

~ The Vision of Cataclysm ~

“Precession of the Equinox”

Five Movements for the Cosmic Consummation
For Flute Quartet and Percussion



~ *Jordan Alexander Key* ~

Commissioned by the Charlotte New Music Festival
Charlotte, North Carolina, Summer 2014

~ The Vision of Cataclysm ~

“Precession of the Equinox”

~ Movements ~

Precession of the Equinox: “Progression to Cosmic Consummation”

The Vision of Cataclysm: “The Song of the Sybil”

De Regressu ad Deorum: “The Final Consummation”

Ekpyrosis: “The Great Conflagration”

Apocatastasis: “The Primordial Return”

Instrumentation:

Flute I & Piccolo I; Flute II & Piccolo II

Flute III & Alto Flute; Flute IV & Bass Flute

Acoustic Percussion: Woodblocks, Suspended Cymbal, Bongos, and Triangle

Synthesized Percussion: Large Gong, Concert Bass Drum

~ Jordan Alexander Key ~

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Program Notes:

Astrology, as it is known today, was developed between the fourth and first centuries BCE in the Mediterranean Basin. At this time, the beginning of the year was marked by the Spring Equinox (approximately the 20th of March) when the Sun rose in the constellation Aries. Around 125 BCE, however, following many centuries of previous observations, the Greek astrologer, Hipparchus, noticed that the Sun was not rising in exactly the same position in the sky every few years, and over long periods of time, its position on the morning of the Spring Equinox changed significantly. He discovered that the Sun gradually moved in relation to the Zodiac. This motion would later be called the precession of the equinox.

This precession is caused in part by the tilt of the Earth, spinning on an axis slanted at about 23 degrees in relation to its orbit around the Sun. Many know that this slant accounts for the change of seasons throughout Earth's revolution. However, because Earth is not a perfect sphere, it also wobbles slightly as it spins on its axis. It is also this wobble that causes the Zodiac to move slightly backwards in the sky each year. That movement is hardly noticeable, however, being only one degree every 71 years. This movement is slight from year to year, but consequently, over many centuries, precession can make a significant difference. It takes approximately 2,150 years for the Spring Equinox to move from one zodiac sign to another and approximately 25,800 years for the wobble to make that point return to its previously held position in the Zodiac. This complete cycle, taking almost 26 thousand years, is called the Great Year.

The Vision of Cataclysm is about the Ancient Grecian Stoic belief in the periodic destruction of the cosmos by a great conflagration every "Great Year." The cosmos is then recreated, only to be destroyed again at the end of another new cycle. The Ancient Stoics believed that this Great Year (the complete cycle of the equinox through all zodiac signs) would end with the complete destruction of the cosmos in a conflagration or great cataclysmic fire, to then be recreated in a primordial state. The movements of this piece follow the progression of this Cosmic Consummation, called Ekpyrosis by the Greeks, from the final "Precession of the Equinox", to the "Vision of Cataclysm" portrayed in the ancient Greek poem *The Song of the Sybil*, then "De Regressu ad Deorum" (The Return of the Gods) to destroy the universe, followed by the destruction of the universe in the Ekpyrosis or "The Great Conflagration," and then ending with the "Primordial Return" to the beginning or the "Apocatastasis."

The Vision of Cataclysm

Jordan A. Key: Text inspired by *The Song of the Sybil*

A Great Fire from the heavens will descend;
Even the seas, rivers, and streams will burn.
All will burn in the reign of fire, none to be spared from doom.
Fish, birds, trees, rocks, all will scream loud in horror.

The Sun will lose its lightness, becoming dark and veiled,
The moon will give no light as the stars plummet from their thrones in heaven
Man, woman, and child will wail, none to be spared from doom.
The whole world will be sorrow on that day of the Final Consummation.

Compositional History & Methodology:

The Vision of Cataclysm began as a minor project to write a short, five movement piece for a solo wind instrument, either flute, oboe, clarinet, or bassoon, following particular parameters for each movement. This assignment was given to me in August of 2013 upon my entrance into graduate studies in composition at the University of Arizona under the tutelage of Professor Daniel Asia. Up to this point in my composition studies, I had never written a piece for a solo instrument where, in general, only one note could sound at a time. This project was going to be an opportunity to show what I could do given limited parameters, both instrumentally and compositionally, while also trying to be original and creative within those parameters. I chose to write the piece for solo flute, and within about three weeks, I had completed the first edition. I had no program in mind when beginning to write it, except I knew how I wanted each movement to sound and feel. When the first edition was completed, all I could hear was cataclysm.

The First Movement was supposed to be slow and incantatory in nature, with rhythmic values no smaller than quarter notes. It had to be quiet with a limited register, using only small intervallic leaps. Also, there could be no fixed meter and, last, the movement could only comprise six different pitch classes. I took these rules as strictly as I could, but there were places where I chose to break the rules. I used these moments of deviation to highlight particularly striking musical gestures. One such moment in the original flute solo, found now in Flute I of this score, is the use of a modified fragment of the *Dies Irae* chant: a hidden, recurring theme throughout the piece and, here, foreshadowing events to come. This movement came easily to me, having a great interest in chant and meditative music and having already written much music based on chant. The movement now has greatly changed from the original solo, having the additional three flutes and percussion. However, the same feel and original melody have been preserved.

Also of particular interest in this movement is the newer Woodblocks part. The rhythm of the sounding pitches of this part are taken from the first sounding rhythmic cell in the First Flute part in the Second Movement, *The Vision of Cataclysm*, a rhythmic theme that recurs through the entire five movements, encapsulating cataclysm. I call this thematic rhythmic cell the "Cataclysm Cell." The first phrase of the Woodblocks is the Cataclysm Cell, played in a slow tempo. The second phrase is another thematic rhythmic cell from the Second Movement, found initially in the first motive of the Flute III part in mm. 1-2 as a response to the first rhythmic cell. It acts as the rhythmic counterpart to the Cataclysm Cell. It is, in fact very similar to the Cataclysm Cell, and so I call it the Prime Cataclysm Cell. It is from these two rhythmic ideas, the Rhythms of Cataclysm, that much of the rhythmic content of the Second and Fourth Movements is derived. The sounding of these two cells in the Woodblocks in the First Movement is also foreshadowing events to come – Portends of Cataclysm. The nature of the Great Year is cyclical – a cycle where rise incurs fall and fall incurs rise, beginning incurs end and end incurs beginning. Thus, the use of retrograde is common throughout the five movements. In the First Movement, it is the rhythm of the Woodblocks, the Rhythms of Cataclysm, that are in retrograde. The first two rhythmic phrases in mm. 2-5 are retrograded in the last two rhythmic phrases in mm. 8-12, not only foreshadowing cataclysm, but also giving symbolism to the cyclical nature of the precession of the equinox and the Great Year: this destruction will bring new beginnings and, eventually, new ends.

For the second movement, I was directed to write a fast piece that was "ebullient in nature," only using rhythmic values equal to or smaller than an eighth note. I had to use a three note set in inversion and transposition for pitch content. The dynamic spectrum and registral space was supposed to be very wide, using as much of the instrument's color as possible. For my pitch content, I chose set class 3-3 (014), but taking many liberties at times with how I used it and breaking from it numerous times. Also significant to the pitch content of this piece

is the tritone, major third, and the augmented triad. The piece, in its original solo flute version, was a large palindrome, retrograding itself rhythmically and melodically in mm. 14 on the fortississimo (*fff*). This palindrome has not survived the expansion of the piece into the full flute ensemble and percussion, but remnants of it still exist and can be traced throughout the piece in the flute ensemble, particularly in the rhythms, which are mostly derived from the original solo part, however with some new material. The melodic palindrome is more obscured and no longer an essential part of the structure, but can still be somewhat traced. It is only important to note this because it is how this movement had its compositional origins, and it is the Ur-structure upon which the piece evolved.

In this movement, also note the occasional use of the *Dies Irae* chant, often rhythmically shifted, and melodically altered. The first occurrence of it is in mm. 2 in Flute IV. While the symbolism of this chant is obvious in the context of the piece, this chant is also the figurative “Song of the Sybil” in my conception. It occurs numerous times, in various voices, during this movement, often accented and/or given dynamic dominance, but also altered in various ways.

The Third Movement needed to be more moderate in character: a mid-tempo piece, lackadaisical in nature, using only eighth, triple, and quarter notes. The pitch content was confined to an octatonic scale confined to the middle range of the instrument. Dynamics could be *piano* to *forte* but without many extremes. This piece was originally conceived as a break, both for the listener and performer, between the Second and Fourth Movement, which are the more demanding movements of the work. I wanted it to have a haunting and mysterious character with lots of silence and curious gestures. Also, I wanted it to build into the Fourth Movement. I didn’t want too much of a break; this movement slows the momentum created by the Second Movement, but I didn’t want it to stop the momentum. If this movement had found a close, then I believed that the drive to the Fourth Movement would have stopped. Thus, it needed to build back up. It is a gathering of forces for the final assault.

Notice in this movement the subtle and continued use of palindromic structures. Being the literal middle of the macro character-palindrome of the whole work, this movement is somewhat unsure of how it wants to move, how it wants to reflect. It is in a phase of uncertainty. We don’t know what is exactly to come. However, there are hints of the reversal. Notice the loose but clear palindromes in the vibraphones part, bring us back, at the end of the movement, not to a vision of cataclysm, but the cataclysm itself.

For the Fourth Movement, I was directed to reorganize the materials from the Second Movement, making it like a variation, giving a mirrored character-structure for the five movements. All the parameters for the Second Movement were held the same; they only had to be varied. Thus, the similarities in character between the Second and Fourth Movements are audibly clear, but they are also clearly different from the very beginning: this is not just a vision of cataclysm, it is now the cataclysm fully realized. The Rhythms of Cataclysm return in this piece. Exact duplications, retrogrades, and rotations of the two Cataclysm Cells form the rhythmic foundations of this movement. Notice the continued use of the *Dies Irae* chant, still mutated rhythmically and melodically, but still audible and highlighted by registral or dynamic hierarchies.

This movement has two distinct sections: one from mm. 0 to 14 and the other from mm. 15 to the end. The first section was imagined as the chaos that ensues when the cataclysm begins and the world sees and comprehends its inevitable demise. The second section is the actual destruction of the universe: the darkening of the Sun and Moon, the fall of the stars from the heavens, and the consumption of the world by fire. The piece begins to lose its resemblance from the second movement as everything spirals out of control. Form and regularity are lost, and the music whirls into chaos. In this final moment of cataclysmic doom, the *Dies Irae* chant is heard clearly and regularly in whole notes in the bass flute from mm. 21 to 26: a final intoning of the song that portended this cosmic destruction.

The Fifth Movement completed the character-palindrome of the piece. Here, I was directed to reorganize the materials from the First Movement. The only difference in the parameters from the First Movement were that I had to use the other six pitches not used originally, it had to be quieter, and there needed to be more silence. This piece was envisioned as the stillness after a catastrophic event, portrayed in the Fourth Movement. It also reflected the First Movement, reminding all of the cyclic nature of destruction and rebirth. I also wanted this movement to be somewhat haunting – peaceful, but haunting – because even though we have achieved peace and the destruction is over, it is inevitable that it will one day return, and we must not forget. The *Dies Irae* chant appears for the last time in the Flute I part, as in the First Movement. It is melodically altered, but clearly similar to the chant, a subtle and haunting reminder of what has passed and what will come again. Also, hauntingly reminiscent is the return of the Rhythms of Cataclysm in the woodblocks in a similar palindromic structure as in the First Movement. The cycle has simply begun again and the Woodblocks, intoning the Rhythms of Cataclysm, is like the ticking of a clock, starting the count again.

Performance Notes:

This piece in its incarnation herein, was commissioned by the Charlotte New Music Festival. For this commission, the Festival asked that I write a piece for flute ensemble consisting of four flutists, with two doubling on piccolo, one doubling on alto flute, and one doubling on bass flute. Also, they requested that I write parts for a solo percussionist, with access to vibraphone, various acoustic percussion instruments, and a Korg Wave Drum, which can produce numerous synthesized percussion and electronic sounds. Please note, that this piece can be performed with more than four flutists, without the need for doublings. Also, this piece can be performed with more than one percussionist. Last, note that those instruments synthesized on the Korg Wave are more preferably played on acoustic instruments and not synthesized. Thus if there is a need, synthesized percussion may be used, but acoustic instruments are preferable.

For the Percussionist, please refer to the below notational clarifications for your reduced percussion parts:

Acoustic Percussion: (five line staff)

Woodblocks – square notes heads on the treble-clef f, a, c, and e spaces

Bongos – “x” note heads on the treble-clef f and c spaces

Triangle – triangle note head on the treble-clef b line

Cymbal – round or normal note head on the treble-clef b line

Synthesized Percussion – Korg Wave Drum: (two line staff)

Large Gong – upper line

Bass Drum – lower line

Please note as well that there is no expressive difference between an eighth note and a sixteenth note followed by a sixteenth rest. In such cases where this occurs, it is simply done for more clarity and cleanliness in beaming to the beats.

For the Flutists, please note that there is no rhythmic or expressive difference between an eighth note with a staccato and a sixteenth note followed by a sixteenth rest. The reason for the use of both is only to provide more clarity and cleanliness in the beaming of beat groups.

The Vision of Cataclysm

I. Precession of the Equinox "Progression to Cosmic Consummation"

Jordan Alexander Key
Spring 2014

Incantatory (♩ = c. 40)

The musical score is arranged in a system with the following parts from top to bottom:

- Piccolo I: Rests throughout.
- Flute I: Melodic line with dynamics *mp*, *mf*, *p*, *mp*, *p*. Includes triplets and slurs.
- Piccolo II: Rests throughout.
- Flute II: Sustained notes with dynamics *p*, *mp*, *p*, *pp*.
- Flute III: Rests throughout.
- Alto Flute: Sustained notes with dynamics *p*, *mp*, *p*, *pp*. Includes a triplet.
- Flute IV: Rests throughout.
- Bass Flute: Sustained notes with dynamics *mp*, *mp*, *mp*, *p*.
- Acoustic Percussion: Rhythmic patterns with dynamics *mp*, *p*, *mp*, *pp*, *mf*, *mp*. Includes instructions: "triangle: play in corner w/ thin beater" and "suspended cymbal: play with bow".
- Synthesized Percussion: Rhythmic patterns with dynamics *mp*, *p*, *p*. Includes instructions: "muffled" and "open".
- Vibraphone: Sustained notes with dynamics *pp*, *pp*. Includes a *ℓ* (legato) marking.

7

Fl. I *mp* *mf* *p* *p* *mf* *p*

Fl. II *p* *mp* *pp* *p* *pp*

A. Fl. *p* *mp* *pp* *p* *pp*

B. Fl. *mp* *mf* *p* *mp* *p*

Acous. Perc. *mp* *p* *mp* *pp* *mf* *p* *mp*

Synth. Perc. *p* *open.* *mp* *muffled* *open* *p* *muffled* *open*

sim. *play with bow* *sim.*



II. Vision of Cataclysm

"The Song of the Sybil"

Fevered (♩ = c. 200) (2+2+2+2)

Fl. I *mp* *f* *mp* *f* (3+2+2) *p* *f* *ff* (2+2+2)

Picc. II *f* *mf* *p* *f*

Fl. III *mf* *f* *mf*

A. Fl. *f* *mp*

Fl. IV *mf* *f* *mf* *f* *f* *mp*

Acous. Perc. *mf* *f* *mp*

Synth. Perc. *mp*

triangle: play normally

6 3

Picc. I *mf* *f* *mf* *p* *f* (2+2+1)

Picc. II

Fl. II *mf* *f* *mp* *f* *ffp*

Fl. III *mf* 9

A. Fl.

Fl. IV

B. Fl. *mp* *mf* *f* *ffp*

Acous. Perc. *f* *mf* *f* *mf*

Synth. Perc.

11

Picc. I *fff* *p*

Fl. II *f* *fff* *p*

Fl. III *f* *fff* *p*

Fl. IV *f* *fff* *p*

B. Fl.

Acous. Perc. *f* *f* *ff*

Synth. Perc. *f*

Vib. *p*

16 (2+2+2)

Picc. I
Fl. I
Picc. II
Fl. II
Fl. III
A. Fl.
B. Fl.
Acous. Perc.
Vib.

21 (2+2+3)

Picc. I
Fl. I
Fl. II
Fl. III
Fl. IV
Acous. Perc.
Vib.

(2+2+2+2)

25

Picc. I *ff* *fff*

Fl. II *ff* *fff*

Fl. III *ff* *fff*

Fl. IV *mf* *f* *fff*

Acous. Perc. *mf* *f*

Synth. Perc. *muffle*

Vib.



III. De Regressu ad Deorum

"The Final Consummation"

Moderato (♩ = c. 150)
(3+2+2)

1

Fl. I *p* *mf* *pp* *ppp* *f* *mp* *f*

Fl. II *p* *p* *p*

A. Fl. *p* *f* *p* *mf* *mp* *pp* *ppp* *p*

B. Fl. *p* *f* *p* *mf* *mp* *pp* *ppp* *p*

Synth. Perc. *pp* *open*

Vib. *p* *Red.* *

7

Fl. I *p* *pp* *mf*

Picc. II *p* *pp* Flute *mp*

Fl. II *p* *pp* *mp*

A. Fl. *mf* *pp* *pp* *p*

B. Fl. *p* *p* *pp* *mp*

Acous. Perc. *p*

Synth. Perc. *pp*

Vib. *p* *pp* *p*

Reo. *



12

Fl. I *p* *f* *mf* *mp* *f* *p* *mf* *p* *pp*

Fl. II *mf* *p*

A. Fl. *mp* *p* *pp* *p*

B. Fl. *mp*

Acous. Perc. *p* *mp*

Synth. Perc. *mp*

Vib. *mp* *p*

Musical score for measures 16-19. The score includes parts for Fl. I, Picc. II, Fl. II, A. Fl., B. Fl., Acous. Perc., and Vib. Dynamics include *mp*, *mf*, *p*, *pp*, and *f*. A double bar line is present at the end of measure 19.

Musical score for measures 20-23. The score includes parts for Fl. I, Picc. II, Fl. II, A. Fl., B. Fl., Acous. Perc., Synth. Perc., and Vib. Dynamics include *pp*, *p*, *mf*, *f*, *mp*, and *mp*. Performance markings include *molto rall.* and *Attacca*. A double bar line is present at the end of measure 23.

IV. Ekpyrosis
"The Great Conflagration"

0 **Fevered** (♩ = c. 200)

Fl. I: *mf* *mf*

Picc. II: *mf* *f* *mp* *f* *mf* *f* *mf* *f*

A. Fl.: *mf* *mp* *f* *mf*

Fl. IV: *mp* *f* *f*

Acous. Perc.: *mf* *mp* *ff* *mf* *mf*

Synth. Perc.: *f* *f* *f* *f*

Fl. I: *mf* *f* *f*

Picc. II: *mf* *f* *ff* *mf*

Fl. III: *f* *mf*

A. Fl.: *sfz* *mf* *f*

Fl. IV: *sfz* *mf* *f* *f* *f* *mf*

Acous. Perc.: *mf* *f* *mf* *mf* *mf*

Synth. Perc.: *f*

10

Picc. I

Fl. I

Picc. II

Fl. II

Fl. III

Fl. IV

Acous. Perc.

Synth. Perc.

||

poco accel.

15

Fl. I

Fl. II

Fl. III

Fl. IV

Acous. Perc.

Synth. Perc.

20 **Frantic** ♩ = 120

Fl. I *ff*

Fl. II *ff*

B. Fl. *ff*

Acous. Perc. *f*

Synth. Perc. *ff*



24

Fl. I *ff* *p*

Fl. II *ff* *p*

Fl. III *mf* *ff* *ff* *p*

B. Fl. *ff* *p*

Acous. Perc. *ff* *mf* *f* *p* *f*

Synth. Perc. *ff* *mp*

V. Apocatastasis
"The Primordial Return"

1 Incantatory (♩ = c. = 40)

Fl. I: *p*, *p*, *mp*, *mf*, *mp*

Fl. II: *p*

A. Fl.: *p*, *p*, *p*

B. Fl.: *p*, *mp*, *mf*

Acous. Perc.: *p*, *pp*, *mp*, *mp*

Synth. Perc.: *p*, *p*, *p*, *p*

Vib.: *p*, *pp*, *mp*

Acous. Perc. *play with bow*

Vib. *mp*, *pp*, *

5

Picc. I: *pp*, *pp*, *pp*, *pp*

Fl. I: *p*, *mp*, *p*, *pp*, *p*

Fl. II: *p*, *pp*, *p*, *pp*, *ppp*

A. Fl.: *p*, *p*, *p*, *pp*, *ppp*

B. Fl.: *p*, *mp*, *p*, *ppp*

Acous. Perc.: *mp*, *mp*

Synth. Perc.: *p*, *open*, *pp*

Vib.: *p*, *pp*, *

Picc. I (3+2) *pp*, *ppp*