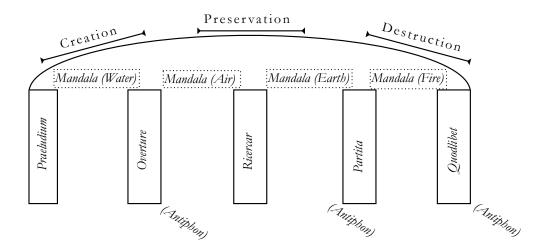
Notes on the Program

Welkinharmonie, or "sky-music," is a meditation on the mythic cycle of creation, preservation, and destruction that is at the heart of many faith traditions, particularly Vedic Hinduism. The work draws on a number of sources: most prominently, it references the "organ masses" of the Baroque era, where chants or hymn tunes would be quoted in organ works and placed in the order in which they would appear in the service. This historical tradition was accompanied by contrapuntal workmanship, so in some senses *Welkinharmonie* grapples with how to create counterpoint in a musical language that freely uses consonance and dissonance, while at the same time creating a ritual progression absent of direct quotation. The texts associated with the composition serve to create meaningful resonance, providing some illumination for each individual movement. Frequently referenced themes in the work are time and meaning: how are these created, sustained, and changed? The first movement, for instance, plays with time and rhythm, culminating in a seven-fold augmentation fugue at the end. This suggests something quantum, a resonance with the study of physics that seeks to unify the infinitely small elements of the universe with the infinitely large. Ultimately, *Welkinharmonie* is a ruminative twenty-first century statement of faith, blending elements of myth, science, and musical study.

The movements are divided into three basic types: "pillar" movements – larger-scale structures that directly reference (particularly Baroque) musical forms; "mandalas" – movements that are somehow based around a pattern; and "antiphons," which serve as touchstones, musical "mile markers" that pave the way through the arch-like structure. Every three non-Antiphon movements serve as one-third of the Creation-Preservation-Destruction cycle:



Creation

Praeludium – Toccata Capriccioso: In the Baroque era, a Prelude was frequently a piece of free counterpoint featuring chordal figuration, while a Toccata (meaning "touch") was a work that demonstrated technique; *Caprice* means "playful." Part of the "play" here is a slow emergence of a tonal and contrapuntal system from a densely packed cluster, a sort of musical "primordial mass." The prelude emphasizes the interval of a minor third, which plays prominently in many of the movements, itself a "primal" interval: this is the melodic interval heard in children's games and calls cross-culturally. The densely packed clusters eventually explore into a peculiar type of tonality formed by cycling through three-note patterns (or "trichords") to create a "towering" scale that spans almost the entire playable scope of the organ:



By placing the motives in different registers of the scale, a unique, kaleidoscopic effect is achieved where the musical ideas refract and reflect the individual colors of that part of the musical spectrum. The prelude portion thus becomes a meditation on what exists prior to creation, while the Toccata is an experiment in time following a "big bang" moment, cycling through not only the above tonality but also a variety of "threes" in a seemingly perpetual play of notes. The counterpoint is based around three motivic ideas which switch around, alternating between top, middle, and bottom in the texture (like one might change the faces on a Rubik's cube), a contrapuntal device known as "invertible counterpoint." The accelerating tempi hint at the three frames through which we understand time: past, present, and future. Ultimately, these combine together in a final statement (mentioned above), where the motivic ideas are expanded and contracted in a seven-fold fugato passage, rushing towards a moment of clarity that signals the end of the movement.

II. *Mandala of the Dark Seas (Rondellus):* Mandalas are a ritual symbol in Tibetan Buddhism representing the universe, their most basic fundamental form including a central square with four "gates" or entrances. In *Welkinharmonie*, each of the Mandalas represent some sort of patterned idea, as well as one of the classical elements (Water, Air, Earth, and Fire). They also reference the four Duettos in Bach's "German Organ Mass," which have been interpreted either as the four directions, the four Gospels, or likewise the four elements (or, because he added them immediately prior to publication, perhaps a late addition to bring the total of movements in the work to 27, or 3 x 3 x 3, a Trinitarian trinity). This first Mandala is a Rondellus, a peculiar type of double canon from the Middle Ages based upon a *pes* ("foot"), a repeating canonic idea underlying a further canon. The two lines of the *pes* are played literally by the feet: a gently sailing melodic line gradually descending into the depths before being reborn again in the uppermost register. Its melodic structure is based upon the preceding movement's "towering" tonality. The accompanying voices are also in canon, the lines overlapping with each other in wave-like motion.

III. *Overture – Ciaconna Giubilata:* In the Baroque era, the overture was associated with the majestic, and, especially in the French tradition, alternated between chordal and contrapuntal sections. Here, the counterpoint takes the form of a playful jazz-inflected fugue which appears a total of three times in the movement. In the midst of the overture is a Ciacon (or "chaconne"), a 17th-century dance style upon which composers built sets of variations occurring over a repeating bass line or harmonic progression. The harmonic progression undergirding this variation set is a hint at the twelve-tone row which exists only in the background of the work, but is never explicitly stated:



The twelve-tone row was a technique developed by the Viennese composers Schoenberg, Berg, and Webern in the early 20th Century as a means to control and unify harmonic material bereft of a tonal system. This specific row is a special type, an "All-Interval Row," made up of one of every type of melodic interval less than an octave, as well as one of every chromatic pitch within an octave, representing a certain crystalized unity. Thus, the row serves as something fixed and unchangeable, but always in the background; thought about, referenced, danced around, but never heard. This first glimpse of the row signals the end of the "Creation" portion of *Welkinharmonie*.

IV. *Antiphon:* Literally "sounding against," an antiphon is frequently a sung responsory in a Christian religious service. The antiphons here are characterized by mostly stepwise, chant-like lines, accompanied by rapid, reiterated chords built on perfect fourths.

Preservation – The three "Preservation" movements deal largely with patterns and processes that endeavor to control the musical material with a heightened degree of exactitude. Much like the rhythms of the first movement which could be (seemingly infinitely) broken down and built up, the patterns of Creation, Preservation, and Destruction themselves can be broken down into smaller cycles; thus each section portrays itself, as well as its opposing forces. Throughout the "Preservation" section, there is tension between how patterns control musical material, and ultimately how those patterns serve to inevitably create forms, and ultimately destroy or otherwise deform their content. They begin to more directly approach

references to the All-Interval Row, motives of which have been heard indirectly since the beginning (the row's opening four notes, for instance, make up the harmony accompanying the chirping minor-third motive of the *Praeludium*). This approach towards the background unifying force creates at once a sense of crystallization and beauty – as in the *Fantasia Canonica* – as well as a constriction of choice, a brittleness that cannot sustain the motion of the unquiet earth. In terms of physics, this resonates with Heisenberg's Uncertainty Principle, the upshot of which suggests that there is a limit to the exact knowledge one can have concerning the complementary variables (typically location momentum) of a given particle at any one time. Alternately, one can imagine the quantum parable of Schrödinger's Cat, which illumines how direct observation deforms reality. Or, as Douglas Adams suggests in *The Hitchiker's Guide to the Galaxy*, the theory that, as soon as the we realize everything there is to know about the universe, it will immediately vanish and be replaced by something even more inscruitable and unknown.

V. *Mandala of the Four Winds (Arabesque):* An "Arabesque" is a work calling to mind an intricate design or pattern, as might be seen in the weaving of a Central Asian rug or tapestry. In this movement, a pattern is swept about in multiple different textures, transparent and almost insubstantial. The second of the four Mandalas, this movement is set *manualiter*, for manuals only.

VI. *Fantasia Canonica: Ricercare di Campane:* Literally "Canonic Fantasy: Seeking After Bells," a Ricercar was a late-Renaissance contrapuntal form featuring continuous imitation, seen as a predecessor to the fugue. Here, the imitated melody undergoes a process of note-shifting akin to the tradition of change-ringing in English Cathedrals carillons (bell-towers), a sort of rearrangement of musical "genetic" material. The use of this carillon technique serves as a metaphor for the balance between constancy and change and is utilized frequently throughout the work, creating the sensation of a certain background preservation, while at the same time allowing for mutation. Eventually, the initial material has changed so much it takes on the form of a second fugal subject, which eventually becomes so reduced it is nothing but textural figuration. This leads to a culminating point where the two subjects occur together at the apex of the three "Preservation" movements and the half-way point of the work entire. These two subjects are formed from the two halves of the All-Interval Row: but, just as to solve a mystery is to destroy it, so too does the approach to this background unifying force signal a shift towards a gradual process of undoing.

VII. *Mandala of the Unquiet Earth (Variations on a Ground):* The pun in this movement comes from the English Baroque practice of writing variations of a "ground," or bass line, essentially equivalent to a chaconne or passacaglia in other countries. In this movement, though, the "ground" is unstable – it is based on a continuously expanding mirrored set of lines in the uppermost and lowermost voices, beginning with conjunct, stepwise motion and gradually working through the various possible intervallic combinations of trichords. This is accompanied by increasingly fractious statements in the pedal (this is the second of the *pedaliter* Mandals), derived from fragments of the background All-Interval Row: earthquakes breaking apart the patterns. Finally, a chordal outburst is heard: the hint of a chorale, soon to be varied, brings the "Preservation" section of *Welkinharmonie* to a close.

VIII. Antiphon: The second antiphonal touchstone, this movement inverts many of the ideas of the first.

Destruction – The movements that are part of the "destruction" cycle share a few general tendencies. Textually, the poems begin to utilize pronouns and first-person speech (albeit parenthetically, or in another language), perhaps a hint at the dual nature of an *ego*—in a Zen-like sense, destruction, and thus "not-I," can only exist if there is first an "I." The music begins to come closer to direct quotation of the All-Interval Row, signaling a sense of finality in the effort to approach the symbol for perfect crystallization. The dichotomies represented in these movements—discarding forms, as in the partita, or alternations between chromatic and whole-tone scales—resonate with one of the more eschatological questions in physics: does the universe continue expanding until all energy is exhausted (a "heat-death," referenced in the final Mandala, and symbolized by the ambiguity of the whole-tone scale), or does it collapse upon itself in a "big crunch," ready to begin the cycle anew (symbolized by the tightly-packed chromatic scale)? Or, will something else occur that is beyond our earthly imagining?

IX. *Chorale Partita* – "Partita" means, essentially, "parts," and was a term utilized in various ways during the Baroque era, including as a collection of movements akin to a suite or sonata, or, alternately, as a set of textural variations. The latter was utilized frequently by Germanic and Scandinavian composers to explore different ways of setting of a Lutheran chorale tune, sometimes to explicate potential meanings of the text. Here, the chorale is derived from a doubled-up overlay of the background All-Interval Row, and is the most explicit reference to it in any of the movements (thus, the entirety of *Welkinharmonie* could be interpreted as Variations Without a Theme, or, perhaps, Variations on the Unseen and Unheard). The variations continuously deform the original chorale tune's texture and rhythm in a gradual accelerando to a whirlwind of notes; when the dust settles, silence encroaches.

X. *Mandala of the Quenched Flame (Etude)* – The last of the Mandalas is an *etude*, or study, and is the second of the *manualiter* Mandalas. Etudes frequently focused on rapid passagework or scalar exercises, which is the *modus operandi* here. The scales initially outline the intervals of the All-Interval Row, but become disordered through a carillon cycle, switching around the patterns in gouts and gusts of notes. The gestures begin as descending, tightly-packed chromatic scales, and gradually expand to ascending whole-tone patterns, losing any potential referential grounding to a tonal center.

XI. *Postludium: Quodlibet Nocturnam* – The final "pillar" movement translates roughly as "Postlude: What You Will of the Night." A *Quodlibet* ("what-you-will") was a Baroque-era "mash-up" of tunes. A game amongst musicians of the time would be to combine a variety of popular or folk songs together, a patchwork quilt fashioned from musical ideas that were in the air. The term "Nocturne," as referencing a character piece for piano, arguably originated with the Irish composer-pianist John Field, though Frederick Chopin is arguably the most popular composer in the genre. This movement references – through mood, texture, and gesture – a variety of "nocturnal" musics, particularly the works of Chopin, Mahler, and Debussy, all of whom seem to capture something special about the night, whether it be earthly or existential. The movement's primary melody, played on a solo manual, is an art-song-like setting of the poetic text that accompanies the movement. Hints at the melody of the chorale (and thus the All-Interval Row) are heard; the harmonic structure recapitulates the ideas of the previous Mandala, first based on an ascending chromatic line in the bass, then a descending whole-tone scale as the music drifts outward. The movement ends with its beginning melodic gesture, which corresponds to the opening text (*"Warum?"*), and proceeds without pause into the final Antiphon.

XII. *Antiphon – Euouae -* In Medieval chant, "Euouae" was the abbreviation of the Latin phrase "in saecula saeculorum, Amen," meaning "generation to generation;" the poetic intent is sung in the Doxology: "As it was in the beginning, is now and ever shall be, world without end, Amen."