English Handbell Ringers and nurtured the growth of other ensembles. Many of these groups met in churches and performed for services in exchange for use of their rehearsal facilities. Consequently, the instrument became associated with sacred music, as churches incorporated hymn based bell anthems into worship services (Shull 112).

Handbells declined in the United States with the advent of World War II, as foundries turned to producing arms in support of the war effort. Undaunted, Margaret

Shurcliff forged onward. She sponsored the first handbell festival in Castle Hill, Ipswich, and founded the New England Guild of English Handbell Ringers (Watson 78). That organization grew into the American Guild of English Handbell Ringers in 1954, and was renamed the Handbell Musicians of America in 2010 (Proud Tradition, Web 2011). Today, the Guild is split into twelve geographic areas comprised of several states, and boasts thousands of members. Similar international organizations have been established in Europe, Asia, Canada and Australasia. Margaret Shurcliff rescued bells from obscurity. Without her, ringing would not have become as popular in the United States as it is today.

Development of Performance Practices

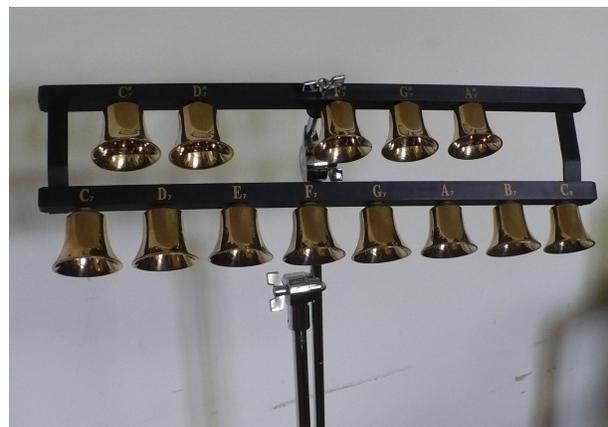
As with many new disciplines, handbell ringing enjoyed its share of growing pains in the 1950's and 1960's. There were lively debates at festivals over all aspects of ringing, including: whether ensembles should play only single notes or chords; table verses off table ringing; solo carillons versus ensemble ringing (Haines); directors ringing behind the table; adding piano and other instruments; whether to damp or not; overtone tuning preferences; and notation methods (Fink). Interestingly, many of the concepts that were discarded early on have been modified and incorporated into today's practices. Although these issues may seem trivial today, they had a direct impact on modern handbell pedagogy, scoring, and composition.

Pedagogical issues resolved themselves as the size of ensembles and octaves of bell sets increased. Chords won out over single notes in ensemble ringing and using tables became standard. Today, it is acceptable for directors to ring while conducting, and there are even groups that perform without a director.

Obviously, the solo handbell carillons used during this era were an outgrowth of tower carillons. These rustic, homemade carillons consisted of bells suspended on a rack for tapping by a soloist (Parry 58). The number of bells used varied from performer to performer. Ensembles were preferred over solo carillons, which all but disappeared by the mid-1960's. They reappeared in the 21st century with the invention of Cymbells® in 2008 by Jacob Malta of Malmark (U.S. Patent Application). Cymbells consist of one chromatic octave of castings, which are mounted in piano keyboard order on a sleek rack, affixed to a tripod stand. They are available in three different 13-note ranges: C5-C6, C6-C7, and C7-C8 (Cymbells).



Antique homemade handbell carillon



Modern Malmark Cymbells

Using different instruments in conjunction with handbells was not allowed at festivals in the early days. As incredulous as this sounds nowadays, even using piano to accompany a soloist was frowned upon! Purists maintained that festivals were for bells alone. This all changed in 1961 when Kathie and Larry Fink, Jr., ages eleven and twelve respectively, performed Mendelssohn's "On Wings of Song" at the St. Louis Festival,

accompanied by their mother on the piano. It was the first time any instrument besides handbells was ever used at a handbell conference. They literally “brought the house down” and from that day forward, piano accompaniment for solo ringers alone became acceptable (Fink). Using piano or organ along with handbell choirs was still not permitted at that time.

Likewise, other instruments faced the same resistance. There were only a handful of ensemble works with instruments published prior to the 1990’s. Albert J. Zabel was the earliest composer to do so, and frequently wrote arrangements for handbells with organ, brass or woodwinds. There were so few titles of this nature available then, that composers hesitated to send them to publishers for fear they would be rejected. “Appalachian Air,” released by Jeffers Handbell Supply in 1991, was the first original composition that included both solo instrument and handbell solo/piano performance options in the ensemble score (Air). Using guitar instead of piano to accompany a handbell soloist was still unthinkable at that point. My arrangement of Vivaldi’s “Largo” written in 1989 and published in 1993 by Augsburg Fortress, was the first handbell solo and guitar work in print (Vivaldi).

The debate over whether or not to damp a bell after it was rung persisted for many years. One faction held that bells should be allowed to decay naturally once they were rung (Wood). The result was similar to holding the damper pedal of a piano down for an entire piece. In fairness to them, this is a hold over from change ringing, as it is impossible to damp a two-ton tower bell! Handbells are not damped when playing changes either, as they are imitative of tower ringing. Change ringing patterns are a single melody line, whereas ensemble music has full chords, so the sound becomes cloudy

without damping.

Damping became the accepted practice in the 1970's with Donald Allured, who taught ringers to damp notes according to their rhythmic values. James Meredith, Artistic Director of Sonos Handbell Ensemble took this one step further. He advocated damping according to what the ear perceives, in addition to observing the duration of notes (Fink). Katsumi Kodama taught players to damp their bell as their neighbor rang to smooth out melodic and scale-wise passages (Kodama). These and other refinements did much to enhance the phrasing and musicality of performances.

Tuning proved to be a more sticky issue, with people divided sharply into two opposing camps: those who preferred bells with major overtones versus those that were tower tuned (Benton). The fundamental of a handbell is tuned at the lip, while the overtones are tuned at the waist (Appendix B). If you ring a handbell and damp the lip with your finger, you can hear the upper partials speak (Nelson). All British and American bells used in the 1950's, with the exception of Deagan-JenCo instruments, were tuned with a major 12th overtone (Markey). The Dutch Petit and Fritsen bells popular during that time were tower tuned, with a strong minor 3rd overtone (Bigelow 6). The upper partials in the Deagan-JenCo bells could not be tuned uniformly, due to their unique pear shape. Ensembles tended to favor the consonant 12th overtone, while those with a carillon or change ringing background preferred tower tuned instruments. Playing full chords on Petit and Fritsen and Deagan-JenCo bells produced strong dissonances that clashed with British and American instruments. Because of this, their use was discouraged at massed ringing festivals and they fell into disuse (Fink). This shift to

instruments with a major 12th overtone affected handbell composition greatly, because they are capable of much more complex harmonies.

Bells have a very homogeneous tone throughout their entire range. This uniform sound, while lovely, sometimes exhibits a sense of sameness. Handchimes are all fundamental so their pure, flute-like tone did much to augment the tonal landscape, as did the plethora of percussive bell articulations devised over the years.

Despite this, ringers still hungered for an expanded tonal color palate. This yen was sated by the very brands of bells that were banned in the 1960's. "Alternate bells," such as Petit and Fritsen, Deagan-JenCo, Schulmerich Silver Melody Bells™, and Deagan Shaker Chimes are now prized for their unique timbre. So great was the interest, that Schulmerich recently began production of Silver Melody Bells for the first time since the late 1980's (Schulmerich Bells).

*From top to bottom:
Malmark handchime
Petit and Fritsen Dutch handbell
Whitechapel cup bell
Antique William Dunn standard handbell
Deagan-JenCo pear shaped handbell
Schulmerich Silver Melody Bell*



Unfortunately, the other instruments have not been manufactured for many years and are very rare. While alternate bells cannot be used in thick chords, they can spice up melody or counter melody lines, ostinati, cadence points, and bass lines.



Photos of Deagan Shaker Chimes courtesy Mark H. Shour, used by permission

Examples of waveforms illustrating the difference between these instruments can be found in Appendix C.

Several notation methods were explored during this dawn of ensemble ringing, including chart, band, and closed scoring. Chart notation was used primarily for one to two octave choirs, and came in three varieties: alphabetical, numeric, or in standard music notation. The music was written on a large piece of paper that was placed on an easel for all the ringers to read, while the conductor pointed to the music. All three used typed letters instead of a musical staff used in today's "bells used" charts. Alphabetical charts used letters, sometimes with the numbers "1" and "2" to distinguish between upper and lower bells, or with octaves separated by a horizontal line (Appendix D). Numeric notation, which grew out of the change ringing discipline, used ringer position numbers to notate the music. This is not to be confused with octave designation or mould pattern

numbers, which will be discussed later. Standard notation charts used the treble clef only, with ledger line for 2-octave groups. An example of the latter, arranged by Ellen Jane Lorenz and published by Lorenz Company in 1963 can be found in Appendix E. This primitive, handwritten chart measures 24” x 22” and contains a few short, simple pieces (Lorenz). Thankfully, chart notation was discarded early on as bell sets grew, encompassing more octaves.

Lawrence Fink and others used modern band style scores, with separate parts for each ringing position and a full score for the conductor. They were handwritten or typed with a music typewriter, self published and distributed (Fink). This made perfect sense from a band director’s perspective, but became impractical as the number of ringers in ensembles and octaves of bells increased.

Today, handbell ensemble music is scored like piano music, with all notes from “middle C” and lower written in the bass clef. This eliminates the need for a lot of ledger lines between the staves. It also saves ringers in the battery from hunting for their notes in both clefs. This rule does not apply to solo and small ensemble works such as trios and quartets.

Leaders in the Field

The handbell community has been graced with many trendsetters, whose enormous contributions have advanced the art of ringing. While there certainly are other prominent figures in the field, the individuals cited in this thesis have had a direct impact on my growth as a composer and the works performed at the recital.

Lawrence Fink, 1912-1998, who earned a Master in Music Education from Westminster Choir College, was one of the earliest pioneers in both handbell

performance and education. Lawrence became interested in ringing in the late 1950's, while serving on the faculty at Roberts Wesleyan College, North Chili, NY. He purchased a set of Whitechapel handbells during that period and established the Fink Family Ringers. Lawrence rang while directing the ensemble, which consisted of his wife Wilma and their four children: Cy, Mary Lu, Larry, Jr. and Kathie. The group toured the United States during the summer, and made appearances on many TV programs, including the Ed Sullivan Show.

The Council of Churches of Seattle, Washington commissioned Lawrence to teach handbells to youth groups at the 1962 Seattle World's Fair. This generated so much interest that he designed the first curriculum for handbell instruction and began teaching full time in the public school system. He founded senior citizen groups and helped churches to establish choirs too. An active composer, he arranged, published and distributed music for choirs because commercial handbell music was not readily available at that time (Legacy Video).

Lawrence developed a great deal of the pedagogical ensemble and solo ringing tools in use today. He invented weaving, passing the bell, double damp and many other ensemble techniques. He was also the first to use mallets with bells. He invented, designed and made mallets for his daughter Mary Lou, so she could execute rapid passages in his arrangement of "Parade of the Tin Soldiers" for a television performance (Fink).

The techniques that Lawrence devised were eventually adopted by the Guild. Being from opposite sides of the country, however, the two did not cross paths until 1961 at the AGEHR National Festival Conference in St. Louis. The Fink Family Ringers were

in the area on tour, and decided to drop by when they learned of the festival. The officials were so impressed with their audition that they invited them to perform at the festival. The concert was received with thunderous applause! Thereafter, they performed regularly for Guild events, while Lawrence taught classes on the solo and ensemble methods which he developed (Fink).

Kathie, his youngest daughter, was one of the first handbell soloists. She and her siblings applied his ensemble techniques in their solo performances (Fink). Other early soloists include Elizabeth Bradford, who played in the English style with the bells standing upright on the table (Fink); and Mac McKeehan, who served twice on the AGEHR National Board (Benton).

Kathie Fink is a founding member of Sonos Handbell Ensemble, an active performer, arranger, and Overtones author. She is highly sought after as a clinician for workshops and festivals, where she teaches advanced ensemble and solo techniques. In addition to performing with Sonos, Kathie tours regularly, presenting a combined solo concert and “Legacy” program, in tribute to Lawrence Fink and the “Fink Family Handbell Ringers” (Fink).

Marlow and Frances Cowan of Ankeny, IA, have been leaders in the bell world for decades. A social worker by trade, Marlow founded two bell ensembles under the auspices of their local YMCA in 1954. Frances, a professional pianist, accompanied the choirs and wrote many of the arrangements for their performances. The groups prospered for twenty-seven years, and countless children benefitted from their program. The choirs toured internationally, performing at prestigious venues such as the 1964 New York World’s Fair and Disney World (Nelson).

Though in their 90's, the Cowans remain active, performing for senior citizen groups, leading workshops, directing, and helping other local churches to establish bell choirs. The YouTube video of their impromptu piano performance at the Mayo Clinic of 2008 went viral soon after it was uploaded (Mayo Clinic). This led to numerous appearances on national TV, commercial recordings, and a Public TV Movie entitled "Over 90 and Loving It" (Cowan).

They started CBR Handbell Repair approximately fifty years ago and the business is still thriving. Marlow has refurbished bells from over fourteen different foundries, including obscure brands that haven't been manufactured for centuries. His knowledge of the acoustics and tonal properties of rare alternate bells is unsurpassed, and composers frequently call on him when writing for them (Cowan).

Donald E. Allured, 1922-2011, earned a Master in Sacred Music from the Union Theological Seminary in New York City, and was employed as a church musician for many years. He became involved in handbells in 1963 while serving as the Minister of Music at Central Methodist Church, in Lansing, MI. Affectionately known as the "Father of Handbell Ringing," Donald influenced generations of ringers with his groundbreaking work and musical genius. The quintessential musician, he was a master conductor, composer, author, educator, and innovator. (Remembering Donald E. Allured).

Donald served as President of AGEHR from 1973 to 1975 (Bradford 6). An internationally renowned clinician, he taught master classes and conducted massed concerts for countless major handbell events in the United States and throughout the world. He instituted the "Bay View Week of Handbells" for advanced, bronze level ringers in 1978 and remained as conductor through 2002 (Wiltse). In 1978, he founded

the handbell program at Westminster Choir College, and was a member of the faculty until 1988. The Westminster Concert Bell Choir, with 8-octaves of bells ranging from C1 to C9 is still is the largest bell choir in the world. They quickly gained accolades for their virtuosic performances under his tutelage. The list of Allured's considerable, prestigious awards include:

1982 AGEHR Honorary Life Membership Award

n.d. AGEHR Master Teacher Certificate

n.d. AGEHR Master Conductor Certificate

1999 Westminster Choir College Merit Award, Princeton, NJ

2007 Honorary Doctorate, Westminster Choir College

Participants in the "Bay View Week of Handbells" established the "Donald E. Allured Original Composition Award" in 1993, in his honor. The winning compositions are published by Handbell Musicians of America (Remembering Donald E. Allured).

Allured's seventy handbell compositions are among the most challenging original works in the literature and have been recorded numerous times. He was a regular contributor to "Overtones," as well as other professional journals, wrote nine books, and produced two instructional handbell videos (World Cat).

His early innovations had a profound and lasting impact on the development of the instrument. In the late 1950's to early 1960's, most choirs set the bells up from low to high, with the treble bells to the right of the conductor. This configuration is easier for a director because the notes are arranged in piano keyboard order. It is more difficult for the ringers, since from their perspective, it is in reverse keyboard order. Donald preferred the ringer-centered style, with the treble bells to his left, similar to an orchestral setup

(Fink). This became standard, as there are very few choirs that still use the older configuration nowadays.

He was also the first to use modulations and key changes in handbell compositions. As Kathie Fink says, “Before Donald, if a piece was in G major, it stayed in that key. The ringers only took out the two bells they needed for that piece and left the rest in the cases. Donald revolutionized that when he changed keys in the middle of his pieces, which shocked and challenging the ringers!” (Fink).

He invented or popularized nearly all of the legato, stopped articulations, and pedagogical techniques in use today (Fink). His two books, “Joyfully Ring!” and “Musical Excellence in Handbells” list many of these articulations along with instructions on how to execute them properly. Both books cover just about anything a new director needs to know, from required equipment to suggested repertoire (Allured).

“Mastering Musicianship in Handbells,” a sequel to the books cited above, is widely considered as the handbell bible by choir directors. Although there is some overlap in information, he goes into much greater detail in this book, particularly in the areas of notation, bell assignment and pedagogy. Coordination drills, precision ringing, advanced techniques, and multiple articulations are explained in depth and illustrated in pictures, exercises and actual music examples. There are also helpful chapters on rehearsal planning and management, concert preparation, and bell maintenance (Musicianship).

The journal article "Guidelines for Composing and Arranging Music for Handbells," illustrates the joys, quirks, and “dos and don’ts” of composing for handbells. He addresses instrument specific concerns, such as transposition, chord voicing, ranges of

handbell sets, and effective accompaniment figures, in addition to very basic traditional compositional devices (Guidelines).

Donald pioneered unique methods to conduct complicated passages, such as glissandos and rolled chords, which are very difficult for an ensemble to execute. He invented several ways to alter the dynamics on sustained tones, such as whole notes. Everybody thought this was impossible once a bell had already been rung. Not so! Using his “controlled diminuendo” technique, a decrescendo can be accomplished by lightly running a gloved finger up the casting, after ringing the bell. A crescendo can be achieved by ringing the bell horizontally, close to the table, gradually raising it up to the normal, vertical ringing position. Sound emanates from the sides of a bell, rather than the lip. The audience hears this increase in volume because the tables and music stands are not obscuring the sound; plus the sides of the castings that produce the most volume are now facing them. That same technique can be applied to shakes, producing an even more dramatic crescendo (Master Class). Donald Allured’s legacy lives on in his students; the thousands of ringers, composers, directors and clinicians, who continue to pass on his teachings.

Douglas Benton is another pivotal figure whose work has propelled handbells into the mainstream. A composer, conductor, author, and performer, Douglas began playing organ professionally in church at the age of fourteen, and became involved with handbells in 1973. He graduated cum laude with a Bachelor in Organ Performance from Northern Arizona University, Flagstaff, and then joined the faculty as director of the NAU Harter Memorial Handbell Choir.

Benton was a feature columnist for “Overtones” from 1981 to 1999. His articles

on bass bell techniques and carpal tunnel syndrome in 1988 and 1991 laid the groundwork for healthy ringing handbell performance arts medicine books by subsequent authors. He chaired and designed the first Director's Handbell Certification program for AGEHR in 1998. It was modeled after the American Guild of Organists program, with a written exam, an applied music component, and had two levels (Benton). Recently, certification was completely changed from a testing to a course based process. Students now achieve three levels of certification after completing a series of training classes at festivals. Unfortunately, the Guild does not offer college credit for these new classes, nor do they intend to in the future (Handbell Musician Certification).

In the early 1970's, Shelley Weaver invented a way to play two bells simultaneously with one hand, while ringing in Kathy Fink's choir in Walnut Creek, CA. It was the first of the multiple bell-in-hand techniques to be developed. They are called thus because ringers who use this method normally play two bells in each hand. The word spread as other ringers began using this technique at festivals. It became known as "Shelley ringing" because when asked where they learned the technique, the performers would say "I saw Shelley do it!" As time elapsed, people forgot who this Shelley was, but the title stuck. For years, Shelley Weaver had no idea that ringers all over the world were using this innovative technique bearing her name! An article in *Overtones* in the 1990's cleared up the mystery; giving Shelley Weaver the credit she was due (Fink).

Shelley ringing is achieved by crossing the handles of the bells in a scissor-like fashion, with the logos of the bells up, facing the ringer. It enables ringers to play two treble bells, such as a C7 and C8 simultaneously, and is very useful in passages that contain a lot of consecutive octaves. There are many variants of Shelley ringing,

including those that allow the two bells to be played separately, as in 4-in-hand ringing.

It is not known who invented 4-in-hand ringing, but it was used as early as the 1970's. The setup is similar to Shelley ringing, except the bells are placed in a cross, with the logo of the horizontal bell is turned toward the ringer. This bell is usually the heavier of the two, so in this position it sits in the hand in the normal ringing position. The advantage over Shelley ringing is that it is easier to play the bells separately. The top bell will sound in the normal ringing position, and the bottom will sound when the ringer moves their arm into a position akin to knocking on a door. Twisting will cause both bells to ring. Those who advocate healthy ringing principles, prefer the terms "push" to "knock"; and "rotate the arm" to "twist," as the wrists should remain passive when ringing. As with Shelley ringing, there are several ways to 4-in-hand ring, including a method that calls for the handles to be interlocked.

Marty Brent invented 6-in-hand ringing in 1976, while on tour with the Grand Canyon State Ringers. This ensemble was comprised of the combined choirs from Mount of Olives Lutheran Church, Phoenix, Douglas Benton, director; and Casas Adobes Congregational Church, Tucson, Lynn Hauck, director. Marty, who was a member of Benton's choir, developed this technique to facilitate the rapid treble passages in Allured's "Prologue, Fugue and Finale" (Benton). Diagrams for this and other multiple bell-in-hand techniques mentioned previously can be found in Appendix F and Appendix G.

Nancy Hascall holds a Bachelor of Arts degree in Music Education and Vocal Performance from the College of Idaho. She began performing as a handbell soloist in 1989. Nancy can frequently be found conducting and teaching at Guild events, especially

multiple bell and ensemble classes. She developed the traveling 4-in-hand technique. In this variant, the bell that is used frequently in a passage is held in the normal ringing position, while the knock position remains free to pick up other bells as needed. This method affords ringers the means to execute difficult passages easier, and in a fluid, musical manner (Nancy Hascall).

Louise Frier invented the belltree in 1982, when she observed ringers interlacing the handles of the bells while putting them away after rehearsals. She suspended strings of these interlocked bells on a rack, experimented with various mallets, and the belltree was born. Her “Two Belltree Processionals” was published by AGEHR in 1988, making it the first belltree composition in print. “Joy,” which was one of the compositions in that set, was chosen as a massed ringing selection for the 1990 AGEHR National Festival. Belltree ringing was an instant hit, and Louise became in demand as a Guild clinician. She has taught this technique at many festivals over the years, including the 1998 International Symposium held in New Mexico (Frier). Belltree, like solo ringing, has become a popular subset within the handbell performance community.

William Alexander has been active Guild author, clinician and massed conductor for over thirty years. He directs a graded, intergenerational handbell program consisting of five choirs at the First United Methodist Church in Duluth, MN. His band at Marshall High School, Duluth has won many prestigious awards under his baton. Strikepoint, his critically acclaimed community ensemble, has gained worldwide recognition through their recordings and tours in the United States and abroad. William, Marlow, James Salzwedel, who conducted the Hussite Ringers, and Phyllis Treby Hentz, composer and conductor of the Jubilation Ringers, were some of the first directors to use alternate bells

with their community handbell ensembles (Alexander).

William invented a number of progressive, creative handbell articulations in the late 1980's to the mid 1990's. A partial list includes: bowing the rim of the bells, marting (damping the bell horizontally on a padded table producing a stopped sound) the castings on paper and other materials, and the "singing bell" heard in "Spiritus." The "aqua bend" used in "SoundShards" was invented by him in 1987 (Alexander). An explanation of the latter two articulations is addressed in the analysis portion of this thesis. He also invented the echo, which is approved by Handbell Musicians of America and listed in their notation guide (Handbell and Handchime Notation).

These advancements affected handbell composition as well as performance, in that they broadened the horizons of the instrument. Handbell composition has progressed greatly due to the contributions from these innovative trendsetters.

The Role of Music in Estonia's Cultural Identity

Estonia is a diminutive but dignified country in Northern Europe, approximately the size of Vermont and New Hampshire together. It lies above Latvia, on the coast of the Baltic Sea and the Gulf of Finland, with Russia on its right hand border. Helsinki, Finland is directly across from Tallinn, a mere two hours away by sea. The population is relatively low at 1.3 million, so there is ample space for farming, preserved open land, and bustling, but uncongested modern cities (CIA).

Nearly every country that surrounds Estonia has invaded it over the years. Estonia enjoyed a short-lived independence after World War I, but got caught in a tug of war between Germany and Russia during World War II. Russia won out, and the country endured wholesale genocide during the 1940's. Most of the men were slaughtered or taken from their homes in the dead of night to labor camps. The military had monthly quotas to fill and even women and children were sent away. Thousands of Russians were transplanted to these vacant Estonian properties during the Soviet "Russification" program (Tusty, James, et al.).

Estonian national identity was preserved through centuries of occupation by two inextricably bound forces: their vocal music and native language. Folk songs passed down through oral tradition preserved their history and culture, while their unique language isolated them from their captors. Estonian is a Finno-Ugric based language, and does not share a common ancestry with Germanic, Romantic, or Slavic languages (Berg 4). Because of this, it is a very difficult language for invading forces to learn. Currently, only approximately 1.5 million people in the world can speak Estonian fluently. As the name suggests, it has Finnish roots, but there the similarity ends. While many Finns

speaking Estonian, and vice versa, the two are still distinctly different languages. The same word or phrase in Finnish may have a very different connotation in Estonian. The following is an amusing example relayed to me during my visit: the phrase roughly meaning, “to clean the house” in Estonian, results in “to clean or prepare a body for burial” in Finnish (R. Lai).

Estonians gained their freedom from the Soviet Union in 1991, and did so without bloodshed or violence. It is the only country in recorded history to win a revolution peacefully, through the power of massed song. Known as “The Singing Revolution,” the movement spread to Latvia and Lithuania and prompted Russia to secede from the Communist Bloc, marking the fall of the Soviet Union. It is chronicled through a riveting documentary film, bearing the same name (Tusty).

The resistance began in 1939 with a clandestine group called the “Forest Brothers.” Their work was shrouded in secrecy for those were dangerous times. If discovered, members could be executed on the spot or sent to a Gulag (Tusty).

The Laulupidu, or choral festivals, comprised of traditional folk and classical music, have taken place in Tallinn since 1868 (I. Lai). The Soviets permitted them to continue, as they did not consider them a threat. Moreover, they thought the festival made a splendid internal and external propaganda tool. Songs edited with State approved lyrics were meant to brainwash the people. The world saw happy Estonians singing fervently in Russian (Waren 7). What could go wrong?

Needless to say, speaking Estonian or other displays of nationalism was prohibited during Soviet occupation (Rüütel 5). This ban proved to be a double-edged sword. It is difficult for conquerors to learn a rare, complex language when the

indigenous populace is forbidden to speak it, and so few outside their borders are fluent (Waren 5).

The first public protest took place in 1947 at the song festival with the massed singing of “Land of My Fathers, Land that I Love” by composer, conductor, Gustav Ernesaks. Periodically, songs sung in Estonian were permitted at the Laulupidu, provided the lyrics were scrubbed clean of nationalistic content. Ernesaks set the text from a 100 year-old Estonian poem to music, but cleverly disguised the Estonian lyrics so the Soviets would not realize it was a patriotic song. It worked because the officials had an inadequate grasp of the language. The piece became Estonia’s unofficial national anthem. It was performed again during the 100th anniversary of the song festival. This time, the audience joined in and 100,000 voices erupted in song. The Soviets tried in vain to stop them and then finally gave up. The demonstration in 1969 rekindled Estonian patriotic fervor and the resistance movement began to grow again (Tusty).

The revolution came to a head with a series of demonstrations from 1987 to 1991. Estonians sang patriotic songs of freedom at the festivals, flew the Estonia flag, and met each threatening Soviet response with a quiet resolve. Peaceful demonstrations were held in the Old Town Square, and impromptu rock concerts sprung up throughout the country. A human chain, over a million strong was stretched from Estonia through Latvia and Lithuania, with people singing all the while. Choristers encircled the Tallinn TV tower protecting radio announcers who continued to broadcast amid Soviet attempts to storm the building (Tusty). The outside of the tower still bears the marks of Soviet bullet holes.



Relations were tense, to be sure, but the Estonians remained calm, robbing the Soviets of the excuse to launch a full out attack. The time was also right. The Cold War was over and the Berlin Wall was down. Gorbachev was trying to promote a more tolerant Soviet image to the United Nations. Computers and the Internet heralded the impending Information Age, which brought the world closer together. Attacking Estonians without provocation would severely damage Soviet international relations. The world was watching.

Russia seceded from the USSR, Estonia triumphed, and the other Baltic States followed soon after. Iceland was the first country to recognize their independence (Tusty). In 2004, they became members of the European Union and joined NATO (CIA).

Today, Estonia is a free, democratic nation. They shrugged off centuries of oppression and went full steam into the 21st century (CIA). They have made significant contributions to many fields, including technology with the invention of Skype (I. Lai), and even joined the space race with the development of the ESTCube, a tiny solar wind sail satellite (ESTCube-1). Recently, Gabriel Passov invented the chord viola, which has a mechanism that enables performers to play three-string double stops (Passov). Paiste, the cymbal company established in 1901 by Estonian-born Michail Toomas Paiste in, continues to blaze new trails in the industry (Paiste History).

The study of music is mandatory in Estonia for twelve full years. Children in grades one through four attend two music classes per week, which consist of singing, general music and the history of music in Estonia. Grades five through twelve have one class per week. Many youth take private instrumental lessons, or attend intense after school programs at area music schools. Field trips to workshops that provide unique

musical experiences for elementary aged students are offered by the State or cultural centers (I. Lai).

I had the good fortune to participate in an annual workshop entitled “Teeme isemuusikat” or “Let's Make Music” at the Parnu Concert Hall, while I was in Estonia. It was a most interesting event! Elementary school children, some only seven years old, were bussed in for a morning or afternoon session. Four different, highly creative classes were offered: handbells, body music, African drumming, environmental music, and kannel, a traditional Estonian zither.

Most of these children have never heard of, much less seen a handbell. Inna Lai taught them how to ring and play three short pieces, while I helped them individually with ringing technique. Children learned to strum a simple I, IV, V progression on the kannel while singing folk songs. They learned easy to very intricate drum patterns in the African drumming class. Body music combined body drumming, snapping fingers, clapping, vocalization, stomping, flapping arms, etc., to make rhythmic, percussive music. Students imitated natural, man-made, and industrial sounds in the environmental music class.

The children chose and registered for the class in which they were interested beforehand. The classes were only forty-five minutes long, but they learned a great deal in that short time. Afterward, each class presented a concert for their peers. The whole process repeated in the afternoon with an entirely new group of students from different schools. The children had fun in the classes they chose and it was an enjoyable, positive experience for them.

Estonia has produced an impressive array of famous, gifted composers, including

Arvo Pärt, Gustav Ernesaks, René Eespere, Artur Kapp, Liis Viira, and Veljo Tormis. Today, Estonian music encompasses a wide variety of styles, from classical to jazz; traditional folk to world music. The crossover between these styles is intriguing, particularly in 20th and 21st century music and rock. Many of their famed, classically trained composers such as Peeter Vähi, Erkki-Sven Tüür, Alo Mattisen, Jaan Rääts, Sven Grünberg, Rein Rannap have either played in rock bands, and/or have incorporated elements from both genres in their works (I. Lai). Tüür and Mattisen, for example, both led the progressive rock band “In Spe,” at different junctures (In Spe).

Mattisen, best known for his rock protest songs written during “The Singing Revolution” (Engelhardt 3) also composed 20th century works such as the Sonata for Cello and Piano. Tüür’s neo medieval “Raerituaal,” which features crumhorns, recorders, and chorus, pitted against full orchestra in an explosion of rhythmic sound, also sports a driving electric guitar solo (Classical Discoveries). Lauri Varulven Õunapuu, who taught the environmental music workshop in Parnu, also plays in “Metsatöll,” a heavy metal band. As a matter of fact, he was leaving for a tour to the United States the day after the workshop.

The size of the country accounts for this intermixing of genres. Estonia is such a small nation that musicians cannot earn enough money specializing in one style of music, so they have to branch out in order to make a living. Folk rock, which incorporates traditional Estonian music, is very popular at the present time (I. Lai).

It is said that even the sand sings in Estonia (Laulasmaa). A wonderful example of environmental music can be heard on the beaches on Laulasmaa and Ruhnu Island. Walking on, or sweeping the sand produces a whistling, violin-like, pitched musical

sound (Singing Sand). Laulasmaa, literally translated “singing land,” is about an hour from Tallinn (Laulasmaa).

The “Estonian Song Festival” is still held every five years in the summer at the “Song Festival Grounds” in Tallinn. Choirs must audition to sing in the festival. Thousands of singers, dressed in traditional costumes participate in the event. Traditional dancers take part in the celebration, plus there are theater performances, crafts, and fine arts exhibits throughout the town (I. Lai). It is rather like an Olympics for the arts! There is a statue of Gustav Ernesaks, seated on the grounds with him seemingly overseeing festivities. It is a powerful sight, even in the fall, when the amphitheater is empty.



Song Festival Grounds



Ernesaks monument

The many monuments to musicians, poets, and artists throughout the country give testimony of their commitment to the arts. Music is an integral part of their cultural identity.

Planning the Recital

Inna Lai holds advanced degrees in Music Education and Choral and Orchestral Conducting from the Estonian Academy of Music. She studied with conductor Jüri Variste while at the Academy, and has sung solos under the baton of Arvo Pärt. She is the consummate musician, a gifted conductor, pianist, vocal and handbell soloist, educator and composer. Inna Lai has introduced handbells to many countries including Finland, Poland, Latvia, Lithuania, Russia, Sweden, and Germany. A talented handbell soloist, she has performed extensively in Russia and Europe, and has had numerous appearances on Estonian and Russian radio and television programs. She conducts four handbell ensembles in addition to käsikellade ansambel Campanelli, her community-professional group. Her ensembles have been featured on radio, television, audio and video recordings. Inna Lai's work has propelled handbells into the mainstream, both in Estonia and in the international arena.

I met Inna Lai on February 23, 2010 when she sent me this private message on Facebook: "Greetings from Estonia!" We exchanged pleasantries, and I learned that Campanelli had performed some of my works and had also recorded them on their CD. She sent me a copy of the CD shortly thereafter. We chatted at least once a month, found we had much in common, and quickly became good friends.

In August 2010, Inna Lai asked me to recommend some more of my music for their next CD recording. Sometimes it is difficult and costly for Estonians to order sheet music from the United States. Many vendors will not accept Estonian credit cards, plus shipping costs are high. Music and educational materials are not supposed to be taxed by the postal system in Estonia, but the recipient can sometimes be hit with 38% tax on the

total value of the materials. Also, packages can get hung up in customs for months. To avoid these issues, I emailed her PDF files of all my works with 4 Tolloed Publishing, since I own the copyrights.

On November 10th, I got a surprise visit from Inna Lai's husband Ivar and daughter Riina, as they were running in the New York City marathon! They stopped by on their way home from picking up a set of CymbBells from Malmark. We had a wonderful time talking; playing bells, and I sent them home with a stack of handbell music.

November 18th, I received an email from Marget Haug of Imagine Ad Agency, requesting rights to use my arrangement of the "Brian Boru March" for a TV Christmas commercial in Estonia. The ad was for Rocca al Mare mega mall in Tallinn, and Campanelli was scheduled to perform the piece for the commercial. I answered, and then forwarded the message to my publisher, From the Top Music, as they owned the copyright. The publisher, Inna Lai and I were all very excited about this opportunity. Ms. Haug and my publisher handled the legal issues, and the commercial aired from late November through December. Imagine Ad Agency had a very creative concept and Inna sent me a link to the video so that I could see the final product.

We remained in contact via Facebook and email in the coming months. On August 27, 2011 she told me of her idea to have an "author's concert" featuring my compositions. I was humbled and honored! We began planning the performance together.

She needed more music to flesh out the program, so I asked her to select the titles from the list on my website. I ordered multiple copies of my pieces with the larger publishers and mailed them to her. Unfortunately, she had to pay the import tax when

they arrived in Estonia. The two smaller publishers gave me permission to send her PDFs so she could print the works out. This was much faster, easier, and did not incur any shipping or delivery fees.

We discussed performance options, tempos, any printing errors, etc., as those questions arose. I do not like to interfere unnecessarily with a conductor's interpretation, as it stifles their gifts and creativity. Inna Lai sent me videos of their previous performances, all of which were excellent, so I knew my music was in good hands.

Originally, we planned to do the concert in 2012, however a personal injury resulted in the postponement of the performance until October of 2013. Initially, only one choir was slated to perform, but by July, the roster grew to four handbell choirs: Campanelli, KellaRing Concert Ensemble, KellaRing Youth Ensemble and Nobell Laureates; and fifteen instrumentalists, including a brass quartet and small chamber ensemble.

In August 2013, I approached Dr. Floyd Richmond to ask if this concert could be used as my graduate composition recital for Valley Forge Christian College. I had not even considered the possibility until a friend suggested the idea. He consulted with Dr. William DeSanto, Chair of the Music Department, and they graciously granted me permission. Valley Forge Christian College is the first institution in the world to support an international graduate handbell composition recital.

Incredibly, this concert was initiated, organized and implemented by Inna Lai and the performers. I advertised the concert through Facebook, email, Twitter, and several handbell Internet digests. Ms. Lai handled all the publicity abroad, including advertisements in local newspapers, radio and TV, in addition to Internet sources. She

also designed the posters and programs, hired all the musicians, secured the performance space, and led the rehearsals.

Her efforts grabbed the attention of producer, Anneli Ahven, in September 2013. Anneli offered to do a documentary film that would chronicle this event from the initial invitation on Facebook, to the final concert. When finished, it will be aired as an episode in a series entitled "Meie Inimesed" or "our people" for Estonian TV.

Dress Rehearsal

We arrived in Tallinn, Estonia on Friday, October 10, 2013 at 1:00 in the afternoon, and were greeted by Inna Lai and the film crew, who were documenting the collaboration. Sunday evening, we attended the dress rehearsal at Nomme Kultuurikeskus, which is Campanelli's home base. One of the ringers had to work late, so my sister Celia and I took turns filling in until that person arrived. The rehearsal went very smoothly. We fixed one misprint in "Sue's Blues," but everything else was perfect. The musicians were so well prepared that there was little for me to do but relax and enjoy the rehearsal.

Performing Forces

Inna Lai assembled an impressive, diverse roster of performers for this concert, including four handbell choirs and a total of forty ringers. The event was similar in scale to regional Guild festivals, complete with a massed ringing selection. While there were fewer handbell choirs than at HMA conferences, there were many more instrumental soloists at this recital. Instruments from the string, woodwind, brass, percussion, and keyboard families were represented, along with a tambura, an Asian Indian instrument. The fifteen soloists encompassed teenagers through adults and talented amateurs through

seasoned, degreed professionals. Some were drawn from the Estonian National Symphony Orchestra. A complete listing of the performers can be found in Appendix H.

Most of the handbell ensembles in Estonia are secular or school-based organizations, rather than church choirs as in the United States. Conductor, Inna Lai is the founder and director of three of the choirs that participated in this performance.

Campanelli Handbell Ensemble is bronze level adult community/professional ensemble comprised of thirteen ringers. They perform on 5-octaves of handbells, 7-octaves of handchimes, and a set of Cymbells, all made by Malmark. KellaRing Youth Ensemble has eleven ringers, ranging from elementary through middle school aged children who ring on 3-octaves of Malmark handbells and handchimes. It is a training choir for the concert group. KellaRing Concert Ensemble is an advanced community choir consisting of ten members from high school through college age students. They perform on 3-5 octaves of handbells and handchimes. KellaRing Concert and Campanelli have performed extensively throughout Europe and Russia, and have recorded several CDs (I. Lai).

Karolina Sepp, founder/director of the Nobell Laureates, holds a B.A. in Piano Performance and a teaching certification from the Estonian Music Academy, and a M.S. in Educational Sciences from Tallinn University. The Nobell Laureates perform on 3-octaves of Schulmerich handbells. All eleven ringers are on the faculty at the International School of Estonia, and represent five different countries: Estonia, America, England, France and Portugal (Sepp).

Venue

Located in the heart of Tallinn, Old Town is the oldest intact medieval city in Europe. Most of the town wall is still standing, and the buildings, some of which date back to the 1100's, all are original. They have been restored and equipped with modern conveniences, but have essentially remained the same since the Middle Ages. The narrow cobble stone streets, gorgeous architecture, street musicians, artisans and vendors, quaint shops, and period restaurants give the illusion of stepping back in time.



The concert *Inna and me in front of Mustpeade Maja in Old Town* was held 7:00

p.m. on Tuesday, October 15, 2013 at White Hall, Mustpeade Maja in Old Town. It is one of the oldest concert venues in Estonia. The building houses four large halls, four meeting rooms, and common areas, all with their own distinct period décor. Much of the historic elements have been retained. Our performance was held in White Hall, a lovely Renaissance style hall with a balcony that can accommodate 240 people.



Range of the Instrument

Handbells are transposing instruments that sound one octave higher than written. Because of this, American handbell foundries designate “Middle C” as “C5” instead of “C4,” as is done in American Standard Pitch Notation. Handbell ensemble sets are made in graduating sizes, beginning with two chromatic octaves, which spans from “G4” to “G6.” Extra bells are added at both ends when increasing the range, so 3-octave sets span “C4” to “C6”; 4-octave sets span “G3” to “G7,” and so on. Two, four and six octave sets are essentially G instruments, while three, five and seven octave sets are C instruments.

Specialty handbell sets, such as diatonic or solo ringer instruments are available too.

Handchimes use the same configuration, except 6th and 7th octave add-on sets have the bass chimes only. Treble chimes only go up to the C8, the highest chime in the 5th octave. Chimes are indicated in the score by diamond shaped noteheads.

The bulk of published handbell music falls in the 3-5 octave range because most church choirs have either three, four or five octave sets. When compositions include multiple octaves of bells, parenthesis, brackets and sometimes greater/less than symbols are used on notes that need to be omitted, depending on the range of the instrument used for the performance. Generally, composers will write for 3-octaves, and then expand the work to 5-octaves by doubling the treble up and the bass down by octaves. It is unusual to see works that use a different treatment for the extended octaves, particularly in the treble region.

Handbell music is often short so it will fit into a church service or a light concert program. It is frequently in AB or ABA form, sacred rather than secular, and generally is not of a progressive nature. Because of this, the analysis of the compositions used in my recital will begin with those that fall outside of the norm, rather than in program order.

Analysis

SoundShards

“SoundShards” was inspired by musical sonification, a process in which digital data is transformed to create a musical composition. The raw data is run through a computer program that converts it into sounds based on a pre-set mapping scheme. When transferred into notation, the music becomes both an aural and graphic representation of the data. There are a number of sonification programs available, ranging from simple freeware applications to huge set ups at Universities or research facilities. Any type of algorithmic data can be utilized. Some examples include brain waves, seismic activity, solar wind, weather information, the genome, and stock market data. “SoundShards” was commissioned by Michèle Sharik for her B.A. senior recital for California State University, San Marcos.

The form of the piece is explained in the instructions, included with the full score. Separate instructions for each of the instruments are indicated on their individual parts. The score is intended as a guide only and the musicians are not tied to the printed page. Lengths of the solos and even whole sections of the score are flexible and may be shortened or lengthened, as needed. The suggested substitute instruments may be used if the specified instruments are not available. No two performances will be the same, and will vary depending on the musicians, instruments used, flexibility in the score, and the degree of improvisation that is used.

Players move from section to section when they are ready. The optional third development (m.66) is all free improvisation and may be omitted. Two pairs of musicians may play out of phase with each other during the recap. The percussion and marimba;

and solo handbells and piano opted to do that at the performance in Estonia and it was very effective. The composition does not ritard and the ending should be loud and abrupt.

I opted to write an original composition based on sonification, instead of collecting and transforming data. The written portions of the composition are the “constants” and the “shards,” my term for the instrumental solos, are the variables. Shards are short solos, one to four measures in length. A shard may be started by one instrument and then completed by another (m.62 and 63). Shards represent spikes or anomalies in the data.

All the instruments, except the tambura have their own main theme motif and accompaniment patterns. The marimba, piano and handbells have pre-written solo shards, but they may also improvise them. The percussionist’s shards are always free improvisation. The tambura provides cohesion and does not improvise. It plays the same role as it would in an Indian raga, to produce a defused, continuous, unaccented drone.

I chose instruments that are readily available, but perhaps are not normally used together. They were selected for their unique sound, contrast and texture. I chose handbells (Inna Lai) because they are capable of so many diversified sounds, marimba (Rein Roos) for its earthy-woody tone; available percussion (Aivar Lai) for variety; tambura (Krista Joonas) to provide continuity; and prepared piano (Karolina Sepp) for spice. These are also instruments that I’ve performed on at one time or another during my career. The piece reflects my background and education as well, and is influenced by 20th Century and ethnomusicology, specifically music of India and Indonesia.

Some of the instrument received unusual treatments. The handbells are set up in four performance stations, that correspond to their main theme or written shards. Each

station has its own unique tonal color and purpose. The solo ringing station is used for the main theme and accompaniment patterns, while the rest of the stations are used for shards and improvisation. The belltree station has upper 3rd octave bells and produces a sustained, delicate sound; while the malleted lower 3rd octave bells on the table have a stopped sound. The “aqua bend” (m.53-54) station is perhaps the most unconventional. William Alexander invented the aqua bend in 1987. The bells are rung and then the rims are dipped into a tub of water, which bends the pitch down a half step. It is an interesting and highly effective technique.



The percussionist is encouraged to be creative in their selection of contrasting instruments when improvising. They may use items in the performance space, such as music stands, instrument cases, metal tubes, or car keys, for example. They may also use percussion instruments from other cultures.

A prepared piano is preferred over a standard instrument. I experimented with many ways to do this, and after much trial and error, discovered that “Stick-it-Craft Felt” produced the best dry, thunky sound for my purposes. The product is a 9” x 12” “peel and stick” piece of felt, available at most craft stores such as A.C. Moore for a modest price. It can be cut in 4” pieces and applied to the strings, sticky side down, as close to the dampers as possible. It does not harm the strings, and is easy to apply and remove, even during a performance.



During an interview at WPRB radio, Princeton, Dr. Marvin Rosen remarked that the work is very Estonian. When I asked him to elaborate, he sent me the following quote:

“When I listened to “SoundShards” for the first time I had been struck by some similar characteristics shared with contemporary Estonian

composers. The work, with its impressive creativity, unique instrumentation, and rhythmic energy, recalls the work of various Estonian composers such as, for example, Raimo Kangro, Jaan Rääts, Urmas Sisask and Peeter Vähi, while retaining its own musical language.

The hypnotic, almost minimalistic writing (different somewhat than the minimalism of the American minimalists such as Philip Glass, for example) is a total delight to the ear and also recalls to a degree the composers named above. I can easily understand why "SoundShards" attracted the attention of Estonian musicians and received its European premiere there."

There is very little literature of this nature written for handbells. It is the only minimalist solo handbell work that has been published to date. Handbell solo works are normally written as for a soloist with an accompanist or as unaccompanied works. "SoundShards" is unique because all the instrumentalists play an equal part in the composition. It is truly a collaborative work.

(NOTE: SCORE Omitted)

Sue's Blues

“Sue's Blues” is the first in an ongoing series of original jazz compositions; including “Sue's Blues Too” and a third work that is still in process. It is in 4/4, C major, and written for flexible instrumentation and may be played by a jazz ensemble (solo instrument, guitar, piano, bass); solo handbell with keyboard or guitar accompaniment; or a solo instrument and 3-4 octaves of handchimes. It is unique because of the versatile instrumentation and because there are very few original jazz compositions for handbells. It is published with Above the Line Publishing.

Hando Põlluste, clarinet, and Märt Roogna, bass guitar were accompanied by Campanelli on handchimes for the Estonian performance. Hando is a degreed, professional jazz musician who is well versed in improvisation techniques.

The work contains lush jazz chords, which give it a free, open sound, despite their tight voicing due to the liberal use of major 7ths, 9ths and 11ths. The melody is quite relaxed also. The composition is largely built on the standard ii-V-I jazz turnaround progression. This progression can be found in the very first measure, and it continues, except for a respite in measures 7 to 17. The chords may be major or minor, depending on when they occur:

m.1, beat 3 to m.2, beat 1: ii-V-i of A minor

m.3, beat 3 to m.4, beat 1: ii-V-i of A minor

m.4, beat 3 to m.5, beat 1: ii-V-I of F major

m.5, beat 3 to m.6, beat 1: ii-V-I of D minor

m.18, beat 1 to m.6, beat 1: II-V-I of Db major

The first four sequences illustrated above repeat in the recap beginning in measure 20.

The accompaniment is basically a written out lead sheet that allows the musicians the freedom to improvise. The bass guitar part is written in open position to make it accessible, but lends itself to embellishment by seasoned performers. The vibrato on the chimes is imitative of vibes.

(NOTE: SCORE Omitted)

Fanfare for an Uncommon Instrument

P. L. Grove, director of Velocity Handbell Ensemble commissioned “Fanfare for an Uncommon Instrument” for their “Vintage & Vogue” tour. From the Top Music publishes this original composition in three compatible, yet completely independent editions, so they can be performed together or separately:

Brass quartet

3-oct. handbell quartet or choir with optional 2-oct. chimes and alternate bells

4-5 oct. handbells with optional 2-oct. chimes and alternate bells

It can be played antiphonally by stationing two or more of the ensembles in different areas of the performance space, or as a double handbell choir piece. The opening three measures can serve as a processional. Using chimes and alternate bells such as Petit and Fritsen handbells greatly enhances the effect of the processional. Campanelli performed the 5-octave version with a brass quartet composed of Lauri Kivil and Peep Geraštšenko, trumpet; Hanno Kedik, French horn; and Johannes Kiik, trombone.

“Fanfare” is one of a handful of handbell works in print that utilizes blurred tonalities. It is written in G minor (“A” sections) and G major (“B” section) because it cadences on G chords at the end of each section. Also, two and four octave pieces are often written in G so that key is familiar to ringers. It is in cut time.

The D to A, perfect 5th motive forms the basis for the polyphonic portions in the “A” section and recap. This tiny fragment may appear transposed (“G4” to “D5” in m.5, beat 1), with an interval other than a 5th (major 2nd in m.5, beat 3+), may stay on the same

note (m.13), be inverted (m.15, treble clef, beat 3+), or harmonized (m.40), and can be found in all registers of the instrument.



The “B” section serves as a foil to the “A” sections. It is more consonant, slower, has longer phrases, no eighth notes, and has a homophonic, hymn-like texture.

Campanelli played chimes on the repeat in this section, which further accentuated the contrast.

The recap occurs in the pickup to measure 38, with some interesting modifications. The aforementioned motive bounces back and forth in different octaves in the treble clef, supported by ascending chords in the bass. These chords then become the harmonized motif in measure 40, as cited earlier. The whole section gives the illusion of ascending upward, ending with full G major chord.

(NOTE: SCORE Omitted)

Spiritus

“Spiritus” is an original, programmatic composition, commissioned by Nancy Hascall, conductor of Bells of the Cascades of Portland Oregon for their "Magic, Mystery and Majesty" tour. They wanted a work that would showcase their recently purchased lower 6th and 7th octaves of handchimes. From the Top Music publishes it in two compatible versions: 5-7 octaves of handbells with optional 5-7 octaves of chimes, and 3-4 octaves of handbells with bells optional 2-4 octaves of chimes. Both versions have parts for optional flute, bar or wind chimes. Campanelli used 5-octaves of handbells and 7-octaves of chimes for the performance.

The introduction in the key of A minor set in 3/4 time, but should be taken freely, with a lot of breadth. It begins with bar or wind chimes followed by the “singing bell” technique on open fifths (“A3” and “E4”) in measure 2 that continues through measure 7. William Alexander invented this intriguing articulation in 1987. The technique is borrowed from the Tibetan singing bowl discipline. It is achieved by rubbing a wooden dowel around the rim of the bell to produce a singing sound. The casting may be rung to start the tone first before doweling, which speeds the onset of the singing, but in this case, the performers started with a silent bell. Either method is acceptable. The singing bell articulation is indicated in the score by a broken circle with arrows, or simply “SB” with a footnote.



The sub-bass chimes have a solo in measures 3 to 7 of the introduction. This may be played on bells or chimes, as most groups rarely have both available, due to the cost of the instruments. Another interesting articulation called the “shimmer,” which was invented by Rusty Sanders approximately in 1998 appears in measures 8, 9, and 123. A shimmer is accomplished by rotating the bell quickly from side-to-side after it is rung. It is indicated in the score by a horizontal line with arrows on either end.

The tempo changes to quarter note 74-80 at measure 9, and though it is more metric than the beginning, it should still be played expressively and with a degree of freedom. The melody in measure 9 through 11, beat 2 comes from the measure 6, and is further developed until measure 17. The sparse accompaniment in that section eventually morphs into murmuring eighth notes of major 2nds in the mid-range, supported by long tones in the bass.

The three-note motif (“G5,” “C6,” “B5”) in measure 17 is a fragment taken from measure 4, beat 1+ to measure 5, beat 1. A dialogue follows, as the motif bounces back and forth between registers, first in the chimes, doubled two octaves up by suspended, malleted bells (m.18). It is echoed in measure 18 in the chimes and doubled up by suspended, malleted bells, and then in the upper 3rd octave bells (m.19). The full phrase appears simultaneously in the sub bass in measure 19. In measures 20 to 22, the eighth note accompaniment from measure 17 is embellished by eighth notes in contrary motion in the treble clef, which grows into “LV” accompaniment used in the next section. LV, an abbreviation for “let vibrate,” instructs the ringers not to damp their notes until another LV symbol is given, or an “R” (ring) or “bulls eye” tells them to damp.

The tempo in the “A” section slightly faster and fixed. The sub-bass chimes are not used in this section. A new unison eight bar melody is introduced the, accompanied by arpeggios in the bass. The progression is: Am, C, G, Am, Em, A. The melody is repeated in bars 34 through 41, but the chord progression is slightly different: C, G, Am, Em, A. The entire “A” section is repeated, harmonized with full chords in the treble.

The transition in measures 57 and 58 lead to the restless “B” section in measure 59. The new melody played on chimes or flute is in A-dorian in measures 61 to 68 and A minor in measures 69 to 76. Open fifths supply accompaniment in the bass, while the highest treble bells have an ostinato consisting of eighth notes in broken octaves. Each pair of malleted, suspended bells in the ostinato is assigned to a different ringer. This makes it easier to keep the eighth notes even in this passage. This melody is repeated in measures 77 to 92, accompanied by lush chords and LV arpeggios. The F chord in measures 77, 78, 85 and 86 give the impression that this passage is in Lydian, but it is still in Dorian. The sub-bass chimes return in measure 76 and the full 7-octaves remains in for the duration of the work.

At measure 93, another transition composed of material from measure 20 of the introduction predicts the recap that begins at measure 96. The harmonized melody in the treble clef is echoed briefly by an eighth note figure in the highest bells, before they are incorporated into stacked, full chords. LV lines and long tones in the bass provide a rich foundation. The piece builds steadily to the apex in measure 107 and gradually ebbs during coda (m.112). Measures 112 to 115 uses material from measures 19-22 of the introduction.

The adagio restates measures 9 through 13, but in grander fashion with chords expanding in contrary motion. Dramatic dynamics, from pianissimo (m.115) to fortissimo (117) enhance the effect. The decrescendo, ritard and fermata in measure 120 prepare the listener for the ending. The descending, suspended, malleted treble bells, molto ritard and pluck lifts in the bass bells give the feeling of time being suspended. The shimmer on the open fifths in the last measure is not damped, letting the sound die out naturally.

(NOTE: SCORE Omitted)

Brian Boru March

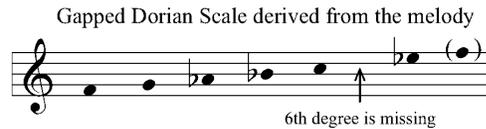
“Brian Boru March” is an ancient Irish jig named for a king who reigned in Ireland during the Middle Ages. From the Top Music publishes a quartet and full ensemble version. This arrangement is scored for 3-5 octaves of handbells and optional flute (C instrument). Campanelli played the handbell part on 5-octaves of chimes, while soloist Tiina Rum expertly performed the flute part on the belltree by memory.



Tiina Rum

The melody is in rounded binary form, and the meter is in 6/8. The piece is in the F-Dorian mode. While an argument can be made for the Aeolian mode, Irish tunes in Dorian frequently move back and forth between the first and seventh degree of the scale. This gives the piece a minor, followed by major quality. This can be seen in the beginning of the arrangement, where the opening sequence in measures 1 and 2 slides down a full step from F to E-flat.

The tune uses a "gapped" scale, another characteristic of Irish music employed to avoid diminished chords that occur naturally in eight-tone modes. In this case, the sixth degree of the scale is missing from the melody.



The chord progression for melody in the “A” section is i, VII, i, v, i, and the progression for the “B” section is III, VII, i, v, i.

The arrangement is a set of variations, which opens with the melody in the treble, supported by droning parallel 5ths in the bass and mid-range.

The second variation features broken open fifths in the bass and arpeggios (root-3rd-root-5th) in the battery (m.18-23), followed by arpeggiated open fifths (m.24-33). The sustained “let vibrate” (LV) and stopped sound of the bells malleted on the table provides a nice contrast in this section.

The melody is in the bass, accompanied by the trebles with either open fifths (m.34-41) or chords (42-49) in the third variation. Articulations such as shakes (SK) and thumb damps (TD) add a bit of texture to this section. The work ends with a boisterous mart lift.

(NOTE: SCORE Omitted)

Elysium

“Elysium” is an original composition that was commissioned by Laurie and Rusty Sanders for Crusader Bells of Pacific Beach Presbyterian Church in San Diego, CA. Originally, they requested a 3-octave handbell piece, but then asked that it be expanded to 5-octaves when they received the manuscript. I wrote a completely independent descant line for the upper fifth octave instead of just doubling the melody, which is normally done when expanding a piece from 3-5 octaves. This gives the two scores a completely different character and difficulty rating. The 3-octave, Level 2 version is lighter and easier than the more intricate and challenging 5-octave, Level 3+ version. The composition has five performance options:

3-octaves of handbells or handchimes

5-octaves of handbells or handchimes

Handbell ensemble with flute (C instrument) on the melody or descant

Solo instrument with intermediate or advanced piano accompaniment

Solo handbells with piano accompaniment (with or without flute descant)

Above the Line Publishing of West Hollywood, California publishes the piece.

The company is unique in that they allow the composer to retain copyright of the works.

Campanelli used 5-octave handbells and augmented the bass line with the lower 5th through 7th octaves of chimes (Aivar Oroperv) for the performance. The doubling of the bass a full octave lower was very effective indeed.

“Elysium” is a 4/4 ballad in C major in ABA form. The lyric melody enters after a brief, two measure introduction, supported by flowing arpeggiated, LV accompaniment.

The chord progression in the A section is simple popular song formula: I, IV, V, I, vi, IV, ii, V, (I), with a few color tones added periodically.

The eight-measure melody is repeated in measure 11, where the descant for the upper 5th octave begins. A modulation occurs in measures 17 and 18, and the “B” section begins in E-flat major, where it stays briefly before modulating back to C major in measure 27, via the G7 chord in the previous measure. In measure 38 the melody goes up to a “G6” instead of an “F6” as it did in previous occasions (see m.6, 14, and 30, beat 1) goes up one note to a “G6.” This slight change makes way for the melodic extension in measures 38 to 43. The work ends peacefully after the short coda.

A four-note melodic motive is first stated in the treble clef on the “G5” in measure 2, the score. Examples can be seen in the bass (m.33), mid-range (m.10), and treble descant (m.11). Usually it appears as single notes, but sometimes it is harmonized. Examples of this can be found in the descant in measure 19, and in the mid-range in measure 35 from beat 1+ to beat 3. In the coda, it can be found three times in succession, rising from the bass to the treble, beginning with the “G4” (m.43, beat 1+), “G5” (beat 3+) and again on the “G6” (m.44, beat 1+). Other melodic fragments such as the “E6, F6, D6” (m.12) behave similarly, and the descant frequently imitates the melody.

(NOTE: SCORE Omitted)

Saint Louis Blues

“Saint Louis Blues” is an arrangement of the famous jazz standard, which was written by the incomparable W.C. Handy in the early 1900’s. It is scored for a 3-5 octaves of bells with an optional soloist, ad lib. Sax, trumpet, guitar or harmonica is preferred, but other instruments are welcomed as well. Campanelli used 5-octaves of handbells during the performance. It is published with From the Top Music.

The piece contains an “A” section (verses), “B” (bridge), and “C” (chorus). It is largely a twelve bar blues, except for the eight measure bridge section. It is written in 4/4 with a relaxed swing.

The “A” section (m.1-12) opens in C major with a straight I-IV-V progression. Handy introduces jazz elements in the melody from the onset, with flatted 3rds (m.2), flatted sevenths (m.8), and raised fifths (m.4). It should be noted that musical grammar was sometimes suspended in order to make it easier for ringers to read. Such an example is present in measure 1, beat 4, where the Gb7 chord was changed to an F#7. Simple quarter note chords that imitates a soulful strumming of a guitar, accompany the melody. The melody is answered periodically by the inner voices, as seen in measures 3, 4, and 7. Jazz elements include anticipation of the beat (m.1, beat 4+; m.11-12), accented upbeats, and seventh chords. A standard jazz turnaround of I-vi-ii-V in the first ending leads back to the top.

The transitional Cm6 chord in the second ending leads to the bridge (m.15-30) in C minor. The progression is i-ii7(b5) [substitute for iv]-V or i-iv-V. This strain has full chords in the treble with a Cuban habanera-style bass line. The eighth notes in measure 9, beat 4 imitate the “wah-wah” sound of a trumpet with a Harmon mute. This device is

used throughout the score. The transitional Cm6, D7, and G chords in measures 29 to 30, along with their rhythmic anticipation and full voicing herald the impending return to C major in the next segment.

The “C” section is a boogie-woogie of malleted bells in the bass. The long awaited head of the tune is featured from measure 31 through the end of the arrangement. Each of the four 12-bar sections has a slightly different character. Measures 31 to 42 establish the boogie. The walking bass in measures 41 and 42 leads to the next strain.

Measure 43 to 51 contains original melodic material. This is actually an improvisation-like solo, written out for the bells, as it is difficult for individual ringers to improvise as though they are one person. The grace note, first found in measure 44 is achieved by having one ringer play a thumb damped “Ab6” while ringing the “A6,” simultaneously. The ear perceives the thumb damped note as a grace because it is so short. This technique is used for subsequent grace notes in measures 48, 50, and 58. The most obvious example of blue notes can be seen in measures 46 and 51, although they appear throughout the score. The walking bass line reappears in measure 53, followed by chromatic ascending chords (Harmon mute) that lead to the third strain.

Measure 55 through 65 is a vamp to accompany an instrumental soloist. This arrangement marks the first usage of a vamp in handbell literature. The repeat is not taken if a soloist is not available. The eighth to clipped quarter note chords in the treble imitate “pops” normally played by brass sections in jazz bands. A I-vi-ii-V turnaround in the second ending followed by the chromatic ascending chords in measure 69, which are doubled up an octave leads to the slower, final section in measure 70. This section is sassy, boisterous, and incorporates the shakes (rolled piano chords) and pops (brass) from

the previous sections. It spans the full 5-octaves of bells. Blue notes descend in triplets at a molto ritard in measure 84, culminating in a cliché, Harmon muted-like “oh yeah” ending.

(NOTE: SCORE Omitted)

Elegy

“Elegy” is an original composition in print with Augsburg Fortress. It is scored for 2-octaves of handbells or handchimes with optional soprano saxophone, B-flat or C instrument. It is a traditional, chorale prelude-like work in 4/4 with a unison melody line suspended over a broken, LV, chordal accompaniment. The descending chord progression and bass line move down in a step-wise fashion. The tessitura of the melody only spans a 6th in the entire composition, from “Bb5” to “G6,” with the exception of measure 28, where it dips down to a “G5.” These elements work well for two octave compositions because they allow for several layers within that limited range.

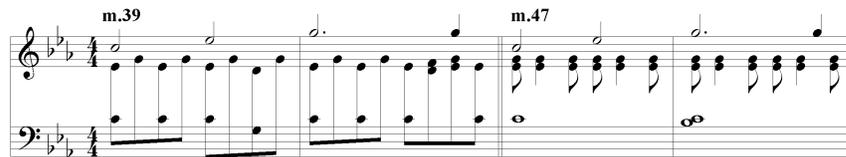
C min C min/Bb bass Ab Dm7(b5)/Ab Gm7

Like many bell compositions, it is in ternary form with a short introduction and coda. The piece opens in C minor, with the single line melody supported by tightly voiced broken chords. It modulates to the relative major in measure 20 to 21 simply by removing the 3rd of the C minor chord.

Open voicing is used in the accompaniment during the “B” section (m.22). That, plus the key change to C major gives it a freer, more expansive sound.

C G/B bass Gm/Bb bass F#sus2/A F/A Fm/Ab

It begins to modulate beginning in measure 34 and returns to C minor at measure 37. The chord voicing is the same as the beginning, but eighth notes are used in the bass instead of half notes. A new rhythmic figure is used in measures 47 through 52 to provide interest.



The coda begins in measure 54, using the transition material from measures 18 to 21, but in a different order: m.54 is m.21; m.55 is m.18; m.56 is m.21; and m.57 is m.19. The composition ends in measure 58 on an open 5th in C.

Campanelli used 2-octaves of handchimes at the concert. High school students Sung Kyung Kim and Janika Lepik played the solo violin and flute, respectively.

(NOTE: SCORE Omitted)

Bwana Awabariki

“Bwana Awabariki,” which is in print with Hope Publishing, is arranged for 3-5 octaves of handbells and handchimes and optional drum. An African talking drum or djembe is preferred, but a hand drum or similar instrument may be substituted. KellaRing Concert Ensemble performed the work on 5-octaves of bells and chimes, accompanied by Aivar Lai on a set of four congas. “Bwana Awabariki,” translated “May God grant you a blessing,” is a traditional, sacred Swahili song.

The setting sports plenty of handbell articulations including the shake, thumb damp, ring touch, mart lift, and bells malleted on the table. Elements such as “call and response” syncopated rhythms, and voicing of the chords are designed to imitate the sound of traditional African choral music.

The piece is in 4/4 in the key of F major. It opens with a soft, slow, free section that continues through measure 8. The melody played on the bells serves as the "leader," while the chimes imitate a vocal choir.

It launches abruptly into a bright tempo in measure 5, while the chimes simultaneously close the last phrase from the previous section. The rhythm of the interlude (m.9-16) is derived from the second measure of the Swahili melody. This device is used in the malleted bass bells in measures 24 and 48 also. The chords in the interlude build progressively to make way for the full block chords beginning at measure 17, where the main body of the arrangement begins. The “call and response” resumes in measures 33 through 40, followed by stacked chords through measure 48.

Measures 49 through 68 are multi-textural, with block chords in the treble, long sustained tones in the bass, and malleted, stopped bells that mimic drums. Shakes punctuate the cadence points in measures 60 and 68.

Inner voices are frequently doubled in the soprano in both African choral music, and African-American gospel music. This technique is borrowed in measures 69-70, and 73-74 with the tenor line doubled up two octaves. Similarly, the alto is doubled in measures 71-72 and 75-76, while the melody is in the bass. The thumb damp in measure 69 is answered playfully by the ring touch in measure 73.

The image shows a musical score for measures 69 through 72. The score is written for a grand piano with a treble and bass clef. Measure 69 features a tenor line doubled in the treble bells, indicated by a circled 'TD' above the notes. Measure 70 continues this technique. Measure 71 features an alto line doubled in the treble bells, also indicated by a circled 'TD'. Measure 72 continues this technique. The bass line in measures 71 and 72 features a melody in bass chimes, indicated by a box around the notes and the label 'Melody in bass chimes' below. The score includes various musical notations such as block chords, sustained tones, and malleted notes.

Block chords resume in measures 77 through 85, while a dialogue between rung and ring touch chords follows in measures 83 and 84. The piece ends by restating of the interlude and builds to a fortissimo.

(NOTE: SCORE Omitted)

Cradled in Thy Loving Arms

“Cradled in Thy Loving Arms” is an expressive original composition written in the style of a Contemporary Christian worship song. It is published by 4 Totted Publishing, and is scored for 3-5 octaves of handbells with optional flute. It is similar in sound and structure to “Elysium” but it is not quite as complicated. It does, however, use color tones such as suspended 2nds, added 6ths, major and minor 7ths in the chords more frequently.

The work begins in 4/4, in C major, with a six-measure introduction. The eight bar antecedent phrase is answered in measures 15 to 21. Extensive use of LV technique creates smooth arpeggio accompaniment lines in this section, and throughout the piece. New melodic material is introduced in the “B” section, (m.23), along with a restless eighth-quarter-quarter-eighth rhythmic figure in the accompaniment.

The piece modulates to A-flat major in measure 47 but is essentially back in C major by measure 51. The half notes, doubled in octaves on the downbeat in measures 47 through 50 draw attention to the new melody used in that section. The eight and sixteenth note run in measure 53 to 54 uses material from the melodic extension introduced in measure 19.

Fortissimo block chords, sustained bass (ringers do not damp adjacent notes when they are the same) and broadened tempo are designed to amass sound. This continues until the decrescendo and caesura in measure 62. There is a return to tempo 1 in measure 63, although the single melody line, thinner chord textures and descant give the recap a more delicate sound.

(NOTE: SCORE Omitted)

Trumpet Voluntary

“Trumpet Voluntary” is an arrangement of John Stanley’s masterful work, set for 3-5 octaves of handbells with optional trumpet and organ. It has five performance options: handbells, bells and trumpet, bells and organ, tutti, or organ and trumpet. It can also be played antiphonally. It is published with SoundForth, a division of Bob Jones University Press.

There is no organ in White Hall where the performance took place, so Inna Lai devised an ingenious, creative solution to the problem. In doing so, she invented yet another performance option for the piece. Campanelli performed the work on 5-octaves of handbells; while Karolina Sepp doubled the bass line an octave down on the lowest 5-7 octaves of chimes. Karolina covered an astounding 1.5 octaves of chimes ranging, from C2 to G3. To my knowledge, it was the first time a handbell solo was played on sub-bass chimes at a concert, and her performance was amazing. This instrumentation worked very well because chimes, being all-fundamental, sound very similar to organ flute stops. Lauri Kivil performed the solo on the piccolo trumpet, adding another dimension that gave the performance even more of a distinct British sound.

Baroque English organs did not have a pedal organ division, so the music was played entirely on one or two manual instruments in that era. This is confirmed in the edition of Stanley’s “10 Voluntaries for Organ or Harpsichord, Opera IV” printed by Harrison and Company in the 1780’s. Stanley’s marching bass line outlines the harmonic structure so skillfully that one does not even notice the absence of a chords in the left hand.

The image shows a page of musical notation for a voluntary. At the top left, the number '12' is printed. The score begins with a treble and bass clef system. The title 'VOLUNTARY V.' is written in a large, bold font. Above the first system, the instrument 'Diapasons' is indicated. The tempo marking 'Adagio' is placed below the first system. The second system is marked 'Trumpet' and 'Andante Largo'. The notation includes various rhythmic values, including dotted eighth-sixteenth notes, and rests. The key signature has one sharp (F#) and the time signature is 4/4.

The arrangement is in 4/4, in C major. Organ voluntaries do not have a set form or even a set number of contrasting movements. Most movements derive their name from either the organ stop used, or the tempo marking. It opens with the bright, main theme on handbells and trumpet and continues to measure 12. The compelling dotted eighth-sixteenth rhythmic figure on which the melody is built is present in the first measure. Interesting melodic sequences are used in measures 5, 6, and 7; followed by a descending sequence in measure 9.

A new melodic figure appears in the “B” section that has more quarter notes, triplets rather than dotted rhythms, although they are still present. The organ joins the handbells for the repeat in measure 13 to 24. The organ drops out in measure 24, beat 4 to provide a contrast in texture. There is a hint of a dialog between the instruments in measures 32, beat 4 to 36, but it is not fully explored until the next section. The dotted

eighth-sixteenth note rhythm reappears in measures 39 and 40, closing with the a melody similar to the cadence from measure 11 to 12.

Stanley's delightful dialog between the echo and full organ is rendered by the handbells and organ in measures 32 to the first beat of measure 50. The bells begin first in parallel 3rds, and are answered by the organ and full chords in the bells. The trumpet enters again over the full chords and remains in for the duration of the piece. The texture thins out somewhat in measure 55 to 57, where the sequence from measure 5 is borrowed and somewhat altered. The melody in measure 59 to 62, beat 2 is taken directly from measures 39 to 42. The dialogue makes one last visit in measure 62, followed by stately chords leading to a fortissimo in the final bar.

(NOTE: SCORE Omitted)

Festive Ring

“Festive Ring” is a showy original composition for the 2-3 octave choir, and published with 4 Totted Publishing. It is written in triple meter and in the key of C major.

The work is in ABA form but gives the impression that it is through composed because of the continuous eighth notes in the “A” section. It does not have an introduction and begins straight away with a flurry of eighth notes in the treble clef, accompanied by half and quarter notes in the bass clef. The tempo is quarter note 132, but it can be taken much slower because it is so busy.

The contrasting “B” section begins in measure 17, with a short respite from the driving eighth notes until measure 25. The malleted, bells on the table in measures 25 through 28 provide a brief diversion, but the descending and ascending runs in measure 29 through 32 push the piece forward to the recap that begins in measure 33, proceeding relentlessly to the ending without a ritard.

Two 7-year old children joined the KellaRing Youth Ensemble in September, one month prior to the concert. They were beginners, and had never played handbells before, but desperately wanted to participate in the concert. Inna Lai asked if there was some way we could include them. I wrote an easy, repetitive chime part of “G” octaves played in dotted half notes on the downbeat during the “A” section. If they rang them correctly, fine. If they missed or rang them at the wrong time, chances are they would fit in due to the overabundance of “C” and “G” chords in the piece. She placed the children together at the end of the table to her right, so they could see her easily when she cued them. They played beautifully for the performance and didn’t miss a beat.

(NOTE: SCORE Omitted)

A Trumpet Voluntary

“A Trumpet Voluntary,” not to be confused with Stanley’s “Trumpet Voluntary” mentioned earlier, is an original composition written in the style of the trumpet movements found in English Baroque organ voluntaries. It is in 4/4 and in C major. This highly versatile work scored for 2-5 octaves of handbells with optional organ and trumpet, has ten performance options:

- Handbells
- Double handbell choir (m.9-16 and m.25-32 played by 3 oct. choirs, then repeated by the 5 oct. choirs.) It may be performed antiphonally.
- Handbells and handchimes (repeat as above).
- Handbells (regular bell part) and chimes ("Optional Easy Chordal Bell Part").
- Handbells and trumpet.
- Organ solo.
- Organ and trumpet.
- Handbells and organ with or without solo trumpet.
- Organ and "Optional Easy Chordal Bell Part" with or without solo trumpet.
- Tutti.

Toomas Sepp performed the trumpet solo during the performance, accompanied by Karolina Sepp, piano, and the combined choirs of Campanelli, KellaRing, and Nobell Laureates.

The “A” section is played on organ (m.1-8) first, and the handbells join in with full chords on the repeat (m.9-16). As stated previously, British organ music from that period were for manuals only. Modern editions of trumpet tunes, such as those arranged

by E. Power Biggs, move the bass line down to the pedal organ, and add chords in the left hand (Purcell). The chords are usually positioned in the middle of the great manual, so there is still a clear delineation between the solo trumpet and bass lines. This separation is clearly evident in the organ part of the score. The progression in this section is the same as that used in the Pachelbel “Canon” except that a ii is substituted for the IV in the next to the last chord: I-V-vi-iii-IV-I-ii (IV)-V.

A new melody is presented on the organ in the “B” section (m.17). The trumpet is tacit and the organ part is played on the great and pedal manuals using foundation stops. The bells join in on the repeat (m.25-32) with full chords. The progression is traditional with the exception of a few surprise substitutions that give it a modern twist: I-flatted/VII-ii-vi-V; iii-vi-ii-V; I-v-V-II-V; ii-I-IV-V-I. This section stays in the tonic key and does not modulate.

Elements that emulate style of 18th Century trumpet voluntaries include the step-wise melodic line and periodic leaps of a perfect fifth; dotted eighth to sixteenth note rhythms; triplets; ornamentation in the solo trumpet; consonant chords; and contrary motion in the melody and bass lines.

A “D.C” in measure 32 leads back to the beginning, and the composition ends with the “fine” in measure 16.

(NOTE: SCORE Omitted)

Conclusion

This recital contained one world premiere (the full version of “Fanfare for an Uncommon Instrument”) and five European premieres: “Spiritus,” “Cradled in Thy Loving Arms,” “Saint Louis Blues,” the Stanley’s “Trumpet Voluntary,” and “SoundShards.” The concert was a rousing success and the hall was filled to capacity. The audience was responsive and seemed to enjoy the performance immensely. We received an ovation, so the massed groups performed “A Trumpet Voluntary” again as the encore. I’m certainly grateful to Inna Lai, Karolina Sepp, and all the musicians that came together to make this possible. They all performed beautifully. A concert entirely of one’s works is truly the greatest honor a composer can receive.

Film Audio Sound Studios of Tallinn, Estonia produced the DVD recording that accompanies this thesis. The production crew included: Ants Andreas, audio engineer, Mairi Myee-Ree Sõelsepp and Jaan Kristjan Utno, camera, and Toomas Sõelsepp, editor.

Several opportunities have transpired as an outgrowth of this concert, in addition to the aforementioned documentary film. Dr. Marvin Rosen invited me to appear on WPRB 103.3 radio during his annual Classical Discoveries “Viva 21st Century” 24-hour marathon program. “SoundShards” was aired at that time, and re-broadcast Wednesday, March 26, 2014 during his “In Praise of Woman” series.

January 5-7, 2014, Campanelli toured in St. Petersburg, Russia and performed some pieces from this concert, including “Elysium,” “Brian Boru March,” and “A Trumpet Voluntary.” Inna Lai was interviewed on a Russian radio station. The chamber

ensemble will perform “SoundShards” in addition to these works during their January 2015 tour.

Campanelli and the Nobell Laureates participated in a handbell festival in Pärnu, April 2014. They performed some of my new works, which I gave to them during my visit.

Future plans include presenting the entire concert here in the United States. It is very expensive for such a large group to travel all the way from Estonia. Funding sources from both countries need to be investigated in order to bring this dream to fruition.

Appendix A

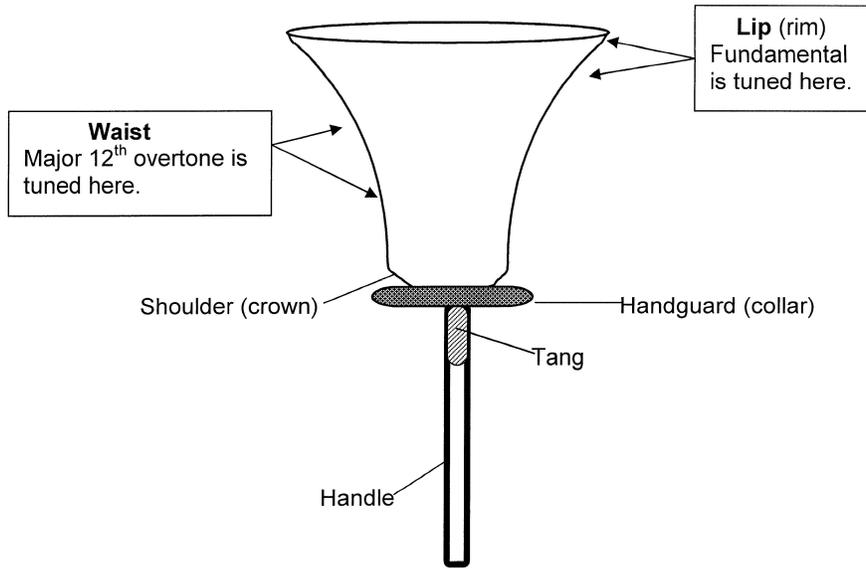
Plain Hunt Change Ringing Sequence



1	2	3	4	5	6	7	8
2	1	4	3	6	5	8	7
2	4	1	6	3	8	5	7
4	2	6	1	8	3	7	5
4	6	2	8	1	7	3	5
6	4	8	2	7	1	5	3
6	8	4	7	2	5	1	3
8	6	7	4	5	2	3	1
8	7	6	5	4	3	2	1
7	8	5	6	3	4	1	2
7	5	8	3	6	1	4	2
5	7	3	8	1	6	2	4
5	3	7	1	8	2	6	4
3	5	1	7	2	8	4	6
3	1	5	2	7	4	8	6
1	3	2	5	4	7	6	8
1	2	3	4	5	6	7	8

Appendix B

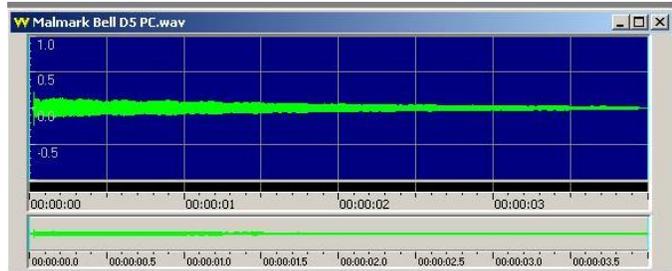
Tuning



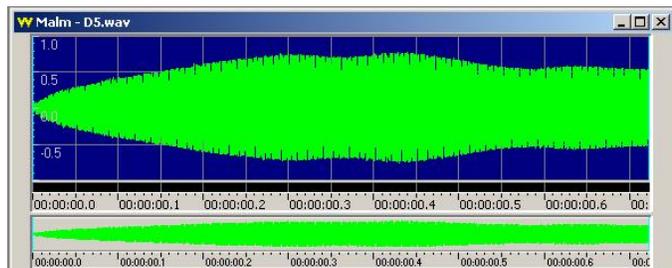
Appendix C

Wave Forms – D5 Bells and Chimes

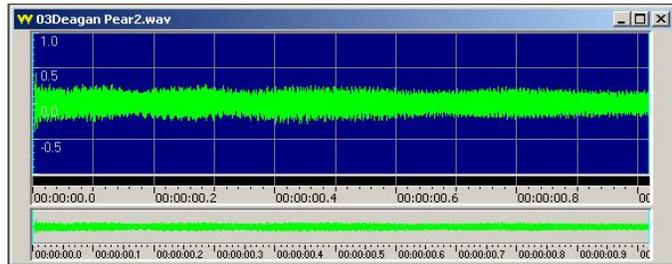
Malmark Handbell



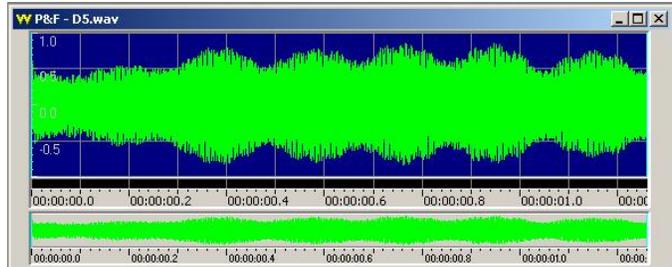
Malmark Handchime



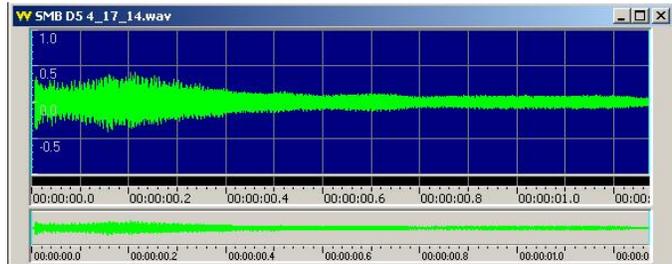
Deagan-JenCo “pear shaped”
Handbell



Petit & Fritsen Handbell



Schulmerich Silver Melody Bell



Appendix D

Alphabetical Chart Notation

				D			
	B		A	A	B		A
4	G	G	F#	F#	G	G	F#
4	D	D	D	D	D	D	D
	B	B			B		
	G				G		
	1	2	3	4	1	2	34

		D	C		D	D	D
	B	B	A	A	B	A	B
	G	G	G	G	G	F#	G
	D	D	E	E	D	D	D
	B	B	C	C			B
	G						G
	1	2	3	4	1	2	34

Appendix E

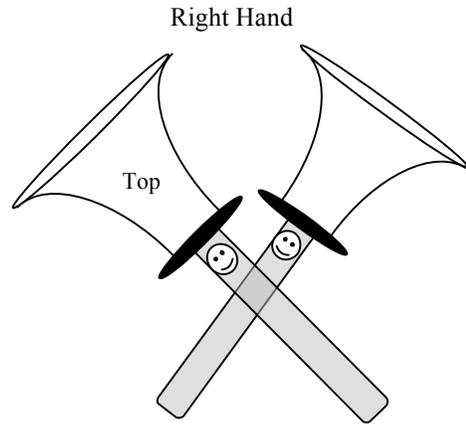
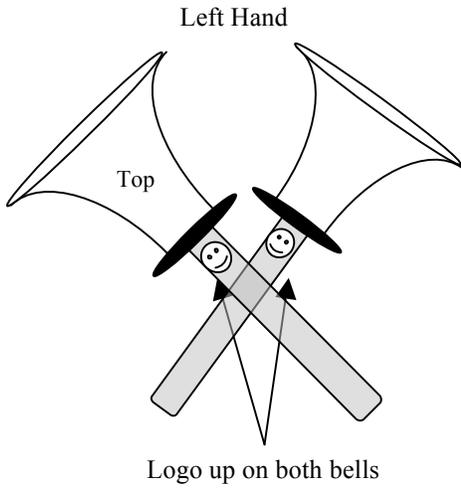
Music Chart Notation



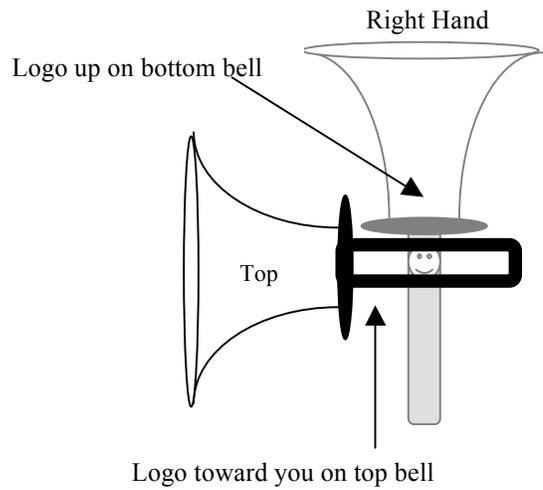
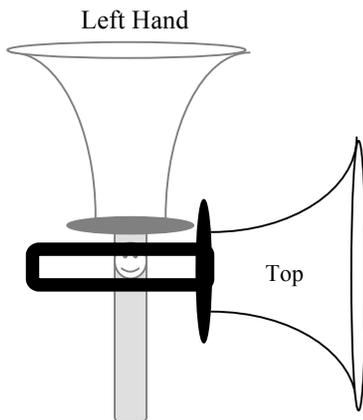
Appendix F

Multiple In-Hand Techniques

SHELLEY



4-IN-HAND

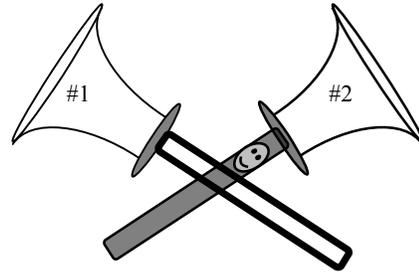


Appendix G

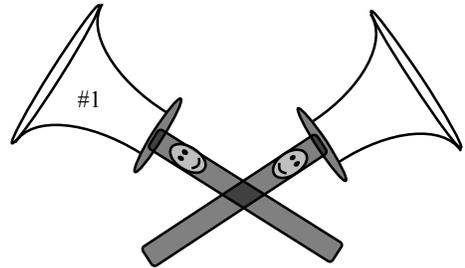
Multiple In-Hand Techniques

6-IN-HAND

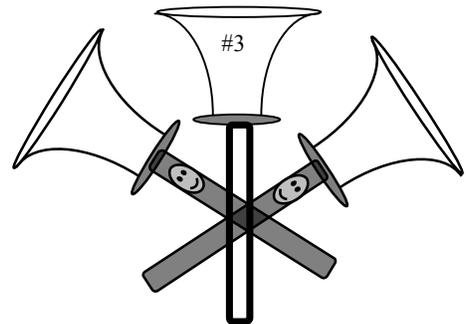
Slide bell #1 through handle of bell #2.



Turn handle of bell #1 so the logo is up.



Slide bell #3 through handles of bell #1 and #2.



Appendix H

Concert Program



Käsikellade ansambel CAMPANELLI

Dirigent Inna Lai

15. oktoober kell 19:00

MUSTPEADE MAJA VALGE SAAL

Susan T. Nelsoni (USA)
AUTORIKONTSERT

SUE'S BLUES

Külalisesinejad:
Käsikellastudio KellaRing
NoBell Laureates
Solistid

Kavas:

Campanelli

- Sue's Blues - Hando Põlluste *klarnet*,
Märt Roogna *basskitarr*
- Brian Boru March - Tiina Rum *kellapuu*
- Spiritus
- Fanfare - Lauri Kivil *trompet I*
Peep Geraštšenko *trompet II*
Hanno Kedik *metsasarv*
Johannes Kiik *tromboon*
- Elegy - Janika Lepik *flööti*
Sung Kyung Kim *viul*
- Elysium
- Cradled in Thy Loving Arms
- Trumpet Voluntary - Lauri Kivil *trompet*
/John Stanley/
- St. Louis Blues (W.Handy)

KellaRing

- Festive Ring
- Bwana Awabariki - Aivar Lai *conga*

NoBell Laureates, Campanelli, KellaRing

- Trumpet Voluntary - Toomas Sepp
trompet, Karolina Sepp *klaver*
- SoundShards - Rein Roos *marimba*,
Karolina Sepp *klaver*, Aivar Lai *löökpillid*,
Krista Joonas *tambura*, Inna Lai *kellad*

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Vita

Susan T. Nelson has been published since 1991 and has over 200 works in print with 22 publishers, including Hope, Lorenz, GIA and Alfred. Her compositions have been featured in many handbell Guild seminars, and recorded by ensembles in the USA and abroad. A church musician since 1974, Ms. Nelson is employed as Director of Music at St. Mark Lutheran Church in Hamilton, NJ, where she serves as organist and directs the vocal and handbell choirs. She is also works as a music cataloger at Talbott Library, Westminster Choir College, Princeton, NJ.