

Stuart Greenbaum

String Quartet No.5 – Light from Distant Stars (2005 / 2012)

Analysis by the composer

18 July 2021

Background

This string quartet was written in memory of Matthew Grant Cole (15 June 1972 – 22 January 2005). Matthew Cole was a violin student of my wife, Marianne Rothschild, and a friend of us both. He was knocked off his bike on a morning ride in January 2005 and died at the scene. He was 32. The first movement of this string quartet, *Light from Distant Stars*, was written at short notice to be played at the funeral service. A sketch for another movement was written around that time but left unfinished. The *Processional* and *Amen* are based on that sketch, and in completing the work seven years later (2012) I sought to be true to the original intention.

The work is around 11 minutes long in three movements, each one shorter than the previous movement. The final movement ‘Amen’ is barely a movement at all in content and duration; but it is conceived as one, and therefore duly labelled as such:

1. *Light from Distant Stars*
2. *Processional*
3. *Amen*

Performance History

It’s hard to describe a funeral as a performance. More an offering, a gathering. But the first movement was nonetheless heard by people in a church in early 2005. Marianne played, joined by musician friends. People don’t applaud at funerals. There are no recordings or reviews. Its function is utterly different to the art music concert world. It was not an easy day, but I do recall feeling that it was important that we all turned up and did something.

After completing the full quartet seven years later, it received a full public premiere in Singapore with the Yoong Han Ensemble (YST Orchestral Hall, Singapore) on 21 September 2013 as part of the Asian Composers League Festival. The Australian premiere was given by Orava Quartet at the Huntington Festival (Musica Viva) on 20 November 2016. And they repeated that performance 6 days later as part of the festival’s final evening, accompanied by a live broadcast on ABC Classic. In December of 2020, the world was still in various stages of pandemic lockdown; and The Crossing Machine made a multitracked video recording of the work for Youtube:

<https://www.youtube.com/watch?v=UeOfH4ckRrs>

As Melbourne opened up a little further, The Crossing Machine were then able to perform the work live at Tempo Rubato on 2 May 2021.

1. Light from Distant Stars

The material for the 1st movement was originally sketched by hand in short score (grand staff) with the working title 'Conversations with Mr Cole':

Ex.1

The image shows a handwritten musical sketch on yellowed paper titled "CONVERSATIONS WITH MR. COLE". It consists of two systems of music, labeled A and B. System A is a grand staff with a treble clef on the top staff and a bass clef on the bottom staff. The top staff contains a series of chords and some melodic lines, while the bottom staff contains a rhythmic bass line. System B is also a grand staff with a treble clef on the top staff and a bass clef on the bottom staff. The top staff shows a melodic line with some ornaments, and the bottom staff shows a bass line. The sketch is written in purple ink.

Matthew was a great talker and writing music in memory of him felt like a conversation. The sketch shows 8 bars divided equally into an A phrase and a B phrase. The B phrase is not harmonically complete but reveals the bass line and rhythmic flow before again showing harmony. The phrase openings are built around a chordal motive with shifting quaver syncopation:

Ex.2

The image shows a printed musical score for Ex.2. It is a string quartet score in 4/4 time, marked "with empathy, ♩ = 100". The score is for violin I, violin II, viola, and cello. All parts are marked "pizz." (pizzicato) and "mp" (mezzo-piano). The violin I part has a "let ring" instruction. The score is divided into two measures. The first measure contains a series of chords, and the second measure contains a series of chords with some melodic lines. Below the cello part, there are five brackets with the numbers 3, 3, 2, 1, and 2 underneath them, indicating fingerings for the notes in the first measure.

The quaver repetitions outline cells of 3, 3, 2, 1 + 2 beats, each separated by a non-articulated quaver beat. The pizzicato strings play the rhythm together, outlining 5 chords in the first 2-bar phrase:

Ex.3

Dmin Amin/D Dmin Amin7 Gmin/Bb

These are all technically minor chords, some with altered bass notes (Amin/D) jazz chord extensions (Amin7) or in first inversion (Gmin/Bb). Harmonically it corresponds to an Aeolian mode in D. The full 8-bar harmonic introduction is completed by second phrase on the same syncopated rhythmic pattern, but slightly extended – outlining a further 7 chords:

Ex.4

Dsus2/4 Dmin/F Amin/C Dmin/F Amin7 F/Bb Gadd9/B

These chords are also altered, but still fit within the D Aeolian mode. The exception is the final chord, which features B natural, providing a chromatic lift. It is deliberately designed to avoid harmonic resolution in its own right; but rather to allow the progression to loop back to the start (Dmin) and repeat. The full progression of twelve chords is relatively tonal – though the altered bass notes, extensions and inversions not only provide harmonic colour but a degree of ambiguity. The progression only fully resolves upon return to the first chord. And a general avoidance of root position triads in the harmonic progression makes the return to D minor more pronounced at the start of each new cycle.

Melodic flow (often in the 1st violin) is overlaid against the harmonic chord cycle and first appears from letter A (episode 1):

Ex.5

Harmonically, the melody fits closely with the chord cycle, but adds some ornamental blues notes at bar 12 (such as Ab) to colour the D Aeolian mode. The following pitch scoop up to G is not necessarily exactly F#, but also an ‘outside’ note.

The first half of the melodic phrase (antecedent) is in hocket counterpoint with the lower pizzicato string syncopation, so that the arco melodic notes are placed in the gaps between the syncopated pizzicato notes.

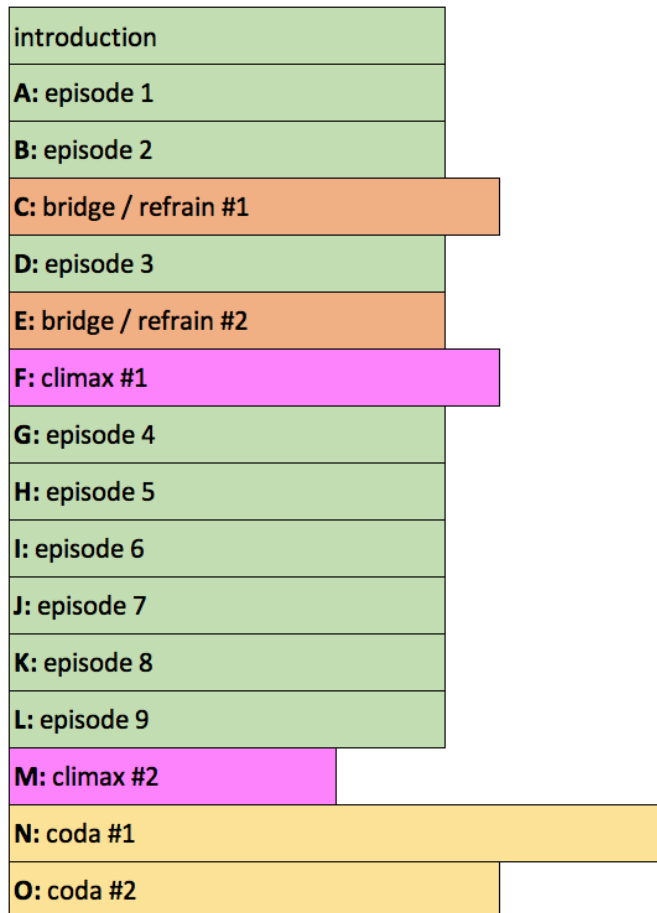
Ex.6

Having the singing arco melody in the violin against a pizzicato accompaniment is a technique influenced by Gabriel Fauré’s *Pavane* (1887). The same melody is varied and ornamented further in subsequent episodes, including appearing in inversion at letter H:

Ex.7

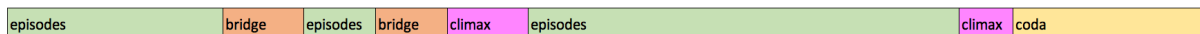
There are 9 episodes that follow the initial 8–bar introduction, and that structural repetition resembles a modified passacaglia or ground bass. A structural chart shows that repeating cycle:

Ex.8



The 9 episodes are all 8 bars in length. The first bridge and climax sections are a bar longer (9 bars) to break up the general 8–bar pattern. Both create a slight pause or hold-up before resuming the episodic flow. This chart can be further condensed into a single line to highlight the proportion of contrasting material:

Ex.9



The episodes generally build in intensity and constitute around 60% of the movement. The bridge and climax sections are generally shorter, functioning as more intense arrival points. The coda is of mid-length designed as a dissolve – like light from distant stars.

The bridge and first climax sections were also sketched by hand in short score:

Ex.10

The image shows a handwritten musical score on yellowed paper. It consists of two systems of staves. The first system is marked with a circled 'C' and contains two staves with notes and chords. The second system is marked with a circled 'D' and also contains two staves with notes and chords. The notation includes various musical symbols such as notes, rests, and chord symbols. The score is written in purple ink.

The bridge is marked 'C' and the 1st climax is marked 'D'. They are not yet fully complete in part-writing for string quartet; but the harmonic outline is clear.

The bridge/refrain occurs twice, relatively early in the structure. It's built around an oscillation of chords based on G and D, with some modal alternation (F natural / F#). It leads to an arrival chord built on C, notably with no 3rd (neither E nor Eb):

Ex.11

The musical score for Ex.11 is presented in two systems. The first system (bars 27-30) includes the following chord analysis above the staves: Gmin9 arco, D7sus2-4, D, Gmin9 flautando, Cadd9/E, and Dadd9/F#. The second system (bars 31-34) includes: Gmin9 ord., D7sus2-4, D, C11 (no 3rd), Cadd9/E, and Dadd9/F#. Dynamics are marked as *mf*, *sub p*, *f*, and *fp*. Performance instructions include *arco*, *flautando*, and *ord.* (ordained). The score is for violin I, violin II, viola, and cello.

This example has jazz chord symbols annotated above to show the harmonic progression. The music was not written with these chord symbols in mind – they represent analysis ‘after’ the fact. They again illustrate that while the music is somewhat tonal, most chords have either jazz extensions (added notes), suspensions or altered bass notes. And as with the episodes, the phrase ending is deliberately unresolved, leading back into the continuation of the episodes.

The arrival at bars 31–32 was subconsciously influenced by the chorus tag from the song *I Want it That Way* (1999) by the American boy band, Backstreet Boys. The rhythm is similar, and the melody is a close (non-exact) inversion. The harmonic context is different. Pop influences in my music are generally closer to 1970’s British Rock (Pink Floyd, The Who, Led Zeppelin, Deep Purple, Queen); but in this instance, looking back, I’d say that chorus tag somehow stayed in my musical memory bank.

The first climax at letter F is not only played double forte with the quartet in high register; it is also shifting around the sharp cycle of 5ths harmonically. From a D Aeolian pitch set of white notes and a Bb, it shifts up to B natural and F#, finally adding C# as the harmonic sequence rises to its apex.

Ex.12

This can be further reduced to chords in grand staff with chord symbol analysis:

Ex.13

What is again notable here is the that all chords have added notes and altered bass notes. Three of them are in 1st inversion (3rd in the bass); but that second chord – Gmaj9/A – is quite unusual and took some analysing. It is a 9th chord in 4th inversion (with the 5th omitted). Looking at it differently again, it could also be analysed as the final four notes of a B Aeolian mode (F#, G, A, B). The final two added note chords in 1st inversion correspond to the final two chords of the previous bridge (see Ex.11 above). And they in turn bear some resemblance to sustained harmonies found in the slow sections of Aaron Copland’s *Appalachian Spring* (1944).

The prevalence of 1st inversion chords in the harmony in some ways also connects back to Mozart; to be precise, the rising arpeggios sequence of the trombone solo in the Tuba Mirum from his *Requiem* (1791). In that example the rising sequence features pure triads. The Copland example is a little more complex with added tones; and the Tintinnabuli style of Arvo Pärt takes that idea further again – highlighting that diatonic/modal harmony can be quite dissonant with complex voicing of harmonies.

The 1st climax at letter F creates intensity through sequentially rising harmony with close-voiced seconds (like an anguished cry in the dark). The second climax at letter M is equally intense but somewhat more elated, arriving as it does on F major (in 2nd inversion) – the relative major of D minor; and it subsides back to another major tonality (Bbmaj13) by bar 110.

Ex.14

Fmaj7/C **Gsus2 (add6)** **C#(b5,b9)** **Dmin(add9)** **F** **Bbmaj13 (no 3rd)**
 rit. ----- (non dim.)

Actually, the Bbmaj13 has no 3rd (D) – but that is implied clearly in the previous bar. So while it’s a slightly open voicing, the ear tends to fill in the missing 3rd.

The final coda section from letter N features a slower tempo (crotchet = 92) and is harmonically based around Bb (the flattened 6th degree). The episode melody is prominent, but harmonic progression is frozen in time – unresolved through to the ending. It’s an image of dwindling light.

2. Processional

In a funeral, a processional is a ritual, often involving the carrying in and out of a casket or coffin bearing the deceased. When carried by people this is necessarily a slow and heavy motion. I was not asked to write for that part of the funeral, but I had sketches for it from around the time in question. It was slow (measured, crotchet = 48) and minimal, just a few simple cells contrasting regular quavers, triplet quavers and silence. The cells sketched were these:

Ex.15

A



B



C

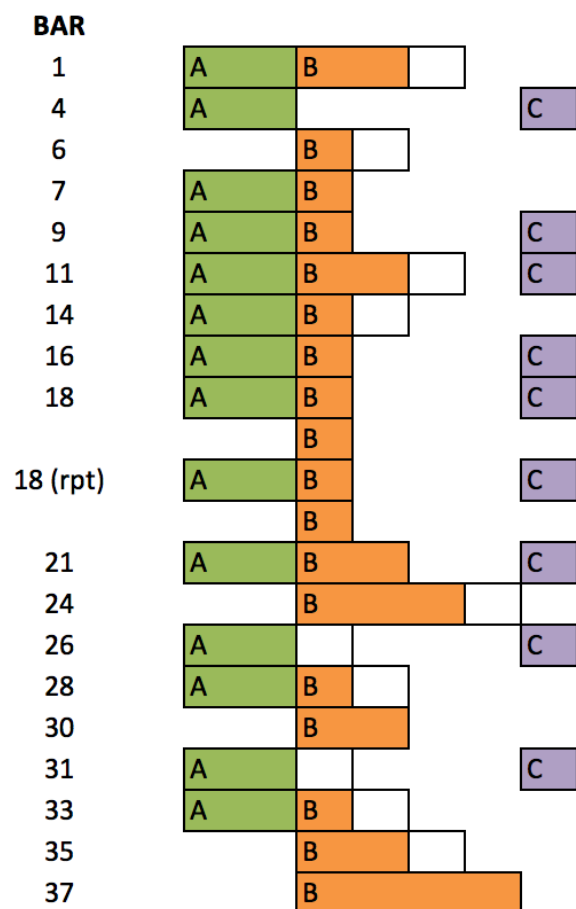


silence



Coming back to the work 7 years later, I arranged these harmonically and structurally in a composed way that felt like a ritual procession. I wanted a high degree of simple repetition; but I also wanted to subtly shuffle the order of events (and the register and density of the quartet scoring) so that it wouldn't feel stuck in a loop. The structure can be charted paradigmatically so that it reads like a book (left to right, line by line) but also shows columns of incidence (similar material):

Ex.16



The 'A' motive is always a single bar of 4/4 and features repeated F's (only) as two quavers, followed by three triplet quavers and followed again by two regular quavers. The 'B' motive features an E quaver anacrusis into a repeated E slurred up a semitone to F and again repeated. It's like an upward sigh. Sometimes it is sustained longer, and sometimes it is followed by silence (represented by an empty box). The 'C' motive is the most melodically active, functioning like a turn-around – two quavers followed by a triplet outlining the first 5 notes of a minor scale: 1–5, 4–3–2. The 'C' motive typically loops back into the 'A' motive, but on a few occasions to goes straight to the 'B' motive (bypassing 'A') which makes the underlying progression a little harder to predict.

Harmonically and structurally, the progression reaches its full connected flow and voicing by bars 18–20 which are repeated:

Ex.17

18 Dmin Dmin7 Dsus2-4 Dmin (add b6, 9) D (no 3rd) Fmaj9 Gmin13

The annotated chord symbols are, again, analysis after the fact. At the time of writing, I was aiming for an open modal sound (D Aeolian) but intuitively trying to add, remove or alter tones and bass notes in a way that seemed filtered and contemporary – yet also referencing the historical religious musical world of chant.

3. Amen

The final brief movement is around a minute and a half. It's a secular 'amen' built on only two chords: F and Bb / F. It's short enough to show in its entirety:

Ex.18

III: amen

tr tranquil, ♩ = 52

The musical score for 'III: amen' is presented in two systems. The first system (measures 1-5) begins with a tempo marking of 'tr tranquil, ♩ = 52'. It features four staves: Violin I, Violin II, Viola, and Cello/Double Bass. The key signature has one flat (Bb). The first three measures are in 4/4 time, and the last two are in 2/4 time. Dynamics are marked as *mf* in measures 1-3 and *pp* in measures 4-5. The second system (measures 6-11) continues in 2/4 time. Dynamics are *pp* in measures 6-8 and *ppp* in measures 9-11. Performance instructions include 'flautando non vib.' and 'ord.'.

The two chords literally represent a virtual text setting of the two syllables – ‘a–men’. It’s like a looping cycle of a plagal cadence with a sustained tonic pedal (F). The voicing of that is just slightly more complex as the C (5th) is also sustained as a pedal under the shift to Bb, creating a subtle diatonic cluster. That partial diatonic cluster is found also in the voicing of harmony throughout the work. Aesthetically, though, the music is calm, serene; as if it were saying ‘peace now’.

Additionally, while bars 4–6 are just a softer echo of bars 1–3, from bar 7, the rhythmic durations of the repeats are increasingly stretched out in time (longer duration). The implication is that it extends into infinity (unending). And that is the secular prayer: that our lives are not lost or over when we die. That our light (like that of distant stars) might continue to travel into the future.

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