Visual interpretations of the score in painting and digital media

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Historically much of the activity in the area of visual music has been focused on the creation of visual compositions stimulated by musical performance. I suggest that the intuitive act of painting to live and or recorded music is flawed in its interpretation of the musical intentions of a composers score. For the purpose of this investigation the studio practice concentrates on the shared systems and language of composition, what Zilcer identifies as the 'application of formal compositional elements of music to painting'. In part, the project will draws on the expertise of British composer Michael Berkeley and conductor Peter Manning². The premise for the research is to identify the presence of process and system in each of the practitioner's work. Also through collaboration with a composer and conductor the project offers a further opportunity to consider the effects of music found in contemporary painting practice. The initial findings of the research are used to establish an intellectual framework where neither the audible or visual elements of the disciplines take precedence over each other.

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There are many examples of painters, who have sloshed paint around the canvas in the pursuit of what Walter Pater defined as the "condition of music3". This type of expressionistic painting is fundamentally intuitive and is often a by-product of listening and painting. Painting of this kind has its own visual limitations and struggles to relate to the composer's intentions and use of compositional technique4.

¹ Judith Zilcer (2005), 'Music for the Eyes: Abstract Painting and Light Art' in Visual Music: Synaesthesia in Art and Music 1900, Olivia Mattis, Jermey Strick, Ari Wiseman and Judith Zilcer (eds.), New York: Thames and Hudson, 34.

² Director of the Manning Camerata, Concert Master at the Royal Opera House Covent Garden.

³ Walter Pater (1873), The Renaissance, Studies in Art & Poetry, 135

⁴ Kevin Laycock, Arts and Humanities Research Council (AHRC) Grant 2008.

Introduction

This paper details the analyses of Berkeley's four musical scores: *Coronach, Inner Space*, 'Elegy' and *Gethsemani Fragment*. The scores are interpreted into a series of preparatory paintings, which culminated in a digital-media projection piece, in the form of repeat-pattern wallpaper entitled, *Collision*. The process of analysis is pre-determined by a series of research questions which are outlined in the introduction to Chapter Four, '*Collision*: The Translation and Interpretation of the Structural Elements of Berkeley's Musical Compositions through the Painting and Digital Media'. *Coronach, Inner Space* (for Solo Flute), 'Elegy' (from the slow movement of the Oboe Concerto) and *Gethsemani Fragment* form the primary reference material for *Collision*. In its entirety, *Collision* comprises nine paintings, a series of thirty-six postcard paintings and a forty-four minute digital-media projection piece. The nine paintings and thirty-six postcards are executed in oil and may be considered as preparatory studies for the digital-media wallpaper in colour, form and pattern.

I employ four different geometric motifs in the translation. The geometric information is retrieved from the score in numeric form. Each motif is then numerically pro-portioned to represent a specific musical feature of the score. This information is taken from either the melodic (horizontal) or harmonic (vertical) components of the score and the geometric motifs are re-configured into regular repeat pattern formations, similar to those used to create patterns in textiles and wallpaper design. Initially, I explored this translation through conventional oil painting techniques, but ultimately I realised it with digital media, in conjunction with Berkeley's music in either a live or recorded format. The musical analysis and visual interpretation of the scores were carried out using a series of five research questions.

Visual music

For the past sixteen years I have sustained a studio practice and research interest in what I have most recently come to describe as *the translation and interpretation of visual and harmonic information derived from the musical score into visual formats*⁵. In hindsight it seems like a long time to pursue one area of research. Nevertheless, I have attempted to observe a common link between the act of composition shared by both music and visual art. Many artists and composers have explored this territory before and with varying degrees of success. My opening quote suggests that the intuitive act of painting in response to live and or recorded music is flawed in its interpretation of the musical intentions of a composer's score.

Peter Manning and the Manning Camerata

In 2007 Manning Camerata invited me to take part in a series of preliminary discussions about forming a Visual Music collaboration that would re-examine the relationship between artist, composer and conductor. The Manning Camerata is a professional Chamber Orchestra based in London, directed by Peter Manning⁶. The orchestra's philosophy is centred around the idea of collaboration

⁵ Kevin Laycock, Arts and Humanities Research Council (AHRC) Grant 2008.

⁶ Peter Manning also directs Musica Vitae, Sweden and is Concert Master of the Royal Opera House, Covent Garden, London.

with projects and disciplines from outside their musical sphere. Recent collaborations have included *Personal Obsessions* with Sean Rafferty, and an operatic interpretation of *The Burial at Thebes* by Seamus Heaney.

Manning Camerata had for some time been looking to establish a project with a visual artist who also shared an interest in the relationship between early twentieth century British music and painting. To begin with, the project was nothing more than a vague idea, for example we did not know what kind of composer we were looking for, nor what the outcome of the collaboration might be, although instinctively we all felt the project idea was worth pursuing. From my point of view the research possibilities were enormous, and here was a unique opportunity to work with an established composer and conductor alongside a group of professional musicians.

Finding a composer

English music from the mid twentieth century is fundamentally intuitive in style, romantic in nature and often evocative of the British landscape. I was aware that my current interests were concerned with the identification and analysis of a musical system using visual representation through pattern, and that in general English music from that period is likely to be driven by the qualities of intuition and emotion. It then became apparent that my original intentions to find a composer of serial music might not be the most appropriate choice of musical genre given that we were trying to identify a British composer who was (or had been) significantly influenced by the traditions of English musical composition from the early part of the twentieth century. It became clear to both Peter Manning and me that aligning two intuitive, process-based practitioners of visual and musical composition was in fact moving away from the original intentions of the research. With that thought in mind, I realised that our next challenge was to find a British composer who would be willing to work on such a project and with a systems based visual artist. Several composers were suggested including Stephen Montague, David Mathews, Michael Torke⁷ and Michael Berkeley⁸.

In 1995 I worked with Stephen Montague on a project called *Sound-Scapes* in conjunction with Huddersfield Art Gallery, so I was familiar with his music, working practice and interest in visual music. After much discussion, it was decided that Michael Berkeley with his breadth of experience, as not only a composer but also a writer, television and radio broadcaster would make an ideal collaborator. My first recollection of Michael's work was at the UK premier of his *Concerto for Clarinet* at Huddersfield Contemporary Music Festival in the early 1990s. Like much of Berkeley's music, the composition is permeated with the common threads of grief, sadness and loss. My experience of the performance was one of a thrilling and emotionally intense demonstration of musical writing that tests both the musical range of the instrument and the technical ability of the performer.

⁷ I was inspired by Torke's urban Minimalist sound and entered into a series of conversations to explore his involvement in this project. However, we agreed that for this research project Torke was not the right person because of his US nationality and methods of composition.

⁸ Michael Berkeley was born in 1948, the eldest son of the composer Sir Lennox Berkeley and a godson of Benjamin Britten. As a chorister at Westminster Cathedral, singing played an important part in his early education. He studied composition, singing, and piano at the Royal Academy of Music but it was not until his late twenties, when he went to study with Richard Rodney Bennett, that Berkeley began to concentrate exclusively on composing.

Collaboration

In 2008 Peter Manning and I had our first meeting with Michael Berkeley at his London home. At that first meeting we exchanged our ideas and previous experiences of visual music collaborations and agreed to enter into a series of preliminary discussions about developing a method of collaboration and ultimately composition. Early into the project Michael told me that he had some reservations about the collaboration, due to his unfamiliarity with my work. Over the years, since his first collaboration with Rufus Potts Dawson in the 1970s, he had been asked on several occasions to collaborate on similar projects with other visual artists. Often he had been confronted with artists who presented a rather clichéd, figurative, quasi-expressionistic interpretation of his music. Fundamentally there was nothing wrong with this approach, but it was likely, in the Michael's opinion, to produce a predictable visual response.

This reservation of Michael's was allayed by a series of intense meetings. My regular visits to his home would often coincide with the recording sessions for his BBC Radio 3 programme *Private Passions*. On odd occasions, I would catch a glimpse of that day's guest artist, a poet, a writer or actor. I would often arrive around four o'clock just as Michael and his guest artist were finishing for the day. After a brief exchange of pleasantries, usually followed by a swift cup of tea, we would climb the stairs to Michael's music studio on the top floor of the house. Here we would discuss our ideas about the collaboration, select and listen to Michael's recordings and imagine what the results of our outcomes might be. During this period we discussed examples of other visual music projects, including Michael's own project with Rufus Potts Dawson. It took Michael and me a long time to shape our ideas and intentions and these initial ideas were ultimately used to write a successful bid to the Arts and Humanities Research Council.

Visual context: Systems art

Halfway through the project, I realised that I had begun to lose sight of the work of other artists who had or were working in a similar vein to me. In fact, I had become so involved in the analysis and translation of the formal aspects of Berkeley's scores that I was beginning to forget I was a painter. I knew I had to re-establish my practice in painting. The only thing I can be certain of during this period is that I was putting a great deal of energy into finding and recording number sequences and patterns from four particular Berkeley scores. What I had not done was to fully consider how I might use this information for my forthcoming studio practice. My reason for the collection of harmonic and melodic information from monophonic⁹ and polyphonic¹⁰ scores, was in answer to the five research questions that I set myself at the beginning of this research project (see **Score analysis and visual interpretation**). Fortunately and at just the right moment in time, I was invited to select examples of British non-figurative painting from the Gallery Oldham permanent collection. The act of selecting work from the Oldham collection enabled me to position the work I envisaged making, in relation to other works of notable British Systems and geometric artists.

I selected three abstract images, two paintings (Figures 1 and 2) and one print (Figure 3).

⁹ Monophonic is the term used to describe an unaccompanied melody, for example Berkeley's Inner Space (2007) for Solo Flute. 10 Polyphonic (or contrapuntal) refers to several sounds being heard at the same like those in a symphony or concerto.



Figure 1 (left): Jeffrey Steel, (b.1931), Scala, 1965, oil on canvas.

Figure 2 (middle): Peter Sedgley, (b.1930), Phase 2, 1965, gouache on card, laid on hardboard.

Figure 3 (right): Bridget Riley, (b. 1931), Splice, 1975, screen print on paper.

The Sedgley painting was gift to Gallery Oldham via the Contemporary Arts Society. *Scala* by Steel came to Gallery Oldham during the time of the then Director of Oldham Art Gallery, James Carter. The story of Carter's plan to renew the collection is recently documented in a publication entitled, *At The Edge, British Art 1950 - 2000*.¹¹ There are no details about the history of the Riley print, which was purchased by the gallery in 1976.

Steel and Sedgley belonged to an informal group of British artists known as the Systems Group (1969-1976). Riley was not a member of the Systems Group although her work is without question informed by the processes common to that of systemic art, namely her use of colour, geometry and tessellating pattern.

I investigated the members of the Systems Group further and came across an exhibition at the Samuel Osborne Gallery, London, from 2007. The exhibition explored the work of British Constructivists and included several works by the Systems Group. Dr. Fowler¹² wrote the essay for the catalogue, which expertly traces the history of this movement in Britain. The exhibition was called, *Towards a Rational Aesthetic: Constructive Art in Post-War Britain* ¹³. Soon after this, I made contact with Dr. Fowler and discovered that in 2005, Southampton City Art Gallery presented a survey exhibition of geometric abstraction in Britain from 1900 to the present day. The exhibition *Elements of Abstraction: Space, Line and Interval in Modern British Art* ¹⁴, was presented by Dr. Fowler in association with Professor Brandon Taylor¹⁵. The exhibition was so successful that the curatorial team were alerted to the demand for information on the subject. The Southampton show was the first exhibition of its kind since 1972. In 2008, in response to this growing interest, Southampton City Art Gallery presented a further exhibition and catalogue of systemic art entitled, *A Rational Aesthetic, The Systems Group and Associated Artists* ¹⁶. In 1972, the then Arts Council produced a catalogue to

¹¹ Whittle S, Ford S, Winch D, Hardman Y and Draper A (2009), At the Edge British Art 1950 – 2000, Gallery Oldham.

¹² Art Historian and Curator.

¹³ Fowler A, Osborne S and Samuel G (2007), Towards a Rational Aesthetic: Constructive Art in Post-War Britain. London: Osborne Samuel Ltd.

¹⁴ Taylor B and Fowler A (2005), Elements of Abstraction Line and Interval in Modern British Art, Southampton City Art Gallery.

¹⁵ Senior Research Fellow in Faculty Media, Arts and Society, Southampton Solent University.

¹⁶ Fowler A, Steel J and Craven T (2008), A Rational Aesthetic, The Systems Group and Associated Artists. Southampton City Art Gallery.

accompany the second United Kingdom exhibition of the Systems Group entitled *Systems*. A second Arts Council publication was produced in 1978, for an exhibition of Constructive and Systems art entitled *Constructive Context*.

Until 2008, there was little information available on British geometric, abstract art. I wondered why the British art establishment had taken so little interest in the promotion of this particular kind of British fine art practice. In the forward to Fowler's essay, Tim Craven¹⁷ notes that the London Constructionists remained very much in the public eye through exhibitions and publications. Kenneth Martin (1905-1998), Mary Martin (1907-1969), and Anthony Hill (b.1930), were hugely influential both as pioneers and mentors for the Systems Group. In an attempt to stimulate an awareness of geometric and mathematical systems based art in the United Kingdom, Craven presents a possible interpretation for such an oversight in his forward for the catalogue, *A Rational Aesthetic, The Systems Group and Associated Artists* from 2008. Here Craven describes how the reluctant nature of the Group to self-promote their work, combined with a disinterest in the commercial art market hindered their visibility in the United Kingdom. This was further exacerbated by the effects of the Cold War in the 1950's and 1960's which led to the promotion of the largely US based Abstract Expressionist scene, in opposition to the Russian Constructivism and Suprematism movements¹⁸.

From a visual perspective it is clear to see that the Systems Group aesthetic and their use of composition and materials, is informed by what Fowler describes as "an enduring European Constructivist tradition"¹⁹. That is to say, a tradition rooted in the experimental work of the Russian Constructivists and Suprematists, and explored beyond Russia by the Dutch movement of De Stijl, the Bauhaus, in Germany, along with the British predecessors like the Vorticists, to the Systems Group, and the London Constructionists. All of these movements have been influential in repositioning my own painting practice towards what Fowler describes as a "Rational Aesthetic"²⁰. The tradition continues today in the work of the surviving Systems Group members and their continued interest in systemic art practice.

Colour

The use of colour in the paintings was taken from two sources. I made colour reference to four works from three of the Systems Group artists, including works by Michael Kidner (1917-2009), Jean Spencer (1924-1998) and Peter Sedgley (b.1930). In addition, I took references from two of the three works selected from the Oldham collection of British non-figurative painting, including works by Sedgley and Riley. The colour referenced from the two Oldham paintings and the four works from secondary sources was achieved by colour matching. The process of colour matching is not an exact science and I consider this aspect of my practice intuitive, rather than based on any pre-planned system. The matched colours were then used to create a series of nine oils on paper, which formed the preliminary studies for *Collision*.

¹⁷ Senior Curator at Southampton City Art Gallery

¹⁸ Fowler A, Steel J and Craven T (2008), A Rational Aesthetic, The Systems Group and Associated Artists, Southampton City Art Gallery.

¹⁹ Fowler A, Steel J and Craven T (2008), A Rational Aesthetic, The Systems Group and Associated Artists, Southampton City Art Gallery.

²⁰ Fowler A, Steel J and Craven T (2008), A Rational Aesthetic, The Systems Group and Associated Artists, Southampton City Art Gallery.

I then used the colour combinations in the oil paintings to inform the digital compositions for *Coronach, Inner Space, Elegy* and *Gethsemani Fragment.* The preliminary studies in oil comprise nine works on paper (see Figures 4 to 12).

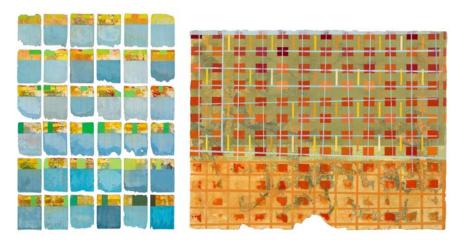


Figure 4 (left): Coronach, 36 post cards, 2009, oil on paper 14.7×10.5 cm. Figure 5 (right): Coronach 1, oil on paper, 2009, 55×71 cm.



Figure 6 (left): Coronach 2, oil on paper, 2009, 55×71 cm. Figure 7 (right): Coronach 3, oil on paper, 2009, 55×71 cm.



Figure 8 (left): Elegy 1, oil on paper, 2009, 55×71 cm. Figure 9 (right): Elegy 2, oil on paper, 2009, 55×71 cm.

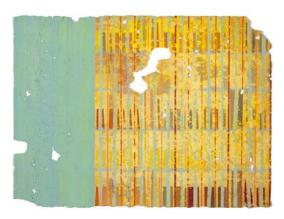


Figure 10: Elegy 3, oil on paper, 2009, 55 × 71 cm.



Figure 11 (left): Gethsemani Fragment 1, oil on paper, 2009, 55×71 cm. Figure 12 (right): Gethsemani Fragment 2, oil on paper, 2009, 55×71 cm.

I employed these colour combinations to create the colour palettes in each of the eight components of the digital wallpaper. The components are comprised of four titles and four digital media links. I photographed the paintings digitally and selected groups of colours using the *Illustrator* drawing programme. Figures 13 to 20 show examples of the eight components of the digital wallpaper.

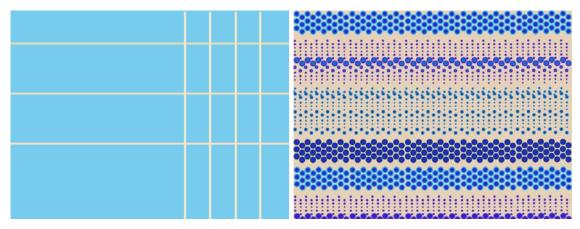


Figure 13 (left): Link to Coronach 010, projection still, 2009, dimensions variable. Figure 14 (right): Coronach 038, projection still, 2009, dimensions variable.

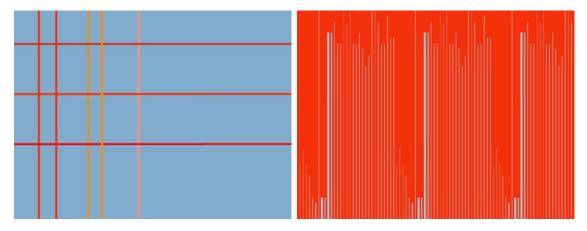


Figure 15 (left): Link to Innerspace 019, projection still, 2009, dimensions variable. Figure 16 (right): Innerspace 080, projection still, 2009, dimensions variable.

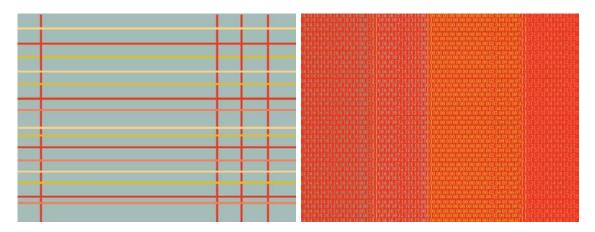


Figure 17 (left): Link to Elegy 032, projection still, 2009, dimensions variable. Figure 18 (right): Elegy 031, projection still, 2009, dimensions variable.

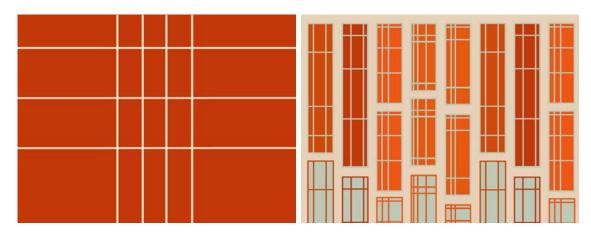


Figure 19 (left): Link to Gethsemani fragment 031, projection still, 2009, dimensions variable. Figure 20 (right): Gethsemani fragment 249, projection still, 2009, dimensions variable.

Score analysis and visual interpretation

I analysed and interpreted the formal compositional elements of Berkeley's scores, creating visual formats suitable for painting and digital media using the following parameters:

- 1. Harmonic analysis of the score structure.
- 2. Analysis of score proportion versus metronomic proportions.
- 3. Identification of visual and audible mirroring and repetition of musical motifs.
- 4. Identification of the gestural aspects of the compositions, for example, accent intervals, pitch, rhythm and rhythmic contour.
- 5. A comparison of the visual proportions of Feldman's (1926-1987)²¹ scores in relation to time signature, as a comparative assessment of Berkeley's score structures and proportions.

The questions (or methods of musical analysis) are designed to extract specific musical information from the four Berkeley scores. Results of this musical analysis are used to reconfigure information from the score into four visual motifs using geometric forms that included: circles, straight lines, numbers sequences, grid structures, rectangles and grids in rectangles. In order to re-proportion the same numeric values present in the Berkeley scores, I assigned particular geometric forms (or visual motifs) to specific musical elements present in the four acoustic compositions. The choice of geometric forms was inspired by the work of the experimental filmmakers from 1919-1942. For example, in the analysis and interpretation of *Coronach*, Circular structures are used to represent the rhythmic structure of the cello line and circular forms are deployed across the digital picture plane in repeat pattern formations.

In the representation of *Inner Space*, vertical linear structures are employed in repeat patterns to represent the melodic contours of this monophonic work. In addition, I represented the rhythmic value of each note by changes in the width of the vertical lines, for example progressively thicker lines to indicate greater rhythmic values. Therefore, my interpretation of *Inner Space* is two-fold: in the assessment of musical contour and in the representation of rhythmic structure. In the analysis of the score for the 'Elegy' (the slow movement from the oboe concerto), I took the visual representation from the harmonic structure of the four-part harmony in the music. I presented the results of this analysis as a number sequence, (again, placed into a repeat pattern formation). In the final acoustic work for string orchestra *Gethsemani Fragment*, measurements of the bar dimensions are taken from each of the thirty-eight musical systems. These are observable changes in time signature throughout the composition and these are combined with the bar dimensions to create grid structures within rectangles. I used this musical information to create four visual motifs each of which are central to the construction of visual compositions in digital-media.

In conjunction with my research supervisor Dr. Michael Spencer²², Michael Berkeley and Peter Manning, I established the methods for the score analysis and subsequent visual interpretations of each of the four selected acoustic and electronic works by Berkeley.

Michael Berkeley has an established interest in visual music which dates back to the 1970s when he teamed-up with graphic artist Rufus Potts Dawson to work on an experimental art and music stop

²¹ Morton Feldman associated with the New York School of experimental composers which included John Cage, Christian Wolff and Earl Brown

²² Senior Lecturer in Composition and Critical Musicology, University of Leeds.

motion film for the BBC. Entitled, *Voice from the Dark*, this title was also the name of a work for solo flute written by Berkeley circa 1970 - 1975.

In 2006, Berkeley reworked this flute composition and re-named it *Inner Space*. Some thirty years on I am the latest collaborator to work alongside Berkeley on a project that once more re-examines the relationship between the two art forms. Dawson's original response to Berkeley's haunting solo flute composition is based on an invented narrative driven by an emotional and intuitive visual approach to the composition. In Dawson's treatment of the flute piece he employs sinister cartoon-like characterisations of the male and female forms. Dawson adopts a primitive drawing style reminiscent of the untrained art practice found in the genre and commonly known as Outsider Art²³. One can only speculate about Dawson's visual intention as there is no documented evidence to describe the true nature of the work.

Collision is the name given to the digital projection piece and catalogue publication that comprise this project. The accompanying suite of eight paintings in oil is titled in response to Coronach, Inner Spaced, Elegy and Gethsemani Fragment. The Concise Oxford English Dictionary provides three possible definitions for "collision", of which point two relates to our understanding of the word and in this instance of the artist, composer and conductor's position, "the clashing of opposed interest or considerations.²⁴" The title refers to the differences in approach to composition used by both Berkeley and me, intuition versus system. Each approach might be thought of as being at odds with the other in terms of method whilst at the same time exploiting each other's shared creative processes to establish a new composition from two very distinct disciplines.

Digital media wallpaper and the Berkeley electronic sound links

The digital-media wallpaper is composed of eight visual components, of which four are in response to Berkeley's acoustic compositions and four in response to the electronic sound-links. Berkeley's electronic sound-links are inspired by my digital interpretation of Berkeley's acoustic works. The composition in digital-media employs the graphic design software *Illustrator*. During our discussions and preparations, Berkeley and I were uncertain about what the collaboration would be and how it would turn out, therefore it took considerable time to come to fruition. The structure of the digital media wallpaper includes the following audio-visual components: Link to *Coronach, Coronach, link* to *Inner Space, Inner Space*, link to 'Elegy', 'Elegy', link to *Gethsemani Fragment* and *Gethsemani Fragment*.

Musical context: composition

"...Grief: the rage and anger, as well as the sadness..."25

Coronach is a Celtic lament²⁶ that originates from the Scottish Highlands. This lament was composed for string orchestra and commissioned for the Presteigne Festival of Music and the Arts,

²³ Tate Britain (2010), Outsider Art [http://www.tate.org.uk/britain/exhibitions/outsider/default.shtm – last accessed 1 July 2010].

²⁴ Allen RE (1990), The Concise Oxford Dictionary of Current English. Oxford: BCA.

²⁵ Berkeley M (1994), Fierce Tears I & II, Oxford: Oxford University Press

Wales in 1988²⁷. *Coronach* belongs to a group of works dating from 1976 to 1990 that include the *Elegy* from the oboe concerto (1976), *Fierce Tears I & II*²⁸ (1983 & 1990), *Keening*²⁹ (1988) and *Gethsemani Fragment* (1990). All composed within a fourteen-year period, here Berkeley explores the multifaceted territory of human emotions that relate to grief, anger, sadness and loss. Each of these works is concerned with the same sense of rage and vulnerability experienced through loss, during the process of grief³⁰. Although not selected for reinterpretation into visual media, both *Fierce Tears I & II* and *Keening* were considered for inclusion at the planning stage. In the final selection Michael and I both favoured the rich, harmonic structures of the string textures present in *Elegy, Coronach* and *Gethsemani Fragment*. Also selected was *Inner Space* a composition for solo flute, reworked in 2006 from *Voice from the Dark*, Michael's first collaboration with a visual artist.

An aspect of *Collision* was a new visual interpretation of the solo flute piece. Like Dawson before me, it became my challenge to make a new visual response to Berkeley's *Inner Space*. As part of the design process, I created digital wallpaper set to eight of Berkeley's electronic and acoustic compositions. In addition, the Oldham paintings were employed as a visual and contextual reference for the initial stages of visual research.

In 2009 Berkeley revisits these sensations once more in his composition for STAB³¹ in *Gabriel's Lament: Requiem for a Dreamer*. In June of the same year Berkeley wrote an article for The Guardian about a composition in memory of a close friend, Gabriel Bailey. The article describes the circumstances that led to Gabriel's untimely death and considers the notion of grief in English music reflecting upon Berkeley's most recent encounters with it. Extreme emotion in music is something that Berkeley has always been drawn to, the sentiments of loss inspiring several compositions. Berkeley's musical response, *Gabriel's Lament: Requiem for a Dreamer*, is a reminder of the composers continuing fascination with the phenomenon of grief. All but one of the works selected for *Collision* are influenced by grief³².

The translation of musical ideas to a visual format is fundamentally a contradiction.³³ This statement belongs to a paper I wrote in 2007, entitled *Tectonics* for the electronic Journal, *Colour: Design & Creativity*. In the paper, I trace my ideas in relation to the translation of musical elements from the Sir Arthur Bliss *Colour Symphony of 1922*, into a series of paintings in oil. On reflection, I

²⁶ Stanley S and Latham A (1990), *The Cambridge Music Guide to Music*. Cambridge: Cambridge University Press. A piece of traditional music of an elegiac character. The Scottish clans reserved their laments for the occasion of a death of a member of the clan; they were generally bagpipe pieces, but sometimes songs.

²⁷ This composition was first performed in 1988 under the direction of William Boughton by a group of young musicians together with members from the English String Orchestra.

²⁸ Berkeley M (1994), Fierce Tears I & II, Oxford: Oxford University Press. "Fierce Tears I was written in 1983 in memory of Janet Craxton, and first performed by her pupil Nicholas Daniel, with Julius Drake." "Fierce Tears II was commissioned by the Aldeburgh Festival in memory of the composer's father, Lennox Berkeley, and first performed in the Jubilee Hall, Aldeburgh in June 1990 with its companion Fierce Tears I when the artists were Nicholas Daniel and Julius Drake."

²⁹ Berkeley M (1995), *Keening*. Berkeley M (ed.), Oxford: Oxford University Press. "Keenings was commissioned by John Harle with funds provided by Greater London Arts. The first performance was given by John Harle and John Lenehan in the Purcell Room, London 23 November 1988."

³⁰ Berkeley M (2004), Press Release for Keening and Fierce Tears I & II. Oxford: Oxford University Press.

³¹ Soprano, Tenor, Alto and Bass.

³² Berkeley M (2009), Requiem for a Dreamer [http://www.gaurdian.co.uk/music/2009/jun12/michael-Berkeley-gabriels-lament – last accessed 1 March 2010].

³³ Laycock K (2009), Tectonics [http://www.colour-journal.org/2009/4/4/090404article.htm – last accessed 5 July 2010].

think it is fair to say that my thoughts on the subject have changed substantially, to the degree that I am now suggesting something very different. For example, the practice-led research into visual music I was then exploring was perhaps rather naive in its visual response.

Tectonics was nevertheless an important steppingstone in the development of Collision. Here, I explored each of the four colour movements of Bliss's Symphony, through the composer's use of shifting time signatures. I employed the time signatures to create grid structures on each of the picture planes in conjunction with my own observations of the period style and colour from the same era in British painting. Uncertain Harmonies, my second research project took a slightly different approach in that it explored the relation between colour and the musical scale. Tectonics and Uncertain Harmonies both use number systems present in musical composition to create visual representations in colour through oil paint techniques.

Collision builds on these ideas and through the collaboration with Berkeley, I was able to explore which musical elements best characterised each of Berkeley's four acoustic works. The nine paintings in the Collision series act as preliminary studies for the digital wallpaper. In many ways, the graphic qualities achieved through Illustrator, enabled me to make more exact translations of the number sequences (musical intervals), patterns, visual contours and reoccurring visual motifs present in the Berkeley score than can be realised through painting. It is possible using this process, more so than using hand drafting techniques for painting, to proportion information from the score to the digital picture plane with a greater degree of accuracy. Therefore the transfer of information from the Berkeley scores to a visual format in this research project has been possible and can be seen in the component parts of the wallpaper as each sequence unfolds through time. From my recent experience of working with Berkeley and in my involvement with visual music over the past six years, his visual placement of musical information on the score is not dissimilar to that of the process of handling the formal elements of design.

In my opening remark of the conclusion I describe the translation of musical ideas to a visual format as a "contradiction". The way in which artists make such translations differs according to their approach and mode of visual practice. Consider for example the notion of the artist as listener. Here the artist responds to organised sound (or musical composition) intuitively, emotionally and physically during the act of listening and painting to live or recorded sound. Mark Rowen-Hull, a British artist is an example of a painter whose practice is based on listening, with painting as an act of live performance. Zilcer identifies three ways in which artists can engage with music:

- 1. Standard painting practice through the application of formal compositional elements of music
- 2. Make scientific links between the musical scale and the colour spectrum,
- 3. Evoke sound or create visual analogues for music.³⁴

My own interest relates to the process and systems of composition, what Zilcer identifies as the application of *formal compositional elements of music*. In contrast, *Collision* became a research investigation about discovering and translating musical systems present in the written scores, rather than an intuitive response. My idea and approach was to take physical measurements from the scores, which could then be translated into a visual format. I did this by counting the intervals between notes,

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³⁴ Zilcer J (2005), Music for the Eyes: Abstract Painting and Light Art, *Visual Music Synaesthesia in Art and Music 1900*, Brougher K, Strick J and Wiseman A (eds.), New York: Thames and Hudson.

looking for pattern and repetition in the different instrumental lines, exploring the contour of the music and by measuring the area of bars in each of the musical systems. All of this information was employed to rescale and form structures and patterns in both the preliminary paintings and in the digital wallpaper. It was then possible to explain which aspects of the score were being heard and seen in the audio-visual wallpaper. Recently I took the whole process one stage further and used a musical pattern (or motif) from Berkeley's *Coronach* to produce a Minimalist composition for String Quartet using a simple number sequence. The result was a repeat pattern musical composition not dissimilar to the forms and structures I had used in my response to *Coronach* for the digital wallpaper. I am now beginning to develop an understanding of how to place musical and visual ideas in either practice through the analysis of an established or invented system. I intend to explore this new approach further through audio-visual media, and through my role as artist, educator and researcher.

Summary

The nine paintings in the *Collision* series act as preliminary studies for the digital wallpaper. In many ways, the graphic qualities achieved through *Illustrator*, enabled me to make more exact translations of the number sequences (musical intervals), patterns, visual contours and reoccurring visual motifs present in the Berkeley score than can be realised through painting. It is possible using this process, more so than using hand drafting techniques for painting, to proportion information from the score to the digital picture plane with a greater degree of accuracy. Therefore the transfer of information from the Berkeley scores to a visual format in this research project has been possible and can be seen in the component parts of the wallpaper as each sequence unfolds through time. From my recent experience of working with Berkeley and in my involvement with visual music over the past six years, his visual placement of musical information on the score is not dissimilar to that of the process of handling the formal elements of design. A full account of this practice-as-research can be found in my PhD thesis from 2012 entitled: *The Translation and Interpretation of the Structural Elements of Musical Composition through Painting and Digital Media.* 35

³⁵ Laycock K (2012), The Translation and Interpretation of the Structural Elements of Musical Composition through Painting and Digital Media, *PhD Thesis*, University of Leeds, 59-95.