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Website Context and Research

Electroacoustic Composition 1

Mictlan (2003/04) (Score revised 2009) 17'14"
Single Movement for amplified bass recorder, live digital effects and tape

This is a single source, single movement electroacoustic composition realised during 2003/04 for amplified bass recorder, live digital effects and tape (concrete audio).

The concrete parts were conceived for multiple stereo, summated mono and sub-bass speaker surround sound diffusion. The live part should be amplified through a fixed two to six-speaker, front and centred half-circle equidistantly placed either side of the musician.

The inspiration for this piece lies within Aztec mythology and early Mexica folklore. Mictlan [MEEK-tlahn] is the name for the nine levels of the Aztec underworld: The Land of the Dead. Aztecs had no concept of heaven and hell, but souls considered to have met with an unworthy death would need to earn their eternal rest. They would pass through a series of trials and tests on a journey taking four years to complete:

The Nine Trials of Mictlan:

1. Cross a deep river (helped across by a red dog spirit-guide) …
2. Pass between clashing, high mountains …
3. Climb an obsidian mountain …
4. Pass through icy winds that cut like a knife …
5. Flapping flags …
6. Arrows shot at soul: Pierced by arrows …
7. Wild beasts eat human hearts …
8. Narrow paths and passages between hard rocks …
9. Darkness and rest: The soul sleeps …

The dead were often buried with food, blankets, paper flags and dogs (fawn or red dogs were most common) to help them on this journey. A jade bead was placed in the mouth of the deceased to act as a human heart.

The dead would carry offerings to present to the Lord and Lady of Mictlan: Mictlantecuhtli [Meek-tlahn-tay-COO-flee] and Mictecacihuatl [Meek-tay-kah-SEE-wahtl] for when they reached the final level: The Cave of the Dead.

Through sonic reference, analogy and metaphor, the nine trials seemed to quite literally translate into aural equivalents, so they were used to shape the form and textures of this work. The dramatic narrative provided a fluid and cohesive sense of connective and transition throughout the sonic journey. Each trial quite naturally suggested its own textural and sonic characteristics.

Brief Synopsis of Form:

The first trial has an obvious choice for sonic equivalent and reference: running water growing in density from a peaceful trickle to a dramatic torrent …

Trials 2-4 (Mountains and Icy Winds) implied a continuous sonic landscape: an accumulative tension towards crescendo with slow-motion bass sonorities blending and clashing into each other to create high-pitched resonances and ascending glissandi, with howling winds and repeating rhythmic accents heightening the crescendo: A general sense of overall ascension …

The 5th trial (Flapping Flags) marks a pause in momentum and a chance for the music to breathe: a psychological interlude perhaps? The narrative suggested the use of repetitive rhythms (loops) that could blend smoothly into the soundworld for the 6th (Pierced by Arrows), where breathy accents and aggressive articulation, reminiscent of Shakuhachi techniques could develop rhythmic impetus and gathering dynamic intensity.

With 'Wild Beasts Eating Human Hearts', the 7th trial must surely be a violent crescendo: primal and aggressive beast-type sounds, loud dynamics and violent overblown trills?

The 8th trial (Paths and Passages) evoked a tangible sense of release and achievement, perhaps even victory, as the soul emerges from the violence into a final test of endurance: a final extended and sustained crescendo, with high-pitch sustains, plodding bass resonances and ascending glissandi. This could be balanced with a period of textural and dynamic dissipation, diminuendo and descending glissandi preparing for the ultimate descent into the Cave of the Dead.

The 9th trial suggests a poignant soliloquy as the soul pleads its case for eternal rest: The soul sleeps. This would eventually prompt the idea to begin the work with the musician in solo: The soul awakes.

Mictlan Sound Source:

Having established concepts of form, atmosphere and character, the composer researched authentic Aztec music and its contemporary descendants for further inspiration. Some consistencies were noted as this accessible musical language was aurally assimilated:

Breathy, antiquated quality
Modal, folk-type melodies
Wooden flutes and conch shells
Unstable intonation and microtonality
Consistent use of wind and percussion
Repetition (motif, rhythm and theme)

The intention was to compose a tangible soundworld: an almost living entity, which respectfully emulated (but never copied) authentic Aztec music, within idiomatic writing for the chosen instrument: a symbiotic relationship between the musician and the concrete media. If possible they should sound as one: a meta-instrument.

To compose this type of piece, one would require extensive access to the source: the instrument and musician.

Approximately 18 months earlier, the composer had stumbled across a family of recorders on a market stall and was ashamed to admit they had gathered dust since purchase. Experimenting with the basic performance techniques for the different ranges, it was found that a stable pitch could be voiced and maintained on the bass after only a few minutes practice and so one made a 'leap of faith': learn to play the bass recorder.

The instrument has an ancient quality to its tone, a flexible facility to voice the harmonic series and an inherent ability to present microtonal variations of pitch; all of which seemed to be an ideal contemporary alternative for authentically emulating the breathy sound of traditional Aztec instruments such as the conch shell.

During initial exploration into the practicalities of the bass recorder, technical limitations proved to be a compositional ally. Multiphonics, squeaks, squeals and over-blowing are all signs of the beginner, but immediately offered interesting recordings for developing the concrete canvas.

It was found that one could produce complex stable multiphonics and screaming overblown trills long before one could play a legato major scale competently. Inexperience with embouchure introduced a microtonal inflection reminiscent of the music heard using instruments of authentic Aztec design.

Mictlan – The Sound of the Soul: The Soul Awakes – The Soul Sleeps …

Armed with a handful of fingerings for the lowest pitches (fundamentals) of the instrument and a mental image of the atmosphere for the piece, the composer 'stepped into character' and improvised with multiphonics and overblown harmonics. One was searching for an opening statement worthy of the extra-musical inspiration: The Sound of the Soul. These early sessions produced an ideal acoustic soundworld:

Mictlan Multiphonics

The Soul Awakes: The Soul Sleeps
Introduction and Conclusion

[It is easiest to read from the lower clef and use performance techniques to realise both staves]
[Cross noteheads denote silent fundamentals - see score preface for explanation of symbols]

Bars 1 & 242



These opening (and closing) solo multiphonics outline a triad-based microtonality: a protospectralist language with natural resonance theories idiomatic to the instrument. Complex in sonority and notation, but relatively simple in performance, this material provided a literal identity for the soul as an acoustic object: The Sound of the Soul – ancient, primal and ethereal …

Mictlan Concrete Material:

Apart from the distant presence of flowing water during the introduction and conclusion, all concrete sounds originated from the bass recorder. Whilst recording the primary sound material, the composer referred to a list of sonic categories: pitch and resonance, gesture and motif, breath and articulation, non-pitch and percussion, ambient noise and incidental rhythm. Although one was always looking for unique and exciting events, providing a balanced spectrum of primary sound was essential.

The fundamental approach for preparing the sound palette was to preserve the acoustic properties and inherent breathy nature of the primary material as much as possible. Regardless of how radically removed from the source they became, the sounds needed to appear organic. The intent was to shape an acoustic environment: an extension or exaggeration of the instrument, blurring the audible definition between the two mediums.

This approach is similar to that adopted by Luigi Nono in la lontananza nostalgica utopica futora for violin and pre-recorded 8-track tape (1988-89), where the concrete parts explore extended acoustic resonances blurring (sometimes rendering invisible) the audible definition between tape and violin.

The emerging sound manipulations were grouped into orchestral-type families: loops, drones, resonance, rhythm, pitch, percussion, metal, wood, ultrasound, extreme, soprano, alto, tenor, bass, sub-bass and infrasound.

This process can be compared to Luigi Russolo's 1913 Futurist manifesto L'arte dei rumori (The Art of Noise), where categories of extra-musical acoustic sound are arranged into families of sonority as an alternative palette to the conventional timbres of the orchestra.

Through reference to pre-compositional planning, realisation and production of the concrete audio was often as instinctive as 'painting by numbers'. Using authentic Aztec music as an additional guide, the composer manipulated timbres and textures in a structuralist fashion until they shaped the soundworld and narrative suggested by the nine trials.

If one listens to the concrete audio in acousmatic form (without the live instrument), it is easy to imagine natural acoustic environments. All sounds appear to exist in the real world, but, except for the multiphonics at figure D in the score (4'24" in concrete version), no concrete material appears in its primary acoustic form. One is never conscious of listening to synthesis. The timbral relationship with the source instrument is consistent throughout, yet contains a spectrum of organic sound, natural ambience and atmosphere comparable to audio ecology and environmental recordings.

Closing Thoughts: Electroacoustic Interactions

In Aztec culture there was no concept of a gift. Nothing was received without offering something in return. It is this distinctive etiquette that governs the interplay between fixed sound and live musician within Mictlan. Notes are taken from one to the other and offered straight back with alterations of intonation. Extracts and phrases are passed between them and returned with subtle contortions, elaborations and grotesque distortions.

The intention was to blur the defining lines between musician and recording, at times rendering the join invisible. The two mediums regularly combine and at times merge into a single symbiotic entity.

At other times, they intentionally occupy their own acoustic and acousmatic space, reminiscent of the defining isolation of humanity and the individual experience of life, and ultimately – death.

The Mictlan Canticles (2024)

Mictlan is one of the oldest compositions on this site and the oldest electroacoustic piece. During the latter part of 2024, the composer found the time and motivation to revisit the work.

The original master had been mixed from eight stereo files that were prearranged (and premixed) into 'families' of timbral strata. These eight source files (now two decades old) were extensively remastered and then the project was remixed into an acousmatic format (with the live parts removed). Some elements of 'acoustic' bass recorder can still be heard, but they were always part of the concrete audio.

In acousmatic form, *The Mictlan Canticles* worked best when arranged into three movements, and so …

Mictlanique (2024) for bass recorder solo

Mictlan was originally composed in an electroacoustic format during 2003/04. This solo version was conceived two decades later during December 2024. This score is an abridged and rearranged adaptation of the original live part, with altered timings (mostly removal of redundant spaces), new opening multiphonics and an additional couple of phrases (to establish coherence and linearity in solo) here and there.

The accompanying recording was performed and produced by the composer in his home studio, and remains the only piece of music he has ever played on the instrument! At an approximate duration of nine minutes, *Mictlanique* is the ideal length for a solo slot within an eclectic contemporary programme and would make an excellent performance vehicle for any bass recordist. The composer adds: If he can perform it, how hard can it possibly be?

Contact:

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