Taking the Chance: A Descriptive Study of a Creative Work that Utilizes Chance and Indeterminacy whilst Maintaining Form.

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Abstract

This paper is a descriptive study of the creation of a new work that used practice-based and practice-led methodology, chance, indeterminacy, Malaysian folksong, Hindustani Raga, birdsong and philosophy to guide its creation, its coming into being and its performance realization. The paper also addresses the main problem encountered in its creation, which was how to maintain form whilst using indeterminacy. The composition which was the focus of the study employed indeterminacy and chance in the approximation of the performance realisations and interpretations of the notation. Each of the four main elements of the composition was created separately and incorporated a mode of limited transposition, Hindustani Raga, Kalimantan folktune and Malaysian avian motifs. In the context of the emphasis of the John Cage 101 International Conference, the composition attempted to explore concepts of space and time, chance and indeterminacy and the Cagean notion that "There is no such thing as an empty space or an empty time. There is always something to see, something to hear." (Cage, 1961)

Keywords indeterminacy, chance, aleatoric, birdsong, Malaysian folk tune, raga, transcription, practice-based and led research, process-relational philosophy, Whitehead.

This article is about a practice-based and practice-led enquiry and research process into creating a new work for presentation at the John Cage 101 International Conference in August 2013. The concepts to be explored were the issues around keeping the musical strengths of form and structure whilst using chance and indeterminacy components created in the score, and space and time in the performance of the music.

The project also examined the integration of multiple sound events occurring simultaneously to create a live 'field of sound' experience within the confines of a chamber music work. It utilized the composer's interests in birdsong, process-relational philosophy and the concepts of becoming, as well as Heidegger's notion of "bringing forth" (Lines, 2003, p.16). The resulting composition In the Presence was so named in an attempt to scrutinize some of process-relational philosophy's notions of reality, namely that the only reality is in the present. The future does not exist and therefore is not real; the past no longer exists and is not real with the exception that it influences the present because the present comes out of the past (Mesle, 2008, p.7). It also is coming from what Warren Burt calls "John Cage's idea of 'letting sounds be themselves":

This much maligned idea - especially harshly criticized by cultural theorist Douglas Kahn and his acolytes - is, despite their efforts, a very powerful one - if by it one understands it to be a Buddhist or Quaker kind of activity involving totally shutting off the mind's word machine, and experiencing sound without mental commentary. The late Tibetan Buddhist writer Lobsang Phuntsok Lhalungpa calls this state "becoming listening itself (p.4).

The initial musical concept for the work was that there would be a 'ground', an ostinato of sorts, or repeated pattern, over which would float a series of small musical events. This concept for the work and score was not original and had it roots in the 1970s circular scores of George Crumb. The practicalities of creating the work directed the creation away from this original idea and towards a simpler concept of creating a number of separate musical happenings and placing them together. Each piece would have a different time signature and key, divergent cultural roots, disparate performance style and musical mode or scale. To reflect the Malaysian culture in which the work was created, where there is a mixture of Malay, Orang Asli, Hindustani and Tamil Indian as well as European influences, these separate musical happenings would engage a European mode of limited transposition, a Hindustani raga, an Orang Asli pentatonic folk tune from Kalimantan and birdsong from the peninsular mainland. A more in-depth analysis of how these were created and utilized is presented later in the article. The practical problem solving of the combining of these elements determined the research methodology.

Methodology

The methodologies utilised for this project were practice-based and practice-led research. These terms are viewed by the author to be interrelated, as each method though different, overlaps and invades the other's territory. Simply put, the doing of the task informs the task that is being done. The doing teaches and brings to light the information needed to do the work. This new information and understanding is a contribution to the wealth of knowledge. However, in music composition the composer also creates a score or recording and this end product is tangible, physical evidence of the new comprehension.

Breaking this down into sections defies the notion of how these overlap and feed into each other, but does bring some clarity to the explanation. To begin with practice-led research, a quote from Haseman (2006, p.4) will suffice: "Practice-led research is intrinsically experiential and comes to the fore when the researcher creates new artistic forms for performance" and this was what the In the Presence musical work was all about; it was the intent of the author. Niedderer and Roworth-Stokes (2007) see this method as a "research process based on or rooted in practice, or where practice plays a lead role in the investigative process" (p.10) In the Presence explored this investigative process to find if such disparate musical elements could indeed be placed together; to see if the experiential mixing of these cultural influences would result in a new artistic work that reflected an aspect of Malaysian culture.

To bring clarity to what the difference between practice-led and 'based' methodology is we turn to the authors of the 'Creativity and Cognition' site who clearly differentiate between the two methods: "If a creative artifact is the basis of the contribution to knowledge, the research is practice-based. If the research leads primarily to new understandings about practice, it is practice-led" (2013). The author of this article, primarily because he is a composer, associates a new musical score as a 'creative artifact'. It is however, more than just a series of notes. The music score is a map of the procedures utilised, a method record logbook. Like any academic paper or argument it can be analysed, deconstructed and pored over for insightful understandings, neoteric processes and the intellectual application of known practices of rigour and artistic sophistication. To this writer, writing about the music and the score is really a redundant act as the music and the score both speak and document the findings of the research. As Burt (2009) in his paper 'Some words in praise of nonverbal communication' so aptly reminds us:

In medieval England, the 14th century "Cloud of Unknowing" was another text which dealt with the need to find an alternative to language to gain understanding. In their terms, they were looking for the knowledge of God, but even in a contemporary secular world, the idea of seeking understanding beyond the limits of language is still a very powerful one. One of the lovely contradictions in the book is the prayer, "God, I beg you to rid me of God!" Only by getting rid of all conceptions of God, all images, all religious (and irreligious) brain-chatter can the mind be made quiet enough for divine wisdom to flow in. Or if you don't like the concept of "divine" wisdom, then just say: energy, light, and inspiration.

This tradition of the silent mind continues throughout what James Joyce called "all Christian minstrelsy." The 15th century English composer and luthier Thomas Mace (an extraordinary instrument inventor, apparently) is reputed to have said that the purpose of music was to "sober and quiet the mind, thus rendering it susceptible to divine experience." This quote became a motto in the 1950s for composer colleagues Lou Harrison and John Cage (p.3).

Returning to the methodology and away from this author's hobby-horse, practice-led and based enquiry affects the practitioners as well. The composer is imbedded in the practice. They are being led and informed by the research and they are developing their knowledge and skills. They are gaining more insight and depth into their craft. This is made evident in the score, which becomes their invention, their end product, and their testimony of endeavour.

Music though, and it must not be forgotten, is a performing Art. To this discussion must be added that this score can then also be performed. Transforming it into a live temporal moment, an actuality in time and space. Hegel, like most people did not view music as a concrete object. He was attracted to its performance side, its ephemeral nature, as Ford (2010) explains:

Hegel proposed that music, because of its temporal nature, does not stand over and against us as a something concrete and fundamentally other ... rather music is ephemeral, and so "volatilizes its real or objective existence into an immediate temporal disappearance." (p.3) [quote from T. M Knox's (1975) translation of Hegel's Aesthetics: Lectures in Fine Arts.]

The methodology also extends to the actual performers, who, in the performing of the work, utilised practice-led methodology in the practice of developing the performance. Here, as in the practice of crafting the object (the score), new contextual knowledge was uncovered in the rendering of making the work playable. There was collaboration, dialogue and interpretation sought between the composer and the performers, all guided by the desire to seek the highest possible comprehension of this 'non-verbal' communication.

The Philosophical Support

The underpinning philosophy of this research is that of the mathematician and metaphysical theorist Alfred North Whitehead (1861–1947), whose work on process and reality (a reconciliatory position that brings together science and philosophy) postulated about the existence of a dynamic order that is manifest in reality in the action of process (Epperley, 2011, p.223). Whitehead described its function as a creative lure, drawing everything towards greater sophistication and aesthetics, as evidenced in the 'coming into being' of new actualities. Some of Whitehead's notions have parallels with Nietzsche's concepts of becoming, as Lines (2003) explains:

For Neitzsche, a new conception of being was found in the dynamism of process and transformation. Inspired by the unseen, ephemeral art of music ... Neitzsche thought that what mattered in existence lay in the dynamic and energetic qualities of becoming ... indicating a notion of existence as a moving dynamic flux of directional energy" (p.11).

Keeping in mind Hegel's concept of music's temporal ephemeral quality, the process-relational philosopher Robert Mesle (2008) articulates becoming in the context of time:

We are always on the verge of falling forward into nothingness; but, in each moment, the world becomes anew, and the creative advance continues ... the future does not exist ... decisions must be made; the future must be created. The creatures of the present must decide between many possibilities for what may happen, and their collective decisions bring the new moment into existence (p.56).

This process-relational philosophy, which Griffin (2007) describes as a 'radically different postmodern philosophy' influences the psychology and cognition of this research through its tenants of the coming into being of novel entities. In music creation there is a constant process of becoming; new things come into existence.

Composers create new music all the time. Performers make new old music, bringing into the present reality the voices of past composers. They make it live again, again it comes into being, it enters existence, and the music becomes real. Old knowledge is made new again.

Taking a small but related (to this work) tangent, David Rothenberg (2005), a professor of philosophy, brings birdsong and philosophy together. Rothenberg is a composer and avant-garde clarinetist who has recorded his own improvisations in 'real time' while directly interacting with birds as they sing. Rothenberg advances the tenant that birds sometimes sing purely for the experience of making music:

What fascinates me most about this question is how it illuminates the disparities among the many human ways of knowing. Information does not really touch experience. ... Birds certainly sing to find love [procreate] and to find home [territory], but these reasonable purposes do not deny joy. If science is to comprehend happiness, then it should employ the skills of musicians and poets, who have used different human abilities to find meaning in the natural world (p.5).

Here Rothenberg is acknowledging the knowing that is gained from the communication of a species other than human, through a medium other than words. In the Presence as a creative enquiry and research project flirts with this concept as well, in hoping to 'be in' this actuality. By integrating Malaysian birdcalls; crafting (through compositional techniques) these transcribed motifs into the musical composition; mixing the birdcalls with other Malaysian sourced influences and consciously engaging in the process of creativity; it was hoped to evidence the philosophy of the process of becoming in the In the Presence project.

There is more about how the birdsong was utilised in the critical analysis section of this article, however, in brief, birdsong was used as a provocative operative (De Bono, 2002), an external source of influence, to provoke the composer to write music outside of their usual thought processes. The birdsong also aligns with the Whiteheadian notion of panexperientialism, a term used to describe the idea that all entities have experiences and these experiences contribute to the process of reality (Dorrien, 2006). Birdcalls are another aspect of the experienced world. In the 'here and now' they contribute to the becoming process: The activity where an actuality (an occurrence) becomes another actuality (another happening). In this study, the calls of birds heard and transcribed while waiting for the train at the Tanjong Malim station (see Figure 9) became part of the musical composition, which in turn became a performed art form, which in turn was experienced by an audience, who in turn were influenced, touched, and (hopefully) their perception of reality was altered. A new cultural understanding occurred; a new comprehension made, truth discovered.

The Problem: How to Use Indeterminacy and Chance but Maintain Form

Morrison & Kerr-Berry (2005), De Souza (2008) and Joseph (2013) have all researched indeterminacy in music composition and John Cage: Morrison in how it pertains to dance; De Souza on the polarity of European serialism to American chance music; and

Joseph about the scarcity of research into indeterminacy, observing "Within the legacy of John Cage, no single concept looms as large as that of chance. Yet, despite having been invoked regularly by art historians for almost half a century, Cage's ideas about chance have remained surprisingly little explored within the discipline." De Souza's article about the relationship between Boulez and Cage and their 'ultra-rationality' and 'anti-rationality' approach to music composition draws attention to the "binary understanding of serialism and chance", noting that in recent history, commentators such as Sutherland and Smith Brindle conceive of the difference in approach as Europe verses America, with Sutherland (as cited in De Souza, 2008, p.1) stating "the European serialists and the American experimentalists proceeded from diametrically opposed ideological positions."

Boulez wrote everything down to the minutest detail, leaving very little to chance. Cage on the other hand allowed for chance to be the determining influence. Music that employs indeterminacy and chance requires the composer to release the usual strictures of control. This is not new in many regards, as common notation is in reality 'a type of graphical score', where if one were to indicate every nuance and subtlety desired by the composer, there would be more written instructions than there would be notes, such as in Boulez's Glouse. This example stands in direct contrast to Cage's 4'33" in which there are no musical notes whatsoever.

Many scores created in the pre-Baroque and Baroque era do not stipulate tempo, instrumentation, dynamics or tone colour, thus these aspects were left to chance, to be 'determined' by the performer. This is because it was generally understood by the practical musician that a four-part harmonization could be played on any consort of four instruments, that repeated sections could be added to with some tasteful ornamentation, and most often cadenzas were left to the performer's discretion entirely. There are parallels with current music practice: Generally a rock band comprising the usual lineup of bass, drum kit, rhythm and lead guitars and a singer will perform a rock-song. Today it is common practice for many professional musicians to work from 'chord charts' which have no specific voicing of the chords, in much the same way as Baroque 'Basso Continuo' players had to, thus it is up to chance how the player fills in the gaps of what is required to make the music complete. In these types of cases the song provides the form and structure into which the performers improvise their playing and there is a general 'understanding' of how to realise the work or style. However this is not the problem that In the Presence was addressing. It was the issue of a greater indeterminacy where there is considerable risk of there being a cacophonic outcome due to the lack of 'understood' musical practice.

In the post-war era, after composers like John Cage, there have been a plethora of works created that use total indeterminacy and chance, often rendered as graphical scores typically showing lines, blobs, squiggles and boxes of star shapes and the like, or perhaps just a set of written instructions. Stephen Stanfield's Bubbles comes to mind: A score, which consists of a series of circles with lines connecting them. In each circle there are graphical dots, dashes, small star shaped explosions, larger black lines and the like. The performers are asked to move freely from one circle to the other and to interpret the small dots as quick notes, the explosions as loud explosive sounds, the dashes as held notes. Thus the work moves from sound happening to sound

happening. It is playable by one or many. Having performed this work a number of times with various ensembles, the author has found that it often begins well but quickly degenerates into a greyness of timbre, and then has difficulty finding a cadential point. But its greatest weakness is that once started it becomes static in its oneness of structure.

Music students who have been struggling to come to terms with their developing ability to realise traditional notated scores and all the disciplines associated with them are surprised by these types of scores with cries of, 'what is this?' and, 'how am I supposed to play that?'; and in the defense of these scores the author has attempted to explain the Zen Buddhist philosophy behind their creation. The release of the ego, the removal of 'self' to allow the music to come through unhindered by the composer's voice, to make the Cagean statement that "There is no such thing as an empty space or an empty time. There is always ... something to hear" (Cage, 1961, p.8). Interestingly, and on a side note, John Cage's foremost attempt to totally remove himself from the music by composing 4'33" of no performed music at all, totally defeated its purpose of denying the self, for it is this work that is almost always associated with Cage and thus the ego that created it.

But back to the defense, one must resort to telling students about abstract visual artists who remove their 'hand' from their paintings by throwing the paint at the canvas, thus creating a 'space' between their action (of throwing) and the consequence of how the paint arrives on the surface. These simplistic explanations seemed to help the student to grasp the how and why of a composer's need to 'let go' of the tight control they might usually exert. However, it might be best to remember the words of the composer and teacher Reginald Smith Brindle (1989) at this juncture, "music that abandons formal principles to the point of formlessness, is doomed to failure ... The fact that modern art is quite unmemorable – and modern music particularly so – is perhaps a result of formal weakness, and is certainly the reason for its perishable quality." (p.7) Clearly Smith Brindle thinks that modern music "of which [he] contributes his own part" (p.7) needs some structure, to be intellectually satisfying.

This was the struggle the author encountered in the creation of In the Presence. How to have structure, but also freedom, to have indeterminacy and chance, but also form, contrast and most importantly, emotional and psychological content.

The author's piece *In the Corridors of Becoming*, is a work of high random qualities and it was also premiered at the John Cage 101 conference. Though it employed the devices of total randomness where players were asked to play something from their standard repertoire for about 10 minutes starting all together at a set time (these performers were students from the UPSI music faculty, and each was stationed about 5 metres apart throughout the corridors of the music building), the problem of structure and form was solved by asking the audience to wander at will through the corridors to experience the music coming into being. This work gave the audience a type of separated yet multitudinous overlapping, which was structured by the listeners themselves as they perambulated through the complex. Total randomness, like Stanfield's Bubbles, is risky, as "Inevitably, open forms with many free parameters ... create an extreme kind of indeterminacy, and if too many performers are involved, the result will be chaos, perhaps exciting at first, but ultimately boring" (Smith Brindle, 1989, p.152). However, *In the Corridors of Becoming* was a success, primarily because

the performers were spread out over the building, and the audience maintained their interest by moving from one sound source to the next. The solving of the problem of combining indeterminacy and yet maintaining structure within the work, which is the focus of this paper, In the Presence, is discussed in a later section of this article; firstly, an analysis of the musical components of the work in question.

Critical Analysis of In The Presence

The work brought together four separate elements: Firstly a series of four note chords limited to a mode of limited transposition; secondly the Hindustani Raga Raag Yaman; thirdly a Kalimantan folk-tune; and fourthly Malaysian birdcalls.

The piano part was crafted employing a mode of limited transposition (see Figure 1). The unfolding chords derived from this mode were designed to function as a type of 'ground' over which the flutes and viola would perform. Simple in structure, the chords begin on dissonant ninths and sevenths and slowly evolve through intervallic diminution to consonant chords of sixths, thirds and seconds with each new rendition. This created a harmonic form unfolding and moving from highly dissonant to less dissonant. Figure 2 gives the opening chords and Figure 3 the final chords. In Figure 3 can be seen the final chord, which is a C chord with both of the thirds present, what some call a major/minor chord. Though this final chord is dissonant, in the greater context of this work it had an air of consonance about it and functioned perfectly well as a harmonic place of release and rest.



Figure 1 Mode of limited transposition.



Figure 2 Piano chords of ninths and sevenths.

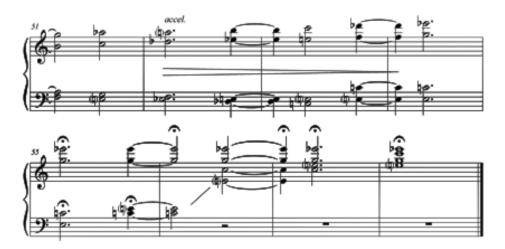


Figure 3 Piano chords of sixths, thirds and seconds.

In keeping with the European quality wanted here, these chords utilised the Bulgarian rhythm of 2+3, 2+2+2+3 whilst gradually increasing in tempo from a very slow crotchet = 64. This rhythmic pattern is usually performed at a rapid tempo, but in this work the tempo was very slow and freely interpreted. This rhythm and slowly changing tempo created a deliberate ambiguity, which enhanced the element of indeterminacy in the accuracy of its rendition, yet maintained form. Here is indeterminacy without total abandonment. In this way, part of the problem of maintaining structure and a sense of unfolding through time and space was solved. Over this 'ground' of unfolding harmony were 'floated' the other musical happenings.

The first to sound was the alto flute. This instrument was given a realisation of the Hindustani Raga, 'Raag Yaman'. This is a scale, which is traditionally performed differently when ascending, to that of when the performer is descending. The raga is given in Figure 4 with a dotted barline to indicate the division of its two natures.



Figure 4 Raag Yaman.

Adhering to the traditional practice therefore, the first utterances of the raga were in the ascending form, a pentatonic scale starting on the 'soh'. In Figure 5 shows the alto part's first statement of the raga, ornamented with chromatic melismatic notes, it still adheres to the tradition of the ascending practice, and also includes the tradition of ending phrases on a neighbour note, here given as a grace note. Please note that the alto flute part is a transposed part and would be heard a fourth lower than written.



Figure 5 Alto flute ascending raga.

When the alto flute returns in the latter part of the work it is given the descending form of the scale an example of which is given in Figure 6.



Figure 6 Ascending realization of the raga.

The next musical happening, which was derived from the Orang Asli culture, was given to the viola. This instrument's first utterance was material derived from a Kalimantan folk-tune called Kajat Petuyang. This folk-tune was a simplified transcription of a Sape recording found on the public domain of Youtube (http://www.youtube.com/watch?v=1OhAmy54CSQ). This tune used the pentatonic scale in its pure form, but in this project the transcription was given a drone note as well (Figure 7). The excerpt given in Figure 7 is from the 'B' section of the overall work, and in stating this the problem of solving what form the work should take is given away.



Figure 7 Kalimantan folk-tune.

Because this folk-tune accompanies a dance, it has a distinct rhythmic drive and thus was at odds with the other elements. However, the decision to place it at the centre of the work, the 'B' section, allowed it to function as a contrast and helped to solve the problem of form and structure to the whole.

As part of the 'A' section of the work, the Kalimantan melody was fragmented into separate phrases and performed in a sacred quasi-Gregorian-chant style as well. These fragments were placed so as to enter in an overlapping manner, where the viola overlaps the alto flute and visa versa. This allowed the performers to determine the appropriate place to enter with the next material. Figure 8 shows the viola entry with no set tempo marking, only the guide to play "slow, chant like" and how the alto flute is to pause whilst the viola plays and then to enter about halfway through the last note of its phrase.

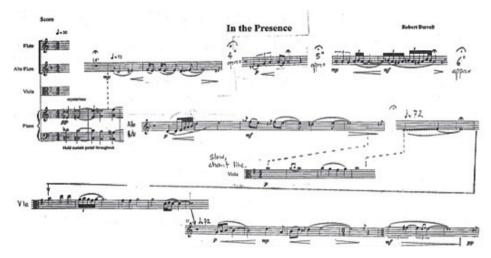


Figure 8 Entry of the viola.

The final ingredient was that of birdsong. Transcribing birdcalls can be onerous and aurally challenging. Birds tend to call in a non-tonal manner being outside of our human comprehension of tonality, or modality. Their performances are most often virtuosic in nature with complex rhythmical and metrical ambiguities. Figure 9 is from the author's notebook and it is from these transcriptions that the concert flute part was derived. The original birdcalls were quickly jotted down when heard whilst waiting to catch a train in Tanjong Malim, Perak, hence the untidy nature of the notation.



Figure 9 Notebook transcriptions of birdsong.

During this task of transcription many decisions are made spontaneously. The calls are lowered many octaves so that they can be written within manuscript. The tempo is not indicated, however they are usually extremely fast. The 'rests' are approximate. From these rough notes was the concert flute part. The decision to have a concert flute was to enhance the timbre contrast of the 'B' section, and because the concert flute was better suited to this material.

The concert flute part is a direct derivative of the notes taken in the field. Figure 10 shows the relationship between the 'in the field' transcriptions and the concert flute part.



Figure 10 Excerpt of concert flute part.

The process of bringing together these unrelated and disconnected components into a homogenous work was the challenge of the research. Here the practice of solving the problem became the enquiry that brought forth new methods. The questions of how will it sound, and will it all sit together without being too disjointed, were resolved by recording the separate elements (through the audio save function in Finalé) and placing the audio in a digital audio workstation (Pro Tools). This allowed the author to check the possible outcomes and to also relocate and re-craft sections and individual statements so that they would unite and correlate as a whole. On the surface this seemed to be defeating the purpose of using indeterminate and chance elements, but in practice it was only a simulation. This solved the overall problem of form. Working in the digital audio workstation (DAW) allowed the ternary form of the 'A' section, contrasting 'B' section and concluding 'A' to be developed, tested and simulated in its performance.



Figure 11 Picture of DAW.

Working in the DAW the author attempted to create a score that was sourced from the midi files, however this proved too difficult and in the end he had to resort to printing out the Finalé score files and to physically 'cut and paste' them to a sheet of paper to create a master score that the flautists and viola player could follow. What actually happened when the parts were given out and the rehearsals began was where the aleatoric component came to the fore.

Taking the Chance

Though the advances of computer technology are great, the practicalities of live performance remain a physical influence on the music. Computers and computer technology have become a great friend of the composer and performer, as Penny (2010) elucidates:

The continuum of change and new encounter generated through electronic/ digital technology has further re-shaped the player [and composer] symbiosis of performer, instrument, equipment, computer, technologist, space and new performative relationships. This symbiosis creates a new ensemble of machines, spaces, sounds and musicians. Relationships and hierarchies shift, and specific technologies locations influence the interconnections of self, other and context (p.2).

However, working with the performers in the first rehearsals it became clear that the simulation of the DAW, whilst helpful and practical in determining some of the polish required in enabling the disparate elements to gel together, it become another work once it was actualised. The performers' decisions to enter a fraction early or

late changed the subtlety of the delivery of the material, and the viola player chose to perform with greater solemnity and sonority than was imagined by the composer. This moved the next entry of the alto flute back a few seconds and the work began to grow in length. There was also the added dynamic of the passionate playing. This brought greater 'presence' to the work and it began to grow in how its 'sound' filled the space. Time and space become different when the work was performed. Not surprising either was the fact that no single play-through was the same. The maxim 'one cannot put your foot into the same river twice' proved true.

In this sense, the research methodology of being led and based in practice is most apparent. Whereas some research of the empirical kind, which focuses on documenting and tracking every decision made, creative work is more a state of flow, a moving from one thing to the other. In real time, in the actuality of bringing the music into life, into being, the work of the composer and performer realises the tenants of process-relational philosophy and such thinkers as Heidegger, Hegel and Nietzsche. New comprehensions and entities do come into being, springing from the activity of the present, moving immediately into the past where they influence the next present reality (Epperley, 2011).

The work had its first airing at the Faculty of Music, Universiti Pendidikan Sultan Idris, at the John Cage 101 International conference on 22 August 2013. The audience of undergraduates, academic staff, visiting academics and conference attendees indicated that the work achieved its purpose. That a sense of being In the Presence of a something other than the physical space would seem to indicate it did occur.

Conclusions

It was worth taking the chance. Music can be composed that utilises chance and indeterminacy whilst not degenerating into chaos and boredom. The type of structure and form developed for In the Presence was and is a worthy finding of the investigation. The philosophical tenants of process thought have been evidenced. The practice-led and practice-based enquiries are methodologies very suited to the creative work of music composition. Creating a simulation in a DAW of how the chances might be realized are merely a simulation and the reality of performance is far greater in sophistication and aesthetic outcome than what a simulation can capture.

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Biography

Dr Robert Burrell is a senior lecturer at Universiti Pendidikan Sultan Idris in Malaysia. He has been a music composer, educator and performer for over 35 years. His professional career began as an Arts Administrator in Queensland, Australia. This was followed by a specialization in secondary music education. As Head of Music Department in various private colleges, he was responsible for a wide range of curricular and co-curricular music activities. He has extensive composition and conducting experience with community and school choirs, instrumental ensembles and large-scale productions. He has composed for professional and academic performances. The Moravian Philharmonic Orchestra has recently recorded his symphony for string orchestra.

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