The Revelation of John in Musical Form

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Abstract
The following is an account of the author's odyssey as a composer seeking a model for his own music in an Apocalyptic mode. Along the way he explains aspects of his own belief system and stylistic features found in post-WW II Western Art Music fitting to eschatological themes, both sacred and secular. Two works are analyzed more closely: *inwendig voller Figur*, by Klaus Huber, and the author's own *Vision 4*. Both works very purposefully deal with the Bible's book of Revelation, but with different formal approaches. One uses the images of the book to warn and wake in the hopes of preventing a man-made Apocalypse. The other endeavors to nourish the hope of paradise, as utopic as it may seem.

I have for the past two decades been thinking of a music which is an enactment, one like those of Ezekiel, the OT prophet. He carried out certain actions which were figurative (or pre-figurative) of a coming execution of adverse judgement, or coming blessings. These actions, presumably, were performed in front of onlookers. For instance, he was to shave off his hair and beard, weigh it, then divide it into three parts. A third he was to take and burn inside the "city" (represented by a brick upon which he'd etched the word "Jerusalem," and around which he had built a miniature wall), a third he would strike with the sword outside and all around the city, and a third he would scatter to the wind. Thus, a third of those still left in Jerusalem would be cut off inside their city, a third would be killed outside the city, and a third would be scattered throughout the surrounding nations. Now, I do not see my works as performing any prophetic function themselves. But I am attracted to the idea of them taking the *form* of a prophecy, as I am personally attracted to the works of others in the 20th century that seize upon prophetic forms and features, particularly Biblical ones.

If a composer embraces or denies certain eschatological beliefs, this could be a formative influence in their work. I personally view time as a gift from a heavenly father; and since music is the grand time art, to my way of thinking, it should be the best one to express and engender appreciation for this gift. And, at the same time, if time is an interval filled with pain and suffering, then I wish it to be over, if not terminated, even if its prolonging would ultimately be beneficial. Therefore, I do not generally aim for musical statements that evoke timelessness or eternal stasis. Since the time given us is far too short to do everything we wish, we view it as both precious and tyrannical. Rhythmic complexity in music, whether it is in the isorhythmic practice of the 14th century *Ars Nova* or the multiply nested metric structures in Stockhausen's *Klavierstück I*, is an effort to deal with (or, perhaps, create) the tyranny of time. Both if too long, or too short, time is a mean bully. But if it reaches a fullness (πληρώματος), it is oh how wonderful, delectable!

Yes, it is desirable for certain things to happen at just the right time. It is also desirable for them to last just long enough before they become oppressive. *Pleroma* in NT usage can apply to time, as it is at Ephesians 1:9. But this is specifically the *right*, *opportune* time, the *moment*. The moment of all moments is the *eschaton*. This moment or event means the end of the world as we know it. And a music or art which engages with the *eschaton* may aptly be labeled "apocalyptic," even in the manner of the Apocalypse or Revelation given to John on the Isle of Patmos.

After surveying some works of certain Post-WW II European avant-garde composers (those whose mature activity started in the 1950's and continued into the '90's), I came up with 5 defining characteristics of an apocalyptic music: (1) catastrophic imagery, (2) expanded sense of time, (3)

numerology, (4) anxiety of "doubles," and (5) polystylism. The 20th century (particularly after WW II) has been one marked by unprecedented musical images of *catastrophe*—explosions, both of a sudden and anticipated kind. Many of the challenges I, as a composer, have had to deal with involve the dissipation of energy following such explosions and its regathering and transformation. *Non-linear narratives* and the experience of *multiple times at once* have been a commonplace of late-20th and early-21st century music. How best to capture simultaneity as an experience has been a great preoccupation of composers from Ives to the present. And there is no better laboratory than music to study Einstein's concept of the *relativity* of simultaneity. *Numbers* can be accepted as an outside divine influence which aids in transcending the temporal, corrupt world of pure sensuality. A mystical, symbolic motivation (as opposed to a purely pragmatic one) stands behind numerical structuring techniques. There is also a faithfulness to the numbers maintained, even in the face of extreme difficulty, as if they partly constituted a divine order not to be contravened. *Doubles* have played an important role in apocalyptic literature from the beginning; and in apocalyptic music one sees examples of both the alienation from and discovery of *the other*, as well as the play of Christ and Anti-Christ figures. Finally, *polystylism* is featured in those works which seem to be researching decadence or attempting some kind of historical transcendence.

The use of such things does not point to an *exclusively* apocalyptic genre; but it is safe to say that these characteristics are certainly *appropriate* to such a genre. Both sacred and secular approaches to apocalyptic music exist in Western Art Music, and I have adduced examples elsewhere.[1] I would add that a sacred apocalyptic, especially in the Christian tradition, further divides into: (1) world end and/or millenarianism, and (2) individual apocalyptic or the "hereafter."

One composer who belongs to the generation mentioned above was Klaus Huber (1924-2017). The work of his most directly connected to the Revelation to John is *inwendig voller Figur* (1970/72). The composer was commissioned by the city of Nürnberg for the occasion of Albrecht Dürer's 500th birthday. It is a confrontational work of catastrophic imagery. The title ("inwardly full of figures") comes from a statement made by Dürer about the involuntary and immediate flow of images coming from deep within an artist that can be considered a special gift of God. Yet this intuitive flow is tamed and channeled by painstaking techniques of measurement and proportion management in the works of Dürer. Similar techniques have been the mainstay of Huber's craft as well. Dürer's woodcut engravings of visions in the Revelation to John--made in 1498--are well-known; and these, along with his dream image of 1525 (which seems prophetic of bombs and nuclear fallout), were inspiration for Huber's *inwendig voller Figur*. Scored for divided choir, recorded sounds, orchestra, and amplified solo voices, this work contains terrific outbursts at strategic moments. They are usually preceded by calm or near silence. After my initial listening to the live recording (Wergo 0069), I was tempted to connect these moments with the four winds held back by four angels mentioned in chapter 7 of the Revelation. I felt I heard 4 main outbursts, with the 4th being a series of 4 outbursts itself.

The Revelation is not a tight narrative. Its separate visions laid end-to-end do not seem to be in chronological order, as different visions may refer to the same event. So, it is fitting that the texts quoted from Revelation in Huber's work are not in any kind of chronological or scriptural order. And, just as the book itself (and, thus, the whole Bible) ends with a rather non-final and still expectant tone,[2] Huber's work ends delicately and tentatively, with low harp, low men's voices singing in whispers, spoken texts, then a single voice.

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[1]Eric Simonson, "Towards an Apocalyptic Music," (self-published paper by the author).
[2]"He which testifieth these things saith, Surely I come quickly. Amen. Even so, come, Lord Jesus. The grace of our Lord Jesus Christ *be* with you all. Amen" (Revelation 22: 20, 21—*KJV*).

Huber makes clear, in writing about the piece, that he intended to sound a warning with it. He aims to de-mythologize John's Revelation:

> The enlightened centuries—particularly the 19th and the early 20th—believed themselves superior to the extent that they disposed of the visions of horror and destruction as absolute magic, the products of diseased imaginations in a euphoric (in modern language psychedelic) condition.

> Beginning with World War II and the year 1945 with its atomic mushroom, which Dürer forestalled by 425 years in his "Dream Vision," it enters our rational-materialistic consciousness ever more that there never has been a time in which the primeval fright of the destruction of life on our earth was more justified than today, although in a significantly modified form: the fear of a self-destruction of mankind.[3]

In a later interview with Claus-Steffen Mahnkopf, the composer said:

> …I was interested in the bridges between outer and inner worlds, and in establishing what provocation they hold for musical form and time. In the Modern Age people discovered atomic fission, produced the bomb and ultimately dropped it twice. That's a radical secularization: towards an eschatological fear in which the apocalypse starts to take on a real significance. What will the end of the world be like? We don't need to wait for it anymore; we can produce or provoke it ourselves…[4]

The "outer and inner worlds" mentioned here refer to the external reality of an end-of-the-world scenario and the internal, personal reaction to such a possibility. Though we do not see the overt political activism here that is in evidence in later works (*Erniedrigt-Geknechtet-Verlassen-Verachtet*, for example), the following statement shows the clear intention to raise awareness of something beyond the music and the form it is given by John's Revelation:

> …I do not write extremely engaged music with the intent to change the social structures by it. Rather, I create this engaged music in order to shock and thus change the empathic experience and hence the consciousness of the listener by the shock and the turbulence of the musical statement.[5]

This "turbulence" is manifested not just in local details, but in the larger form of the piece. Huber compiled a large list of things he considered important in the Revelation. Then he found connections between chapters 1, 21, and 22 and compiled those together with the "Holy, holy, holy" (Sanctus) of chapter 4, verse 8 into the texts of the introduction. This introduction is interrupted by an "Initium" (the first "outburst," according to my listening) right before the Sanctus. This Initium is also the first sounds heard on 4-track tape, over the 4 loudspeakers which are placed up high at the four corners of the audience seating area. Huber makes clear that the loudspeakers are not to be placed on the floor. What we hear on tape throughout the work is, for the most part, pre-recorded chorus and orchestra, mirroring what we hear live.   After the introduction there follow, in order, Signacula I and II, 7 seconds of calm, Signacula III, IV, V, Tutti Orchestra Improvisation (of 60-70 seconds), VI, 7 seconds of silence, and finally VII. These correspond, at least in number, to the 7 seals featured in the Revelation. The last

[3] Huber, Klaus. "Ende oder Wende: Wo ist Zukunft?" ("Where is Future?")—English trans. appearing in liner notes. Klaus Huber …inwendig voller Figur…/ Tempora. Perf. State Orchestra of Nürnberg; Choir of the Bavarian Radio Munich; conds. Josef Schmidhuber and Hans Gierster. WERGO, 1991. CD.

[4] Klaus Huber and Claus-Steffen Mahnkopf, *From Time-to Time: The Complete Oeuvre* (Hofheim: Wolke Verlag, 2010), 179.

[5] "Ende oder Wende: Wo ist Zukunft?".

section is titled "Oratio." It is preceded by 12 seconds of "absolutes SILENTIUM," as indicated in the score. In the performance on Wergo 0069, the Tutti Orchestra Improvisation was left out, which is allowed by the composer.

In the preface to the score, Huber mentions two trends that happen over the course of the work. Sharp "juxtaposition," which takes place *across* time, gives way to "superposition," a crowding of layers taking place *in* time, or simultaneously. The other trend is coordinated activity, ordered by a common tactus, giving way to layers which have their own independent tempi. (It is more correct to think of measure numbers as rehearsal numbers when this is the case.) The most crowded superposition comes with Signaculum VII. This is wholly appropriate, given that this section is subtitled "Velum" or curtain. Huber has stated the following about this subtitle:

> …In the Sufi tradition, as well as in Christian mysticism, velum is the curtain that conceals the important things from us. They are there, behind it, but not really accessible to human consciousness…The 'velum' serves to bring things together. It's like a general pause in the macrostructure, a point at which one hears very little, i.e., a notional silentium…[6]

Thus, in this "notional silentium" an opaque and varied tape part consisting of recorded chorus, spoken words, and orchestral sounds, is heard simultaneously with live chorus, live orchestra, and two solo voices. A separate conductor is needed to perform the independent choral portions of Signaculum VII. They have their own score, independent of the main score. The two texts that are set are Dürer's words describing his dream vision of "great waters falling from heaven,"[7] and Revelation 9:6 (in the Latin Vulgate).[8] The tenor and baritone vocal solos in the same section are only given starting points in the main score and, along with the chorus, strive to end together on the last outburst (singing the Latin interjection "vae" on a descending glissando).

Another noteworthy feature of Signaculum VII is the fact that measure numbers start over at that point. Is this merely for pragmatic purposes, or is it for symbolic reasons? Does it represent a new beginning as well as an ending climax? The composer has said that, at least from a musical standpoint, the apocalypse has already taken place by Rehearsal 23, and it is at this point that a second collage of Dürer woodcuts is inserted into the score for the purpose of inspiring a second tutti improvisation. (This shorter improvisation *is* included on the Wergo recording.) I hear a four-stage series of chaotic outbursts beginning here. The second in the series feels like an aftershock (Rehearsal 28). The third is marked *fortississimo* (Rehearsal 61), and leads directly into the last, which is marked *fortississississimo* and *marcatissimo possibile!* (Rehearsal 64).

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[6] Huber and Mahnkopf, 195f.

[7] "In the year 1525, after Whitsun in the night from Wednesday to Thursday I have seen in my sleep the apparition as many great waters fell from heaven, and the first water struck the ground about four miles from me with such fearfulness and enormous roar, and it sputtered and drowned the entire land. I was frightened so strongly that I awoke. Then the other waters fell, and those which fell were very mighty and there were many of them, some more distant, some closer by, and they fell down so high that they appeared to fall at the same slow rate. But when the first water, which struck the ground, had wellnigh come down, it fell with such speed, rage and roar, and I was frightened so strongly that when I awoke my whole body was trembling and it took a long time until I regained my composure. When I got up in the morning, however, I painted it as I had seen it. May God turn all things to the best."—Albrecht Dürer.

[8] "And in those days shall men seek death, and shall not find it; and shall desire to die, and death shall flee from them" (Revelation 9:6—*KJV*).

The last section, "Oratio," has the thought-provoking phrase, *non finis*, written in place of the final barline. The composer still had much more to say by way of waking up everyone to the very real potential of man's destruction, not only of himself, but of all life on earth. (See FIGURE 1: Sectional Summary)

But there is a "counter-world to the apocalypse," says the composer. "A transcendent world is also possible…"[9] On the large foldout page of the main score (Rehearsal 244), soprano and alto soloists, in speaking voice, quote from Revelation chapter 7, wherein is described a great crowd who survive the great tribulation and have washed their robes in the blood of the Lamb. Also, they hunger and thirst no more, and are led to fountains of waters. They have all tears wiped from their eyes. Indeed, what could be more transcendent! And it is this chapter of Revelation that is the primary inspiration and impetus for my own work, *Vision 4*.

FIGURE 1: Sectional Summary of *Inwendig voller figur*

	measures or rehearsal numbers
Introduction (chorus, whispering)	1-19
"Initio" (first "outburst"-taped voices and live trombones, finishing gesture by live orchestra)	20-22
Sanctus (chorus, unmeasured and measured music)	23-56
Signaculum I / II (live orchestra, starting in bass register, texture accreting upwards)	57-126
The rhythm of this section forms aggregates and gradually all parts settle on quintuplet-16th-notes.	
Signaculum III (live orchestra, downward motions and glissandi prominent)	127-137
Signaculum IV (live orchestra, first "superposed" blocks of unmeasured activity)	138-151
Signaculum V (second outburst-live chorus and orchestra)	152-235
All activity, though in independent layers, is precisely measured throughout in this section.	
Tutti Improvisation (live orchestra)	236
If performed, this would constitute the third outburst.	
Signaculum VI (live solo voices, chorus, and orchestra)	237-244
Proportional notation is used beginning at 244; solo voices have separate scores.	
Signaculum VII "Velum" (taped voices, live solo voices, chorus, and orchestra)	1-69
There are outbursts at 15, 23, 28, 61, and 64. The choral parts are conducted independently beginning at 27. As a clear allusion to the Hiroshima bombing, a countdown is heard in the tape part at 32.	
"Oratio" (2 harps, percussion, contrabasses, bass voices, speaking voices, and tenor solo)	70-end(?)
The only activity precisely measured is in the percussion parts; all else is proportionately notated, with only approximate coordination. Nothing rises above *piano*.	

[9] Huber and Mahnkopf, 184.

On the Way to *Vision 4*

As a graduate student preparing for my qualifying exams, I had the luxury of giving focused attention to how a composer's eschatology informs his music. I was interested in this topic for a number of reasons. One is connected with my own cosmology. I have been raised with and have embraced for myself a faith which is very much rooted in eschatology. Jehovah's Witnesses are commonly referred to as a millenarian sect; and, though I dislike certain connotations associated with the word "sect," I fully consent to being classified as "millenarian," because I do look forward to a millennium that will bring paradise to the earth's meek inhabitants. But I feel that this period will be preceded by a brief time of tribulation, during which God's hand will be clearly discernible in bringing an end to the present 'heavens and earth,' the corrupt and Satanic order (and its manifestation in human society) which currently holds sway. So, my vision of *imminent* things conforms to a more fundamentalist Christological apocalyptic model, with its requisite time of ultimate woe followed by transcendent peace and goodness. Yet even during and beyond the Biblical millennium, I foresee a continual progressive existence for myself and the rest of God's children, a progression towards ever greater enlightenment and clarity. So, a rapid and facile achievement of perfect stasis is not what I presently consider likely or even desirable, not in perfect human lives (which is what, as I see it, God intends to see populate the earth to come). Yet, by using the term "ever greater" I imply a movement towards the ultimate, with satisfying arrivals along the way at points of closure, near and nearer completeness.

Consequently, I undertook the aforementioned survey of works which treated of apocalyptic themes and also acquainted myself with the composers' world views and motivations with a view to arriving at a composite paradigm of an apocalyptic music. Some of the composers were religious, other not especially. Some were politically active, resting hope in political action to bring about epochal change, others not. None of them would be considered religious fundamentalists. But say that a composer of art music considers himself fundamentalist Christian in some ways, definitely Adventist (in the sense of looking forward to the second coming of Christ and feeling it imminent): what modern-day model could he examine and look to for inspiration? I did not find one that fit my own world view. But I did find that the concerns fueling both sacred and secular apocalyptic were similar. And the musical techniques and qualities befitting the music of one or the other needn't be mutually exclusive. After all, the desire for termination of present crises, enlightenment, and lasting peace are common to both. After analyzing the Huber work, I concluded that there is an apocalyptic music which is confrontational, purposefully and very obviously manipulative. It attempts to wake the listener up to the need to make some change before it is too late, by giving some suggestion of terrible, destructive phenomena. But I also discovered works which mocked any obvious and unambiguous suggestion of a crisis which is to be feared. It is, as if, telling us not to be deceived by the obvious, and at the same time not to get too comfortable, either. Or it could be trying to show the folly in taking 'the end' too seriously. It may be dubious of any kind of 'deeper meaning.' A third kind of apocalyptic music suggests or allegorizes a post-apocalyptic catatonia, or, on the other hand, valorizes this stasis, either as the divine time of eternity or the acceptance of and resignation to finding beauty in meaningless or non-transforming (in a linear logical way, at least) changes. This can be claustrophobic, like being inside an unending explosion, or trapped in an inert and equivocal opaqueness (or its obverse, the minimalist transparency). But there is also that which seeks to nurture the utopian, to feed the hope of paradise. And it is this kind that I, rather grandiosely I suppose, seek to invoke in *Vision 4*.

Before proceeding to the discussion of my own work, I'll briefly point out that all music, especially that written at the end of the last century, could in a sense be considered apocalyptic. One literary theorist, Frank Kermode, proposed as much for all literary fictions. According to his theory, since much fiction is

an attempt to make a beginning, transformative middle, and end which are concordant, it owes its design to fictions about *the End*. Others, such as Warren Wagar, emphasize that there actually is a specific genre of eschatological fiction. And some of their ideas are applicable to music in general. A music which immanentizes apocalypse could be one which is teleological in design yet balances its outward directionality with elaborate concurrences of underpinning perpetual cycles. It is perhaps the music which epitomizes the ideal well-ordered and modern mind that reserves hopefulness in humanistic progress. A work like Elliott Carter's Double Concerto (1959-61) comes to mind. In 1971, citing the influence of Alfred North Whitehead, Carter expressed his belief "that existence of any kind is a teleological process, in which various kinds of concrescences attain and then later lose integrated patterns of feeling."[10] This is well demonstrated in the Double Concerto. There expressive worlds are gradually built up to the point of maximum intensity or integration, unity and are then very assiduously dismantled or allowed to fall apart. My point is that teleological is not necessarily eschatological. And my aim in *Vision 4* was to be the latter.

Vision 4: Hermeneutics, Musical Form, and Techniques

The occasion for the premiere of this piece (for piano and electroacoustic sounds) was a concert held in conjunction with a mini conference on the Apocalypse held at Danville Area Community College (Danville, IL) in Spring 2015. The composer was soloist. The program note included with the score is as follows:

> *Vision 4* is a work informed by chapter 7 of the Apostle John's Revelation. The number of chapters in the Bible book does not correspond to the number of visions, hence the fourth vision appears in chapter 7. 4 angels are poised to let go of the winds of tribulation but must hold them back until after the sealing of the 144,000 slaves of God, 12,000 from each tribe of Israel. After this a vast and un-numbered multitude is seen. The apostle is told that this multitude survives the great tribulation. They express joyful praise and gratitude to the one seated on the throne and to the Lamb, because they will be led to fountains of waters of life.[11]

The reason for the title should be clear from this. But there are other things that bear explaining, especially from my own hermeneutic perspective as one of Jehovah's Witnesses. (And I know that stating it like that, rather than saying that I am a member of a certain denomination, may seem like a boast, which is not my intent.)

"Four Angels" – How do we know that it is winds of tribulation they are holding back? Revelation 7:9 refers to harming the earth, sea and trees. Verse 14 identifies the great crowd or multitude as surviving "the great tribulation." Four angels hold back winds from all 4 directions, implying an earth-wide distress. They receive an order from another angel coming from the East, telling them to wait until the sealing of God's slaves.

"Sealing" – What is meant by this? The original Greek word here used (a form of the verb *sphragizō*) indicates "ownership and security, together with destination."[12] The Apostle Paul used similar language

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[10]Allen Edwards, *Flawed Words and Stubborn Sounds*-A Conversation with Elliott Carter (New York: W. W. Norton, 1971), 100.

[11] Score and recordings are available upon request from the author.

[12] W. E Vine, *A Comprehensive Dictionary of the Original Greek Words with their Precise Meanings for English Readers* (McLean, Virginia: MacDonald Publishing Company, 1989), 1013.

when discussing the action of the Holy Spirit on believers when they are "born again" to a new hope, that is, a heavenly destination (Ephesians 1:13; John 3:3; Colossians 1:5). That tribulation is being held back until after this sealing happens would indicate that, though the sealing of spirit begotten Christians started in the 1st Century, it wouldn't be completed until just before the great tribulation. Interestingly, Paul speaks of being "sealed unto the day of redemption" at Ephesians 4:30.[13] The word for "redemption" (ἀπολυτρώσεως) here carries the meaning of releasing by ransom. This "day" of releasing would be when the struggle with one's sinful flesh is complete and they are released from their physical bodies and when heavenly life becomes a reality for them.

"Slaves of God"—Who are they? They are the ones next referred to as the 144,000. The other places they are mentioned in the Revelation are in Chapter 14 and Chapter 22. In Chapter 14 they are not called "slaves," but in both places they are said to have the name of God and of the Lamb written on their foreheads. This connects with the mention of being sealed in the foreheads that we read in Chapter 7, verse 3. One significant detail in Chapter 22, verse 5, is that "they shall reign for ever and ever." This is a royal group of slaves, rulers. It must be remembered that among the OT promises were those related to God's intention that His people be "a kingdom of priests, and an holy nation" (Exodus 19: 5, 6). This is recapitulated by Peter at 1 Peter 2:9; and the context of his words shows that he applies them to those "which in time past were not a people, but are now the people of God" (vs. 10).

"12,000 from each tribe of Israel"—Are these slaves all male virgins taken from the natural or fleshly tribes of Israel? A literal reading of Revelation 14:4--which is referring to the same group--would lead to that conclusion. Jehovah's Witnesses do not read this literally, and so do not think that natural Israel is meant here, nor do they believe they are all of the male gender. We take this to mean the "Israel of God," made up of both Jews and Gentiles—in the flesh—but all made new by God's Spirit. As Paul says at Galatians 6:15, 16: "For in Christ Jesus neither circumcision availeth any thing, nor uncircumcision, but a new creature. And as many as walk according to this rule, peace be on them, and mercy, and upon the Israel of God." And earlier in the same letter (3:28): "There is neither Jew nor Greek, there is neither bond nor free, there is neither male nor female: for ye are all one in Christ Jesus." Revelation 14:3, 4 also provides two other unique details about them: they alone master a new song, and they are bought from the earth as first fruits to God and the Lamb.

"An un-numbered multitude"—What do we know about them, according to the Revelation itself? They are explicitly mentioned only here in Revelation chapter 7. But they are implied elsewhere. Reading on in the chapter we find that (1) they survive or come out of the great tribulation (though the *KJV* leaves out "the," just saying "they which came out of great tribulation"), (2) they have washed their robes in the blood of the Lamb, loudly ascribing their salvation to God and the Lamb, (3) they render God sacred service continually in His temple, (3) God spreads his tent over them, (4) they are relieved from hunger, thirst, sun, and heat, (5) the Lamb leads them to fountains of waters, and (6) God wipes out the tears from their eyes. Revelation 21:3, 4 mentions that God tents with mankind, wipes away every tear, and ends death, sorrow, crying and pain. This is an expanded list of the same blessings mentioned back in Chapter 7 with regards to the "great multitude." And verse 1 of this chapter makes clear that these are details of a "new heaven and a new earth." Jehovah's Witnesses teach that the 144,000 are Christ's bride who rule with him in heaven, and that the "great multitude" will, along with righteous ones who are resurrected, experience blessed conditions on an earth made new.

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[13] Unless otherwise indicated, all scriptures will be quoted from the *KJV*, for the sake of general familiarity in the English-speaking world.

Armed with these insights, we will now examine the form of my piece. Not all compositional decisions were dictated by my belief system or interpretation of this passage of scripture. Some things were just a matter of artistic preference or my particular interest in purely musical phenomena or challenges to the performer. The order of events in the music follows directly from the order of images in the vision itself: A. four angels, B. angel from the east, C. sealing the 12 tribes, D. great multitude, E. praise music, F. before the throne, and G. fountains of water. (It will be noted there are 7 sections, though this may not be explicit to the listener, since they are not usually bracketed by lengthy pauses.) The only music that returns is the opening low register music, initially marked "abyssmic," but slightly altered in its return, just before the "throne" music. There the interval of the tritone has been replaced by a perfect fifth, a representation of overcoming and resolution. Fixed-media electroacoustic sounds are heard in "great multitude" and "fountains of water." Recordings of Revelation 7:10 being read in several different languages are convolved together (a signal processing technique that multiplies, time shifts, and adds digital sample values), resulting in a smeary, undifferentiated mass of voices. In the "fountain" music, the same rolling figures that the live pianist plays are heard, in just intonation, in the echoes of the electroacoustic part. These echoes become dislocated from their source, both in time and space, taking on ascending forms. Live DSP (Digital Signal Processing) is used in "before the throne." Pitches and amplitudes are tracked, and a bank of sine wave oscillators follows with a slower envelope, creating an electronic "glow" to the sound. I thought this was appropriate to the description of God's throne found at Revelation 4:3. The rainbow figures prominently here, just as it does in Ezekiel's earlier vision of the throne. But here it is a rainbow that looks like an emerald. Jasper and sardine (sardius) stone are also a part of the picture. Classic vibrato--at random depths and speeds--is applied to the oscillator sounds, giving them added brilliance and life. It also was a fitting allusion to Messiaen's use of the ondes Martenot in certain of his works. And this is not the only connection with Messiaen and his student Pierre Boulez, as will be discussed later.
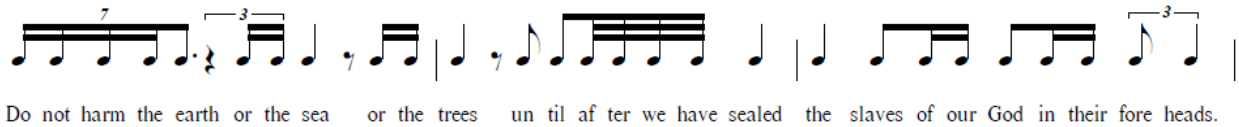
Temporal proportions are worth mentioning, which are provided here in measures as well as approximate clock time, as well as tempo/expression descriptions:

FIGURE 2: *Vision 4*, temporal proportions

A	four angels	mss. 1-42	3'20'	slow, dotted with occasional rapid gestures
B	angel from the east	mss. 43-45	0'15''	fast, declamatory
C	sealing the 12 tribes	mss. 46-76	2'30''	fast, urgent, incessant
D	great multitude	mss. 77-103	2'15''	slow, engulfing
E	praise music	mss. 104-165	3'00''	fast, driving
F	before the throne	mss. 166-191	2'20''	slow, grand, with rushing ascending stepwise gestures
G	fountains of waters	mss. 192-225	3'20''	slow, with repeating rapid "rolling" figures

The total duration of the piece is around 17 minutes. Section B is so short because it is directly based on the length of time it takes to read the angel's words at Revelation 7:3. My own reading of the text (using the *New World Translation*, rev. 2013) took the following rhythmic form:

FIGURE 3: speech rhythm

Do not harm the earth or the sea   or the trees   un til af ter we have sealed   the slaves of our God in their fore heads.

And if the quarter-note is set at 48 beats per minute, it takes 15 seconds to read this.

The music representing the angels in the beginning aims to give them distinct personalities, fully formed. Each one makes two appearances, and they are as if suspended over a two-part slow-moving counterpoint in the bass register. Their harmonic content is reminiscent of Messiaen's chord types, but I did not in any systematic or faithful way construct my chords according to any of the categories he laid out in his *Traité de rythme, de couleur, et d'ornithologie*. I worked intuitively and with a particular sound image in my mind. One thing that I did strive for was complementarity of harmonic resources. I kept track of what pitches were repeated (either at the unison or octave) in one resource, and then avoided them in another. The only kind of development is in the bass register counterpoint. It is a rotational kind of development that doesn't result in much change; actually, it's just basic isorhythmic technique (or "rhythmic pedal," as Messiaen would refer to it).[14] This slow-moving abyss is replaced by a building turbulence which is then released into the upper register, where it becomes the proclamation of the 5th angel, using the rhythm above.

The sealing of the 144,000 involves two contrasting materials. 7-pitch row matrices generate the content for a continuous 32nd-note idea for the tribes. And the sealing of each is represented by a most obsessive 5-note signal gesture, using the same 5 pitches (two in the right hand, and three in the left). The order of tribal presentation is that found in Revelation 7, which differs from that in the Pentateuch. The sound pictures of Judah, Reuben, Gad, Asher, Naphtali, Manasseh are all similar, being mid-register, soft, and primarily defined by continuous 32nd notes. Yet the row used is gradually transformed through multiplicative operations.[15] "Simeon" diverges in register, placing the hands higher and lower. "Levi" starts low and ascends, now using triplet 32nd notes. (It is to be remembered that the Levites were not numbered among the 12 tribes under Mosaic law, since they were a tribe without a land allotment.) "Issachar" and "Zebulun" freely mix duplet and triplet 32nd notes, once again with hands in high and low registers. "Joseph" and "Benjamin" are strikingly different. Joseph alternates 4- and 3-pitch chords in dotted 8th notes, in an ascending direction. (Once again, in the tribal listing in the Pentateuch there wasn't actually a tribe of Joseph, but he was represented by Ephraim and Manasseh, his sons.) The last sound picture, for Benjamin, is tender and yielding, moving in calm 8th notes. By this time, the row transformation has produced pitch redundancy too, softening the music's edges.

The sound pictures of the "sealing" action, which take place after each tribe is presented, involve a rhythm in two parts that keeps changing in its speed relationships. As stated above, the pitches are the

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[14] Olivier Messiaen, Trans. John Satterfield, *The Techniques of My Musical Language*, 1st volume, (Paris: Alphonse Leduc, 1956), 26.
[15] Charles Wuorinen, *Simple Composition* (New York: Longman, 1979), 98—101.

same, constituting an obsessive feature in this section. So, I introduced variation just by changing the speed of the 5-note signal gesture. Here are 7 instances:

EXAMPLE 1: sealing gestures

This "obsession" gives way to a grandiose unison rhythm before the appearance of the great multitude.

This gives me a good opportunity to respond to anticipated "why" or "why not" questions that may arise at this time. For instance, why a 7-pitch row instead of a 12-pitch row for the 12 tribes? Or, why 5 notes in the "sealing" gesture? Why such precision in the notation of the speeds? Why such a change in character for Joseph and Benjamin? And did I take any clues from Jacob's (Israel's) famous deathbed prophecy in the 49th chapter of Genesis? In response to the first question, I must state that my harmonic goals were such that a non-redundant ordering of the total chromatic was not desirable. Also, the time allotted to tribes 1-10 was 7 eighth-notes. "Joseph" was given 7 dotted-quarters. "Benjamin" was given 7 half-notes. The number 7 is more common in the Revelation. As we trace its appearance in the OT and NT it carries the sense of completeness, from God's 7th day of rest to the seven congregations, seven seals, seven trumpets, and seven plagues in the Revelation. These are all associated with things of God. But His adversary also lays claim to it. I find it interesting that the wild beast of Revelation chapter 13 (the beast coming out of the sea) has seven heads, and the scarlet-colored beast of chapter 17 has seven heads; and it is itself an eighth king, but it derives from and is inextricably linked to the seven heads. It is as if "seven" constitutes a limit, beyond which the beast cannot grow. On the other hand, "five" is not a featured number in scripture. Yet, from the standpoint of metrical completeness in rhythm, both 5 and 7 are important. In a meter of 4, the 5th beat feels like a downbeat. The 7th beat feels like beat 3 of the second measure, a naturally accented beat. Perhaps that's why, when we knock on someone's door, it seems so natural to knock 5 or 7 times. This is how I justify my choice in connection with the "sealing" gesture. As for the precision in the notation of speeds, I would have to say that giving performers a chance to flex their rhythm muscles is something I find exciting. And these are very bald and exposed moments. The performer needs to focus on only

one thing: playing the 5 repeating notes at precisely the correct speed. And when there are independent speeds, they truly need to think in terms of two different "speeds," and not where attacks fall with respect to a common tactus. As for the different character of the last two tribes, it can be pointed out that Joseph and Benjamin were special to Israel since they were the only children of Rachel. Besides this, the character of the tribes' sound pictures was not informed by anything in scripture, though in retrospect it may have made this section of the piece more satisfying if I had taken a closer look at the deathbed prophecy of Genesis 49 and come up with more distinctive features for each of the tribes.

The "great multitude" is represented by an electroacoustic interpolation of convolved voices. The live pianist alternates between high register rapid figures and soft low register chords. The damper pedal is down the whole time. The pitches of the rapid figures come from the same matrix that yielded the unison rhythm passage that ended the "sealing" music, but the low chords take their pitches from that matrix with the modulo set to 12, rather than 7. This results in more chromatic music.[16] The convolved voices are spatialized in virtual 3D. There are 7 voice layers in each region of the 3D space, with the following orientation: Lower Left, Lower Front, Lower Right, Lower Rear, Mid Left, Mid Front, Mid Right, Mid Rear, Upper Left, Upper Front, Upper Right, and Upper Rear (12 regions from low to high, surrounding the listener). The entry times for the voice layers are staggered, but very closely. This creates the sensation of rapid envelopment. Incidentally, the languages heard—which probably are not discernible to most listeners with such layering—are Albanian, Danish, and Korean. These voices are convolved with each other and with a repeating C-octave on the piano. Thus, an acoustic connection is made with the repeating C-octaves that the live pianist had played at the end of the "sealing" music. Such connections are inherent in the convolution process, since it produces something which is a hybrid mixture of two sounds; one is the input signal or "excitation," and the other one (of fixed and shorter duration) is the "impulse response."[17] In this case, voices were always the input, and other voices or the repeating piano octaves served as impulse responses.

How does one represent "praise" in a more modernist idiom? I take as models both Messiaen and Stravinsky in the next section of *Vision 4*. Insofar as current human experience is largely made up of dissonances that do not lead to resolution or consonance, the greater awareness and deeper appreciation of this fact as mankind suffered through the 20th Century admits of a certain acceptance and even valorization of it. As my teacher, Roger Reynolds said once, "We must accept the mess."[18] As one who awaits what others politely and tactfully consider a quaint, naïve utopic solution to this "mess," I must say that I *don't* accept it, not ultimately. Yet do I see beauty in the rugged and harsh? Do I admire seeing adaptation and development at work? Absolutely! And these are not things traditionally associated with Heaven and the Divine Presence. Yet, if God's glory is something no human can bear, then it is not something cozy and comfortable, fully comprehensible, familiar; it is everything but that. Messiaen's particular sonic manifestation of the religious and mystical succeeds many times, I believe, in *dazzling* the listener with what is multi-faceted, overwhelming, and opaque. It seems to me that it strives to present the Divine glory, to bring the human listener face-to-face with it. This is in keeping with the purpose of what he considered the highest form of liturgical music: "Sound-color and

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[16] The row, 0 2 4 3 1 5 1 (C D E E-flat C-sharp G C-sharp), would invert to 0 3 1 2 4 0 4 if the modulo were 7. But if the modulo is changed back to 12, the inversion would be 0 10 8 9 11 7 11.
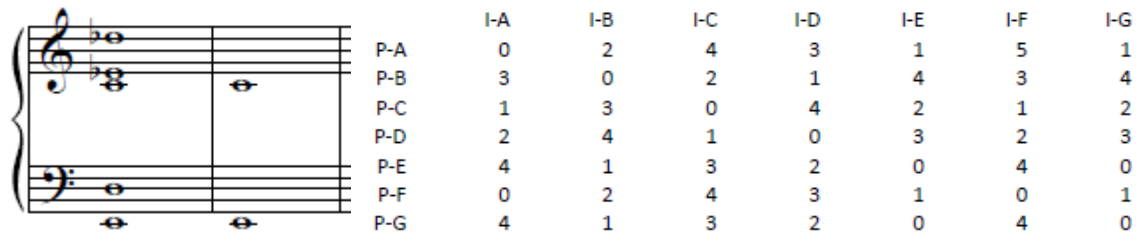
[17] Erik Spjut, "Convolution in Csound: Traditional and Novel Applications," in *The Csound Book*, ed. Richard Boulanger (Cambridge, Massachusetts: MIT Press, 2000), 507.

[18] J. Beals, "Artists Must Accept Mess." *San Diego Reader* (11 February 1999).

Dazzlement" (*éblouissement*)[19] And he has behind him the Catholic Church's long tradition of contemplation about these mysteries. The aim of praise works in a different way and direction, however. It assumes the humility of the believer, rather than making him humble. And its direction is towards God. As humans we praise God with what we have, not with what we don't have. And what we have is partial and flawed. But it must be our best; therefore, it should show a striving. Praise is a joyful expression; but human joy, even if excited by something Divine, is not just one pure color. It carries anticipation, yearning, hope, desire, drive, gratitude. If a harmony is to do justice to this, it must encompass tensions which are not eased.

To me, harmony implies selectivity. So, I begin with a 5-pitch chord in the praise music:

FIGURE 4: 5-pitch chord with matrix

	I-A	I-B	I-C	I-D	I-E	I-F	I-G
P-A	0	2	4	3	1	5	1
P-B	3	0	2	1	4	3	4
P-C	1	3	0	4	2	1	2
P-D	2	4	1	0	3	2	3
P-E	4	1	3	2	0	4	0
P-F	0	2	4	3	1	0	1
P-G	4	1	3	2	0	4	0

But it isn't just a 5-pitch chord; it has two pitches duplicated. This is because it comes from the first column of the matrix we used earlier. As can be seen, the pitch content of each column is the same, except for I-F. But what gets duplicated changes. So, with each chord, these duplicates are iterated 7 times, then followed with a chromatic ascent to a different transposition of the chord. This opening subsection is marked "driving, exuberant." An adjustment in the harmony takes place in mss. 120-124:

FIGURE 5: adjustment in harmony
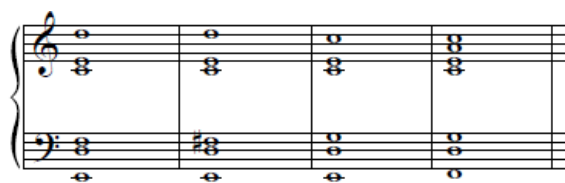
The last chord is a very common pentatonic collection. A new matrix (mod 12) is now formed, with the chord (from top to bottom) becoming the top row. The 4th pitch is always a duplicate of the first. A similar series of iterations and ascents to different transpositions follows; but the ascents are all the pitch-class set [0 2 4 5 7 9], our diatonic or major hexachord (6-32 according to Forte's set names[20]), rather than chromatic. Also, the transposed chords are varied in their spacing; and there are descents as well as ascents. I was aiming for a brighter and more ebullient sort of joy here, which is then carried over into the final part of the praise music, marked "buoyant, rippling, running over." Here we have a different kind of texture. And this is also where my homage to Stravinsky, the pre-serial one, takes place (see Example 2: play of major hexachords).

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[19] Almut Rössler, *Contributions to the Spiritual World of Olivier Messiaen with Original Texts by the Composer,* trans. from the German by Barbara Dagg and Nancy Poland (Blumenstrass: Gilles & Francke Verlag, 1986), 57.
[20] Forte, Allen. *The Harmonic Organization of The Rite of Spring* (New Haven: Yale University Press, 1978), 29.

EXAMPLE 2: play of major hexachords
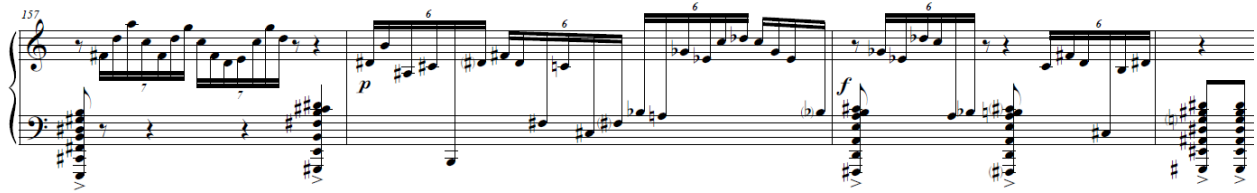
At this point there is a free play of major hexachords. Sometimes there is cross-fading of different hexachords, but usually juxtaposition, as we see here. I hear similar moments in Stravinsky's works, especially in *Petrushka*. And when I heard them for the first time, they came to define, for me at least, an exuberance and lively joy that I find altogether pleasing. Yet, that particular sort of joy is not called upon, for instance, in Stravinsky's *Symphony of Psalms*, movement III, which sets the 150th Psalm. Regarding this, the composer stated:

> The commissioning of the Symphony of Psalms began with the publisher's routine suggestion that I write something popular…I even chose Psalm 150 in part for its popularity, though another and equally compelling reason was my eagerness to counter the many composers who had abused these magisterial verses as pegs for their own lyrico-sentimental 'feelings.'… Although I regarded Psalm 150 as a song to be danced, as David danced before the Ark, I knew that I would have to treat it in an imperative way…God must not be praised in fast, *forte* music, not matter how often the text specifies, 'loud'…[21]

The use of the word "imperative" is interesting here. Rather than a reflection of joy, the tone of the setting would be that of a solemn mandate or urging. And this certainly agrees with the verb tense of the text. However, for my own representation of the Great Multitude's hymn of Revelation 7:10 I chose to inject the spirit of dance and fluid movement, also diatonicism freed of common-practice functionality that is such a signature in Stravinsky's music.[22] I have inherited the situation Messiaen spoke of when he noted in the 1990's that "nobody at all expresses joy."[23] So I take up that challenge in this part of the work, but using the language of one (Stravinsky) who felt such an application inappropriate.

"Before the throne" gave me an opportunity to create an impression of glory not only through live electronics, but also through a sequential procedure, chord multiplication, and telescoping. As mentioned before, the low register music, marked "abyssmic," has returned, but now lacking the tritone. So, it is now marked "abyssmic, peaceful." The pitch sequence present in this two-part structure is A-flat, D-flat, E-flat, B-flat, G, and A. If F replaces G, and G-flat replaces A, we have the following chord, our old friend, the major hexachord:

FIGURE 6: major hexachord multiplication

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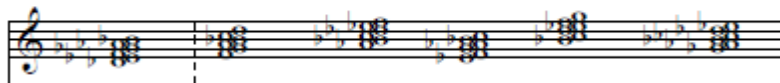
[21] Stravinsky, Igor and Craft, Robert. *Dialogues and a Diary* (Garden City, New York: Doubleday, 1963), 76f.

[22] Berger, Arthur, "Problems of Pitch Organization in Stravinsky," *Perspectives of New Music*, Vol. 2, No. 1 (1963), 12.

[23] Rössler, 91.

The chords that follow (after the dashed lines) are transpositions based on each pitch of the original chord. This is basically a procedure used by Pierre Boulez called "chord multiplication."[24] The original chord is multiplied by itself, essentially. However, I didn't treat these chords as "blocs sonores" in exactly the same way as Boulez does in certain of his works (e.g., *Le Marteau*).[25] The pitch sequence above is treated as a melody which is then "harmonized" (very traditionally, with the melody placed in

FIGURE 7: harmonization of pitch sequence
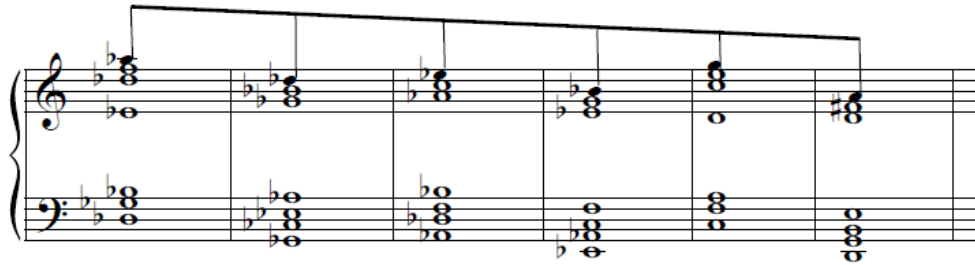
the highest voice), using a specific voicing of the major hexachord. This chord progression is cycled through 4 times, with durations gradually reduced from whole-notes to quarter-notes. A basically ascending gesture of running 32nd-notes is interpolated between chords at shrinking time intervals: 23.5 beats, 10 beats, 4.25 beats, and then .5 beats. The gestures themselves also get shorter. Additionally, they derive their pitch content from the chords multiplied by themselves. Consequently, they will always be missing one pitch class; the major hexachord multiplied by itself yields a collection of only 11 different pitch classes. There is no E-natural here (see EXAMPLE 3: chord with ascending gesture).

EXAMPLE 3: chord with ascending gesture

Telescoping is a revered practice in many music cultures. It is such a good way to imitate the experience of approaching or drawing closer to something, in this case, the throne of God itself.

The final section of the piece is an evocation of fountains, a timeless symbol of vivifying power and refreshment. Four different rolling (or arpeggio) figures in 64th-notes articulate a specific voicing of the major hexachords starting on A, D, C, and G-flat/F-sharp. In their electroacoustic echoes, the intervals are just or pure with reference to the beginning pitch in a figure. So, for instance, in the first figure the intervals from F-sharp would be as shown in FIGURE 8.

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[24] Losada, Catherine, "Isography and structure in the music of Boulez," *Journal of Mathematics and Music*, Vol. 2, No. 3 (2008), 136.

[25] Salem, Joseph, "Boulez's Kunstlerroman: Using blocs sonores to Overcome Anxieties and Influence in *Le Marteau sans Maître*," *Journal of the American Musicological Society*, Vol. 71, No. 1 (2018), 109—154.

FIGURE 8: just intervals
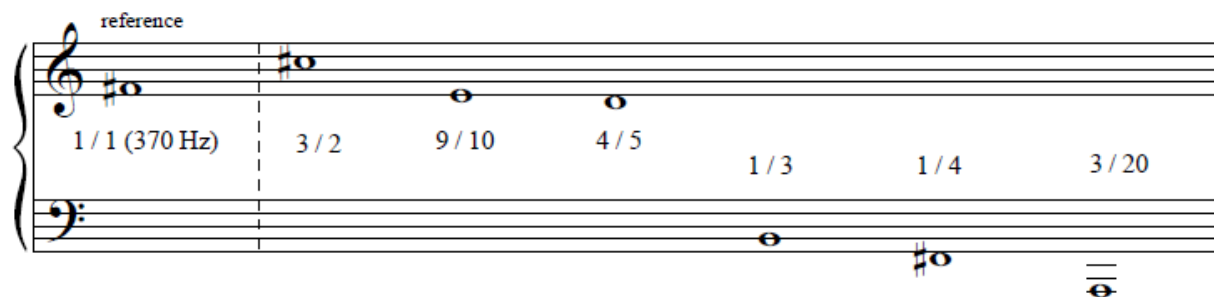
The F-sharp would be in tune with the live piano, but the other pitches heard in the echo figure would be slightly out of tune. These echo figures are not generated in real-time but have been synthesized previously, and their execution is triggered by a MIDI footswitch. Also, they are spatialized, which means they are made to sound like they are distant and coming from different directions. Just like the tuning, the timbre used is somewhat alien, sounding like something halfway between a harpsichord and a piano. This is the result of phase vocoding and the natural progression in time through the analysis of a sampled piano sound being altered in its resynthesis. Another de-naturing effect is transposition itself, even though the phase vocoder does allow pitch change independent of a sound's duration.[26] As the live pianist continues to cycle through the four "fountain" figures, the echoes take on an ascending form, evaporating into the upper reaches of audibility, or almost. Why make these fountains alien and distant? Why exploit the tension between the world of 12-tone equal temperament and that of pure tuning? Doesn't this contribute to the idea of utopia, an unreal *no place*? Precisely! Every effort of imperfect humans, at least of a drastic sort, to create a perfect society has been not just a failure but often destructive. And history hasn't *gradually* produced one yet either (which would certainly be less scary), nor has it erased the notion of striving towards one. 12-tone equal temperament has been shaped by historical factors and compromises in the Western musical world. It is an adaptation, a true adaptation, by which I mean a very conscious effort to change something to accommodate a need; it is by design and not by chance. One must remember that in the Revelation these are "living" fountains or "springs of the water of life."[27] To a Christian believer, the source of everlasting life is God through Christ. How fitting that the vision has the Lamb (Jesus as the sacrifice to ransom mankind from sin and death) leading or guiding the Great Multitude to this life free of sadness! Therefore, those springs or fountains, from a purely human perspective, remain a matter of faith, something not beheld with physical eyes and ears.

Final Thoughts

The two works examined here show different faith-views of the book of Revelation. Huber's is a progressive, non-fundamentalist Christian view that doesn't necessarily see it as the inerrant word of God, not any more than the 1525 vision of Dürer. Yet it does see it as a document to be taken seriously and something with timeless implications for the fate of mankind. *Vision 4* was composed by a person viewing John's Revelation as divinely inspired, inerrant, but symbolic. Symbols, visions, dreams, images—they do need interpreted. Otherwise, Nebuchadnezzar would not have summoned the prophet Daniel to interpret his dream of a gold-headed image. Daniel said, "…there is a God in heaven that revealeth secrets, and maketh known to the king Nebuchadnezzar what shall be in the latter days"

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[26] Dolson, Mark, "The Phase Vocoder: A Tutorial," *Computer Music Journal*, Vol. 10, No. 4 (1986), 23f.
[27] *The New Testament-A New Translation by William Barclay* (London: Collins, 1968).

(Daniel 2:28). What he then proceeded to tell began to be fulfilled with the king himself (he was the head of gold), but the end of the vision would stretch forward into the future, long after the death of that king. After him would be 4 more kingdoms. The end would be a time when iron and clay could not hold together. The end would mean a pulverization of the image and its replacement with a kingdom by God that would never be destroyed. I am persuaded to believe that we are now witnessing that time of iron and clay not mixing, and I do not wish to be either the iron or the clay. What rules now is "partly strong, and partly broken" (Daniel 2:42). I am well aware that, at the ends of centuries and millenia, there have been fantastical expectations in the past. It certainly *seems* right for monumental change to happen then; the numbers may be made to work out. But the founder of my faith said, "But of that day and that hour knoweth no man, no, not the angels which are in heaven, neither the Son, but the Father. Take ye heed, watch and pray: for ye know not when the time is" (Mark 13:32, 33). So, maintaining the attitude of watchful waiting seems the wisest course. An eschatological/Apocalyptic music can serve both to de-mythologize and to keep alive the hope of what many (if not most) consider a no-place.

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