# Tectonics

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## Summary

*Tectonics* charts a private passion of the author and describes a practice-based, research-led investigation into visual music. Common to painting and musical composition, the project was concerned with the formal aspects of audible and visual composition, their similarities and differences, their processes and systems. This studio-based project explores aspects of musical composition through painting. The research aims are three-fold: to consider the relationship and association of music in contemporary abstract painting practice; to develop new theories about processes and techniques currently based upon a notion of 'contemporary visual music'; and to present the documentation of this research process as an integral to the exhibition.

## Introduction

The aim of *Tectonics* was to conduct a practice-based research-led investigation into early twentieth century British painting and musical composition, with the intention of considering their relationship and associations. More specifically the project explores the idea of formalism in abstract and pre-abstract British modern painting and its links with music. *Tectonics* was stimulated by the work of two Scottish colourists, Francis Cambel Boileau Cadel and Samuel Joseph Peploe, and a symphony which explores the idea of the musical associations of different colours by British composer, Sir Arthur Bliss, entitled *Colour Symphony* (1922) [1].

The nine paintings that make up the *Tectonics* series were completed in 2005. The title of the series was derived from the word 'architectonics', a term used to express the spatial qualities more usually associated with architecture. The term in this context describes the architecture of the orchestral score that is in keeping with the metronomic structure of linear music and the two-dimensional qualities of the picture plane. The *Tectonics* series relates to the spatial arrangements or composition of organic and geometric forms in two-dimensional space. For the purposes of this investigation, the term 'tectonic' is used to refer to non-objective painted compositions inspired by the architectural qualities of musical composition.

The research investigation *Tectonics* formed part of a collaborative project in conjunction with the Ferens Art Gallery in Hull, UK and Manchester Camerata, a professional chamber orchestra based in Manchester, UK [2]. The exhibition was accompanied by an illustrated catalogue. The catalogue essay was provided by Dr Matthew Withy, the assistant curator at the Henry Moore Institute in Leeds, UK [3]. The Arts Council England made a financial award to support the exhibition production costs and education programme. The project toured to a

further three venues across the country, including the Drumcroon Art Gallery in Wigan, Myles Meehan Art Gallery in Darlington and Art First in London.

In collaboration with Manchester Camerata and Tim Chatterton, a classically trained musician, I was involved in developing a musical response to both the Bliss symphony and the *Tectonics* series. The composition was based on selected musical moments from each movement of the symphony. My role initially was as listener and adviser to the composer and musicians. I attended the rehearsal session in Manchester and commented on how the arrangement could best be used to aid the interpretation of the music and the paintings. The work has now been performed twice in Wigan and Darlington and used in gallery workshops to enhance the exhibition experience and supporting education programme. The composition was written to enable participants from a range of musical abilities to join in with the professional players and for participants to create their own paintings in response to the music. A recording of the symphony was played throughout the exhibition and on two occasions a recital of the Camerata composition was given at the exhibition openings. The composition was primarily used as an educational resource to help gallery audiences make connections between audible and visual composition.

For the purpose of my higher degree transfer paper, the original arrangement for trombone, violin, cello and percussion was adjusted and re-scored for two oboes, cor anglaise (English horn) and piano. The *Tectonics* series was itself based on the numerical divisions of the time signatures of the four movements Bliss colour symphony.

Artists and composers have produced works in response to each others' practice since the time of Aristotle. For example, Andriessen made a work in 1985, titled *De Stijl*, in response to the work of De Stijl [4]. I found Andriessen's formal approach to composition similar to the systems I have used in the *Tectonics Series*. *De Stijl* is the third movement of *De Materie* (or 'the matter'), a work that explores the relationship between matter and spirit [5]. Here Andriessen takes Mondrian's composition *Red*, *Yellow and Blue* from 1927 [6] and translates its geometric proportions into a work for large orchestra. Schwarz notes that, like Mondrian, Andriessen was a fan of American jazz, in particular the piano-playing style of boogie-woogie. *De Stijl* is characterised by its popular urban sound, a sound reflected in the work of other minimalist composers like Micheal Torke and Steve Reich. Fifty eight years on Mondrian's evocation of jazz returns to sound in *De Stijl*.

Since the project with Tim Chatterton and recent discussions with the composers Dr Michael Spencer and Nicholas Williams, I have become increasingly inclined toward the idea of producing work that combines art and music, where each component is inspired by the other. The *Tectonics* series and accompanying sound piece are two separate works and my goal is to produce a piece in which, both the musical composition and art exist as one.

# **Tectonics Exhibition**

The *Tectonics* exhibition included a series of nine oil paintings plus ten paintings from two previous projects: *Controlled Chaos* (a solo exhibition from 2002) and *Five Character Pieces* (from 2004). I included the earlier work to show how my painting practice and ideas had changed since the development of the *Tectonics* series.

The first work to be described in this paper is *MC*, a non-objective portrait shown in Figure 1. My intention was to capture my subject's personality without reference to the observed form. The idea of using initials to hide the identity of the portraits in the series was borrowed from Elgar's *Enigma* Variations of 1899. In this composition the oil paint is applied to the gesso

panel using thick impasto marks juxtaposed with horizontal and vertical geometric shapes. The high-keyed colour is arranged throughout the composition using complementary colour combinations. In contrast, the work from *Tectonics* uses thin washes of oil paint set against pencil drawn grid structures on a gesso ground, as in *Group One Purple* (Figure 2). The work is less vibrant and is in keeping with British colourists of the 1920s and 30s.



Figure 1 Kevin Laycock, *MC*, oil on gesso on panel (2002)



Figure 2 Kevin Laycock, *Group One Purple*, oil on gesso on panel (2004)

The *Tectonics* exhibition incorporates a selection of paintings and sculpture from the Ferens collection of early twentieth century British art. Included in the selection were two paintings by the Scottish colourists, Cadel and Peploe. Both of these works date from the 1920s and signal a move towards abstraction in their treatment of the subject matter. Cadel's portrait was influenced by the Art Deco style and shows a flattening of the picture plane with greater emphasis being placed on colour and pattern. Peplo's still life is executed in an expressive and painterly way. The tonal quality of the colour mixing and paint application is reminiscent of the New English Art Club. The nature of the collection is described in an exhibition guide [7], which notes that the first half of the twentieth century witnessed some of the most dramatic developments in British art history:

'The Ferens' collection charts these in paintings, watercolours, prints and sculpture by many of the leading artists who contributed to the rise of the 'modern movements' in British art. This aspect of the collection signifies for its depth and variety, since in addition to highlighting the key movements, the Ferens represents individual figures whose work remained independent of established groups and categorisation.'

British musical composition between the first and second world wars might be considered characterised predominantly by the twin threads of sadness and optimism. The associations of Bliss with colour, symbolism and nationalism help define his *Colour Symphony* of 1922. A fundamental association with musical composition during this period are its links with the English folk song and its response and treatment of the British landscape. These influences were significant for many British composers and painters including Vaughan Williams, Fredric Delius, Gustav Holst, Paul Nash, Francis Campbell Boileau Cadell, Ben Nicholson and David Bomberg.

Composed eight years before the Bliss *Colour Symphony*, Vaughan Williams' *Lark Ascending* (1914) typifies this tradition. The four movements of the *Colour Symphony* explore

the notions of pageantry, reverely, melancholy and victory. Not unlike the Bliss *Colour Symphony* in intention, Williams' work might also be considered as a metaphor for freedom and liberty.

#### **Bliss and Dannatt**

In 1980, the artist and writer George Dannatt made his own interpretation of the Bliss *Colour Symphony*. I first came across Dannatt's four paintings<sup>1</sup> on the front cover of a compact disc recording by the English Northern Philarmonia. This beautifully crafted performance took place at Leeds Town Hall in 1985. The recording and print reproductions of the Dannatt paintings rekindled my interest in the association, which then became a starting point for my own investigations into the structures and process common to art and music associations.

Dannatt's suite of four paintings gives no indication of scale or the kind of paint medium but it seems likely that the paintings were executed in either acrylic or oil and I know the works are of a suitable size for domestic hanging. The paintings are arranged in a symmetrical formation. In this configuration the four rectangular paintings create the effect of one composition. Bliss arranges the four colour movements in the following order: from left to right in the top row, purple, red and then in the lower row, blue, green; whereas Dannatt chooses the arrangement: blue, purple, green red. This arrangement establishes a diagonal colour relationship between pairs of paintings for example red-blue and green-violet. The pairs relate to primary-primary and secondary-secondary colour combinations. Each painting has a rectangle of the opposing colour in its composition. The device of musical imitation is something that Bliss had employed in each of his four movements. Dannatt divides each picture plane into four, marking the surface with asymmetric horizontal and vertical lines. The position of the horizontal and vertical lines creates a square and three different sized rectangles within each painting. The use of geometric structures in combination with bold primary and secondary colour creates a visual sensation very much in keeping with the formal qualities of the *De Stijl* group, in particular the geometric compositions of Mondrian and Van Der Leckt.

According to Gerald Towell (chairman of the Bliss Society) [8], Bliss had been a great enthusiast of Dannatt's visual interpretation of his score.<sup>2</sup> Dannatt also produced extensive programme notes for a recording by the BBC Welsh Symphony Orchestra, under the direction of British conductor Barry Wordsworth.

#### **Colour relationships**

In contrast, and informed by a previous association with musical composition, a new body of work entitled *Open Geometries* by British painter Estelle Thompson explores abstract painting through colour and surface space (for examples of her work, see Figures 3 and 4). The paintings make reference to the formal qualities of constructivist composition and explore the spatial arrangements of the picture surface through asymmetric and symmetric use of colour and pattern.

<sup>1</sup> The four paintings by Dannatt are currently in Lady Bliss' possession and no permission to access them has been granted.

<sup>2</sup> Towell, recommended looking at the correspondence that took place between Bliss and Dannatt during the making of the paintings; these letters are held at Cambridge University in the George Dannatt archives and although permission to access the archive has been sought, no response was received.

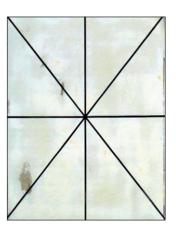
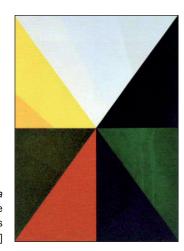


Figure 4 Estelle Thompson, Chroma Chora, oil on panel (2005) [image reproduced by permission of Purdy Hicks Gallery, London, UK]

**Figure 3** Estelle Thompson, *Stellar*, oil on panel (2005) [image reproduced by permission of Purdy Hicks Gallery, London, UK]



Michael Archer describes these new works as a 'new set of articulations<sup>3</sup> [9]. Thompson's *Open Geometries* employ the same structural device throughout the series where similar spatial arrangements and line quality re-appear from one painting to the next. Sol LeWitt referred to this sort of effect as the 'grammar for the works' [10]. Horizontal and vertical lines are used to bisect the picture surface diagonally from left to right, whereas the paintings in the *Tectonics* series are constructed using regular grid structures.

Thompson creates many spatial opportunities allowing her to explore colour relationships using what design science refer to as 'glide reflection' [11]. Thompson's use of angles is based on cross shapes derived from hand movements used to gesture magical incantations. Archer remarks [9]:

'Abracadabra – an incantation, a calling-forth; a well-known term, yet still a word of mystery, often pronounced to the accompaniment of a simple waving of the hands down across the body from one side and then from the other.'

The magician's wand waving or figured incantations carve shapes in space, whilst the gestures of the conductor mark time in space. The patterns created by these movements are in some ways not dissimilar to the magician's wand waving. For example, each time signature has its own pattern or spatial structure that could be represented as a single line or series of lines. I chose to represent the Bliss time signatures using horizontal and vertical grid structures establishing a very different spatial arrangement from Thompson diagonal intersections.

Thompson's *Open Geometries* series includes paintings entitled *Stellar* (Figure 3) and *Chroma Chora* (Figure 4). The use of colour throughout the series is reminiscent of the works of post-revolutionary art of Varvara Stepanova and Alexandra Rodchenko. *Stellar* presents a star structure in linear form placed on a distressed painted background. Thompson's

<sup>3</sup> In music, the phrase articulation is associated with the quality and interaction of sounds between instruments and within the individual registers of instruments. The ability of the performer to interpret the intentions and to clearly articulate the music is significant in an accurate reading of a musical composition. Similarly, the control of the painters medium and in part the facility of the artist to articulate the visual elements clearly within a composition allow the audience to receive visual information in a way similar to that of a competent instrumental performance.

paint application is composed of many flat paint layers and the surface quality is design like in appearance. The paint surfaces reveal and expose the raw material of the support. Like Thompson, I respond to the changing condition of the picture surface, making both dramatic and subtle adjustments to the processes of composition as it unfolds. In a recent conversation with Dr Michael Spencer, with British composer and critical musicologist, we discussed the notion of chance and the hypnotic qualities of composition, with some of my comments as follows (taken from my exhibition catalogue *Uncertain Harmonies*) [12]:

'Mistakes or the use of deliberate visual obstacles can create something unexpected and exciting within a composition. For a time, these twists and turns take me away from my original intentions. They are part of my working process and keep my practice active.'

It is unclear whether Thompson's paintings are born out of design or chance although I expect chance plays an important role in her practice given the quality of paint surface and minimalistic nature of the compositions.

## **Music and painting**

The two art forms of painting and music do possess a number of shared associations that are similar whilst seemingly at odds with each other. Music is composed and performed within a given time or metre, whereas painting is not. The quality of sound, derived from a single note is defined by duration. Sound quality is characterised by articulation and phrasing through the composers use of musical contrast. For example smooth melodic lines juxtaposed with short quick staccato phrases are able to achieve both subtle and distinct contrasts. Visual contrast can be achieved using sensitive use of line and tone. Painting is a static art form, whilst music unfolds through time. The complex structure of a painting could be compared with that of the musical chord. Within a symphonic composition many chords can be heard at the same time, in the same way that the colour arrangements in a painting can be seen simultaneously. The painter has no control over the viewer, unlike the conductor who in a live performance is able to alert the listener to the first and last beat of the composition.

The differences I describe relate to musical performance. I chose to focus the *Tectonics* project upon the notion composition. It is in the examination of composition that one can begin to understand process, form and structure. I needed to identify a link common to both disciplines. The spatial arrangement of sound or ascribed time signature seemed like a logical place to begin. I decided to translate the upper and lower numbers of the Bliss time signatures to the respective picture planes within the series. In addition, I incorporated a further horizontal division based upon the number of instrumental parts in the Bliss orchestration. The time signatures and orchestration numbers were then used to establish the surface structure for the eight compositions. These two component parts of the Bliss composition provide a constant reference to the composer's intentions regarding the architecture of the symphony. The translation of the time signatures from the score to the surface of the picture planes created a two-dimensional grid structure. The scale and divisions of the grids cause a particular spatial sensation for each of the colour movements. However, I did encounter one problem with the Purple and Green movements, in that they both have the same time signature of four–four.

## Translation of time signatures to canvas

To ensure each colour movement had its own distinct grid structures I gave myself the freedom to sub-divide the grids in line with the tempo markings provided by Bliss. Subdividing rhythmic structures and patterns is common practice for conductors, composers and performers in the interpretation of difficult rhythmic structures. I therefore felt my decisions to do so was not out of the ordinary and in keeping with the nature of musical composition and this investigation. At the beginning of each colour movement, Bliss indicates one tempo direction. Bliss makes further changes to the tempo markings throughout the development of each movement. For the purpose of this project, I used only the directions given on the first page of each colour theme. (In future investigations I intend to explore making compositions based upon more than one tempo and time signature direction.)

Bliss provides the following tempo markings for each movement:

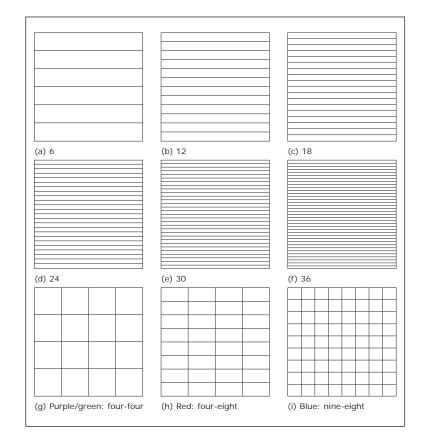
- Purple: Andante Maestoso (moderately slow-majestically)
- Red: Allegro Vivac (lively)
- Blue: Gently Flowing
- Green: Moderato (at a moderate speed).

The *Red* movement has a tempo marking that indicates a fast and lively metre. The time signature is in four–eight. In comparison, the *Purple* and *Green* movements have time signatures of four–four (or four quarter notes per bar). Their time signatures and grid structures indicates a slower tempo that are in line with the tempo markings: slow and majestic, and slow, respectively. If these terms relate to *Red*, the grid structures define the spatial arrangements of the picture plane. In the process of painting the presence of the grid reaffirms the composer's rhythmic intentions and provides a framework to compose and paint.

At the beginning of the practical exploration, I planned to make three groups of four paintings, twelve in all. I intended to represent each of the four movements of the symphony, with four groups of oil paintings. I decided to cut down the series to two groups of four. I also included a further painting to act as a composite piece based upon elements taken from the second group of four paintings. The first group of four paintings were to act as preliminary studies for the second group. I adopted both a systematic and intuitive approach to the studio practice. The practice regime and painting processes were both methodical and intuitive in their execution. For example, I began all of the preliminary and final paintings by employing the Bliss metres (or time signatures) as grid structures in each of the four groups of paintings. The grid structures where then re-drafted between each dry paint layer (which in turn establish a system in the painting practice). Colour reference was taken from examples of the Scottish colourist paintings found in the Feren's permanent collection from the same period as the Bliss symphony. The paint application itself bore no reference to any other external influence and was an intuitive response that was in keeping with my own emerging painting style.

Examples of horizontal structures based upon a divisions of 36 are shown in Figure 5, with examples of the grid shapes based upon the Bliss time signatures of, four-four (purple/green); four-eight (red) and nine-eight (blue), also shown.

Throughout the project I have kept a written and visual account of each paintings development. At times these photographic details provided unexpected and interesting observations. I began to measure and calculate the areas of interest so as to replicate the



**Figure 5** (a)–(f) Horizontal structures based upon a divisions of thirty-six; and grid shapes based upon the Bliss time signatures of (g) four–four, (h) four–eight and (i) nine–eight

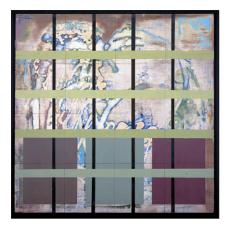


Figure 6 Kevin Laycock, Group One Green (2004)

visual effect in other paintings or within the same composition. I calculated the area of positive and negative space as a percentage and transposed the information onto a new or existing composition. *Group One Green* is an example of a painting developed using this proportioning system Figure 6. The three green squares at the base of the painting were proportioned using geometric structures found in earlier compositions.

*Composition One* takes elements from the structures of the preliminary studies and the final four works and presents them in one final composition Figure 7. As a musical idea presented within the same picture plane, *Composition One* could be considered

as a theme and set of variations; elements of forms and structures are represented and rerepresented in different locations and in different ways throughout the paintings. This idea is similar to both simultaneous representation<sup>4</sup> found in primitive forms of painting and in

<sup>4</sup> The technique of simultaneous representation can be seen in primitive and medieval painting. In particular, simultaneous representation is a common feature in early Egyptian figurative drawing and in early Christian painting, where characters from the gospel can be seen more than once within the same composition as their story unfolds.



Figure 7 Kevin Laycock, *Composition One*, oil on gesso ground, (2004),

the twentieth century movement of musical composition known as Serialism.<sup>5</sup> Simultaneous representation is not new to painting and drawing, nor is the concept uncommon in mid to late twentieth century music where musical rhythms and motifs are played out at the same time and in parallel.

In my recent *in conversation piece* with Dr Michael Spencer, I asked if there was a musical equivalent in style and or movement similar to that of the process of abstraction [12]. Spencer identified Serialism as a form of abstraction, and he cites the work in the early 1950s and 1960s of the German 'Darmstadt New Music Summer School' or the 'Dramstadt School' (as it later came to be known). The school was a centre for serial music written by composers such as Pierre Boulez, Bruno Maderna, Karlheinz Stockhausen, Franco Evangelisti, Luciano Berio and Henri Pousseur. Spencer identifies Boulez's composition *Structures 1A* as abstract, in both the choice of title and in that the work makes no reference to external stimuli as programme music would do. He refers to Stockhausen's composition from 1951 *Kreuzspiel* (meaning 'cross-play') as a literal reference to the process of crossing (the process crosses over itself as he's producing and generating material) [12].

The process by which the musical scale is configured and reconfigured, and employed to create a sound composition is some way similar to the principles of Cubist abstraction. As I pointed out to Spencer during our conversation piece [12]:

"...As a composer, are you composing with the material of sound and that material might be perceived as abstract in itself? The material of sound is audibly recognisable, whether it's the collective sound of an orchestra or the individual sounds of the instruments within the orchestra. There's seems to be a contradiction about the notion of abstraction in sound, in that the act of making music is a recognisable visual experience for the audience and the evidence of making music being the production of organised sound for both the viewer/listener."

In contrast, Spencer suggests that it is difficult to call any piece of music abstract, as the act of playing is a theatrical event and like musical performance abstract paintings are real objects in real space and time. At a conceptual level then it is easier to think about the process and structure of composition in abstract terms. Take for example the *Tectonics* series. The series was not based upon the concept of sensory perception alone (and by that I mean the visual effect). Much of the initial studio investigation was focused upon the translation of the

<sup>5</sup> The atonal scale differs from that of the melodic and harmonic scales in that all of the twelve notes get equal emphasis, with no notes dominating as they do in the major and minors modes. For Arnold Schoenberg, twelve-tone music dominated his composition in the 1930s and 1940s. Serialism became a significant movement in composition throughout the nineteen hundreds. This influence is seen mainly in the music of Schoenberg's students, Austrian composers Anton Webern and Alban Berg. In the 1940s, Olivier Messiaen of France and Milton Babbitt of the United States independently developed 'total serialism'.

structural features taken from the Bliss *Colour Symphony* and translated into a series of two dimensional picture planes. The series of paintings were categorised by Bliss' associations with colour symbolism. It is not uncommon for painters to translate music theory into their own practice, and Brian Evans provides useful models in his paper entitled 'Foundations of Visual Music' [13]. In contrast, examples of composers reworking the theories of visual composition in sound are less common (with the relatively recent exceptions of Andriessen, Feldman, Torke and Reich).

#### **Tonal colour themes**

Serial music, or atonal music, is characterised by its dissonant sound quality and its absence of a central key. In the visual arts the process and conventions of linear perspective allow the painter to construct pictorial illusions in an artificial three-dimensional space. Take away the conventions of perspective, abandon actual colour associations and perhaps what remains is something similar to Serialism. In the same way, the standard harmonic and melodic scales provide the composer with the basic building blocks of musical composition.

Serialist composers of the 1950s arrange other aspects of the music in addition to pitch, such as rhythm and duration, in a certain order or series. The single tonal colour themes in the final four paintings of the *Tectonics* series followed this sort of model. The themes created a uniform colour surface accented with complementary colour to heighten the viewer's response to the overall colour effect. The colour scales are not defined in terms of a musical scale but are random arrangements of the tonal qualities of the Scottish colourist paintings from the 1920s held in the permanent collection at the Ferens Art Gallery and Museum, Hull. Serialist composers of the 1950s arrange other aspects of the music in addition to pitch, such as rhythm and duration, in a certain order or series. The *Tectonics* series orders the geometric aspects of the picture plane against *Tachist*<sup>6</sup> mark making [14], and the notion of repetition and sequence were fundamental in the development of this work.

I felt the project needed to take into account both Bliss' associations with colour symbolism and the work of British painters active between 1920 and 1930. The Ferens Art Gallery collection of British pre-Second World War paintings provided an excellent resource. The collection enabled me to select specific works that best represented period examples of purple, red; blue and green in accordance with Bliss colour descriptions.

Bliss describes the colour movements and provides following tempo markings [15]:

- Purple: 'the colour of Amethysts, Pagentry, Royalty and Death'
- · Red: 'the colour of Rubies, Wine, Reverely, Furnaces, Courage and Magic'
- · Blue: 'the Colour of Sapphires, Deep waters, skies, Loyalty and Melancholy'
- · Green: 'the colour of Emeralds, Hope, Joy, Spring and Victory.'

During my initial visits to the Ferens Art Gallery, I identified two paintings to be of interest, one by Francis Campbell Boileau Cadel, *The Embroidered Cloak* (Figure 8), and the other by Samuel John Peploe, *Martagon Lilies* (Figure 9). Both of these artists belonged to a group, which was known from about 1923 as the Scottish Colourists. I selected the paintings for two

<sup>6</sup> Tachism is a term used from the early 1950s by the French art critic Charles Estienne to characterise Abstract painting where colour was applied in stains or blots, as for example in the work of Wols or Henri Michaux; it became a generic term for the European equivalent of Abstract Expressionism.



Figure 9 Samuel John Peploe (1871–1935), *Martagon Lilies*, oil on canvas (1920s) [image reproduced from: L Laycock, *Tectonics* (Leeds: Hull Museums and Art Gallery in conjunction with University of Leeds, 2005)]

**Figure 8** Francis Cambell Boileau Cadel (1883–1937), *The Embroidered Cloak*, oil on canvas (1920s) [image reproduced from: L Laycock, *Tectonics* (Leeds: Hull Museums and Art Gallery in conjunction with University of Leeds, 2005)]



different reasons. The Cadell portrait of a young woman seated provides the viewer with a composition upon which colour and pattern dominate. There is very little reference to the form of the sitter as the decorative cloak obscures any such view. The folds and bold patterning of this art deco inspired cloak provide the majority of the spatial and tonal arrangements within the portrait. My attention was drawn to this composition because of the tonal use of both complementary and non-complementary primary and secondary colour systems. For example, you can see in the cloak dark green set alongside larger areas of pale red (or pink) against dark green on pale blue. The complementary colours in the Cadell painting were to be a significant in the construction of the *Tectonics* series. Each of the group of two paintings was composed using one or more complimentary combinations.

As far as possible, I attempted to follow Bliss' directions from the notations on the score. The structure of the grids alone enabled me to create an illusion of what I describe as surface speed. In order to maintain a sensation of speed or rhythmic patterning, then the grid and horizontal structure needed to be introduced and reintroduced between each paint layer. Diluted oil paint (using refined turpentine) was applied in thin layers employing *Taschist* mark making techniques on a gesso surface. The surface was allowed to dry before being vigorously sanded back to reveal previous layers of imagery. Before the next paint layer was added the grid structures were reapplied in faint pencil line. It was my intention that the grid structures would also act as a reference point, a way in which to navigate the surface and proportion the composition during their development.

# Conclusions

This investigation has enabled me to recognise those areas that are more relevant towards informing my future practice. Recently, I have become increasingly interested in the composer's viewpoint and approach to composition. For the purpose of *Tectonics*, I have

invested more time in exploring questions relating both to the compositional devices or themes that link the two disciplines and to the significance of the relationship of the latter in contemporary painting practice.

I intend to explore the limits of integration between sound and visual imagery. This will involve extending my current practice beyond the realm of painting, to include mixed media practice in musical composition, projection and object making. This shift in practice will take the form of an innovative arts project combining a visual art commission and a parallel music commission in association with British composer Michael Berkeley and Peter Manning, concert master and conductor of the Royal Opera House Covent Garden, London, UK. The new suite of painting and objects will form the basis of a digital wallpaper based on the development of visual and audible information. The wallpaper will form part of a gallery installation along with a new recording of Michael Berkeley's music, as well as a group of paintings and mixed media objects.

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