# An inspiration from George Crumb: How the representation of endlessness of "Soli for the Blind and Idiot" references "Ancient Voices of Children"

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#### Introduction

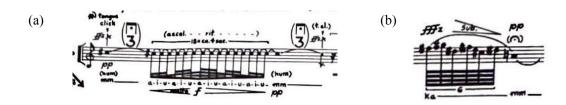
"It is sometimes of interest to a composer to recall the original impulse – the 'creative germ' – of a compositional project. In the case of ANCIENT VOICES I felt this impulse to be the climactic final words of the last song: '... and I will go very far ... to ask Christ The Lord to give me back my ancient soul of a child."

(George Crumb, 1970)<sup>1</sup>

As if a response to George Crumb's inspiration to write the piece as quoted above, *Ancient Voices of Children* (1970) not only sounded primal, but also gave a sense of never ending. The most obvious cue lies under the 3rd movement, in which a section was given a name of its own "Dance of the Sacred Life-cycle", and is also notated circular. Upon further inspection, it is discovered that the above example is merely one of the cycles expressed by George Crumb, each in its own unique way. In the first half of this article, I will discuss how these cycles are expressed in both microscopic viewpoint (cycles going on within a movement) and macroscopic viewpoint (cycles that go on throughout the whole piece). In the second half, I will demonstrate how I use my discovery in the analysis of "Ancient Voices of Children" as a reference to build the structure of my piece "Soli for the Blind and Idiot".

#### Microscopic Analysis of "Ancient Voices of Children"

#### I. El niño busca su voz



<sup>&</sup>lt;sup>1</sup> George Crumb (1970). Ancient Voices of Children

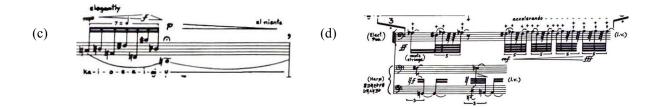


Fig. 1 Example of the four main motives of movement I. (a) Motive A, a repeated note with a changing vowel. (b) Motive B, even and fast moving notes which are close in range. (c) Motive C, an outward growing gesture. (d) Motive D, a repeating and rhythmic gesture played by electric piano and harp.

The first movement is mainly a soprano solo, with other instruments joining occasionally. Fig.1(a) - (d) are the four main motives identified. Other melismatic elements in the movement, mostly whole-tone, described as "building blocks" by De Dobay (De Dobay, T., 1984)2, are in this analysis considered as cement to pull together the four main motives instead.

Fig. 2 shows the 4th and 5th system of the movement, which the point of interest lies on the soprano section from "ka-i-o-mm-rr-" to "ka-mm-ha-ha-ha(etc.)-ai!", which is regarded as the cadenza The cadenza section comprises all elements mentioned above - the free use of wholetone set from the "cement", repeating figures as in motives A and D, even and fast notes from B, leaping intervals from C and rhythmic gestures as in D is marked with grace notes.

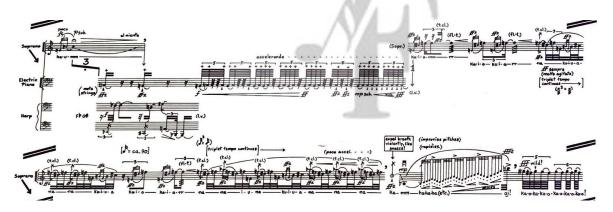


Fig.2 The 4th and 5th system of the movement

After defining every elemental block, we will discover that, before what George Crumb stated as

De Dobay, T. (1984). The Evolution of Harmonic Style in the Lorca Works of Crumb. Journal of Music Theory, 28(1), 89-111. Retrieved January 9, 2021

"after-song", the 1st movement is structured as A-B-C-D-C-B-A-Cadeza- D-C-B-A, which is, in a way, rounded. This observation is enhanced by George Crumb's usage of the poem in this section, which starts with "El niño busca su voz" and ends with "buscaba su voz el niño".

As the cycle was fully drawn, George Crumb started a new phrase which he specifically noted as the "after-song". This phrase acts as the tangent line to project the piece out of the circle it developed previously, both in the sense of music and text. While there were no musical cues implying where the music will project to, let's take a look at the full text.

El niño busca su voz.
(La tenía el rey de los grillos.)
En una gota de agua
buscaba su voz el niño.

No la quiero para hablar; me haré con ella un anillo que llevará mi silencio en su dedo pequeñito.

En una gota de agua buscaba su voz el niño. (La voz cautiva, a lo lejos, se ponía un traje de grillo.)

The poem "El niño busca su voz" by Federico García Lorca (Lorca et al., 1995)<sup>3</sup>

The first eight lines of the poems were used in the piece, and line 5-8 were used in the aftersong section. It is observed in the text part that Lorca in the last lines repeated the structure of the first section of the poem in reverse order, leaving the last sentence "El niño busca su voz" blank. Like what Lorca did, George Crumb deliberately stopped the movement in the middle, implying that the tangent to the circle is meant to draw a bigger circle before returning to its starting point. The unsung

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<sup>&</sup>lt;sup>3</sup> Lorca, Federico García, Allen, D.M. and Lorca, Francisco García (1955) The Selected Poems of Federico garcía lorca. New York: New Classics Series.

song is a strong implication that the movement, and also the piece, is a never ending cycle.

How George Crumb uses the translation of the text is also interesting. As we can see in the original text, the two phrases getting translated as "The little boy was looking for his voices" were actually different. The first one was "El niño busca su voz" while the second one was "buscaba su voz el niño". I believe that George Crumb made use of the translation difference to, as previously mentioned, imply that there exists a bigger hidden circle in the piece that will truly round the text. While some may argue that it is grammatically inconvenient for a phrase to be translated as "Looking for his voices the little boy was", more examples will be reviewed in later movements to suggest that the English grammar is just a convenient excuse for George Crumb to hide this message.

## "Dances of the Ancient Earth"

This is the first interlude to the piece, a mostly whole-tonal, with occasional half-note embellishments, passage that is mostly improvisatory around the motif of B,  $D^{\#}$ , F. The first phrase lasts for two systems, up to before the tibetan prayer stones divide the phrases. Unlike other phrases in this interlude, this phrase is improvised around the motif following a downward arch contour. While other voices follow this contour, the oboe plays a melody that is centered around the notes G, B,  $D^b$ , which is transposed from the previous motif. While the  $D^b$  occurs in grace notes, it is always present with the note C and is stressed by being the top note in the phrase and being repeated multiple times. Combined with the fact that it is part of a member of (0,2,6), the key motif in this interlude, it is sensible to deduce that  $D^b$ , despite being grace notes, is a note of importance in this phrase.

The second phrase, notated as "Very Fast", is led by a melody played by the harp. Again, the motif is B<sup>b</sup>, D, E, which is transposed a semitone lower, but the contour becomes an upward arch. The phrase repeats itself for three times, with the second and last time divided by the playing of tibetan prayer stones, which also play a contour of an upward arch. Note that the third time the leading instrument becomes mandolin.

The third phrase is notated as "Slow, languid". Though sounded very different, this phrase still follows the overall contour from the last phrase, but expressed less as local motives. Tom Toms plays three scattered motives throughout the phrase, starting by an upwards one, then two downward ones follows. The mandolin and harp combine to form two arches, the first being upwards and the second

being downwards, forming an overall upwards then downwards contour throughout the phrase. The oboe section features a more microscopic scaled upward contour, which is presented by note that is bent upwards twice and then downwards, on  $D^{\#}$  once followed by  $C^{\#}$  twice.

The last phrase is very similar to the second one. The main difference is that the leading instrument is transferred from oboe in the first repetition to harp in the last repetition, compared to the transition from harp to mandolin in the second phrase.

A pattern of repetition is observed in this interlude, and the repetition is half-completed, or meant to be never ending, implied by the instrumentation in the second and fourth phrase. There seems to be a process of displacement of instrument going on, and if the interlude is to be repeated eternally, there should be a fifth phrase very similar to the third phrase, followed by sixth phrase with the properties of the second and forth phrase but with the order of transfer of instrument from mandolin to oboe. While the second to fourth phrases form a cycle, the first phrase, the one with the contour opposite to the other three, acts as the tangent line projected from the first movement to the cycle as expressed in this interlude.

## II. Me he perdido muchas veces por el mar

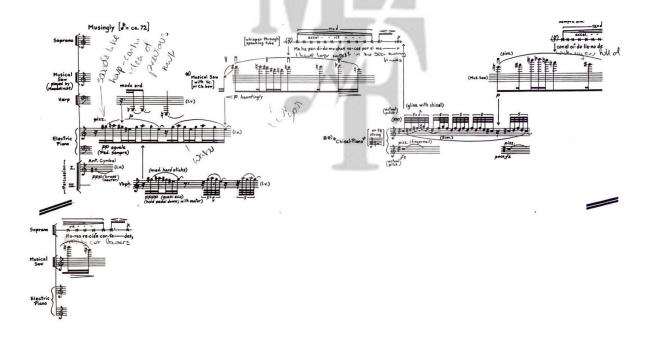


Fig. 3 The first section of movement I

Fig. 3 shows the first system and the following two notes from the musical saw voice, which forms the first section of the movement. Putting the B<sup>b</sup> E tritone from harp aside (we will get back to it later), the movement starts with electric piano and musical saw playing a set of notes, which can be rearranged as the following chromatic scale:

$$DD^{\#}EFF^{\#}GG^{\#}A$$

Then, the chisel-piano joins in, adding the note  $C^{\#}$ .

$$[C^{\#}] D D^{\#} E F F^{\#} G G^{\#} A$$

Note that while a few other notes were notated, the glissando and timbre of chisel-piano does not allow an effective expression of notes except the initial note. George Crumb make sure that the note  $C^{\#}$  is effectively stressed here by putting the note as the first note.

Following the phrase played by chisel-piano, musical saw added C and B to the set.

[B] [C] 
$$C^{\#}DD^{\#}EFF^{\#}GG^{\#}$$

By referring to the missing harp  $B^b$  at the beginning of the movement, the first section of the movement expands to a chromatic scale through a cycle.

There are two processes of contraction going on in the second part of the movement. Before "como me pierdo en el corazón de algunos niños", there are three cells of chisel-piano phrases, which when all intervals are listed out in ascending order ((2,2,4), (1,2,3)) and (1,1,2) respectively), we can observe that the intervals used are contracting towards semi-tones. Another process of contraction lies on the only phrase played by the musical saw in this section. When the pitch class set is compared with the second musical saw cell in the first section, we can discover that they are in a relationship of set and subset ((0,1,2,4,5,6,7,9)) and (0,1,2,4,5,7) respectively). Thus, the musical saw voice is also undergoing a contraction on a different perspective.

The process of expansion restarts with harp replacing electric piano and soprano replacing musical saw. The chromatic scale is half expanded to following.

## $GG^{\#}AA^{\#}BCC^{\#}$

From here, we can see that one and a half cycles of expansion and contraction was expressed through George Crumb's design of pitch. Taking reference to the title of the movement "I have lost myself in the sea many times", it is indeed a perfect representation of the everlasting cycle of breath of a water body - tidal waves.

Again, when we look at the text, we can find out that the phrase "I have lost myself in the sea many times" was translated from two different setting of text, "Me he perdido muchas veces por el mar" and "Muchas veces me he perdido por el mar", which the second one can be translated as "Many times have I lost myself in the sea". Similar to the first movement, the full poem was not used completely and there lies a last "me he perdido muchas veces por el mar" at the end of the poem. Once more, George Crumb used the difference between the original text and translated text to imply that a bigger cycle is yet to be completed and the movement is meant to be going on further, not stopped with the score.

Me he perdido muchas veces por el mar con el oído lleno de flores recién cortadas, con la lengua llena de amor y de agonía.

Muchas veces me he perdido por el mar, como me pierdo en el corazón de algunos niños.

No hay noche que, al dar un beso, no sienta la sonrisa de las gentes sin rostro, ni hay nadie que, al tocar un recién nacido, olvide las inmóviles calaveras de caballo.

Porque las rosas buscan en la frente un duro paisaje de hueso y las manos del hombre no tienen más sentido que imitar a las raíces bajo tierra.

Como me pierdo en el corazón de algunos niños,

me he perdido muchas veces por el mar.

Ignorante del agua voy buscando

una muerte de luz que me consuma.

The poem "Gacela de la huida" by Federico García Lorca (Lorca et al., 1995)<sup>3</sup>

#### III.¿De dónde vienes, amor, mi niño?

The microscopic cycle in this movement is obvious and self-explanatory. The second section of the movement "Dance of the Sacred Life-cycle", apart from how the name suggests, is notated in a literal circle. Similar to how completed and uncompleted cycles are presented to draw tangent lines in previous movements, the "Dance of the Sacred Life-cycle" is completed two and a half times. Also, the local and global crescendo and then decrescendo, and the upwards then downwards glissando of the timpani in the ostinato section resembles the breathing pattern as presented in the second movement.

#### IV. Todas las tardes en Granada, todas las tardes se muere un niño

This movement is divided into two sections - C<sup>#</sup>M triad section and gm triad section. There are a couple of musical events happening in an order - 1a.) Marimba trill in the interval M3. 2a.) percussionists hum in a triad. 3a.) Harmonica plays a triad. 4.) Soprano sings a whole-tonal melody. 1b.) Only the marimba trill is left. 2b.) percussionists hum in a triad. 3b.) Harmonica plays a triad. Then, with the harp and suspended cymbal as a cue, the movement starts a transition where the gm triad accompanies a passage of "Bist du bei mir" in D<sup>b</sup>M (which is enharmonic to C<sup>#</sup>M). Then the second section runs the musical events in the same order (1c.) Marimba trill is left. 2c.) Percussionists hum in a triad.) but in gm triad. It can be observed that again the movement completes a cycle and then draws a tangent line by not completing the second cycle.

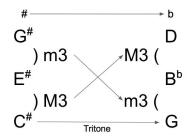


Fig. 4 Summary of movement IV

Fig. 4 provides a summary to the sonority of this movement. This also represents George Crumb's representation of observing the same cycle on two different sides through comparison of properties of these two very similar passages - The intervallic order of the chord is reversed, the root note being a tritone apart (which is the furthest interval in 12-tone temperament) and changing use of accidentals from sharps to flats (which also affects the spelling of "Bist du bei mir"). This is also an implication that we as audiences are now officially observing the other side of the cycle as we are projected by the tangent line drawn in a macroscopic viewpoint in the previous movement, which will be discussed later

Once again Geroge Crumb made us of the text and its translation in this movement. As written on the score, the translation to the text used is "Each afternoon in Granada, a child dies each afternoon", while the original text is "Todas las tardes en Granada, todas las tardes se muere un niño". Unlike movements I and II, this time George Crumb made use of the fact that the order of the translation is rounded, unlike the original text. The choice of poem also further implying that we are now projected to the other side of the cycle, as the quoted two phrases are the only phrases that repeats "Todas la tardes", thus implying that George Crumb is indeed trying to do the opposite with what he did in movements I and II.

## "Ghost Dance"

As the mandolin is to be played with the bottle-neck style, the plucked note will be much more dominating than the glissando-induced notes. Thus, my analysis will base on the plucked notes more than the glissando-induced notes. With this assumption, the second interlude is analyzed to be, even more than the first one, centered around (0,2,6). The first phrase, a very short one, is composed of G, A, D<sup>#</sup> (0,2,6). The second phrase contains two sets of (0,2,6), namely F, G, B and G, B, C<sup>#</sup>. The third phrase consists of B, D<sup>#</sup>, F and A, B, D<sup>#</sup>, which are two sets of (0,2,6), while t

he last  $C^x$  should be interpreted as an expansion of range together with the following part notated as indefinite pitch, with the pitch  $C^{\#}$  being able fit into previous notes forming another F, G,  $C^{\#}$  (0,2,6), which is the third in the phrase rounded with the isolated F followed by G at the beginning of the phrase.

Building up by increasing the number of sets of (0,2,6), the second interlude enters the phrase that forms a cycle like the first interlude did. The last phrase is a repeated phrase composed of  $F^{\#}$ ,  $B^{b}$ , C and  $F^{\#}$ ,  $G^{\#}$ , C and E,  $F^{\#}$ , C, three sets of (0,2,6). While the concept of cycle is presented more vaguely, only with the last phrase repeated once, the second interlude functions similar to the first interlude - to draw a tangent line that leads to the entrance of a cycle.

#### V. Se ha llenado de luces mi corazón de seda

The last movement begins with a chordal section, which, as analyzed by Victoria Adamenko (Victoria Adamenko, 2005)<sup>4</sup>, is symmetrical. Fig. 5 shows the components that make up the next cycle.

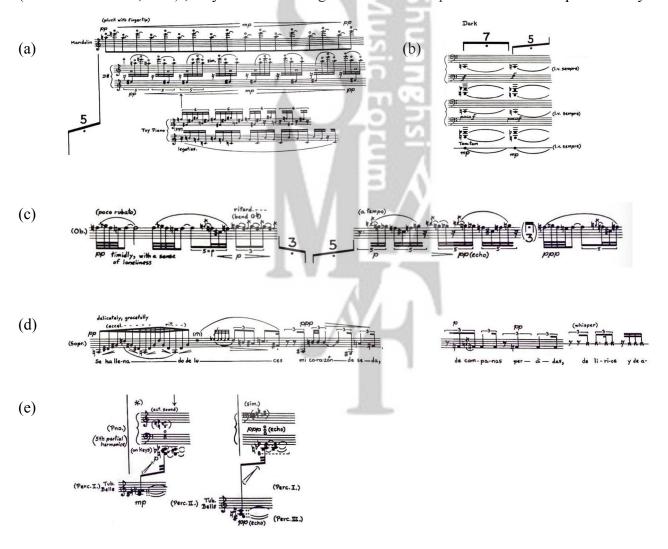


Fig. 5(a) - (e) Components that make up the first cycle of movement V.

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<sup>&</sup>lt;sup>4</sup> Victoria Adamenko (2005). *George Crumb's Channels of Mythification*. American Music, 23(3), 324-354. doi:10.2307/4153057

The first component that appeared, (a), is a wind chimes like section that involves mandolin, harp and toy piano. Here, only the notes  $C^{\#}$ , D and  $B^{b}$ , which is (0,1,4), are not used. This is complemented by the last component appearing (e), a (0,1,4) chord and its inversion played by tubular bells and piano. This relationship also occurs between components (b) and (d), in which d is a soprano solo followed by harp and b is a tritone played by harp and electric piano, complementing the (0,6) missing in d. Lies in the center of the cycle is (c), an oboe solo which the melody reminds us of the interlude "Dance of the Ancient Earth".

The ending section of the first cycle (harp playing a wind chime like passage, accompanied by sleigh bells) also serves as the start of the second cycle, in which every component is altered. The wind chimes in (a) is much reduced and is now played by mandolin and harp only, (b) is reduced to a single note instead of a tritone, (c) is played off-stage and is extended, (e) is also extended, playing more (0,1,4) and its inversion, and extended to other notes when joined by antique cymbals and the electronic piano. (d) is extended to two passages, serving as the ending statement of the movement. The first passage is extended, exploring all 12 notes in the chromatic scale except the note F. The note F is then complemented by the very first note of the second passage, leading eventually to an ending statement - a G<sup>#</sup>D tritone.

After completing the above mentioned two cycles of musical events, a tangent line is again drawn. With the boy soprano and soprano singing materials from the beginning of the 1st movement, the movement is projected to the very beginning of the piece.

## Macroscopic Analysis of "Ancient Voices of Children"

#### I. Symmetry of movements and interludes

The whole piece is divided into five movements and two interludes, which is symmetrical as a whole. Movements I and V are both built up with blocks of motives, and the order of re-appearance of every motif defines the structure of the movements, to provide evidence that the nature of the movements are repeating. After repeating, both movements came to an end by introducing a coda that was alien to the movements, the "after-song" in case of movement I and materials from movement I in case of movement V.

The two interludes, both are dances as suggested by the title, are located after movement I and before movement V respectively. The two interludes are built up within whole tone scales and occasional semi-tone embellishments, as analyzed by De Dobay (De Dobay, T., 1984)<sup>2</sup>. These two-sectional movements feature melodies that develop into repeating themselves, connected by percussive structures.

Following the first interlude and before the second one lie movements II and IV. While both are, in fact, motivic, they were used in a fashion different to the first and last movements. Instead of an emphasis of repeating order, the arrangement of motives in these movements focuses on expressing changes happening within the movement. Movement II expresses a change from expansion to retraction, while movement IV expresses a change of tonal center. Unlike movements I and V, which complete cycles and draw a tangent towards new materials, II and IV stayed and repeated within themselves.

Placed at the middle of the piece, movement III is divided into two unequal parts. The first part lies mostly on the first system, and is a recapitulation of movement I, the cadenza to be specific. Together with Fig. 2, Fig. 6 offers a comparison to the two phrases. If we look at the general direction of notes for each motif, we can also find out that the directions of motives of movement III are reversed compared to the respective motives of movement I. Like what he did within a single movement, George Crumb here completed a cycle through three movements and an interlude, and in the third movement draws tangent to a new musical material, indicating the start of a new cycle.



Fig. 6 The first phrase of movement III

Similar relationship also applies to movement I and V. As mentioned previously, when we compare the first two motives in movement I and the boy soprano part in the last two systems of movement V, we could find similarities, but in movement V the order of the motives are reversed. Similar to movements I and III, it is like drawing a circle - we get to return to the point of origin but in reverse direction.

On top of the fact that two circles were drawn with the symmetry of the piece and the recapitulation of movement I in movements III and V, it is also interesting that the recapitulation in movement III, the movement placed middle of the piece, is a reflection of the cadenza of movement I, which is also placed in the middle of movement I, while that of movement V, serving as the ending of the piece, is referencing materials from the beginning of movement I.

#### II. Implication of unwritten music by use of Lorca's text

In the cover of the Nonesuch recording, George Crumb mentioned that "The text of ANCIENT VOICES are fragments of longer poems..." (George Crumb, 1970) <sup>1</sup>. In fact, text for every movement originated from one single poem by Lorca. Part of the text in the poems were used and the title of each movement were named after the first phrase of the text instead of the title Lorca used for his poem, with the exception of movement III, which uses the full text. As mentioned when discussing individual movements, movements I, II and IV made use of the difference between the original text and the translation to emphasize the cyclic nature of the movements. This may be the reason why George Crumb specified in his score that "Both Spanish and English texts should be printed as part of the program notes" (George Crumb, 1970) <sup>1</sup>.

When we further investigate how George Crumb uses text in movements I, II and IV, we can easily discover that these movements only use the first few phrases of the poem. On the other hand, movement III, the movement that indicates the completion of the first cycle as analyzed, happened to use the full poem. Even more interestingly, the text for movement V is drawn from the middle of the poem "Balada de la placeta" (Lorca et al., 1995)<sup>3</sup>, and supposingly the last phrase George Crumb used, "mi alma antigua de niño.", should be ended with a comma, halfway to the completion of a sentence. It is only logical to come to a conclusion that George Crumb in this piece made use of the way he extracted incomplete text from Lorca's poem to suggest that there lies a bigger cycle of unwritten music.

## III. Symmetric use of voice and text type

As, in this piece, the type of text affects rather directly the timbre of human voices, text type and voice type are discussed together in this section, and Table 7 serves as a simplified summary.

Upon listening to the piece, one may easily strike with an observation that text materials apart from the poem itself were used extensively in this piece. When put into a table as in Table 7, it is easily discovered that the type of text used was rather symmetrical. Movement I starts with a mainly syllabic section, and turns into using text from Lorca when the movement approaches the "after-song" section. Movement V is opposite to movement I, starting with using Lorca's text, and use syllables similar to movement I. The two interludes both feature non-texted speaking voices, using only texts that don't have a specific meaning, or at least not indicated by the composer himself. Movement III starts and ends with similar non-texted contents, while the middle section uses Lorca's text only.

Movements II and IV are designed less directly regarding the use of text. While a humming section in movement II and vowel chanting in movement IV are present, the main body remains within Lorca's text. Humming in movement II takes up the function of musical saw, serving as an extension of the process of expansion to chromatic scale, which is a process individual to the whispering of Lorca's text. Chanting in movement IV serves as a transition of sonority from marimba trill to the harmonica triad, which is also a process individual to the bel canto singing part with the Lorca's text. Here, instead of direct symmetrical placement of musical ideas, movement II and IV, placed in a symmetrical position in the piece, provides texts that function and behave similarly.

The use of voice type in this piece is similar to the use of type of text. Movements I, III and V are symmetrical in the same sense, only differing with an additional vowel whispering phrase in the percussion section in movement I. Both the interludes feature a speaking voice, which shouting and whispering are in fact both a type of speaking voice, only different in sonic and dramatic energy. The odd pair once again is the movement II and IV one. The only explanation here is, as mentioned in the microscopic analysis of movement IV, this movement serves as an indication that George Crumb is drawing a different circle on the other side of the paper which is yet to return to the point of origin.

Movement	Text type	Voice type	
Movement I	Vowels  Lorca text  Non-texted singing	Bel canto singing Whispering Off-stage singing Singing into piano	
Interlude 1	Non-texted shouting	Shouting	
Movement II	Lorca text "Ah-m"	Bel canto singing Whispering	
Movement III	Lorca text (Syllables) Non-texted singing	Bel canto singing Whispering Shouting Speaking	
Movement IV	Lorca text  Vowels	Bel canto singing Chanting	
Interlude 2	Non-texted whispering	Whispering	
Movement V	(Vowels)  Lorca text (Non-texted singing)	Bel canto singing Off-stage singing Singing into piano	

Table 7. A summary to type of voice and text used in each movement

## IV. Symmetrical instrumental substitution

Most of the time in this piece, every instrumentalist plays their normal instruments, with other instrumentalists occasionally playing a percussion instrument or the percussionists chanting a few syllables. Movements II and IV are the moments that sonorities alien to every voice in the piece being introduced. In movement II, the mandolinist was instructed to play a musical saw, and in movement IV the oboist was instructed to play a chromatic harmonica. In both cases, the change in instrument lasts for the whole movements and the musical material played are structurally significant as explained in previous sections, and the changed instrument is, unlike the case in which the pianist's

instrument in movement IV was substituted with a toy piano, very different from the original instrument. Putting all observations to movements II and IV made above, it is possible that this pair of movements, especially movement IV, is designed to represent a change in direction of where the piece would go.

#### V. Implication of unwritten music by staging events

In this piece, quite a few physical movements were indicated in the score. As instructed, soprano should move to and sing into the piano throughout movement I, the first section of movement III and the last section of movement V. While it is natural to see every recapitulation of movement I was to be sung into the piano, the design further reinforced the symmetry of the piece.

The interesting part lies in the oboe section and boy soprano section. The performance of the oboist is mostly on stage, but by the progression of movement V, the oboist is instructed to walk off stage and eventually play a melody offstage. On the contrary, the performance of the boy soprano is mostly off stage, and was instructed to walk on stage by the end of the piece, joining the soprano at the piano, which is also in the initial position of the soprano section. As, in traditional performance of western music, walking on stage and off stage indicates the start and the end of a performance respectively, it is logical to come to a conclusion that the staging events as arranged by George Crumb does not serve only as a way to toy with the spatial aspect of his composition, but act also as a direct implication that the termination of the piece, represented by the departure of the oboist, give rises to the initiation of a whole new cycle, represented by the arrival of the boy soprano.

#### Conclusion to the analysis of "Ancient Voices of Children"

In "Ancient Voices of Children", George Crumb presents the idea of endlessness through a series of cycles and symmetrical arrangements. By analyzing the score, it can be discovered that every movement in this piece gives hints to microscopic cycles, represented through various designs including the manipulation of musical ideas and the text. The whole piece also represents similar cycles, drawn through the first movement as a point of recapitulation, projecting the piece into different directions every time. At the end of the piece, the music returns to the point of recapitulation, and is ready to start a new cycle, which is unwritten but fully implied. The microscopic and macroscopic analysis of the piece both indicate that every movement, and hence, the piece is meant not to end.

## "Soli for the Blind and Idiot"

"Soli for the Blind and Idiot" is inspired by the world of H.P. Lovecraft's writing, and is a depiction of my image towards the outer god Azathoth. It is a highly spatial piece where the positions of the performers acts as a vital music parameter that acts as one of the main ones that build up the structure of the piece.

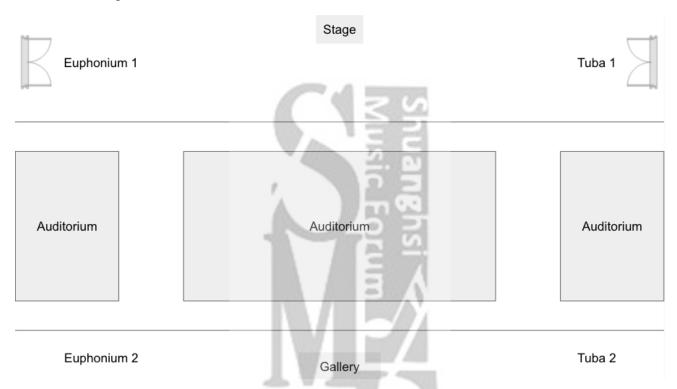


Fig. 8 Spatial arrangement of "Soli for the Blind and Idiot"

As mentioned, "Soli for the Blind and Idiot" is influenced by the way "Ancient Voices of Children" uses its structure to imply the piece is endless. The structure of "Soli for the Blind and Idiot" can be summarized by the following table.

	Section I	Section II	Section III	Section IV	Section V	Order of Symmetry
Title	All Scrambled	Alphabets per word retained	Alphabets scrambled within a word	First and last alphabet in order	All in order	5, 9 or 10 (potentially)
Tonal Centre	F	С	G	D	A	12 (potentially)
Gesture	1 note	Short gestures	Long phrases	Short gestures	1 note	4
Character of echo	Interlocked, decreasing in time	Sparse, constant in time	Non Echoic	Interlocked, decreasing in time	Sparse, constant in time	3
Direction of echo *	1 2 3 4	2 3 4 1	3 4 1 2	4 1 2 3	1 4 3 2	8 (potentially)
Distance from audience	Default	Default	Default	Default	Furter than Default (Off-stage at coda)	Cannot be estimated

<sup>\* 1</sup> as Tuba 1, 2 as Euphonium 1, 3 as Euphonium 2 and 4 as Tuba 2

Table 9 A summary of structure of "Soli for the Blind and Idiot"

## Microscopic Ideas for "Soli for the Blind and Idiot"

## I. diz,ihttoIt lddotBhAeon h aG

This section can be divided into three parts and a codetta. The first part, being mm.1 - 24, builds up the texture by increasing the number of notes in four beats, starting from one note per 4 beats in mm. 1 initiated by Tuba 1 and repeated by the other instruments, simultaneously building up echoes in the opposite direction, to up to six in four beats in mm. 21. The second part, being mm.25-56,

shuffles the melody so that the melody is on-going but only six of the notes could be listened to at a time. The third part, being mm.57-60 reduced the number of beats played down to, supposingly, one beat per 4/3 of a beat, but retained the rhythm developed, and continued to the codetta in mm.61-69.





Fig. 10 Example of (a.) One note per four beats, mm.1-4 (b.) Four notes per four beats, mm.21-22 and (c.) Two notes per 8/3 of a beat, mm.59.

Additional to the design that the melody is unfinished and be continued by the next section, which will be explained later, two calculations were demonstrated here, one increasing and one decreasing, and implies that three more parts, namely decreasing in number of notes per beat => sustain and shuffle => increasing in number of beats each note occupies, exists but unwritten.

#### II. IthtadoG, hAo itlBz odnhd eit

Section II can be divided into three parts with a codetta, which features a gradual shuffle of beat. Taking mm.74-75 as an example, Euphonium 1 initiates a half beat shuffle, followed by Euphonium 2, Tuba 2 and Tuba 1 in that order.

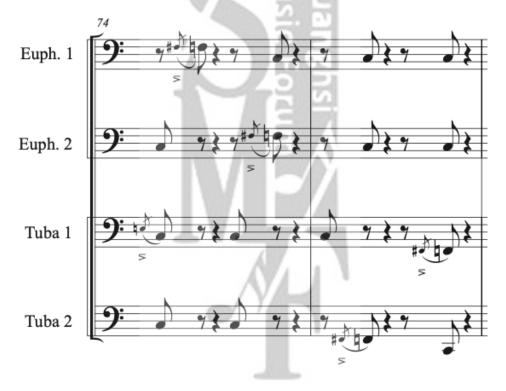


Fig. 11 mm. 74-75, an example of beat shuffle.

This happens three times in part 1 (mm.70-90) and one time in part 3 (mm.112-121). Note that after four shuffles of half a beat, the rhythmic feature is then identical to the beginning of the section due to the repeating feature of the section, but is in fact two beats off. While this provides audiences a fake sense of completion if one so happens to count the beats while listening, it also implies that the cycle is in fact incomplete and is meant to continue.

The second part recapitulates and continues the unfinished melody in section I, and have a different spatial arrangement compared to the majority of the piece. Euphonium 1 and Tuba 1 were paired, and sung a melody antiphonal to the Euphonium 2 and Tuba 2 pair in canon. With the spatial arrangement shown in Fig. 8, it would easily be recognised that it is a front vs back structure. More about this later in section IV and the macroscopic analysis of the piece.

#### III. zottaAhh, hte dlinB dtIoi oGd

Section III is through-composed, and is the most melodic in the piece, and features one long continuously repeating melody, as a recapitulation of the melody in section II, superimposed against a new one.



Fig. 12 mm.143-146, the long melody in Euphonium 2 and Tuba 2 against the new melody performed by Euphonium 1.

The new melody, again, is incomplete, and in this case the interruption is audible. After the new melody started in mm.143 by Euphonium 1, whenever a voice finishes contributing their part in continuing the repeating melody, they will join in performing the new melody, interrupting it and forcing it to start from the beginning before it's their turn to continue the repeating melody again. However, they will only play the notes they had played in this turn. As a result the new melody gets shortened each time with the cut part being replaced by repeating the first few notes until the melody is reduced to only three notes. While it is impractical to write melody or note that is shortened to infinitely close to zero in duration no matter what the unit of measurement is used, this is my attempt to depict the mathematical idea of infinitesimal, an idea of using reduction to demonstrate limitlessness.

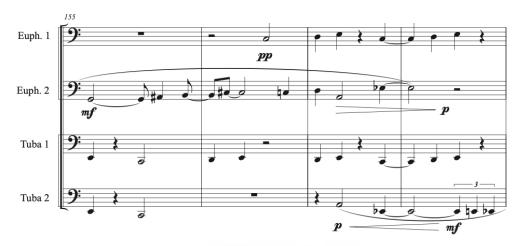


Fig. 13 mm.155-158, the new melody being reduced to a repeating three notes compared to Fig. 12.

#### IV. Ahoaztth, the Bnild Ioidt God

Section IV is through-composed. Again, this section recapitulates the unfinished melody in the last section, but inverted and shuffled through the two-note gestures. Unlike other sections, the recapitulated melody is clearly not finished, further depicting that there lies an unwritten part of the music.

An antiphonal part is also featured in this section from mm.190 to mm.196, where Euphonium 1 and 2 are grouped against Tuba 1 and 2. This results in a left vs right sonic experience in comparison to front vs back in section II. More on this topic in later paragraphs.

#### V. Azathoth, the Blind Idiot God

Section V is in three parts with a codetta. Similar to Section II, the first part features a fragmented melody continued through a canon shuffling beats at the same time three times. The second part recapitulates the previous section and shuffles the beat one more time. The third part restarts the fragmented melody reducing in duration and brings in the codetta. Again, the unfinished melody and the false completion of beat shuffling implies the endlessness of the section.

#### Macroscopic Ideas for "Soli for the Blind and Idiot"

## Unfinished melodies and their succession

As mentioned before, melodies in "Soli for the Blind and Idiot" are mostly unfinished within a

section, and completed by the following one. For example, please see Fig. 14, which shows (a.) the full melody initiated in section 1, and (b.) how it was used in section 1 and (c.) transposed in section 2. As, in the coda, the piece ended with the infinitely repeating melody similar to section 3, it is implied that not only is the whole piece a continuous transformation of combinations of various musical parameters, but also lies a, infinitely long or not, bigger unwritten part.







Fig. 14 An example of how one melody is unfinished in one section and continued in the following one.

#### Symmetry of sections

In my analysis of "Ancient Voices of Children", it is observed that the piece is highly symmetric. I adapted a different approach in "Soli for the Blind and Idiot", designed a different number of characteristics for different music parameters so that the result could still depict the sense of endlessness, but a less perfect, more chaotic kind of eternal.

When we try to observe the section that acts as the midpoint of "Soli for the Blind and Idiot", it is intuitive to immediately go to section III, which, similar to "Ancient Voices of Children", features some mechanism involving looping and stands literally right at the middle of the piece. Then, we will be convinced that section III to be the mid point by the fact that two antiphonal parts lies at section II and IV, and might even internally strengthen this conclusion by the observation that as the antiphony of sections II and IV are front vs back and left vs right respectively, the implied sections VI and VIII will be back vs front and right vs left. However, if one looks at the use of melodies in

each section, they will discover that the one section that recapitulates the melody from section I was section V, and the one section that tangents the rhythmic feature, the most audible music feature of the piece, of section I was section IV. I believe the more confusing and randomness of the structure adapted in this piece fits the chaotic, madness filled world as written by H.P. Lovecraft more.

#### Symmetry of Individual Parameters

In "Ancient Voices of Children", symmetry of individual musical parameters were completed within a movement, and the macroscopic symmetric properties of them are bounded to the overall structure. However, in "Soli for the Blind and Idiot", musical parameters are rotational symmetrical individually and have separate order of symmetry. As a result, the overall order of symmetry of the piece is multiplied. With reference to Table 9, we can see that the audible order of symmetry of the piece is multiplied to be 24, and if we take the name of sections into account, the order of symmetry will be at minimum 72, depending on how one perceive the rule of change in how alphabets of the title were scrambled, although from the perspective of audiences this magnitude of order of symmetry is not conceivable.

Distance from audience is not calculated here, as the scale of the piece doesn't allow us to distinguish if the off-stage performance is meant to be an incremental parameter, in which case the order of symmetry will be infinity, or if it is, like "Ancient Voices of Children", a mere change in timbre or a staging event.

#### Conclusion

Similar to "Ancient Voices of Children", I used different apparatus both microscopically and macroscopically to achieve cycles in "Soli for the Blind and Idiot". Thus, the sense of endlessness "Soli for the Blind and Idiot" is expressed.

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