

Commentary to Accompany Portfolio of Compositions

Benjamin Frederick Gaunt

Doctor of Philosophy

The Department of Music

Faculty of Arts and Humanities

The University of Sheffield

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Summary of Works & Recordings

All recordings are on accompanying USB drive unless stated otherwise.

1. Steamhouse Noir (c. 5')

for flute and cello

recorded by James Cairns and Michelle So, 26th April 2012: IABF, Manchester.

2. The Dust of Long Dead Stars (c. 4')

for flute trio

recorded by Tempest Flute Trio, 26th April 2012: IABF, Manchester.

3. Drenched in Neon and Endless Rain (c. 7')

for large ensemble

recorded by Sheffield Haydn Ensemble, 26th February 2012: Firth Hall, Sheffield.

4. Infected (c. 5')

for oboe

recorded by Christopher Redgate, 6th June 2012: Upper Chapel, Sheffield.

5. Seven Shrinking Machines (c. 8')

for small ensemble

recorded by Icarus Ensemble, 21st November 2012: Bates Mill, Huddersfield.

6. Three Catalysts (c. 6')

for trumpet and percussion (no recording)

7. Cataclysm (c. 7')

for orchestra

recorded by Sheffield University Symphony Orchestra, 12th May 2013: Firth Hall, Sheffield.

8. The Old Cataclysm Blues (c. 7')

for small ensemble

recorded by Ensemble 10/10, 16th October 2013: Cornerstone, Liverpool.

9. Revolution (c. 6')

for mezzo-soprano and small ensemble

recorded by Sounds of the Engine House, 10th March 2014: Firth Hall, Sheffield.

10. Zenir Nadith (c. 6')

for soprano saxophone and piano (no recording)

11. Factory Detritus (c. 6')

for piano four-hands (no recording)

12. The Inflation Ritual (c. 15')

for trombone

recorded by Heider Nasralla, 28th July 2014: Copenhagen.

13. Filling Rubin's Vase (c.10')

for small ensemble

recorded by Sarah Nicolls, Oren Marshall and the London Sinfonietta, 20th August 2014: University of Surrey.

14. In Absence of the Smoky God (c. 7')

for ten singers (video of installation and video of live conducted performance)

recorded by Nick Cox, Pete David, Roo Foxo, Devon Francis, Angela Galvin, Jim Ghedi, Lyn Hodnett, Keitu Motlogwa, Luke Poot, and Linda Lee Welch, 17th August 2014: Beehive Works, Sheffield.

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I am indebted to all the musicians, organisations and festivals that have performed, programmed and promoted my work, especially Sound and Music and Sensoria Festival, who enabled me to embark on career-changing projects.

Finally, I would like to thank my parents for doing all the things great parents do when their son says he wants to become a composer.

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1. Relinquishing Control

At the start of my doctoral studies, I was commissioned to write two short works that would feature in the same concert: *Steamhouse Noir* for flute and cello, and *The Dust of Long Dead Stars* for flute trio. Although *Steamhouse Noir* is a competent work, which explored many of my pre-doctoral concerns (mechanical textures, jazz inflections, and extended techniques), I consider *The Dust of Long Dead Stars* to be a far superior piece, an opinion reinforced by the positive audience response it received. It possesses a sense of excitement, vitality and completeness absent from the more austere *Steamhouse Noir*. I was intrigued by how two pieces written so close to one another could have such varied sonic impacts, and my attempts to understand this disparity fuelled my early doctoral research.

Both pieces contain elements of indeterminacy. *Steamhouse Noir* features a short, simple, box notation coda. By contrast, the guided improvisation in *The Dust of Long Dead Stars* is prominent, complex, structurally integral, and develops organically out of the opening material. Given that the more successful piece features improvisation more heavily, indeterminacy seemed a logical avenue to pursue further.



Figure 1 – box notation in *Steamhouse Noir*. In this example, both the flute and cello have been given two cells each. The flautist and cellist repeat their respective cells, independently and randomly swapping between the two for 15 seconds.

Rather than focus on developing new indeterminate techniques and notations, I instead challenged myself to integrate familiar indeterminate techniques into my existent compositional aesthetic. Consequently, I proposed two possibilities that I explored compositionally:

1. A piece mostly written using conventional notation, featuring a seamless transition to aleatoric notation, which satisfyingly concludes the piece, but is not discernibly aleatoric (ideally an audience member cannot hear that the piece uses aleatoric techniques, but if they can, they cannot tell when conventional notation ends, and aleatory begins).
2. A piece featuring guided improvisation, where the improvisation is structurally integral to the work, but is not discernibly improvisatory (ideally an audience member cannot hear that the piece is mostly improvisatory, but if they can, they cannot tell which elements of the piece are conventionally notated, and which are improvisatory).

I explored the first of these ideas in *Drenched in Neon and Endless Rain*, a work for large ensemble that features a box notation coda similar to *Steamhouse Noir*. In *Drenched in Neon and Endless Rain*,

however, the aleatory is more significant; it emerges seamlessly out of the previous section, references earlier material, and continues the piece's general feeling of descent.

The second idea was explored in *Infected*: the result of a series of workshops with oboist, Christopher Redgate. Here, the performer improvises within a number of limitations (including pitch range, speed, and section duration). At the end of each section, the oboist is instructed to play a short phrase which infects subsequent improvisation. Gradually, the improvisation becomes more complicated and manic as the number of infections increases. Thus, the improvisatory nature of the piece is not just crucial to its aesthetic, but also its structure and development.

After completing *Infected*, I attended a workshop in Italy with Icarus Ensemble, developing an inchoate piece that would later become *Seven Shrinking Machines*. I aimed to write something mechanical, angular and brutal, and devised a complicated sketch replete with guided improvisation, graphic notation, box notation, and independent tempi in an attempt to develop and extend my research into indeterminate music. The result was not musically satisfying; in using so many indeterminate techniques I had relinquished too much control. In previous pieces (particularly *Infected*) indeterminacy had aided the structure and aesthetic, but in this *Seven Shrinking Machines* sketch, aleatoric techniques were destructive. Rather than create an intricate, mechanical texture, the box notation and independent tempi possessed a cluttered, indistinct and unattractive quality. The overuse of improvisation and graphic notation resulted in a work that lacked a sense of narrative urgency. I came to the conclusion that I could write a more effective work if I abandoned indeterminate techniques.

2. Regaining Control

In re-evaluating the first four pieces, I noted the fourth most successful (*Steamhouse Noir*) had no discernible structure, the third most successful (*Drenched in Neon and Endless Rain*) had a somewhat discernible structure, the second most successful (*The Dust of Long Dead Stars*) had a clear structure and development, and the most successful (*Infected*) had a very clear structure and development:

Steamhouse Noir is shapeless, with no audible climax. I had intended soft, jazzy material to transform gradually into repetitive, mechanical cells, but the transition is not apparent enough for it to be successful and the resultant structure is unclear.

Drenched in Neon and Endless Rain was inspired by a descending Shepard tone, and is constructed of four sections. The first (bb. 1–48) is characterised by a clarinet melody rising through a chord sequence that begins at a high pitch and ends at a medium pitch. The second section (bb. 49–84) features a descending violin melody accompanied by a chord sequence that begins at a medium pitch, and ends at a low pitch. The third section (bb. 85–98) is a medium-pitch violin melody, over a low isorhythmic chord sequence. The fourth section (bb. 99–101) is a box notation coda that continues the sense of downward motion. Examining the piece in its entirety, the chords descend throughout, whilst the melody is arc-shaped (i.e. beginning low, rising to a highpoint at the centre of the work, and descending again).

The Dust of Long Dead Stars is a transitional piece; rather than having clearly defined sections, each section transforms seamlessly into the following section. A raucous opening gradually disintegrates into exuberant, overlapping arpeggios, which in turn collapse into a repeated staccatissimo motif, before melting into a quiet burbling that, after a short melody, vanishes into nothing.

Infected is another transitional piece insofar as it begins quietly, simply, within a small pitch range, and reaches a loud, complex climax using a larger pitch range. *Infected* instructs the performer to abide by certain restrictions when improvising, and with every new section, these restrictions change in a way that results in increasingly frenetic improvisation. Each individual section is not transitional, however (unlike *The Dust of Long Dead Stars*).

Singular Structures

In order to critique my own work, analyse the work of other composers, and write *Seven Shrinking Machines*, I coined the term ‘singular structure’. A singular structure is a piece of music or a section of a piece of music that is either:

- Transitional (i.e. has one or more criteria that changes gradually as the piece/section progresses, which is represented by an arrow)
- Static (i.e. has no criteria that changes gradually as the piece/section progresses, which is represented by a rectangle)

Drenched in Neon and Endless Rain is made up of two transitional singular structures, one static singular structure, and a final transitional singular structure, which combine to create one overarching transitional singular structure:

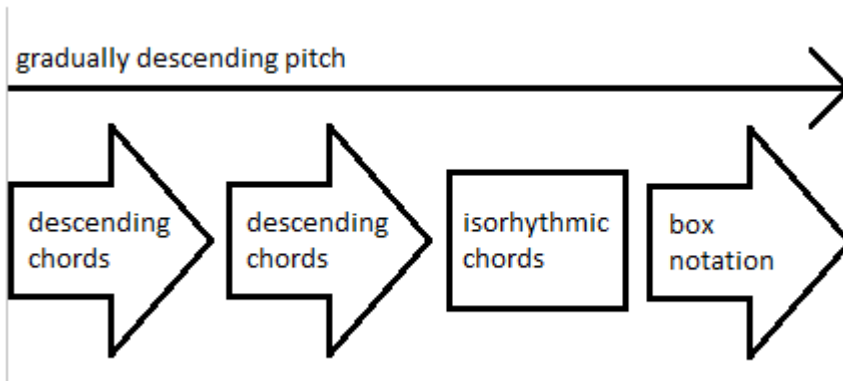


Figure 2 – structure of *Drenched in Neon and Endless Rain*

The Dust of Long Dead Stars is made up of five static singular structures, interspersed with four transitional singular structures, which combine to create one overarching transitional singular structure:

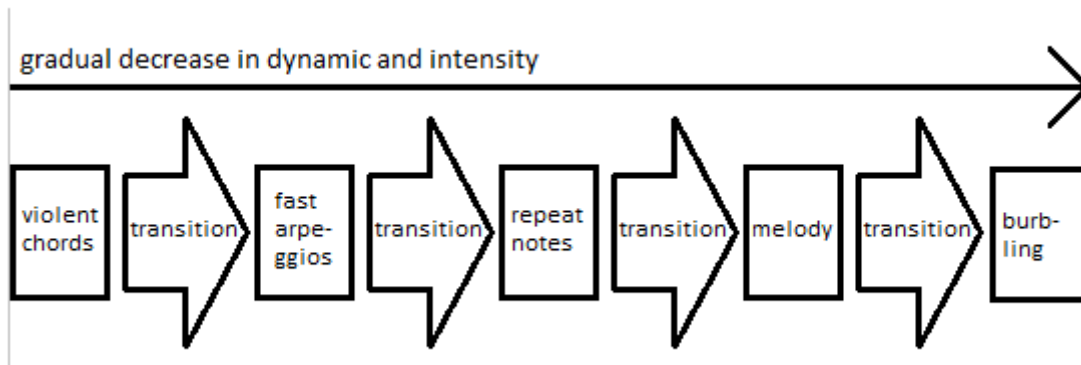


Figure 3 – structure of *The Dust of Long Dead Stars*

Infected is made up of nine static singular structures, which combine to create one overarching transitional singular structure, and a transitional singular structure coda:

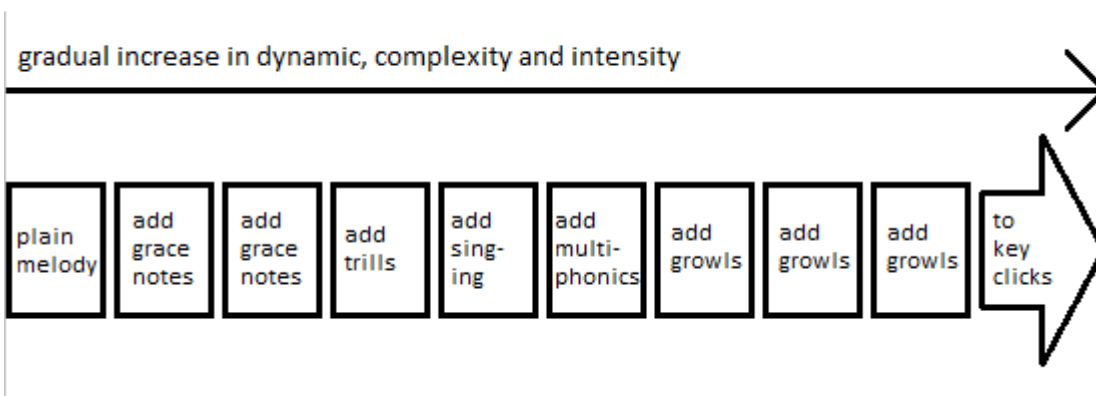


Figure 4 – structure of *Infected*

Of the four pieces, *Steamhouse Noir* is the least successful and is essentially structureless. The other three consist of an overarching transitional singular structure (although this is less audibly apparent in *Drenched in Neon and Endless Rain* than the other two works). The most successful piece is *Infected* which is comprised of an overarching transitional singular structure made up entirely of static singular structures; consequently, the piece's transition is not smooth but stepwise instead. *Seven Shrinking Machines* follows a similar model, but explores structure in a more methodical and mathematical way.

Putting Singular Structures into Practice

Seven Shrinking Machines is comprised of seven distinct sections, labelled A to G for analysis purposes. These seven sections are performed between one and seven times each, giving a total of twenty-eight static singular structures. At the start of the work, all seven sections (A to G) are presented in order. Then, section A is removed, and the remaining six sections (B to G) are presented in order. Then, section G is removed, and the remaining five sections (B to F) are presented in order. Then, section B is removed, and the remaining four sections (C to F) are presented in order. This process continues until there is only a single section (D) remaining:

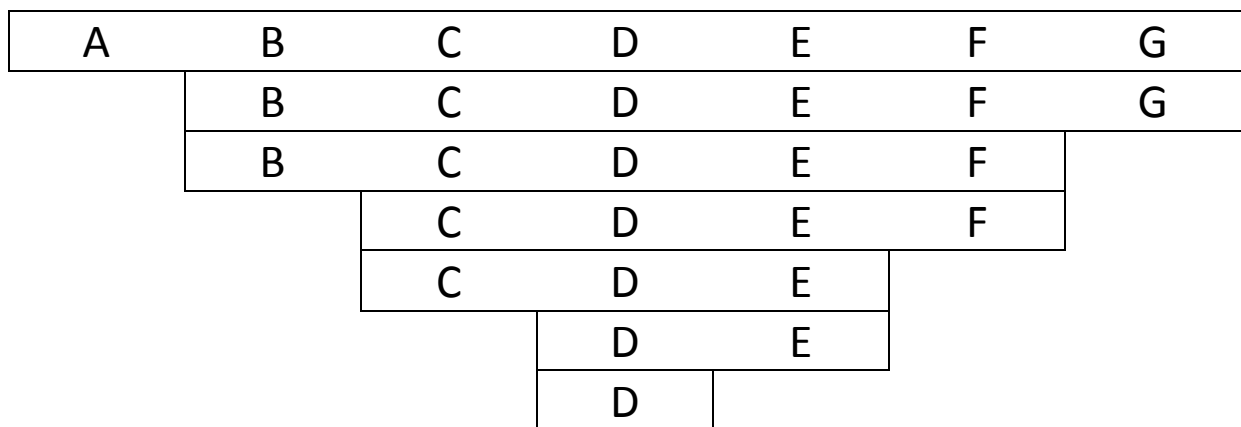


Figure 5 – structure of *Seven Shrinking Machines*

To aid the sense of structural shrinking, each section is two seconds shorter than the previous section, beginning with a 56-second A section and ending with a two-second D section. Additionally the highest note permitted in each section increases by a semitone so the piece begins with an A section where D4 is the highest note, followed by a B section where D#4 is the highest note, followed by a C section where E4 is the highest note. This process continues until the piece reaches its climax at the final D section, where F6 is the highest note.

As the piece progresses, it gets louder and higher in pitch, and through the decreasing lengths of successive sections, the piece feels like it builds momentum. Consequently, *Seven Shrinking Machines* gradually increases in intensity, and is therefore a transitional singular structure. In previous pieces, any overarching transitions (e.g. the increase in complexity in *Infected*) were a product of what was contained within each composite singular structure, and not a result of the structure itself. What makes *Seven Shrinking Machines* different is the increase in intensity is a direct result of the structural process. Satisfied with the quality of *Seven Shrinking Machines*, and happy

with the effectiveness of the structural process used to create it, I decided to devote the rest of my doctorate to experimenting with singular structures.

Three Catalysts consists of three movements each made up of three or four sections. The opening section of each movement features a near-identical trumpet melody (albeit with varying articulation, dynamics, mutes, and extended techniques). This melody is accompanied by the conga in the first movement, vibraphone in the second movement, and five temple blocks in the third movement. Each movement is an exercise in transition, and the percussion material acts as the catalyst for change.

In the first movement, 'Constant' the conga part remains unchanged throughout. After the initial melody, the trumpet part gradually becomes more rhythmical during the second section. In the third section, the trumpet part has become so mechanical that it is emulative of the conga part. The fourth section sees the trumpet part imitate the conga part in rhythmic unison. Therefore, the movement is a transitional singular structure, where the trumpet material gradually loses its identity and becomes analogous to the conga material.

The second movement, 'Changing', is also a transitional singular structure in which the instruments swap roles. In the first section the trumpet part is melodic, embellished with timbral trills. During the second section, the melody gradually disappears: timbral trills become semitone trills, then tremolandos of increasing interval width, before reaching perfect fifth tremolandos in the final section. The vibraphone part operates in reverse, beginning with perfect fifth tremolandos in the first section (acting as harmonic accompaniment to the trumpet melody). During the second section, these slow down, become staccato, and increase in interval width, climaxing in an octave deadstick melody in the third section.

The opening melody in the third movement, 'Absent', is accompanied by a temple block bisbigliando motif, which gradually disappears during the first section (initially played on five temple blocks, then four, then three etc.) During the second section, the trumpet part begins to emulate the temple block motif by vocalising, key clicking, and ripping up and down the harmonic series. In the third section, the temple block motif is gradually reintroduced, and is hocketed with analogous material in the trumpet. The fourth section, containing identical material in both instruments, acts as a coda to the movement and the piece as a whole.

Cataclysm is an attempt to subvert the structural process of *Seven Shrinking Machines*. In *Seven Shrinking Machines*, the length of each section decreases as the piece progresses, resulting in a structure that feels like it is shrinking and compressing. *Cataclysm* functions in the opposite manner; the length of each section increases as the piece progresses, resulting in a structure that feels like it is expanding and exploding. The content of each section in *Cataclysm* compliments the structural expansion; this is unlike *Seven Shrinking Machines*, where the content of each section bears little relation to the overarching structural process. The first section is a slowly pulsating chord: a static singular structure. The second section is a transitional singular structure, whereby the chord disintegrates and collapses in on itself, resulting in a unison burbling in the third section, accompanied by fragments of material. From the fourth section to the final eighth section, the piece decreases in textural complexity. The fourth section is made up of five independent parts (the burbling from previous sections, an arpeggio motif, a cello melody, a descending staccato figure, and

chords that fade in and out). In the fifth section, the burbling is removed and the other four parts remain (although the arpeggios are more intermittent, the melody is now higher and played on oboes and strings, the staccato figure has become more disjunct, and the chords are more prevalent). In the sixth section, the arpeggios are removed and the other three parts remain (the melody is now even higher, the disjunct figure is more prevalent, and the chords are gradually becoming shorter). The seventh section is essentially a duo between two distinct melodic lines; one of these is a continuation of the melody heard previously, the other is a variation of the staccato figure. The eighth section features a grand monody only. Consequently, the piece is a transitional singular structure because of both its structural process (gradual increase in section length) and material (gradual decrease in textural complexity). Furthermore, some of the sections feature transitional elements. For example, in the fifth section, the disjunct figure gradually becomes less staccato, culminating in its legato incarnation in the sixth section. Another example exists in the third section, where fragments of material in the flute and tuned percussion grow with each repetition, transitioning smoothly to the fourth section.

The Old Cataclysm Blues contains structural processes similar to those found in both *Seven Shrinking Machines* and *Cataclysm*. The opening (bb. 1–48) contains twelve static singular structures, of gradually increasing length, in a similar fashion to the expanding process in *Cataclysm*. As a consequence of this process, the material contained within each singular structure grows and develops: the range of the trumpet melody widens, the clarinet countermelody becomes more ornate, and a double bass glissando motif emerges and grows. The next section (bb. 49–102) is constructed using a contracting structural process, similar to that used in *Seven Shrinking Machines*. The start of each singular structure gradually becomes more violent and prominent, from the cello pizzicato notes of bars 49, 56 and 62, to the violin pizzicato dyads and double bass buzzes of bars 68, 73 and 78, to the snap pizzicato, overbowing and string slapping of bars 82, 86 and 89, to the glissandi and flutter-tongued chords that accelerate into the next section (bb. 103–167). This contains twenty static singular structures, of gradually increasing length. Each singular structure begins with the aggressive chord (heard earlier), followed by chaotic Dixieland material. The progressive increase in the length of each singular structure means the chords are heard less and less frequently, resulting in a perceived loss of momentum. A sense of deceleration is even more apparent in the final bars of this section (bb. 157–167), where note lengths increase and the tempo decreases. A short transitional singular structure (bb. 168–178), where a chord repeats and shrinks, concludes the piece.

Having composed a piece with a contracting structural process (*Seven Shrinking Machines*), a piece with an expanding structural process (*Cataclysm*), and a piece that combines both contracting and expanding structural processes (*The Old Cataclysm Blues*), I wrote *Revolution*: a piece with no structural process, constructed of six sections of equal length. The entire work is a transitional singular structure, however, as the vocalist's material becomes more prominent with each passing section. Initially, the singer is silent. Then, in the second section, she performs unpitched techniques, emulating the instrumentalists. The third section features the first pitched notes for the vocalist, albeit ones shared with other instruments (e.g. in bar 45, the singer's C#s are in unison with the oboe, and the A is in unison with the clarinet). In the fourth section, for the first time, notes are sung that are not shared with other instruments, but these are limited to a single pitch. In the fifth section, the singer performs an accompanied melody, which develops into an unaccompanied

melody in the sixth section. Additionally, many of these sections are transitional singular structures. The first section is the most simple: a rhythmically complex pattern gradually builds in layers. In the second section, every performer has an independent motif that becomes shorter with each repetition (e.g. the oboe motif lasts eleven beats (bb. 25–27). This is repeated, without the final beat, resulting in a motif that lasts ten beats. Then this is repeated without the final beat, resulting in a motif that lasts nine beats. This process continues until the motif has shrunk to a single note: the final B \flat of bar 44). In contrast to this reductive process, the third section is constructed using an additive process. The ensemble performs a single chord, then repeats this and adds a new chord, then repeats these two chords and adds a new chord. This process continues until the pattern of chords is ten beats long (bb. 59–61). The fourth section is a transitional singular structure, comprised of smaller transitional singular structures. Bars 62–67 contain ostinati that diminuendo and decay over nineteen beats. Bars 68–72 contain similar ostinati, totalling seventeen beats in length. Bars 73–77 contain similar ostinati, totalling fifteen beats in length. This process continues, shortening the length of each set of decaying ostinati by two beats, until the final one which is three beats long (bar 91). The fifth and sixth sections are both static singular structures.

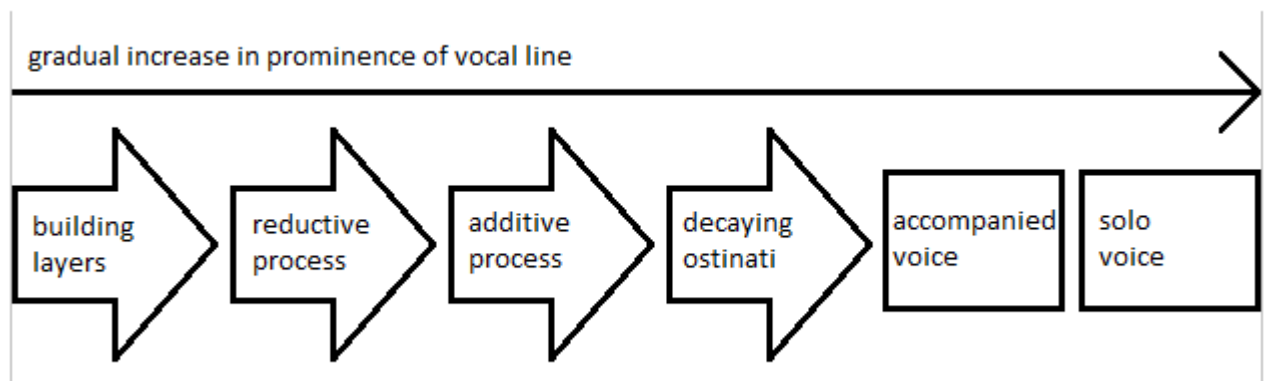


Figure 6 – structure of *Revolution*

Temporal Node Points

Zenir Nadith is essentially two simultaneous transitional singular structures. In homage to Conlon Nancarrow's *Study for Player Piano No. 21*, soprano saxophone material begins extremely quickly and gets slower, while piano material begins extremely slowly and gets quicker. Unlike the Nancarrow work, where the simultaneous acceleration and deceleration is smooth, the process in *Zenir Nadith* happens in stages. The piece is split into 23 sections, each of six bars. The first section features saxophone trills that gradually descend in pitch, and slow to semiquavers, accompanied by a single piano chord. The second section contains fewer saxophone notes (72), and two piano chords. The third section contains fewer saxophone notes (48), and three piano chords. From the fourth section onwards, the number of saxophone notes decreases by four, and the number of piano notes/chords increases by one. As a consequence of this process, the central twelfth section features an equal number of notes/chords in both instruments. Here, the saxophone and piano are playing in rhythmic unison. The remaining eleven sections are a mirror image of the first eleven; the number of piano notes/chords increases by four and the number of saxophone notes decreases by one. The piece concludes with a shrill saxophone wail, and a series of descending piano arpeggios

that get faster and lower – the opposite of the piece’s opening. Occasionally, the process yielded a rational ratio between the number of saxophone notes and the number of piano notes/chords (e.g. section 21 contains three saxophone notes and 48 piano notes, for a ratio of 1:16). On seven occasions, I chose to exploit these relationships and construct sections where the ratios can be easily heard (e.g. the 6:1 ratio of the sixth section is rendered as six triplet crotchet saxophone notes per bar, accompanied by a piano semibreve); I call these sections ‘temporal node points’.

Section	Number of Saxophone Notes	Number of Piano Notes/Chords	Temporal Node Points
1	Many	1	
2	72	2	36:1
3	48	3	16:1
4	44	4	
5	40	5	
6	36	6	6:1
7	32	7	
8	28	8	
9	24	9	
10	20	10	
11	16	11	
12	12	12	1:1
13	11	16	
14	10	20	
15	9	24	
16	8	28	
17	7	32	
18	6	36	1:6
19	5	40	
20	4	44	
21	3	48	1:16
22	2	72	1:36
23	1	Many	

Figure 7 – structure of Zenir Nadith

Although the majority of sections are static singular structures, a few are transitional singular structures; for example, the central section contains twelve chords of six notes, five of which are played on the piano, and one performed on saxophone. The saxophone plays the lowest note of the first two chords, the second lowest note of the next two chords, and the third lowest note of the next two chords. This process continues until it is playing the highest note of the final two chords. This swapping of roles in this section (the piano higher than the saxophone at the beginning, the saxophone higher than the piano at the end) echoes the overall structure of the piece (the piano slower than the saxophone at the beginning, the saxophone slower than the piano at the end).

The Inflation Ritual is a transitional singular structure, consisting of sixteen movements that progressively grow in length, pitch range, volume and complexity. Initially, the opening movements are relatively shapeless, with little variation in dynamic and pitch. As the piece progresses, the movements become more prominently arc-shaped. These arcs increase in size, so the later

movements span the entirety of the trombone’s range. The final arc is so large that it overinflates, and the piece ends with a 90-second descent symbolic of the piece collapsing in on itself. Throughout the first five movements, the trombonist is muted and facing away from the audience. The trombonist turns to face the audience but remains muted for the following four movements. The trombonist is unmuted for the next four movements, and then plays into a snare drum for the final three movements. This progression – from a subdued tone to a raucous, distorted one – emphasises the piece’s sense of inflation and growth. As the piece develops, it also becomes increasingly complex. The first movement contains just one idea; long notes with varying levels of vibrato. The second movement is similar. The third movement contains two ideas: the long notes are bookended by short mechanical motifs. The fourth movement is similar. The fifth movement contains three ideas, as does the sixth movement. The seventh movement contains four ideas, and the eighth movement is similar. This process continues until the final two movements, which each contain eight distinct ideas. The four ideas emerging in the centre of each movement are labelled A–D, and the four at the ends of each movement W–Z:

- A – long notes with varying levels of vibrato
- B – rapidly tongued glissandi
- C – syncopated augmented triads
- D – tremolando minor thirds
- W – notes performed with oo-ee mouthshape
- X – large glissandi with singing and growling
- Y – small glissandi
- Z – mechanical motifs

Each movement is constructed as follows:

Movement	Structure
I	A
II	A
III	Z A Z
IV	Z A Z
V	Z B A B Z
VI	Z B A B Z
VII	Z Y B A B Y Z
VIII	Z Y B A B Y Z
IX	Z Y C B A B C Y Z
X	Z Y C B A B C Y Z

XI	ZYXCBABCXYZ
XII	ZYXCBABCXYZ
XIII	ZYDCBABCXYZ
XIV	ZYDCBABCXYZ
XV	ZYXWDCBABCDCWXYZ
XVI	ZYXWDCBABCDCWXYZ

Figure 8 – structure of The Inflation Ritual

Thus, the arc shape of each movement is influenced not only by the pitch and dynamic contour (a low, quiet opening; a loud, high middle; and a low, quiet end) but also by its nonretrogradable structure.

3. Interval Palettes

My love of puzzles, patterns and mathematics manifests itself in the logic of the singular structure methodology. Similarly, a lot of the pitch material in my music is constructed using numerical processes and restrictions. In order to generate pitch content, I have devised a method of restricting intervals that I call interval palettes. For example, an interval palette of 1/3/5 means I restrict myself to using minor seconds (1), minor thirds (3), perfect fourths (5), and the inversions of these intervals; perfect fifths (5), major sixths (3) and major sevenths (1). Intervals not contained within the palette are not used, but they can still be reached by using combinations of permitted intervals. For example, in 1/3/5, a major third (4) is forbidden; however, the perfect fourth can be outlined by using a combination of 1, 3 and 5 intervals, as shown in the examples below:

Figure 9 – three different methods of using 1/3/5 to outline a perfect fourth

Example I shows that the E cannot immediately follow the C as major thirds are forbidden in 1/3/5. Examples II, III, and IV indicate different ways in which the E can be achieved, using permitted intervals.

I also use interval palettes to generate harmonic material; for example, 1/3/5, can generate a wide variety of chords:

Figure 10 – chords constructed using 1/3/5 (the numbers below indicate the intervals used)

Using only certain intervals gives the chords a particular quality that would not be present if a different interval palette was used; however, since pitches are not restricted (any pitch can be heard as long as the interval palette permits its existence) a composer has control over the range, colour and pitch density of each chord.

There are a number of interval palettes that are difficult to use effectively. For example, $1/2/3$ is quite restrictive as it only allows for very small or very wide intervals, and eliminates fourths and fifths of any kind. $4/5/6$ can result in some lovely harmonic material, but the lack of small intervals makes melodic writing hard. Mathematically, when one interval palette number is a divisor of another, the resultant interval palette is likely to be restrictive. Consequently, $2/4/6$ is probably the least useful interval palette as two is a divisor of both four and six, and any resultant harmonic or melodic material will inevitably conform to the whole-tone scale.

Much of the melodic and harmonic material in *Three Catalysts* is constructed using $1/3/5$. Given that the outer movements feature unpitched percussion (and thus an absence of harmony), the interval palette is used only to create the winding trumpet melody. The central movement contains a vibraphone part, however, which provides harmonic accompaniment, and therefore $1/3/5$ is used to construct both melodic and harmonic material. In the opening section of *Changing* (bb. 1–19), the vibraphone performs perfect fifth tremolandos; the interval between one tremolando and the next always adheres to $1/3/5$ (as shown below). In the middle section (bb. 20–44), the trumpet begins performing timbral trills, which become semitone trills, then tremolandos that expand in interval, all of which conform to $1/3/5$ until they are perfect fifths (emulating the vibraphone's opening material). In the middle section, the vibraphone also goes through a process of interval expansion; the perfect fifth tremolandos become major sixths, major sevenths, then octaves (all permitted in $1/3/5$). Thus, even when other processes are taking place, the trumpet and vibraphone both adhere to the interval palette technique; however, this interval palette only applies to each individual instrument – incidental harmonies created by simultaneous pitch in both instruments do not necessarily conform to $1/3/5$.

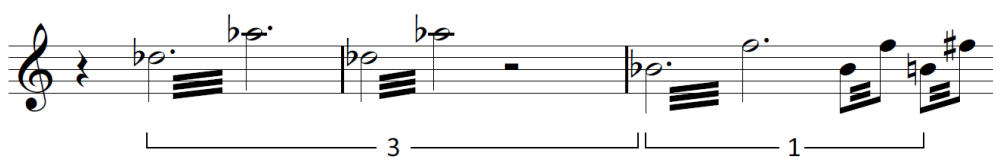


Figure 11 – vibraphone material in the second movement of *Three Catalysts* is constructed using $1/3/5$

The Old Cataclysm Blues features a more complicated use of the $1/3/5$ interval palette. In the opening section (bb. 1–48), the trumpet part is generated using the interval palette, except for the acciaccaturas, which are always a semitone away from the note that follows. At the start of each singular structure (marked by double barlines), the clarinet begins on the same note as the trumpet, but diverges into elaborate acciaccatura flourishes and long notes, all of which conform to $1/3/5$. The violin and cello also begin each singular structure on the same note as the trumpet, and then independently slide downwards, in accordance with the interval palette. Harmonies between the violin and cello often conform to $1/3/5$. The second section (bb. 49–102), features singular structures (again, marked by double barlines) all of which begin with a chord. The first chord (b. 49)

features a unison concert D in the clarinet and cello, and a concert A in the trumpet, creating an interval of a perfect fifth, which is permitted by 1/3/5. As the section progresses, the chords that begin each singular structure (which become louder, denser and more aggressive) all adhere to the interval palette, as do the climactic chords at bars 98 to 102. These chords form the backbone of the next section (bb. 103–167); each of the twenty singular sections begins with one of these chords, and continues with Dixieland-inspired material that melodically adheres to 1/3/5.

The opening to *Revolution* (bb. 1–24) features four independent ostinati, each of which adheres melodically to the 1/3/5 interval palette. As the piece develops, the melodic material undergoes other processes, and the influence of the interval palette decreases. However, the 1/3/5 interval palette returns in the final two sections (bb. 92–116 and bb. 117–148), where it is used to construct the vocalist’s melody.

Although *Cataclysm* does not strictly adhere to an interval palette, certain sections do feature specific intervals prominently. For example, in order to achieve a sense of expansiveness and power in the final section, only ascending and descending major thirds and descending perfect fifths were used. During the early stages of composition, I had intended the work to be written using strict interval palettes. However, as the piece developed it became clear that some of the more complex textures would be impossible to realise in this manner, and so the technique was softened.

Seven Shrinking Machines features a more complex use of interval palettes than any of my other works. Rather than using a single palette throughout, the palette changes in accordance with the overall structural process. The first seven sections (A to G, bb. 1–89) are all constructed using the 1/2/5 palette. As per the structural process, A is removed, and the following six sections (B to G, bb. 89–146) are constructed using a different palette (1/2/6). Therefore, although similar material is presented in both the first B section (bb. 15–28) and the second B section (bb. 90–100), the character and colour is altered slightly on account of the fact that different intervals are permitted and forbidden. This pattern continues – every time a section is eliminated the palette changes, as shown below:

ABCDEFG	BCDEF	BCDEF	CDEF	CDE	DE	D
1/2/5	1/2/6	1/3/4	1/3/5	2/3/4	2/4/5	2/5/6

Figure 12 – interval palettes in *Seven Shrinking Machines*

There are a total of 20 three-number interval palettes; in order to create *Seven Shrinking Machines* I selected my favourite seven. There is a systematic approach to the order in which these seven palettes appear. Given that the smallest numbers result in the largest non-compound intervals (e.g. 1 permits use of a major seventh, 2 permits use of a minor seventh), as well as the fact I wanted to achieve a sense that the piece is shrinking, the numeric value of the palettes increases as the piece progresses.

I tend to use interval palettes containing three numbers; I have found using only two numbers to be rather restrictive (useful, perhaps, for a single melodic line or a short section but less suitable for anything more substantial) and four numbers to be too permissive (allowing so many intervals that it is barely worth employing the palette).

4. Rhythmic Techniques

Whilst I often use structural processes and pitch generation processes in order to devise entire pieces, I tend to approach rhythm more intuitively. Prior to my doctoral studies, I composed a long alto saxophone work where the rhythm was constructed using a complex mathematical process. I intend for singular structures and interval palettes to be audible (i.e. these processes and restrictions have a noticeable effect on the outcome of the piece), and I feel they give me control over development and pitch content. The rhythmic process used in the alto saxophone work was not audible (I believe I could have written something equally effective without the process), and was more time consuming than if I had written intuitively. Consequently, I tend to avoid using large-scale rhythmic processes (i.e. processes that generate the rhythmic material for an entire work). I do, however, use small-scale rhythmic processes (i.e. processes that generate the rhythmic material for a section) if I believe they are audible and beneficial:

Inspired by minimalist phase shifting, ‘independent ostinati’ is a technique featured in *Seven Shrinking Machines*, and *Revolution*. In order to create independent ostinati, there must be two or more simultaneous musical lines. Each line consists of a repeating cell of a different duration to the cells in other lines. For example, in *Seven Shrinking Machines* (bb. 29–41) the flute cell is four crotchets long, the clarinet cell is five crotchets long, the accordion left-hand cell is six crotchets long, the electric guitar and accordion right-hand cell is seven crotchets long, and the percussion and bass cell is ten crotchets long. This creates a complex texture of cross-rhythms, simultaneously static and fluid, possessing a mechanical quality.

A similar technique is used in the fourth section of *Revolution* (bb. 62–91). The opening six bars of this section are constructed using a four-crotchet clarinet cell, a five-crotchet cello cell, and a six-crotchet oboe cell. Although these cells repeat (and therefore form independent ostinati) they also go through a decaying process; for example, the first oboe cell (bb. 62–63) is a five-note melody. The first time it repeats, the D is removed, and it becomes a four-note melody. On the second repetition, the C is removed, and it becomes a three-note melody. The clarinet and cello parts go through a similar reductive process, resulting in a mechanical texture that disassembles.

In the sketches to *Seven Shrinking Machines*, I experimented with superimposed tempi. Although I eventually abandoned the sketch, I decided to use a similar technique when composing the Dixieland section (bb. 103–167) in *The Old Cataclysm Blues*. In the *Seven Shrinking Machines* sketch, I had used box notation and written instructions to realise superimposed tempi. In *The Old Cataclysm Blues* I aimed to achieve a similar effect using standard notation, in order to balance chaos and accuracy. Although this technique occurs throughout the Dixieland section, bar 121 is a particularly good example. Here, the bassoon is playing a rhythm that alternates between crotchets and quavers, achieving a slow swing. Simultaneously, the violin is playing a triplet crotchet and quaver rhythm, achieving a faster swing, and the clarinet is playing a nonuplet quaver and semiquaver rhythm, achieving an even faster swing. For every four bassoon notes there are six violin notes, and nine clarinet notes. Consequently, the violin swing is 1.5 times as fast as the bassoon swing, and the clarinet swing is 1.5 times as fast as the violin swing, resulting in the illusion of three different, independent tempi.

The image displays a musical score for the piece 'Seven Shrinking Machines'. It features six staves: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Electric Guitar (E. Gtr.), Bass, and Accordion. The score is in 4/4 time. Each staff contains a repeated rhythmic cell, highlighted by a grey box. The Flute part consists of a sequence of eighth notes. The Clarinet part features a triplet of eighth notes. The Percussion part has a triplet of eighth notes. The Electric Guitar part has a sequence of eighth notes. The Bass part has a triplet of eighth notes. The Accordion part has a sequence of eighth notes. The score is divided into three measures, with the repeated cells appearing in the first and third measures of each staff.

Figure 13 – independent ostinati in *Seven Shrinking Machines* (boxes indicate the length of each repeated cell)

I use isorhythms in bars 85 to 98 of *Drenched in Neon and Endless Rain* in the bassoon, French horns and double bass. Here, a repeated pattern of seven chords is applied to a rhythm of five notes. This is accompanied by a repetitive violin melody of a different duration to the isorhythm, thus resulting in independent ostinati.

Much of my music is pulse-driven; even when rhythms are complex (and independent ostinati or multiple simultaneous tempi are used) there often exists an audible sense of pulse. There are times, however, when it is desirable to obscure the beat using 'written-out rubato'. Rather than compose a musical line using simple rhythms and give the performer control over the temporal ebb and flow, I maintain control by artificially inducing a sense of rubato (using ties, duplets, triplets, nested triplets and other rhythmic devices that can hide or distort the pulse).



Figure 14 – the lower melody is a written-out rubato version of the upper melody

I have used written-out rubato in a variety of ways:

1. I often write two or more simultaneous lines that undergo independent rubato, and therefore I have complete control over how these lines rhythmically interact;
2. I have experimented with combining rubato and non-rubato material (e.g. bars 55 to 67 of *Seven Shrinking Machines* features a written-out rubato guitar and flute melody accompanied by a rhythmically regular motif on the clarinet);
3. I artificially emulate an accelerando or ritardando without changing the underlying tempo, which I achieve by progressively decreasing or increasing note lengths (e.g. the trumpet melody in bars 68 to 70 of *The Old Cataclysm Blues*). Occasionally, I write multiple musical lines that independently increase or decrease in speed at different rates, (e.g. in bars 162 to 167 of *The Old Cataclysm Blues* the clarinet, bassoon, violin and double bass all undergo independent ritardando; in each part note-lengths gradually increase, but at different rates, so no two parts are rhythmically synchronised).

5. An Aesthetic Study of Seven Shrinking Machines

For as long as I have been composing, I have loved the music of Stravinsky and Messiaen. In particular, I have been drawn to the way in which these composers juxtapose contrasting blocks of musical material. Shortly before composing *Seven Shrinking Machines*, I had revisited a work that I had admired as a teenager; *De Snelheid* by Louis Andriessen. In essence, then, *Seven Shrinking Machines* is an attempt to combine the block forms of Stravinsky and Messiaen with the structural clarity of the Andriessen, resulting in a piece comprised of seven distinct, contrasting sections:

A (bb. 1-14) – The steam/breath sounds of Section A are influenced by both Steampunk (a subgenre of science fiction, inspired by the Industrial Revolution) and Peter Ablinger's *Violine und Rauschen (Veronica)*. I experimented with using white noise as a way of unifying the timbres of the various acoustic, electronic and unpitched instruments. (Air sounds have appeared in a number of pieces written both before and after *Seven Shrinking Machines*, including *Steamhouse Noir*, *Three Catalysts*, and *The Old Cataclysm Blues*). The chords that appear in both the vibraphone and electric guitar are another attempt to unify timbre; the dyads are in unison and the motor and harmoniser add a similar vibrato to both instruments. The pitches themselves outline the three intervals present in the interval palette (minor second, major second, and perfect fourth).

B (bb. 15-28, 90-100, 147-154) – Section B possesses what I consider to be an apocalyptic aesthetic, characterised by the slow, distorted melody and metallic vibraphone interjections (both of which are inspired by *At the Heart of It All* by Aphex Twin), accompanied by siren-like glissandi. Immediately prior to writing this piece, I had been listening to *Asyla* by Thomas Adès; the clamorous gong opening may have influenced the ritualistic bell plate and cymbal material in this section.

C (bb. 29-41, 101-110, 155-161, 181-185, 199-201) – Since hearing Harrison Birtwistle's *Carmen Arcadiae Mechanicae Perpetuum* and Martin Butler's *Jazz Machines* whilst an undergraduate student, I have become fascinated with musical representations of machinery. This drives the clarity of the structure of *Seven Shrinking Machines*, and much of the musical content too. Section C is the most perceptibly mechanical section of the work; a consequence of the independent ostinati, syncopated rhythms and metallic sounds (muted electric guitar, slap bass, and unpitched percussion).

D (bb. 42-54, 111-120, 162-168, 186-190, 202-204, 207-208) – In contrast to other sections, D is unique insofar as all instruments play similar material in rhythmic unison. The melody (performed by flute and vibraphone) adheres to the interval palette horizontally, whilst the harmonic material (performed by all other instruments) adheres to the interval palette vertically. Although not directly inspired by it, this section reminds me somewhat of the final movement of Bartok's String Quartet No. 6, particularly the winding melody constructed of small intervals, the doleful harmonic content, and the shimmering chords similar to Bartok's sul ponticello chords in bars 75 and 76.

E (bb. 55-66, 121-129, 169-174, 191-194, 205-206, 209) – Rather than being constructed of entirely new material, Section E is a combination of elements from other sections. The flute and electric guitar melody is similar to the one found in Section D; winding, harmonically ambiguous and constructed of relatively short intervals. Additionally, both instruments perform essentially the same material in an attempt to unify acoustic and electronic sounds (like Section A). The intricate clarinet

motifs are comparable to the frantic scalar passages in Section F. The repetitive, disjointed accordion rhythms have a mechanical quality to them, and are therefore reminiscent of Section C.

F (bb. 67-78, 130-138, 175-180, 195-198) – In Section F, fast, intricate crossrhythms create a sense of speed and frantic energy. The semiquavers in the clarinet, percussion, and bass guitar, quintuplet semiquavers in the synthesiser, and sextuplet semiquavers in the accordion result in a rhythmically complex texture. In other pieces (e.g. *Cataclysm*, *The Dust of Long Dead Stars*, and numerous pre-doctoral works) I have rendered similar textures using box notation or text instructions. Here, inspired by the exhilarating opening to David Horne's *Concerto for Orchestra* and the marvellous Presto from Elliot Carter's *Clarinet Concerto*, I chose to notate conventionally.

G (bb. 79-89, 139-146) – Section G is the result of extensive workshopping, and was an attempt to make a simple gesture (an ascending flourish) as interesting and colourful as possible.

The coda (bb. 210-234) combines both the tremolando chords of Section D and the white noise of Section A. While the chords remain the same length, the white noise increases in duration with each repetition until it is identical to the first three bars of the piece. The final dyad (bar 234) continues the pattern of expanding intervals explored in bars 4, 9, and 14.

One of the most challenging aspects of writing this work was deciding the order in which the sections appeared (and therefore, the order in which they disappeared). The difficulty was in imagining what material would be most suitable at the piece's climax, what material would sound effective at higher transpositions (because the pitch ascends as the piece progresses), and what material would only work at the beginning of the piece. During the workshop, I discovered Section B, C, D, and E sounded suitably aggressive and energetic at high volume, and they therefore formed the climax. The tranquillity and ethereality of Section A made it ideal material for both the introduction and coda.

6. Time Proportion

...it has often been claimed, especially since Kant, that music is an art of time, if not *the* art of time.¹

My desire to control duration is a reaction to the music I wrote before I began the doctorate. Two compositions in particular (a solo alto saxophone work and a piece for soprano and megaphone) were overlong; there was no sense of structural inevitability, no connection between duration and material. A reduction in length would not have necessarily resulted in a reduction of meaning or impact. Influenced by my dissatisfaction with the duration of both works, I became interested in finding a way to compose pieces that felt like they were the 'right' length.

I became curious about Bartók's close connection with the law of the Golden Section² and Cage's experiments with micro-macrocosmic rhythmic structures,³ where both composers treat duration and proportion as quantitative data. In order to control the overall length of pieces, I decided I must control the duration of sections and the proportional relationships between them.

For Cage's micro-macrocosmic structures to be audibly proportional (in order for the listener to appreciate the symmetry between the length of phrases and the length of sections), the listener must have an unwaveringly accurate sense of the passage of time. This is rarely the case, however, as there are a number of musical and extra-musical conditions that affect temporal perception. These include repetition and alteration of material,⁴ complexity of material,⁵ number of events,⁶ familiarity and predictability,⁷ expectancy of an event to occur,⁸ unpleasantness of stimuli,⁹ body temperature,¹⁰ caffeine intake,¹¹ and drug intake.¹² In his book *Time and Free Will*, French Philosopher Henri Bergson concluded that duration is not a mathematically divisible extensity, but rather an internal experience.

Duration properly so called has no moments which are identical or external to one another, being essentially heterogeneous, continuous, and with no analogy to number.¹³

¹ Philip Alperson, "Musical Time" and Music as an "Art of Time", *The Journal of Aesthetics and Art Criticism*, Summer 1980, p. 407.

² Ernő Lendvai, *Béla Bartók: An Analysis of his Music* (London: Kahn & Averill, 2000), p. 18.

³ James Prichett, *The Music of John Cage* (Cambridge: Cambridge University Press, 1996), p. 16.

⁴ Karlheinz Stockhausen, 'Structure and Experiential Time', English edition of *Die Reihe* musical journal, 1958, p. 64.

⁵ Harvey Richard Schiffman, *Sensation and Perception: An Integrated Approach* (New York: John Wiley & Sons, 1996) p. 496.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid., p. 494

¹¹ Ibid.

¹² Ibid.

¹³ Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (New York: Dover, 2001), p. 120.

Given my desire to employ processes that have an audible effect (e.g. singular structures, interval palettes etc.), how am I to control the proportions of sections if duration is an indivisible, internal experience and a listener's temporal perception is affected so easily by internal and external factors? Through composing, I have learned that by deploying a number of principles, the internal and external factors affecting temporal perception are ameliorated, and durational proportions are made more audible:

- 'Disparity' – if one section (of a piece of music) is considerably longer or shorter than the next, a listener is likely to be able to discern that a difference between the two exists. A listener is less likely to discern a difference in duration if one section is only slightly longer or shorter than the next.
- 'Completion' – it is not possible to understand a proportional relationship before completion. For example, if there exists a minim followed by a crotchet, a listener will only be able to hear that the second note is half the duration of the first when both notes have been played in full. Similarly, a proportional relationship between two sections is only likely to be discernible after both sections have finished.
- 'Repetition' – repeating a proportional relationship allows for comprehension before completion; for example, if there exists a sequence of alternating minims and crotchets, the listener will only need to hear a few notes before understanding the proportional relationship, and will be able to predict the durations of subsequent notes.
- 'Sequence' – a sequential proportional relationship allows for comprehension before completion. For example, if there exists a maxima, followed by a longa, followed by a breve, followed by a semibreve, a minim, a crotchet, a quaver, a semiquaver etc. the listener will detect the notes are halving in duration before the sequence has finished.
- 'Proximity' – a listener is more likely to appreciate a proportional relationship between two sections that are adjacent, compared to two sections that are apart from one another.

These principles influence the construction of the proportional relationships in *Seven Shrinking Machines*. This work consists of 28 sections, the first of which is 56 seconds long. The subsequent sections decrease sequentially, with each section two seconds shorter than the one that preceded it, resulting in a two-second final section. Due to the sequentiality of the process, the listener will detect that the sections are decreasing in duration before the piece has finished.

Although the rate at which the sections decrease in duration remains constant (two seconds every section), the proportion between one section and the next does not remain constant. The first section (56 seconds) is 1.037 times the duration of the second section (54 seconds). The second section is 1.038 times the duration of the third section (52 seconds). These ratios are so close to 1:1 that the listener is unlikely to detect any proportional relationship; however, as the piece progresses, these ratios widen – the ratio between the penultimate section and the final section is 2:1, which is certainly audible. Therefore, although it is impossible to ascertain precisely when the listener becomes aware of the shrinking durations (as this is affected by internal, external, musical, and extra-musical factors), it is inevitable the listener will become aware of it at some point before the piece finishes.

The reason the structural process in *Seven Shrinking Machines* is so audible is because it is a marriage of the 'disparity' principle and the 'sequence' principle. As the sequence of shrinking

durations continues, it becomes more apparent to the listener by virtue of both its repetitiveness and the fact the ratios between adjacent sections are widening.

The expanding structural process in *Cataclysm* is less audible, for two reasons. Firstly, there are fewer sections than in *Seven Shrinking Machines* (eight, as opposed to 28), which affords the listener less opportunity to understand the sequence. Secondly, when the structural process is one of expansion, the 'disparity' principle and the 'sequence' principle do not work in tandem. As the sections lengthen, the ratios between adjacent sections shrink; that is, the listener is more likely to detect proportional relationships at the beginning of the piece because that is when the proportional ratios are at their widest. That runs in opposition to the 'sequence' principle, where a listener is more likely to detect proportional relationships the closer the sequence is to its end.

It is not essential, however, that a listener understands the mathematics that govern the proportions as long as the proportions have an effect on the impact of the piece.

7. Two Final Pieces

This commentary will end as it began, with the critical comparison of two pieces written in close succession. I was commissioned to write an ensemble work for Sarah Nicolls, Oren Marshall and the London Sinfonietta, and also a vocal piece that was to form the soundtrack to a film installation to be showed at the Sensoria festival. I viewed the first commission as an opportunity to put into practice all the techniques and procedures I had developed over the course of the doctorate, and the second commission as a chance to try a different approach to composition.

Having compositionally explored time proportion, I wanted to begin experimenting with notions of musical space (given there are well-documented scientific and philosophical links between time and space)¹⁴. There are numerous ways in which composers have considered space, ranging from the analogous e.g. music that is evocative of a landscape like Birtwistle's *Silbury Air* or Peter Schat's geometric approach to pitch space, to the physical e.g. the separated groups of instruments and off-stage strings in Ives' *The Unanswered Question*, or the way acousmatic musicians use multiple speakers to distribute sound spatially.

I began attending lectures in the Architecture School and I developed an interest in the idea of negative space:

When we create buildings today, we frequently focus our efforts on their shapes, with the shape of outdoor space a rather accidental leftover. These outdoor spaces, such as those typically found in suburbs, are negative spaces because the buildings aren't arranged to lend shape to the spaces in between.

Urban buildings, however, are often designed under the opposite assumptions: building shapes can be secondary to the shape of the public space, to the extent that some urban buildings are almost literally 'deformed' so that the plazas, courtyards, and squares that abut them may be given positive shape.¹⁵

The architectural principle that a positive shape will inevitably enforce some distortion on the resultant negative space prompted me to explore ways in which having a pitch void (i.e. a range of forbidden pitches) might distort and influence both the structure of a piece and musical material. Thus the concept for *Filling Rubin's Vase* was devised. Rubin's Vase is an optical illusion named after the Danish psychologist, Edgar Rubin. Two faces are shown in profile, and the negative space between them forms the shape of a vase. In *Filling Rubin's Vase*, this negative space is represented by a pitch void between middle C and the octave above. The piece is constructed of 32 static singular structures, alternating between high sections (where all material exists above the pitch void) and low sections (where all material exists below the pitch void).

Structurally, *Filling Rubin's Vase* operates in a similar manner to *Seven Shrinking Machines* insofar as sections become progressively shorter as the piece progresses.

¹⁴ Stephen Hawking, *A Brief History of Time: From the Big Bang to Black Holes* (London: Bantam Press, 1988), p.15.

¹⁵ Matthew Frederick, *101 Things I Learned in Architecture School* (London: The MIT Press, 2007), p. 7.

Type of Section	Bar Number	Treble/Bass	Duration (seconds)	Interval Palette
A	1	Bass	32	4/5/6
B	9	Treble	31	1/2/4
C	32	Bass	30	3/4/5
D	51	Treble	29	2/3/5
E	66	Bass	28	1/3/5
F	80	Treble	27	2/4/5
G	92	Bass	26	2/3/6
H	106	Treble	25	N/A
A	119	Bass	24	4/5/6
B	125	Treble	23	1/2/4
C	142	Bass	22	3/4/5
D	156	Treble	21	2/3/5
E	167	Bass	20	1/3/5
F	177	Treble	19	2/4/5
G	185	Bass	18	2/3/6
H	195	Treble	17	N/A
Structural Midpoint				
H	204	Bass	16	N/A
G	212	Treble	15	2/3/6
F	219	Bass	14	2/4/5
E	226	Treble	13	1/3/5
D	233	Bass	12	2/3/5
C	239	Treble	11	3/4/5
B	246	Bass	10	1/2/4
A	251	Treble	9	4/5/6
H	256	Bass	8	N/A
G	260	Treble	7	2/3/6
F	264	Bass	6	2/4/5
E	267	Treble	5	1/3/5
D	270	Bass	4	2/3/5
C	272	Treble	3	3/4/5
B	274	Bass	2	1/2/4
A	275	Treble	1	4/5/6

Figure 15 – structure of Filling Rubin’s Vase

Eight different sections (labelled A–H) are presented. Sections A, C, E, and G are performed by a consort of three low instruments (tuba, bassoon and double bass), while sections B, D, F and H are performed by a consort of three high instruments (piano, viola and accordion). These eight sections are then repeated (albeit with shorter durations). Bar 204 is the structural (but not proportional) midpoint of the work. From here on in, the order of sections is reversed. This now means sections H, F, D and B are performed by the bass consort, and sections G, E, C and A are performed by the treble consort. In order to achieve this, material that was previously in a high register (above the pitch void) needed to be rewritten in a low register (below the pitch void), and vice versa. For some sections, high register and low register incarnations are very similar; for example, the low version of section G (bb. 92–105) is comparable to the high version (bb. 212–218): the idea itself remains identical, only the pitch, duration and instrumentation have changed. For other sections, high register and low register incarnations are very different; for example, the high version of section B

(bb. 9–31) bears little resemblance to the low version (bb. 246–251): the direction of motion has changed (ascending scales have become descending scales) and the low version is much slower. Regardless of whether high and low incarnations are similar or dissimilar in mood and character, they always share the same interval palette.

Alternating between high and low sections is a structural process; however, as the sections become shorter, the rate of alternation increases. The final few sections are so short – it is likely the listener hears the high-low alternation not as the result of a structural process, but as a disjunct texture. The coda (bb. 276–286) takes this further; low and high material alternates even faster, losing detail as it does so, eventually becoming alternating low and high chords. The high chords gradually decrease in pitch, the low chords gradually ascend, and they meet in the middle, filling in the pitch void. The piece ends with a raucous chord which inverts the role of each consort (i.e. the high consort has low material and vice versa).

The high consort is seated apart from the low consort, and because material is only performed by one consort at a time, the piece is antiphonal. Therefore, *Filling Rubin's Vase* is concerned with both a physical and analogous approach to space.

Shortly after completing *Filling Rubin's Vase*, I was invited by filmmaker Matt Stokes to collaborate on an installation, to be housed at the Site Gallery in Sheffield. Inspired by the 1984 Barry Hines's film *Threads*, Stokes's vision was to depict a post-apocalyptic world inhabited by two radically different societies. The first of these is a nomadic, subterranean group of people who scratch a meagre existence by foraging and scavenging. The other society is a mysterious cult of robed, blind people that live peacefully, overground. Stokes and I engaged in varied research to help inform the characteristics and musical language of each group:

- The initial idea was for the overground community to have suffered a radiation-induced blindness, for them to communicate and share knowledge telepathically, and by vocal sounds. Inspired by the religious overtones in John Wyndham's post-apocalyptic novel *The Chrysalids*, and by Stokes's design for costumes (inspired by the white tunics of characters in the sci-fi film *Lathe of Heaven*, and the cowls of medieval monks), I wanted the overground group to communicate in a ritualistic manner. I aimed to avoid consonant sounds (as these were to be used extensively by the underground group), and consequently devised a simple, hummed melody (a synthesis of plainchant and 'Coro a bocca chiusa' from *Madame Butterfly*), that had a religious, spiritualistic feel to it.
- The underground community was modelled on the troglodyte Morlocks of H.G. Wells' *The Time Machine*, Henry Moore's drawings of people taking shelter in the London Underground during WWII, and the cave-dwelling rope-makers of Peak Cavern, Sheffield. Stokes imagined that this group of people had suffered throat cancers as a result of nuclear fallout, and consequently I watched videos of aphonia sufferers, which helped inform the aggressive consonants, growls and grunts of the underground singers. *Threads* is split into three sections: pre-apocalypse, apocalypse, and post-apocalypse. There is a scene in the third section where a female and two males have an argument; the language they use is a corrupted, simplified Sheffield slang. Inspired by this, and by Guy Reibel's album *Langages Imaginaires*, I sought to create an imagined language – a distorted version of English. In

order to achieve this I used the lyrics a Sheffield folk song, *The Good Old Times*, as something I could twist and corrupt.

Stokes's plan was for the piece to climax when both groups had reached a union (although he was not clear as to what this meant, exactly). In order to achieve this sense of climax, I planned to use a structural process similar to that of *Filling Rubin's Vase*; I conceived a piece where the material alternated between the overground and underground group, and the alterations became increasingly rapid, until both groups were singing simultaneously, thus achieving union. It became clear in the early workshops, however, that this structure was unsuitable. Firstly, most of the singers could not read music, and these structural processes require the temporal precision that notation facilitates. Secondly, the speed at which alterations took place meant that certain ideas (like the inclusion of *The Good Old Times*) was not given proper time to develop in a meaningful way. Thirdly, the increasing frequency of alterations, and the consequent increase in energy and excitement resulted in a climax that felt less like a union and more like a conflict. Therefore, it was necessary to change the structure (initially I was disappointed with this realisation as I had hoped to continue researching expanding and contracting structures, but in hindsight I recognise that this alternative approach improved *In Absence of the Smoky God*, and will likely inform my post-doctoral compositions).

I decided that the union reached between both groups should be a subtle one, and should occur before the climax. Previously I had only considered intra-group communication, but Stokes and I discussed the possibility of there being a small amount of inter-group communication. I decided, then, that *The Good Old Times* should be the compositional focal point and the catalyst for interaction between the two groups. To achieve this, one of the underground vocalists was instructed to sing snatches of a quiet, improvised, folk-inspired melody, distorting the lyrics to *The Good Old Times*, as though he was half-remembering a song he once knew. As the piece progresses, this melody is imitated by the other underground singers who abandon their grunts, growls and snorts, and attempt recall this old folk song. Up to this point, the overground group has only been permitted to hum; however, as the underground group adopt *The Good Old Times*, the overground group also begins to imitate it: their mouths open, and the humming gradually transforms into singing (an 'oo' vowel sound), thus achieving a subtle sense of union between both societies. From this point, both groups diverge: the underground group, rather tragically, forget the folk song and return to the grunting, growling and snorting, whilst the overground are transformed, powerfully singing multiple vowel sounds. Thus the piece is constructed of two simultaneous structures; the overground group is a transitional singular structure (from humming to singing), and the underground group is an arc structure (from noise to pitch to noise).

The piece was developed and devised over a period of workshops and, consequently, the score is not a conventional one. It is designed as an *aide-mémoire* for the singers, and only functions in conjunction with a conductor (as shown in accompanying video):

Section	Overground	Underground
A	Keitu hums simple melody	
B		Luke consonant sounds
C	Keitu hums melody again, gradually others join, slow sliding between notes	Luke consonant sound interruptions (very sporadic)

D		Luke instigates call-and-response, the response initially by one person, then gradually more of the group join, Pete's response is the beginning of the folk melody
E	Similar humming, Angela and Nick slide off to 'oo'	Luke consonant sound interruptions and Pete folk interruptions (very sporadic)
F		Consonant sounds by all group, except Pete whose folk melody gradually becomes stronger
G	Pete's folk melody becomes stronger still, gradually (by ripple effect) all Underground (except Luke) are influenced by it, and eventually all Overground are imitating also to 'oo' only	
H	The influence of Pete's melody decreases, and is replaced by independent vowel sound notes, lots of vibrato, with gaps	
I	Same as H	Violent outbursts; snarls, snorts, grunts – sporadic, directed by Ben
J	Climax – Ben's left hand indicates violent Underground stabs, Ben's right hand indicates long Overground notes	
K	Coda – Ben continues to direct both groups, Overground disappears leaving increasingly sporadic Underground outbursts	

Figure 16 – *In Absence of the Smoky God* aide-mémoire sheet (the instructions are not particularly detailed, as the piece was devised over a number of workshops and each section was developed and improved upon in collaboration with the singers)

Stokes and I agreed that in order to achieve the required energy, interaction and spontaneity, we preferred recording in a complete take, featuring all ten singers (i.e. not recording the piece in small chunks, nor recording each singer or group individually and multitracking). This is generally a more difficult and time-consuming method, but on the day of recording, we managed six complete takes. The final track is a splicing of two takes: one take for sections A to I, and another take for sections J and K (to provide an appropriately long coda). Filming took place over a single weekend (a day per group), the singers acted and lip-synched to the pre-recorded track. The resultant film is, in essence, a music video where all communication and interaction happens through music, and there is no spoken dialogue.

Given that *Filling Rubin's Vase* was constructed using techniques I had tried and tested (which had previously resulted in pieces that I found musically satisfying) and *In Absence of the Smoky God* was a venture into the unknown, using unfamiliar methods, I was expecting the former to be a success and the latter to be less so; however, I consider *In Absence of the Smoky God* to be a far more impactful work. Initially confused by this outcome, I have now come to realise there may be inherent deficiencies in the methods used to create *Filling Rubin's Vase*:

- *Filling Rubin's Vase* (and other pieces that use a similar structural process, like *Seven Shrinking Machines*, *Cataclysm*, and *The Old Cataclysm Blues*) are essentially about the structure and little else. Consequently, these pieces may lack the artistic depth present in a more multifaceted work. The research undertaken to create *In Absence of the Smoky God* (ranging from science fiction film and literature to Sheffield folksong and speech impediments) provided me with a cultural and aesthetic framework on which to build the piece. With *Filling Rubin's Vase* (and other similar pieces), I began with a structural concept and a series of mathematical calculations, which was perhaps too restrictive.
- I consider *Cataclysm*, *The Old Cataclysm Blues*, and especially *Seven Shrinking Machines* to be successful, engaging pieces. Perhaps *Filling Rubin's Vase* is less satisfying because the processes and restrictions are too audible (for example, the 3/4/5 interval palette used from bars 33 to 50, or the 2/3/5 palette used from bars 51 to 65, may be too clearly stated and therefore too predictable). It is possible I have fallen foul of a compositional version of The Peter Principle¹⁶; I have elevated a process, using it more and more frequently, until it is no longer serving its purpose. Generally, processes and restrictions are conducive to creativity, and there is little scarier for a composer than starting a new piece with a blank page and nothing to aid you. Processes can become too restrictive if overused, however, and can stunt the development of the piece. I strive to make my music clear and intelligible, but there is an argument that too much clarity and too much intelligibility may beget predictability: an undesirable attribute.
- During the early stages of *In Absence of the Smoky God*, it became clear that the structure was not going to work. I made a conscious decision to sacrifice structural clarity in favour of allowing the performers to express themselves more deeply. In *Filling Rubin's Vase*, expression may have been sacrificed in favour of the structural process.

I anticipate these realisations are going to inform my future work. I intend to continue using the techniques devised during my doctorate (singular structures, interval palettes etc.) but not to the extent where I feel I am sacrificing other elements of the piece (the way the structure of *Filling Rubin's Vase* may have inhibited expression). I am going to obfuscate these techniques somewhat in order to make pieces less predictable. There are two ways of doing this; I can either 'soften' the techniques by using them less frequently or with less concern for mathematical precision (e.g. if I occasionally use a 3 in a 2/4/5 palette), or I can expand upon these techniques by adding more layers of mathematical complexity. It is likely I will explore both approaches, perhaps even in the same work, but I am currently fascinated by the level of mathematical rigour in Richard Barrett's analysis of his 1994 orchestral work, *Vanity*.

I found the research that I undertook whilst composing *In Absence of the Smoky God* to be an enjoyable, enriching experience, certainly something that helped the creation of the piece. Particularly fruitful was the breadth of research: film, literature, art, music, speech therapy, psychology, and more.

¹⁶ Lawrence Peter, *The Peter Principle: Why Things Always Go wrong* (New York: HarperCollins, 2009) p. 9.

8. Conclusion

Throughout my doctoral studies, I have devised, refined and implemented a number of compositional techniques that have been used to create the majority of pieces in the accompanying portfolio.

I am satisfied with these techniques (particularly interval palettes, singular structures and independent ostinati) which, when combined with a mathematical approach to time proportion, have provided me with the capability to write competent, engaging music. Thus, I intend to continue using these techniques in my upcoming pieces. In evaluating my doctoral compositions, however, I feel there are a number of improvements that could be made to these techniques and my music in general. Whilst singular structures engender clarity and a sense of inevitability, they can also lead to predictability and over-simplicity (particularly apparent in *The Inflation Ritual* and *Filling Rubin's Vase*). Perhaps the most effective use of singular structures occurs in *The Old Cataclysm Blues*, where both contracting and expanding processes are employed, resulting in a piece that is simultaneously intelligible and unpredictable. Consequently, I believe discovering new ways of manipulating singular structures will enable me to write music with more complexity and depth. For example, superimposing singular structures of varying durations, or accompanying a procedural part with a simultaneous non-procedural part might yield musically satisfying results. Additionally, the experiments I have conducted into time proportion and structural processes have been realised in pieces of only a relatively short duration, and my upcoming compositions might test whether these techniques are effective over larger periods of time.

Before and during my doctoral studies, I had been heavily influenced by Gérard Grisey's quotation: 'We are musicians and our model is sound not literature, sound not mathematics, sound not theatre, visual arts, quantum physics, geology, astrology or acupuncture.'¹⁷ The titles of my pieces usually refer to the structural processes involved (e.g. *Seven Shrinking Machines* refers to the seven distinct sections and how they reduce in duration as the piece progresses, *Three Catalysts* refers to the three movements and how the percussion material has a catalytic effect on the trumpet melody etc.), and rarely do they give an indication of the aesthetic quality the work possesses or any extra-musical stimuli that influenced the composition. This is because, during the doctorate at least, I considered structure to be the most important aspect of my music. As a result, elements of certain pieces have been sacrificed in order to service the structural process (e.g. to facilitate the sense of expansion in *The Inflation Ritual*, the material itself does not develop, and thus the sense of drama suffers). I have decided, then, that while I desire all my pieces to have a clear structure, this should not come at a detriment to other aspects of the composition, and it is important I devise forms that result in (or at least allow) interesting surface material. To aid this, I am going to start employing extra-musical stimuli, allowing them to inform both the structural processes and aesthetic content of my upcoming pieces.

I have begun to reconsider my opinions on improvisation and indeterminate notation, with regards to my music. In my initial sketches for *Seven Shrinking Machines*, the box notation, graphic notation and improvisation compromised the structure, and resulted in music that lacked a sense of narrative

¹⁷ Joshua Fineberg, *Classical Music, Why Bother?: Hearing the World of Contemporary Culture Through a Composer's Ears* (New York: Routledge, 2006) p. 105.

urgency. Since then, I have further developed my singular structure technique, and devised five time proportion principles that will enable me to compose indeterminate or improvisatory music that is simultaneously carefully structured.

I hope, by combining the techniques developed during my doctorate, using them in increasingly complex and innovative ways, and by engaging with extra-musical stimuli, I can continue improving as a composer.

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Ben Gaunt

Steamhouse Noir
for flute and cello

Steamhouse Noir was commissioned by cellist Michelle So, and premiered at a Sounds of the Engine House event at IABF, Manchester on 26th April 2012.

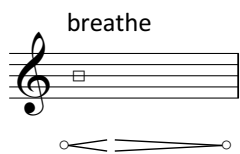
Steamhouse Noir is inspired by Steampunk art, Victorian machinery, and black-and-white film noir. Initially jazz-influenced and sleazy, both the flute and cello parts become more mechanical as the piece progresses.

Year of Composition: 2011

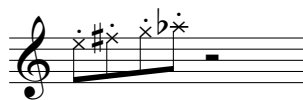
Duration: c. 5'

Techniques


breathe



[flute] produce unpitched air sound

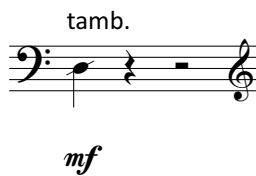


[flute] key clicks with a little pitch



[cello] perform pizzicato tremolando and glissando upwards as high as possible

tamb.



[cello] slap strings with palm

mv 



[cello] molto vibrato

Steamhouse Noir

Ben Gaunt

jazzy, mysterious ♩=108

Flute

pizz. quasi walking bass, quasi rit.

p mp pp p

mp pp

5

pp

mp pp

9

mp p mf

breathe

mp p mp

14

p mf

breathe

p mp p p pp

18

pp *mp* *p* *mp p*

mp *mf* *p* *mf*

22

flz. breathe

mf *p* *mf*

p mf *mf* *mf*

26

flz.

p *mf* *pp*

p *mf*

30

breathe flz.

f *mp* *mf*

mf *p* *mf*

34

p *mf* *pp* *mp* breathe
 tamb. pizz. (pizz.) mv
mf *p* *mf*

37

p *mf* flz. *mp* *p* breathe
 pizz. 3 5 tamb. tamb.
p *mf*

40

p *mf* *p* *mf* *fp*
 mv pizz. 3 3 3
mf *p* *mf*

42

mf *p* flz. *f* *p* breathe
 mv 5 tamb. tamb. pizz. 5
p *mp* *f* *mf* *mf* *mp* *f*

45

Musical score for measures 45-48. The top staff is in treble clef with a 5/4 time signature. It features a melodic line with triplets and a *flz.* (flautissimo) marking. The bottom staff is in bass clef with a 5/4 time signature, featuring a tambourine (*tamb.*) and pizzicato (*pizz.*) markings. Dynamics include *mf*, *f*, *mf*, *p*, and *mf*. Fingerings of 3 and 5 are indicated.

49

Musical score for measures 49-51. The top staff is in treble clef with a 5/4 time signature. It features a melodic line with triplets and a *flz.* marking. The bottom staff is in bass clef with a 5/4 time signature, featuring a tambourine (*tamb.*) and pizzicato (*pizz.*) markings. Dynamics include *p*, *fp*, *f*, *p*, *pp*, and *mf*. Fingerings of 3 and 5 are indicated.

52 breathe

Musical score for measures 52-54. The top staff is in treble clef with a 4/4 time signature. It features a melodic line with triplets and a *breathe* marking. The bottom staff is in bass clef with a 4/4 time signature, featuring a tambourine (*tamb.*) and pizzicato (*pizz.*) markings. Dynamics include *pp*, *mp*, and *p*. Fingerings of 3 and 5 are indicated.

55

Musical score for measures 55-58. The top staff is in treble clef with a 4/4 time signature. It features a melodic line with triplets and a *flz.* marking. The bottom staff is in bass clef with a 4/4 time signature, featuring a tambourine (*tamb.*) and pizzicato (*pizz.*) markings. Dynamics include *f*, *ff*, *f*, and *mp*. Fingerings of 3 and 5 are indicated.

58

flz. breathe

mp f mp sub. mf p mf p mf

pizz. (pizz.) mv pizz.

p mp p mp

62

p f mf f mf

pizz. tamb. pizz. pizz.

mf f p f

65

flz.

mf ff ff p mf ff

pizz. (pizz.) mv tamb. pizz. tamb.

ff f mf f

68

breathe

mf ff mp < ff > mp f p

pizz. tamb. pizz. tamb.

mf f mf ff mf

6

senza misura

71

ff

breathe

ff

pizz.

tamb.

(pizz.)
mv

c. 15"

c. 15"

72

f

flz.

f

pizz.

f

c. 15"

c. 15"

73

mf

mf

c. 15"

c. 15"

74

mp

mp

col legno battuto

mp

c. 15"

c. 15"

75

p

arco

p

c. 15"

c. 15"

76

pp

free rhythm, very slow sul pont.

pp

p

p

p

c. 40"

c. 40"

* The flautist and cellist are to repeat the cells for the given duration, with no rest in between each repetition. When there are multiple cells presented in a line, the instrumentalist is to randomly and independently swap between them. Although instrumentalists should make no attempt to synchronise rhythmically, they should diminuendo at the same rate.

Ben Gaunt

The Dust of Long Dead Stars

for flute trio

The Dust of Long Dead Stars

The Dust of Long Dead Stars was commissioned by Tempest Flute Trio for a concert at the International Anthony Burgess Foundation, Manchester, curated by Sounds of the Engine House, on 26th April 2012.

The title is taken from an interview with Sir Martin Rees in the New York Times where he described humanity:

"We are the dust of long dead stars. Or, if you want to be less romantic, we are nuclear waste."

Year of Composition: 2011

Duration: c. 4'

Techniques

obs - overblow and sing whilst playing, resulting in an aggressive, raucous sound (the pitch of the singing is unimportant, as long as it follows the contours of the flute melody)

Improvisation Section

The improvisation section should follow on smoothly from the notated material. Each flautist has a different set of instructions to follow, and the transition from one instruction to the next should also be as smooth as possible. The duration of the improvisation section should last approximately 2 minutes. The audience should not be able to detect when the improvisation section begins and the notated material ends.

The Dust of Long Dead Stars

fiery, energetic ♩=220

Ben Gaunt

Flute 1

Flute 2

Flute 3

fff (very gradual decrescendo to bar 82)

fff (very gradual decrescendo to bar 82)

fff (very gradual decrescendo to bar 82)

Fl. 1

Fl. 2

Fl. 3

Fl. 1

Fl. 2

Fl. 3

fff

fff

fff

2

22

obs-----|

Fl. 1

Fl. 2

Fl. 3

28

Fl. 1

Fl. 2

Fl. 3

*

G

34

Fl. 1

Fl. 2

Fl. 3

(ff)

(ff)

(ff)

* play a G major arpeggio, as quickly as possible, for a duration of two minims arpeggios can ascend, descend, or both

40 A \downarrow obs-----| 3

Fl. 1

Fl. 2

Fl. 3

46 obs-----| obs-----| B \downarrow

Fl. 1

Fl. 2

Fl. 3

51 obs-----| obs-----| C \downarrow

Fl. 1

Fl. 2

Fl. 3

4

56

Fl. 1

Fl. 2

Fl. 3

obs-----|

obs-----|

obs-----|

A \flat .

60

Fl. 1

Fl. 2

Fl. 3

obs-----|

obs-----|

obs-----|

D \flat .

63

Fl. 1

Fl. 2

Fl. 3

obs-----|

F# \flat .

obs-----|

E \flat \flat .

F \flat .

obs-----|

66 obs-----| Eb \flat .

Fl. 1

Fl. 2

Fl. 3

70 obs-----|

Fl. 1

Fl. 2

Fl. 3

(mf)

(mf)

(mf)

73 obs-----| C \flat .

Fl. 1

Fl. 2

Fl. 3

obs-----|

obs-----|

obs-----|

78

Fl. 1

Fl. 2

Fl. 3

obs-----|

obs-----|

obs-----|

D \flat

G \sharp

82

Fl. 1

Fl. 2

Fl. 3

mp smp

mp sempre

mp sempre

F \sharp

G

C \sharp

C

B \flat

B \flat

85

Fl. 1

Fl. 2

Fl. 3

F \sharp

C \sharp

G \sharp

88

Fl. 1 G \flat \flat \flat

Fl. 2 E \flat \flat \flat \flat

Fl. 3 B \flat \flat \flat \flat

E \flat \flat \flat

B \flat \flat \flat \flat

Ab \flat \flat \flat \flat

91

Fl. 1 E \flat \flat \flat \flat

Fl. 2 C# \flat \flat \flat \flat

Fl. 3 G \flat \flat \flat \flat

94

Fl. 1 D \flat \flat \flat \flat

Fl. 2 Ab \flat \flat \flat \flat

Fl. 3 E \flat \flat \flat \flat

C# \flat \flat \flat \flat

G \flat \flat \flat \flat

D \flat \flat \flat \flat

97

Fl. 1 B \dot{d} .

Fl. 2 G# \dot{d} .

Fl. 3 D# \dot{d} .

100

Fl. 1 B \flat \dot{d} .

Fl. 2 G \dot{d} .

Fl. 3 F# \dot{d} .

103

Fl. 1 F# \dot{d} .

Fl. 2 C# \dot{d} .

Fl. 3 G# \dot{d} .

106

Fl. 1 E \dot{d} .

Fl. 2 B \dot{d} .

Fl. 3 A \dot{d} .

109

Fl. 1 E \dot{d} .

Fl. 2 C# \dot{d} .

Fl. 3 Bb \dot{d} .

112

Fl. 1 B \dot{d} .

Fl. 2 F \dot{d} .

Fl. 3 C# \dot{d} .

Fl. 1 E \dot{d} .

Fl. 2 Bb \dot{d} .

Fl. 3 Ab \dot{d} .

10

115

Fl. 1

Fl. 2

Fl. 3

F $\dot{\cdot}$ $\dot{\cdot}$

C# $\dot{\cdot}$ $\dot{\cdot}$

B $\dot{\cdot}$ $\dot{\cdot}$

118

Fl. 1

Fl. 2

Fl. 3

D \flat $\dot{\cdot}$ $\dot{\cdot}$

F# $\dot{\cdot}$ $\dot{\cdot}$

E \flat $\dot{\cdot}$ $\dot{\cdot}$

120

Fl. 1

Fl. 2

Fl. 3

D $\dot{\cdot}$ $\dot{\cdot}$

B \flat $\dot{\cdot}$ $\dot{\cdot}$

F# $\dot{\cdot}$ $\dot{\cdot}$

segue into Improvisation Section

segue into Improvisation Section

segue into Improvisation Section

Flute 1 - Improvisation Section

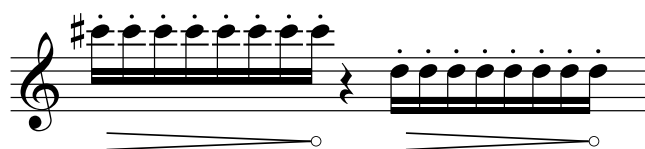


Use the list of notes above to aid improvisation. The notes must be used in order, but you do not need to finish the entire list of notes. If you finish the list of notes, but are still improvising, you may return to the start of the list. Notes can be selected at any octave, at the player's discretion. Gradually decrescendo throughout improvisation section. The entire improvisation section should last approximately 2 minutes. All three flautists should move from one instruction to the next at approximately the same time.

1. Construct very fast major arpeggios, using the list of notes to provide the tonic (e.g. C# major arpeggio, D major arpeggio, Eb major arpeggio etc.) Arpeggios can ascend, descend or both. Fade in and out of each arpeggio. Ensure there is very little space in between each arpeggio. Between the three flutes, the effect should be of continuous, interweaving arpeggios. (c. 20 seconds)

1a. Smooth transition from 1 to 2. Occasionally, instead of performing an arpeggio (1) perform a rapidly tongued single pitch (2). Gradually, allow the tongued pitches to become more frequent than the arpeggios. (c. 20 seconds)

2. Rapidly tongue a single pitch, staccato, and fade out. Use the list of notes to provide the pitch (at any octave.) Leave a reasonably small space in between each pitch. (c. 20 seconds)



2a. Smooth transition from 2 to 3. Every so often allow the rapidly tongued notes (2) to turn into a long, single note (3). Gradually, ensure long notes occur more frequently. (c. 20 seconds)

3. Use the list of notes to construct a melody that is as beautiful and ethereal as possible. The melody should be very quiet, but the player is allowed some freedom of expression, to facilitate a convincing melodic contour. The player has the freedom to choose to play each note for any length, as long as the melody is generally slow. (Flute 2 and Flute 3 do not have this instruction, and move straight onto 4.) (c. 20 seconds)

3a. Smooth transition from 3 to 4. Gradually allow the melody to become faster, more quiet, and less distinct (by using an ever looser embouchure.) (c. 10 seconds)

4. Improvise extremely quiet chromatic runs in the lower register of the flute. Use a loose embouchure to produce an indistinct tone. Between the three flutes, the effect should be of a continuous burbling. (c. 10 seconds)

All three flutes should suddenly stop (as if cut off) simultaneously, to end the piece.

Flute 2 - Improvisation Section



Use the list of notes above to aid improvisation. The notes must be used in order, but you do not need to finish the entire list of notes. If you finish the list of notes, but are still improvising, you may return to the start of the list. Notes can be selected at any octave, at the player's discretion. Gradually decrescendo throughout improvisation section. The entire improvisation section should last approximately 2 minutes. All three flautists should move from one instruction to the next at approximately the same time

1. Construct very fast major arpeggios, using the list of notes to provide the tonic (e.g. B major arpeggio, Bb major arpeggio, B major arpeggio etc.) Arpeggios can ascend, descend or both. Fade in and out of each arpeggio. Ensure there is very little space in between each arpeggio. Between the three flutes, the effect should be of continuous, interweaving arpeggios. (c. 20 seconds)

1a. Smooth transition from 1 to 2. Occasionally, instead of performing an arpeggio (1) perform a rapidly tongued single pitch (2). Gradually, allow the tongued pitches to become more frequent than the arpeggios. (c. 20 seconds)

2. Rapidly tongue a single pitch, staccato, and fade out. Use the list of notes to provide the pitch (at any octave.) Leave a reasonably small space in between each pitch. (c. 20 seconds)



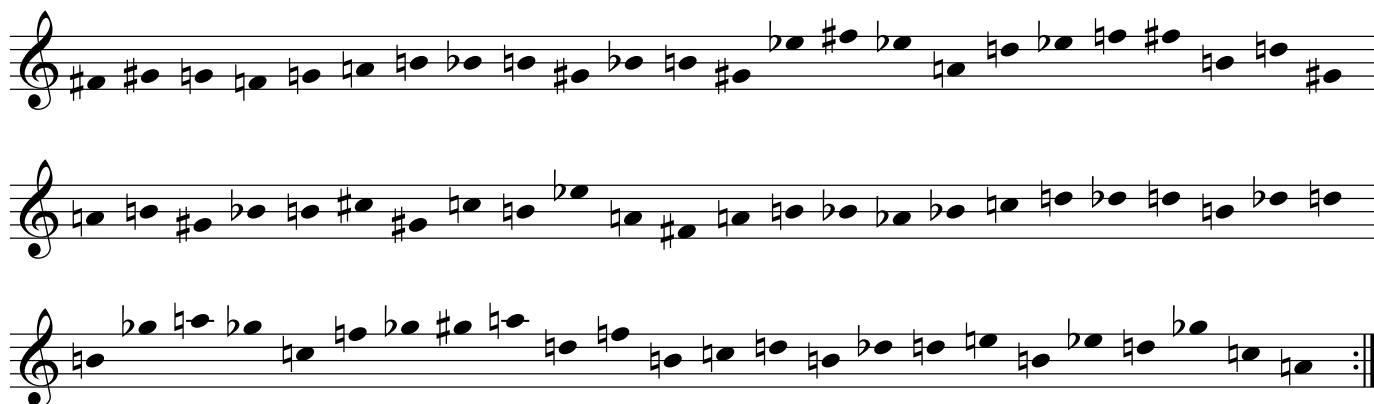
2a. Smooth transition from 2 to 4. Intersperse the rapidly tongued single pitches (2) with small passages of indistinct chromatic runs (4). Gradually, allow the passages of chromatic runs to become more frequent than the rapidly tongued pitches. (c. 20 seconds)

(Note that there is no instruction 3 in the parts for both Flute 2 and Flute 3. This is intentional.)

4. Improvise extremely quiet chromatic runs in the lower register of the instrument. Use a loose embouchure to produce an indistinct tone. Initially, Flute 1 will be playing a melody, before joining Flute 2 and Flute 3. Between the three flutes, the effect should be of a continuous burbling. (c. 40 seconds)

All three flutes should suddenly stop (as if cut off) simultaneously, to end the piece.

Flute 3 - Improvisation Section

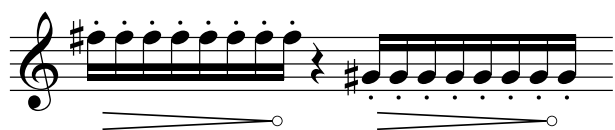


Use the list of notes above to aid improvisation. The notes must be used in order, but you do not need to finish the entire list of notes. If you finish the list of notes, but are still improvising, you may return to the start of the list. Notes can be selected at any octave, at the player's discretion. Gradually decrescendo throughout improvisation section. The entire improvisation section should last approximately 2 minutes. All three flautists should move from one instruction to the next at approximately the same time

1. Construct very fast major arpeggios, using the list of notes to provide the tonic (e.g. F# major arpeggio, G# major arpeggio, G major arpeggio etc.) Arpeggios can ascend, descend or both. Fade in and out of each arpeggio. Ensure there is very little space in between each arpeggio. Between the three flutes, the effect should be of continuous, interweaving arpeggios. (c. 20 seconds)

1a. Smooth transition from 1 to 2. Occasionally, instead of performing an arpeggio (1) perform a rapidly tongued single pitch (2). Gradually, allow the tongued pitches to become more frequent than the arpeggios. (c. 20 seconds)

2. Rapidly tongue a single pitch, staccato, and fade out. Use the list of notes to provide the pitch (at any octave.) Leave a reasonably small space in between each pitch. (c. 20 seconds)



2a. Smooth transition from 2 to 4. Intersperse the rapidly tongued single pitches (2) with small passages of indistinct chromatic runs (4). Gradually, allow the passages of chromatic runs to become more frequent than the rapidly tongued pitches. (c. 20 seconds)

(Note that there is no instruction 3 in the parts for both Flute 2 and Flute 3. This is intentional.)

4. Improvise extremely quiet chromatic runs in the lower register of the instrument. Use a loose embouchure to produce an indistinct tone. Initially, Flute 1 will be playing a melody, before joining Flute 2 and Flute 3. Between the three flutes, the effect should be of a continuous burbling. (c. 40 seconds)

All three flutes should suddenly stop (as if cut off) simultaneously, to end the piece.

Ben Gaunt

Drenched in Neon and Endless Rain

for large ensemble

Drenched in Neon and Endless Rain

Drenched in Neon and Endless Rain was commissioned by Tony Houghton and the Sheffield Hadyn Ensemble, and premiered on 26th February 2012, at Firth Hall, Sheffield.

Drenched in Neon and Endless Rain is a line taken from Empire Magazine's review of the film *Blade Runner* (1982). I have always had an interest in sci-fi films from this era, especially ones set in huge metropolises. Although this piece is not programmatic, I have attempted to recreate an impression of the movie's city; glistening with chords that fall as rain (much like my hometown of Manchester.)

Year of Composition: 2012

Duration: c. 7'

Score in C

Instrumentation

fl
2ob
2cl
bn
2hn
hpd
2vln
2vla
2vcl
2db

(single strings)

Drenched in Neon and Endless Rain

Ben Gaunt

soft, mysterious $\text{♩} = 80$

Flute
pp legato

Oboe I
pp legato

Oboe II

Clarinet I in Bb
jazzy 3

Clarinet II in Bb
pp legato

Bassoon

Horn I in F

Horn II in F
to con sord.

Harpsichord
p

Violin I
sul tasto
pp legato

Violin II
sul tasto
pp legato

Viola I

Viola II
3

Violoncello

Double Bass

8 A

Fl. *pp* *p*

Ob. I *pp* *p*

Ob. II

Cl. I *mp* *p*

Cl. II *pp* *p*

Bsn. *pp* *pp*

Hn. I *pp* *pp*

Hn. II

Hpsd.

Vln. I *pp* *p*

Vln. II *pp* *p*

Vla. I *pp*

Vla. II *pp*

Vc. *pp* *p*
sul pont.

Db. *pp* *p*
sul pont.

13

Fl. *pp* *p* *dim.*

Ob. I *pp* *p* *dim.*

Ob. II

Cl. I *mp*

Cl. II *pp* *p* *dim.*

Bsn. *p* *pp*

Hn. I *p* *pp*

Hn. II

Hpsd.

Vln. I *pp* *p* *dim.*

Vln. II *pp* *p* *dim.*

Vla. I *pp*

Vla. II *pp*

Vc. *pp* *p*

Db. *pp* *p*

B

18

Fl.

Ob. I

Ob. II

Cl. I

Cl. II

Bsn.

Hn. I

Hn. II

Hpsd.

Vln. I

Vln. II

Vla. I

Vla. II

Vc.

Db.

pp

p

mf

pp

p

mp

p

mp

22

Fl. *pp* *p*

Ob. I *pp* *p*

Ob. II

Cl. I

Cl. II *pp* *p*

Bsn. *p* *p* *pp*

Hn. I *p* *p* *pp*

Hn. II

Hpsd.

Vln. I *pp* *p*

Vln. II *pp* *p*

Vla. I

Vla. II *p legato*

Vc. *pp* *mp*

Db. *pp* *mp*

26

Fl. *pp* *p*

Ob. I *pp* *p*

Ob. II

Cl. I *p* *mf*

Cl. II *pp* *p*

Bsn. *pp*

Hn. I *pp*

Hn. II

Hpsd.

Vln. I *ord.* *p* *mp*

Vln. II *ord.* *p* *mp*

Vla. I *sul tasto* *p legato* *pp*

Vla. II *pp*

Vc.

Db.

Detailed description: This page of a musical score covers measures 26 to 29. The music is in 4/4 time and features a variety of instruments. The Flute (Fl.) and Oboe I (Ob. I) parts begin with a *pp* dynamic and move to *p* by measure 27. The Clarinet I (Cl. I) part has a *p* dynamic with triplets and a *mf* dynamic later. The Clarinet II (Cl. II) part also features triplets and dynamics of *pp* and *p*. The Bassoon (Bsn.) and Horn I (Hn. I) parts are marked *pp*. The Piano (Hpsd.) part includes complex triplet patterns in both hands. The Violin I (Vln. I) and Violin II (Vln. II) parts are marked *ord.* and have dynamics of *p* and *mp*. The Viola I (Vla. I) part is marked *sul tasto* and *p legato*, with a *pp* dynamic later. The Viola II (Vla. II) part is marked *pp*. The Cello (Vc.) and Double Bass (Db.) parts provide a harmonic foundation with sustained notes and chords.

C

30

Fl. *p*

Ob. I *p*

Ob. II

Cl. I *p*

Cl. II *p*

Bsn. *mp* *p*

Hn. I *mp* *p*

Hn. II

Hpsd. *mp* *p*

Vln. I *p*

Vln. II *p*

Vla. I *p*

Vla. II

Vc. *pp*

Db. *pp*

Detailed description: This page of a musical score covers measures 30, 31, 32, and 33. The music is in 5/4 time, with a key signature of one flat (B-flat major or D minor). A section marker 'C' is placed above measure 30. The score includes parts for Flute (Fl.), Oboe I (Ob. I), Oboe II (Ob. II), Clarinet I (Cl. I), Clarinet II (Cl. II), Bassoon (Bsn.), Horn I (Hn. I), Horn II (Hn. II), Piano (Hpsd.), Violin I (Vln. I), Violin II (Vln. II), Viola I (Vla. I), Viola II (Vla. II), Violoncello (Vc.), and Double Bass (Db.). The piano part features a complex rhythmic pattern with triplets and sixteenth notes. The strings play sustained chords, with the cellos and double basses marked *pp* (pianissimo). Dynamic markings include *p* (piano), *mp* (mezzo-piano), and *pp*. The score contains several triplets and slurs across measures.

34

Fl. *pp* *p*

Ob. I *pp* *p*

Ob. II

Cl. I *p* *mf*

Cl. II *pp* *p*

Bsn. *p* *pp* *pp*

Hn. I *p* *pp* *pp*

Hn. II

Hpsd.

Vln. I *mp*

Vln. II *mp*

Vla. I

Vla. II

Vc. *mf*

Db. *mf*

37

Fl. *pp* *p*

Ob. I *pp* *p*

Ob. II

Cl. I *p* *mp*

Cl. II *pp* *p*

Bsn.

Hn. I

Hn. II

Hpsd.

Vln. I *pp* *p*

Vln. II *pp* *p*

Vla. I

Vla. II

Vc.

Db.

Detailed description: This page of a musical score covers measures 37 to 40. The music is in 4/4 time and features a variety of instruments. The woodwind section includes Flute (Fl.), Oboe I (Ob. I), Oboe II (Ob. II), Clarinet I (Cl. I), Clarinet II (Cl. II), Bassoon (Bsn.), Horn I (Hn. I), and Horn II (Hn. II). The string section consists of Violin I (Vln. I), Violin II (Vln. II), Viola I (Vla. I), Viola II (Vla. II), Violoncello (Vc.), and Double Bass (Db.). The keyboard part (Hpsd.) is also present. The score includes dynamic markings such as *pp* (pianissimo), *p* (piano), and *mp* (mezzo-piano). There are also trill ornaments and triplet markings (indicated by '3') throughout the piece. The key signature has one sharp (F#) and the time signature is 4/4. The page number '9' is located in the top right corner.

41 **D**

Fl. *pp* *p*

Ob. I *pp* *p*

Ob. II

Cl. I *mp* *mf*

Cl. II *pp* *p*

Bsn.

Hn. I *mp* *mp* *p*

Hn. II *mp* *mp* *p*

Hpsd. *mp* *p*

Vln. I *mp*

Vln. II *mp*

Vla. I

Vla. II

Vc. *pp*

Db. *pp*

pp

Detailed description: This page of a musical score covers measures 41 to 44. It features a woodwind section with Flute (Fl.), Oboe I (Ob. I), Oboe II (Ob. II), Clarinet I (Cl. I), Clarinet II (Cl. II), Bassoon (Bsn.), Horn I (Hn. I), and Horn II (Hn. II). The brass section includes Trumpet I (Hn. I) and Trumpet II (Hn. II). The string section consists of Violin I (Vln. I), Violin II (Vln. II), Viola I (Vla. I), Viola II (Vla. II), Violoncello (Vc.), and Double Bass (Db.). The piano (Hpsd.) part is also present. The score includes various musical notations such as triplets, slurs, and dynamic markings like *pp*, *p*, *mp*, and *mf*. A section marker 'D' is placed above measure 41. The key signature has one flat (B-flat major or D minor), and the time signature is 5/4.

45

Fl. *pp* *mp*

Ob. I *pp* *mp*

Ob. II *mp*

Cl. I *mp* *f*

Cl. II *pp* *mp*

Bsn. *p* *pp*

Hn. I *p* *pp*

Hn. II

Hpsd.

Vln. I *p*

Vln. II *p* *mf*

Vla. I

Vla. II

Vc. *f*

Db. *f*

E

49

Fl.

Ob. I

Ob. II

Cl. I

Cl. II

Bsn.

Hn. I

Hn. II

Hpsd.

Vln. I

Vln. II

Vla. I

Vla. II

Vc.

Db.

mf

pp

mf

mp

mf espress. ad. lib. portamenti

p

p

p

p

pizz.

mp

to con sord.

con sord.

con sord.

ord. molto vib.

sul pont.

sul pont.

sul pont.

ord. senza vib.

gliss.

54

F

Fl.

Ob. I

Ob. II

Cl. I

Cl. II

Bsn.

Hn. I

Hn. II

Hpsd.

Vln. I

Vln. II

Vla. I

Vla. II

Vc.

Db.

serenely

p *mp* *p*

pp *pp* *pp* *pp*

pp *pp*

mf *p*

mp *p*

eliso

Detailed description of the musical score: The score is for page 13, starting at measure 54. It features a variety of instruments: Flute (Fl.), Oboe I (Ob. I), Oboe II (Ob. II), Clarinet I (Cl. I), Clarinet II (Cl. II), Bassoon (Bsn.), Horn I (Hn. I), Horn II (Hn. II), Harpsichord (Hpsd.), Violin I (Vln. I), Violin II (Vln. II), Viola I (Vla. I), Viola II (Vla. II), Violoncello (Vc.), and Double Bass (Db.). The music is written in 2/4 and 4/4 time signatures. The Flute part has a dynamic of *p* and a fermata. Oboe II has a dynamic of *p* and a triplet marked 'serenely'. Clarinets I and II have dynamics of *p* and *pp*. Bassoon has a dynamic of *pp*. Horns I and II have dynamics of *pp*. Harpsichord is silent. Violins I and II have dynamics of *mf* and *p*, with triplets. Violas I and II have dynamics of *mp* and *p*. Violoncello has dynamics of *mp* and *p*. Double Bass has a dynamic of *pp* and a triplet marked 'eliso'. A rehearsal mark 'F' is placed above the first measure of the Flute part.

60 G

Fl. *p*

Ob. I *serenely*
p *mp* *p*

Ob. II

Cl. I *pp* *pp* *p*

Cl. II *pp* *pp* *p* *pp*

Bsn.

Hn. I *pp*

Hn. II *pp*

Hpsd.

Vln. I *p*

Vln. II

Vla. I *mp* *p*

Vla. II *mp* *p*

Vc. *mp* *p*

Db. *gliss*

H

72

Fl. *p*

Ob. I

Ob. II *p* *mp* *p*

Cl. I *p* *pp* *pp*

Cl. II *p* *pp* *pp*

Bsn.

Hn. I *pp*

Hn. II *pp*

Hpsd.

Vln. I *mf*

Vln. II *p*

Vla. I *mp* *p*

Vla. II *mp* *p*

Vc. *mp* *p*

Db. *mp* *p*

I

78

Fl.

Ob. I

Ob. II

Cl. I

Cl. II

Bsn.

Hn. I

Hn. II

Hpsd.

Vln. I

Vln. II

Vla. I

Vla. II

Vc.

Db.

p

mp

pp

3

to senza sord.

gliss.

79

80

81

Detailed description: This page of a musical score covers measures 78 to 81. It features a full orchestral ensemble including woodwinds (Flute, Oboes, Clarinets, Bassoon), brass (Horns), strings (Violins, Violas, Violoncello, Double Bass), and Harpsichord. The score is in 2/4 and 4/4 time signatures. Measure 78 is marked with a '78' and a 'p' dynamic. Measure 79 has a 'p' dynamic and a triplet of eighth notes. Measure 80 has a 'p' dynamic and a triplet of eighth notes. Measure 81 has a 'p' dynamic and a triplet of eighth notes. The woodwinds and strings play melodic lines, while the brass and harpsichord provide harmonic support. The double bass part includes a glissando in measure 81. The score is marked with various dynamics: *p* (piano), *mp* (mezzo-piano), and *pp* (pianissimo). There are also markings for 'to senza sord.' (without mutes) for the horns. The page number '17' is in the top right corner, and a section marker 'I' is at the top center.

sail over the top of the ensemble
without being too intrusive

84

This musical score page contains staves for the following instruments:

- Flute (Fl.):** Treble clef, measures 84-87, dynamics *p* and *mp*, includes triplets and slurs.
- Oboe I (Ob. I):** Treble clef, rests in measures 84-87.
- Oboe II (Ob. II):** Treble clef, measures 84-87, dynamics *mp* and *p*, includes triplets and slurs.
- Clarinets (Cl. I, Cl. II):** Treble clef, measures 84-87, dynamics *pp*, includes slurs.
- Bassoon (Bsn.):** Bass clef, measures 84-87, dynamics *mp*, includes triplets and slurs.
- Horn I (Hn. I) and Horn II (Hn. II):** Bass clef, measures 84-87, dynamics *mp*, includes slurs and triplets. Both staves have the instruction "senza sord." above the first measure.
- Harp (Hpsd.):** Grand staff, rests in measures 84-87.
- Violin I (Vln. I) and Violin II (Vln. II):** Treble clef, measures 84-87, dynamics *p*, *mp*, *mf*, *p*, *mf*, *p*. Vln. II includes "pizz. quasi rit." and a quintuplet.
- Viola I (Vla. I) and Viola II (Vla. II):** Treble clef, measures 84-87, dynamics *p*, *mp*, *mf*. Both include "pizz. quasi rit." and a quintuplet.
- Violoncello (Vc.):** Bass clef, measures 84-87, dynamics *p*, *mp*, *mf*. Includes "pizz. quasi rit." and a quintuplet.
- Double Bass (Db.):** Bass clef, measures 84-87, dynamics *mp*, includes "arco" above measure 85, triplets, and slurs.

89

Fl. *p*

Ob. I

Ob. II

Cl. I *mp*

Cl. II *mp*

Bsn.

Hn. I

Hn. II

Hpsd. *mp*

Vln. I *mf* *p*

Vln. II *mf*

Vla. I *mf*

Vla. II *mf*

Vc. *mf*

Db.

Detailed description: This page of a musical score covers measures 89 to 92. The music is written for a full orchestra. The Flute (Fl.) part begins in measure 89 with a triplet of eighth notes marked *p*. The Oboe (Ob.) parts are silent. The Clarinet (Cl.) parts play a sustained chord marked *mp*. The Bassoon (Bsn.) part features a triplet of eighth notes. The Horns (Hn.) parts play a triplet of eighth notes. The Piano (Hpsd.) part has a *mp* chord. The Violin (Vln.) parts have a melodic line with a triplet and a dynamic change from *mf* to *p*. The Viola (Vla.) parts play a triplet of eighth notes. The Cello (Vc.) part plays a triplet of eighth notes. The Double Bass (Db.) part plays a triplet of eighth notes. The score includes various musical notations such as slurs, ties, and dynamic markings.

93 **J**

Fl. *p*

Ob. I

Ob. II

Cl. I *p*

Cl. II *p*

Bsn.

Hn. I

Hn. II

Hpsd.

Vln. I *mf > p*

Vln. II *mf*

Vla. I *mf*

Vla. II *mf*

Vc. *mf*

Db.

96

Fl. *mp*

Ob. I *p* *mp*

Ob. II *p*

Cl. I *mp*

Cl. II *pp*

Bsn. *p* *mp*

Hn. I *p* *pp* *mp*

Hn. II *p* *mp*

Hpsd.

Vln. I *mf* *p*

Vln. II *mf*

Vla. I *mf*

Vla. II *mf*

Vc. *mf*

Db. *p*

99 **K**

Fl. I *p* *mp*

Ob. I *p* *mp*

Ob. II *mp* *p* *mp*

Cl. I *mp*

Cl. II *mp*

Bsn. *pp* *mp*

Hn. I *mp*

Hn. II *mp*

Hpsd.

Vln. I *mp* pizz.

Vln. II *mp*

Vla. I *mp*

Vla. II *mp*

Vc. *mp*

Db. *mp* pizz.

CONDUCTOR - after c. 40" of repetition of cells, point at the performer furthest to your left. That performer stops playing. Slowly move your hand, from left to right, across the ensemble (c. 30"). When your hand reaches a performer they stop playing, except for the Harpsichord, which continues after you finish conducting, and stops of its own accord.

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

Hpsd. avoid the temptation to slow down rit. final repetition only

Once everyone else has stopped playing, finish the chord sequence, regardless of how long that will take.

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

poco a poco rit. with each repetition → stop when conductor's hand has reached you

Ben Gaunt

Residuum VI for Oboe

Infected

Infected was workshopped by Christopher Redgate at The University of Sheffield, and received its première at the Upper Chapel, Sheffield on 6th June 2012.

Infected opens with a simple, quiet melody. Occasionally, this melody is interrupted by an event, which subsequently infects the melody. As the piece progresses, the melody undergoes an increasing number of infections, and gradually becomes more complex and raucous, reaching a manic climax before dying away.

Year of Composition: 2012

Duration: c. 5'

Techniques

lengths of note, in decreasing order

continue sim. ad. lib.

The box indicates to improvise in a similar manner to the previous material. The notes within the box indicate the range you can use when improvising. In this example, you can improvise between the notes F and A, and you are also permitted E acciaccaturas.

t.tr. t.tr. t.tr.

Timbral trills. Use alternate fingering to trill on the same pitch.

+sing

Sing and play simultaneously. Play the notes as indicated, and sing either in unison or in similar motion at any interval.

Four different multiphonics, all containing Eb.

Notes contained within M brackets are to be played as multiphonics.

breathe in squeak

Breathe in to create a squeak.

Notes contained within growl brackets are to be played as one continuous growl. A lower case g indicates separate growls for each note.

for Christopher Redgate

Residuum VI for Oboe

Ben Gaunt

slow senza misura c. 10" **Infected** continue sim. ad. lib. c. 50"

pppp **mp**

slightly faster c. 10" c. 45"

ppp **mp**

slightly faster c. 10" c. 40"

pp t.tr. t.tr. t.tr.

sim. sempre c. 10" c. 35"

t.tr. t.tr. t.tr. t.tr. t.tr. t.tr. +sing

p

sim. sempre c. 10" c. 30"

+sing t.tr. t.tr. t.tr. t.tr. t.tr. t.tr. +sing +sing +sing +sing

mp **f** M1 M2 M3 M4

c. 9" c. 25"

t.tr. +sing M t.tr. +sing M t.tr. +sing M t.tr. +sing

mf breathe in squeak

c. 8" c. 20"

+sing t.tr. +sing M +sing M +sing M t.tr. t.tr.

f

c. 7" c. 15"

growl +sing t.tr. +sing M growl +sing

ff

Manic c. 6" c. 10"

+sing growl t.tr. +sing t.tr. M growl +sing

fff

ad. lib. all previous modes of playing ord. key clicks c. 40"

faster faster

ffff

for Icarus Ensemble

Ben Gaunt

Seven Shrinking Machines

for amplified ensemble

Seven Shrinking Machines

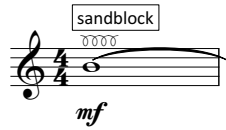
Seven Shrinking Machines was written for Icarus Ensemble as part of the European Composers' Professional Development Programme 2012.

It received its world première at Spazio Icarus, Reggio Emilia, Italy on the 19th November 2012. It received its UK première at Bates Mill, Huddersfield, UK on the 21st November 2012, as part of the Huddersfield Contemporary Music Festival.

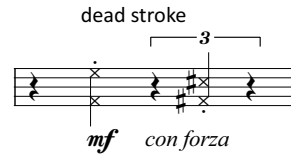
Seven Shrinking Machines is a study in proportion and memory. Seven distinct musical sections are presented, each with their own identity and set of rules; each with their own 'DNA'. One section is removed, and the remaining six sections are presented, each retaining their unique 'DNA'. Again, one section is removed, and the remaining five sections are presented. This process continues until there is only one section remaining. The structural pattern is ABCDEFG/BCDEFG/BCDEF/CDEF/CDE/DE/D resulting in a total of 28 sections. The first of these is long, and low. Each successive section starts a semitone higher and is one second shorter than the previous section. This gives structural cohesion to a work that is otherwise fragmented in construction.

The piece is approximately seven minutes long.

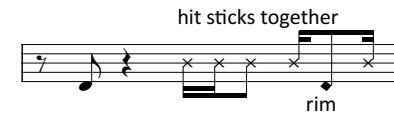
Techniques



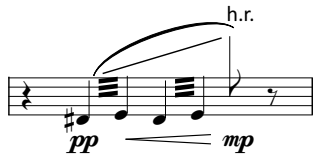
Rub two sandblocks together in a circular motion, aiming for constant 'white noise' with no breaks.



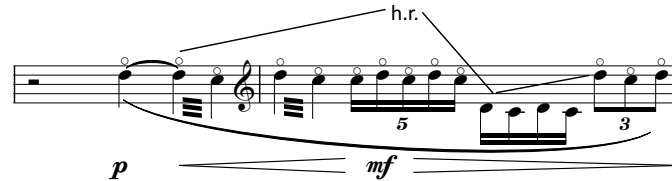
Strike the vibraphone as normal, with the mallet. Leave the mallet on the vibraphone bars, to 'deaden' the sound.



The 'rim' marking indicates to play only on the rim of the muted tom. Do not perform a rim shot.



Whilst performing a tremolando between the two given notes, increase the air pressure. This will result in a 'harmonic rip', alternating between the harmonic series of D# and E (in this example.) 'Rip' has high as possible.



As before, 'harmonic rip' whilst performing a tremelando between C and D. However, on this occasion, start on the first partial, 'harmonic rip' as high as possible, fall back down to the fundamental, then 'rip' back up to the first partial.

Seven Shrinking Machines

Transposed score

airy, ethereal $\text{♩} = 120$

Ben Gaunt

The score is for a 4/4 piece in a transposed key. The tempo is 120 beats per minute. The music is characterized by an airy and ethereal quality. The Flute part features three measures of breath (no pitch) with a *mf* dynamic. The Clarinet in Bb is silent. The Percussion part includes sandblock and a motor on full. The Vibraphone part features a *mp* dynamic. The Electric Guitar part is in drop D tuning and features a harmoniser with a *ppp* dynamic. The Bass Guitar part is in drop D tuning. The Synthesiser part features white noise with a *mf* dynamic. The Accordion part features air (out - no pitch) and air (out) with a *mf* dynamic.

Flute: breath (no pitch), *mf*, breath, *mf*, breath, *mf*

Clarinet in Bb

Percussion: sandblock, *mf*, motor: on full, *mf*, *mf*

Vibraphone: *mp*, Ped.

Electric Guitar: (drop D tuning) harmoniser, *ppp*

Bass Guitar: (drop D tuning)

Synthesiser: white noise, *mf*, *mf*, *mf*

Accordion: air (out - no pitch), *mf*, air (out), *mf*, air (out), *mf*

A *dark, menacing (l'istesso tempo al fine)*

The musical score is arranged in a multi-staff format. The instruments and their parts are as follows:

- Fl. (Flute):** Plays a melodic line with notes marked *p* (piano).
- Cl. (Clarinet):** Plays a melodic line with notes marked *p*.
- Perc. (Percussion):** Includes a bell plate and sizzle cymbal. The motor is off. Dynamics include *mp* (mezzo-piano).
- Vib. (Vibraphone):** Features a dead stroke and triplets. Dynamics include *mf con forza* (mezzo-forte con forza).
- E. Gtr. (Electric Guitar):** Includes an overdrive (max) and no harmoniser. Dynamics include *mp*, *pp* (pianissimo), and *mp*. A tremolo effect (m.v.) is indicated.
- Bass:** Plays a melodic line with notes marked *mp*.
- Synth. (Synthesizer):** Plays a pure sine wave with notes marked *pp*.
- Accord. (Accordion):** Plays a melodic line with notes marked *pp*, *mf* (mezzo-forte), and *pp*. Tremolo effects (m.v.) are indicated.

The score includes various musical notations such as dynamics (*p*, *mp*, *mf con forza*, *pp*), articulation (accents, slurs), and performance instructions (motor: off, dead stroke, overdrive (max), no harmoniser, pure sine wave, m.v.).

B mechanical, precise

27

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

p *pp* *p* *pp* *p* *pp* *p* *pp*

p *pp* *p* *pp* *p* *pp* *p* *pp*

muted floor tom, metal tube, ceramic bowl

pp

m.v. clean, muted, with plectrum

pp *p*

clean

pp

mf *p*

34

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

p *pp* *p* *pp* *p* *pp* *p* *pp* *p* *pp* *p* *pp*

p *pp* *p* *pp* *p* *pp* *p* *pp* *p* *pp*

p *pp* *p* *pp* *p* *pp* *p* *pp* *p* *pp*

T *p* T *p* T *p*

Detailed description: This page contains musical notation for measures 34 through 39. The score is arranged in a grand staff with eight systems. The first system includes Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), and Vibraphone (Vib.). The second system includes Electric Guitar (E. Gtr.), Bass, Synth, and Accordion. The Flute and Clarinet parts feature a rhythmic pattern of eighth and sixteenth notes with dynamic markings from *p* to *pp* and hairpins indicating a crescendo and decrescendo. The Clarinet part includes triplet markings. The Percussion part has a triplet of notes in each measure. The Electric Guitar part plays a rhythmic pattern of eighth notes. The Bass part has a triplet of notes in each measure, with dynamic markings *T* and *p*. The Synth part is silent. The Accordion part has a melodic line in the right hand and a chordal accompaniment in the left hand.

C shimmering, expressive

40

Fl. *p* *pp* *p* *pp* flz.

Cl. *p* *pp* *p* *pp* flz.

Perc.

Vib. *pp* *Red.*

E. Gtr. unmuted *pp*

Bass with plectrum *pp*

Synth.

Accord. *pp*

Detailed description: This is a page of a musical score for a chamber ensemble. It features eight staves: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion (Accord.). The score begins at measure 40. The Flute and Clarinet parts start with a melodic line of eighth notes, marked with dynamics *p* and *pp*. The Clarinet part includes triplet markings. The Percussion staff is mostly silent. The Vibraphone part enters with a melodic line, marked *pp* and *Red.*. The Electric Guitar and Bass parts play a harmonic accompaniment, with the guitar marked 'unmuted' and *pp*, and the bass marked 'with plectrum' and *pp*. The Synth staff is silent. The Accordion part provides a harmonic accompaniment, marked *pp*. A section marker 'C' is placed above the first measure of the second system, with the instruction 'shimmering, expressive'. The 'flz.' (flautissimo) marking is present above the Flute and Clarinet staves in the second system.

D stilted, mysterious

52

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

p con dolore

pp

ppp

with fingers

p

pp

p

59

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

pp

p

pp

p

Detailed description of the musical score: The score is for measures 59 through 64. The Flute (Fl.) part starts with a quarter note G4, followed by a quarter rest, then a half note G4 with a slur and triplet over the next two notes (A4, B4). This continues with a half note G4, a half note F#4 with a slur and triplet over the next two notes (G4, A4), and finally a half note G4 with a slur and triplet over the next two notes (F#4, F4). The Clarinet (Cl.) part consists of a rhythmic accompaniment of eighth notes in groups of three, with various accidentals. The Percussion (Perc.) and Vibraphone (Vib.) parts are silent. The Electric Guitar (E. Gtr.) part mirrors the Flute's melodic line. The Bass part is silent. The Synthesizer (Synth.) part is silent. The Accordion (Accord.) part features chords in the right hand and triplets in the left hand, with dynamics ranging from *pp* to *p*. The key signature changes from one flat to no flats between measures 61 and 62.

E frantic, bubbling

t.tr.~~~~~

Fl. ⁶⁴ 3

Cl. 3 3 3 3 3 3 **ppp espress.**

Perc. 5 temple blocks, muted floor tom **pp**

Vib.

E. Gtr. 3 3 **p**

Bass **pp**

Synth. 5 5 **ppp espress.** 5

Accord. **pp** **p** **pp** **ppp espress.** 3 3 6

3

68

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

hit sticks together

rim

ord.

p

pp

5

6

t.tr.

Detailed description of the musical score: The score is for measures 68, 69, and 70. The Flute (Fl.) part starts in measure 68 with a whole rest, then in measure 69 has a half note G#4 with a dynamic of *p*, and in measure 70 has a whole note G#4 with a dynamic of *p*. The Clarinet (Cl.) part has a melodic line with eighth and sixteenth notes, including slurs and accents. The Percussion (Perc.) part features a snare drum pattern with notes marked 'rim' and 'hit sticks together', and a tom pattern marked 'ord.'. The Vibraphone (Vib.) part has whole rests in all three measures. The Electric Guitar (E. Gtr.) part has a whole note G#4 in measure 69 and a whole note G#4 in measure 70, both with a dynamic of *p*. The Bass part has a rhythmic line with eighth notes and slurs, with dynamics of *pp* in measures 69 and 70. The Synth part has a melodic line with eighth notes and slurs, with a dynamic of *pp* in measure 70. The Accordion part has a melodic line with eighth notes and slurs, with a dynamic of *pp* in measure 70. The score includes various musical notations such as slurs, accents, and dynamics.

71 t.tr.

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

p

rim

pp

5

6

3

Detailed description: This page of a musical score covers measures 71, 72, and 73. The Flute (Fl.) part begins with a trill (t.tr.) on a high note, followed by a sustained note. The Clarinet (Cl.) plays a complex, rhythmic line with many accidentals. The Percussion (Perc.) part features rimshots on measures 71 and 72, and a cymbal crash on measure 73. The Vibraphone (Vib.) is silent. The Electric Guitar (E. Gtr.) plays a sustained chord. The Bass part has a walking bass line with dynamics *pp*. The Synthesizer (Synth.) and Accordion parts feature intricate sixteenth-note patterns with fingering numbers 5 and 6, and some triplets (3).

74 t.tr.

Fl. *p* t.tr. *p*

Cl.

Perc. rim rim rim

Vib.

E. Gtr. *p* *pp*

Bass

Synth. 5

Accord. 6 6 6 6 6 3 3 6 6 6 6

light, effervescent

F

slap
tongue

harmonic rip

h.r.

h.r.

The musical score is arranged in a system with eight staves. The top staff is for Flute (Fl.), followed by Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion (Accord.). The score is divided into three measures. The first measure is in 2/4 time, the second in 2/4, and the third in 4/4. The Flute part features a melodic line with dynamics *mf*, *mp*, *pp*, *mp*, *pp*, *p*, and *pp*. The Clarinet part has a rhythmic accompaniment with dynamics *pp* and *pp*. The Percussion part includes a pattern of notes with dynamics *p* and *p*. The Vibraphone part has a few notes with dynamics *p* and *p*. The Electric Guitar part has a sustained chord with dynamics *ppp* and *p*, and pick scrape effects with dynamics *p.s.* and *p.s.*. The Bass part has a rhythmic accompaniment with dynamics *pp*. The Synth part has a melodic line with dynamics *pp*. The Accordion part has a melodic line with dynamics *p*. The score includes various musical notations such as slurs, ties, and articulation marks.

82

Fl. *mp* *mfp* *mp* *pp* *mp* *mfp* *mp*

Cl. *pp*

Perc.

Vib.

E. Gtr. *Red.* *p* *p.s.* *p.s.* *p.s.* *Red.*

Bass

Synth.

Accord.

h.r. s.t. h.r. h.r. s.t. h.r.

s.v. s.v. s.v. s.v.

5 5

Detailed description: This is a page of a musical score for page 13. It features eight staves: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion. The Flute part has six measures with dynamics *mp*, *mfp*, *mp*, *pp*, *mp*, *mfp*, and *mp*. It includes markings for *h.r.* (half rest) and *s.t.* (slur). The Clarinet part has dynamics *pp* and *pp*, with *s.v.* (slur) markings. The Electric Guitar part has dynamics *p* and *p.s.* (pizzicato), with *Red.* (pedal) markings. The Accordion part has a complex rhythmic pattern in the right hand and rests in the left hand. The page number 13 is in the top right corner.

88

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

h.r.

h.r.

G dark, menacing

pp

p

pp

mp

mp

wood devil

bell plate, sizzle cymbal

p.s.

with fingers

distortion (max)

mf

mf

mf

p

p

m.v.

m.v.

f con forza

H mechanical, precise

94

Fl. *mp* *mp* *p* *mp* *p*

Cl. *mp* *p* *mp* *p*

Perc. muted floor tom, metal tube, ceramic bowl *p*

Vib. *mf*

E. Gtr. *p* *mf* clean, muted, with plectrum *mp* clean, with fingers *p*

Bass *mf* *p*

Synth. *mp*

Accord. *f* *p* *f* *mp*

Detailed description: This musical score page covers measures 94 to 97. It features eight staves: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion. The score is divided into two systems. The first system (measures 94-96) is in 2/4 time, and the second system (measures 97-98) is in 4/4 time. The Flute and Clarinet parts feature melodic lines with dynamic markings of *mp*, *p*, and *mp*. The Percussion part includes a triplet of notes in measure 97, marked *p*, with the instruction 'muted floor tom, metal tube, ceramic bowl'. The Vibraphone part has a triplet in measure 96 marked *mf*. The Electric Guitar part starts with a tremolo (m.v.) in measure 94, then plays chords in measure 95 marked *mf* and *p*. In measure 97, it plays a triplet marked *p* with the instruction 'clean, with fingers', and in measure 98, it plays a triplet marked *mp* with the instruction 'clean, muted, with plectrum'. The Bass part follows a similar pattern with *mf* and *p* markings. The Synth part plays sustained notes in measure 94 and a triplet in measure 97 marked *mp*. The Accordion part features a tremolo (m.v.) in measure 94, then chords in measure 95 marked *f* and *p*, and in measure 97 marked *f* and *mp*. The score includes various musical notations such as slurs, ties, and dynamic hairpins.

103

The musical score consists of eight staves. The Flute (Fl.) and Clarinet (Cl.) parts are in the upper register. The Flute part features a melodic line with dynamics *mp* and *p*. The Clarinet part features a rhythmic line with triplets and dynamics *mp* and *p*. The Percussion (Perc.) part features a triplet of eighth notes. The Vibraphone (Vib.) part is silent. The Electric Guitar (E. Gtr.) part features a melodic line with dynamics *mp* and *p*. The Bass part features a melodic line with dynamics *mp* and *p*. The Synth part is silent. The Accordion part features a melodic line with dynamics *mp* and *p*.

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

107

The musical score for measures 107-110 is arranged in a multi-staff format. The instruments and their parts are as follows:

- Flute (Fl.):** Plays a melodic line in the treble clef with a key signature of one flat. The dynamics alternate between *mp* and *p* across the four measures.
- Clarinet (Cl.):** Plays a rhythmic accompaniment in the treble clef, featuring triplet patterns. Dynamics range from *p* to *mp*.
- Percussion (Perc.):** Features a single triplet of eighth notes in the second measure.
- Vibraphone (Vib.):** Remains silent throughout the passage.
- Electric Guitar (E. Gtr.):** Provides harmonic support with chords and single notes in the treble clef.
- Bass:** Plays a bass line in the bass clef, including a triplet of eighth notes in the second measure.
- Synth:** Remains silent throughout the passage.
- Accordion:** Provides harmonic support with chords in the bass clef, including a flat sign (*b*) in the second and fourth measures.

I shimmering, expressive

J stilted, mysterious

Fl. *flz.*
p

Cl. *flz.*
p

Perc.

Vib. *p*
Ped.

E. Gtr. *p*
unmuted
with plectrum

Bass *p*

Synth.

Accord. *p*

mp con dolore

pp

with fingers

3

3

3

132 t.tr. mp

Fl.

Cl.

Perc. rim

Vib.

E. Gtr. mp

Bass p

Synth. 5 5 5 5 5 5

Accord. 6 6 6 6 3 3 6 6 6 6

t.tr. mp

rim

mp

p

p

5 5

6 6 3 3 6 6 6 6

Detailed description: This page of a musical score contains eight staves. The Flute staff (Fl.) has a treble clef and a melodic line with a trill (t.tr.) starting at measure 132, marked *mp*. The Clarinet staff (Cl.) has a treble clef and a complex rhythmic pattern with many accidentals. The Percussion staff (Perc.) has a drum set icon and includes rimshots. The Vibraphone staff (Vib.) is empty. The Electric Guitar staff (E. Gtr.) has a treble clef and a melodic line with a trill (t.tr.) marked *mp*. The Bass staff has a bass clef and a rhythmic line marked *p*. The Synth staff has a bass clef and a melodic line with five-fingered patterns (5) marked *p*. The Accordion staff has a bass clef and a melodic line with six-fingered patterns (6) and three-fingered patterns (3) marked *p*. The page number 21 is in the top right corner.

135

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

mp

t.tr.

rim

p

5

6

2/4

Detailed description: This page of a musical score covers measures 135 to 140. The score is arranged in a grand staff with eight parts: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion. The time signature is 2/4. The Flute part begins with a trill (t.tr.) in measure 135. The Clarinet part features a melodic line with slurs and ties. The Percussion part includes a rimshot in measure 135. The Electric Guitar part has sustained chords with a dynamic marking of *mp*. The Bass part plays a rhythmic pattern with a dynamic marking of *p*. The Synth part plays a melodic line with a dynamic marking of *p* and includes fingering numbers 5 and 6. The Accordion part plays a melodic line with a dynamic marking of *p* and includes fingering numbers 5 and 6. The score concludes with a double bar line and a 2/4 time signature at the end of each staff.

L light, effervescent

138

Fl. *p mp p mf fp mf p mf* h.r. s.t. h.r. h.r. S.V.

Cl. *p* 5

Perc. *mp* 5 temple blocks, wood devil

Vib. *mp* Red.

E. Gtr. *ppp* p.s. p.s. p.s. p.s. overdrive (max), with plectrum

Bass

Synth. 5

Accord. *mp* 6

Detailed description: This musical score page, numbered 23, covers measures 138 to 142. It features eight staves: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion. The Flute part is marked 'light, effervescent' and includes dynamics from *p* to *fp*, with hairpins and slurs. The Clarinet part has a *p* dynamic and a five-measure slur. Percussion includes '5 temple blocks, wood devil' at *mp*. The Vibraphone has *mp* dynamics and a 'Red.' effect. The Electric Guitar uses 'overdrive (max), with plectrum' and *ppp* dynamics with 'p.s.' (pick strike) markings. The Synth and Accordion parts feature five-measure and six-measure slurs respectively. The score is in 2/4 time, with a key signature of one sharp (F#).

144

h.r. overblow h.r.

M dark, menacing

Fl. *p mp p mf p mf mf*

Cl. *mf* *mf*

Perc. wood devil bell plate, sizzle cymbal *mp* *f*

Vib. *ff con forza*

E. Gtr. p.s. p.s. p.s. with fingers *f*

Bass distortion (max) *f*

Synth. *mp*

Accord. *mp* *f* m.v.

N mechanical, precise

151

The musical score is arranged in a system with eight staves. The Flute (Fl.) staff starts with a *mf* dynamic and features a melodic line with eighth-note patterns. The Clarinet (Cl.) staff has a *mf* dynamic and plays a triplet-based rhythmic pattern. The Percussion (Perc.) staff includes a box with the text "muted floor tom, metal tube, ceramic bowl" and a triplet of notes. The Vibraphone (Vib.) staff has a triplet of notes. The Electric Guitar (E. Gtr.) staff has two parts: one marked "clean, muted, with plectrum" and another marked "clean, with fingers" with a *mf* dynamic. The Bass staff has a *f* dynamic and a triplet of notes. The Synth staff has a *mf* dynamic. The Accordion staff has two parts, both marked "m.v." (moving), with dynamics of *mp* and *f*.

Fl. *mf* *mp* *mf* *mp* *mf* *mp* *mf*

Cl. *mf* *mf* *mp* *mf* *mp* *mf* *mp* *mf*

Perc. muted floor tom, metal tube, ceramic bowl *mp*

Vib. 3

E. Gtr. *f* clean, muted, with plectrum clean, with fingers *mf*

Bass *f* *mp*

Synth. *mf*

Accord. *mp* *f* *mf* m.v. m.v.

O shimmering, expressive

159

Fl. *mp* *mf* *mp* *mf* *mp* *mf* *mp* *mf*

Cl. *mp* *mf* *mp* *mf* *mp* *mf* *mp* *mf* flz. *mp*

Perc. *mp*

Vib. *mp* Red.

E. Gtr. *mp* unmuted *b2.* *b2.* *mp* with plectrum

Bass *mp* T P *mp*

Synth.

Accord. *mp*

P stilted, mysterious

169

mf con dolore

mp

p

mf *mp* *mf* *mp*

with fingers

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

Detailed description: This page of a musical score, numbered 169, is for a piece titled 'stilted, mysterious'. It features eight staves: Flute (Fl.), Clarinet (Cl.), Percussion (Perc.), Vibraphone (Vib.), Electric Guitar (E. Gtr.), Bass, Synth, and Accordion. The music is in 4/4 time and G major. The Flute part starts with a dynamic of *mf con dolore* and features a melodic line with slurs and triplets. The Clarinet part plays a rhythmic triplet accompaniment with a dynamic of *mp*. The Electric Guitar part, marked *p*, mirrors the flute's melody. The Accordion part provides harmonic support with chords and triplets, alternating between *mf* and *mp* dynamics. Percussion, Vibraphone, Bass, and Synth parts are currently silent. A 'with fingers' instruction is placed above the Electric Guitar staff.

174

Q frantic, bubbling
t.tr.

Fl. *mf*

Cl. *p* *espress.*

Perc. *mp*
5 temple blocks, muted floor tom

Vib.

E. Gtr. *mf*

Bass *mp*

Synth. *p* *espress.*

Accord. *mf* *p* *espress.*

177 t.tr. *mf* t.tr. *mf*

Fl.

Cl.

Perc. rim

Vib.

E. Gtr. *mf* *mp*

Bass

Synth. 5

Accord. 6

2/4

Detailed description: This is a page of a musical score for a jazz ensemble, page 29. The score is in 2/4 time and consists of eight staves. The Flute (Fl.) and Electric Guitar (E. Gtr.) parts feature melodic lines with trills (t.tr.) and a mezzo-forte (*mf*) dynamic. The Clarinet (Cl.) part has a complex, rhythmic line with many accidentals. The Percussion (Perc.) part includes rimshots and a cymbal pattern. The Vibraphone (Vib.) part is mostly silent. The Bass part has a walking bass line with a mezzo-piano (*mp*) dynamic. The Synth and Accordion parts play a fast, repetitive eighth-note pattern with fingerings 5 and 6 respectively. The score is divided into three measures, with the final measure ending in a 2/4 time signature.

R mechanical, precise

Fl. *f* *mf* *f* *mf* *f* *mf* *f* *mf*

Cl. *f* *mf* *f* *mf* *f* *mf* *f* *mf*

muted floor tom, metal tube, ceramic bowl

Perc. *mf*

Vib.

E. Gtr. clean, muted, with plectrum *f*

Bass clean, with fingers T P *mf*

Synth. *f*

Accord. *f*

S shimmering, expressive

stilted, mysterious

Fl. *186 flz.*

f con dolore

Cl. *flz.*

mf

Perc.

Vib. *mf*

Leo.

E. Gtr. *unmuted*

mf

with plectrum

mp

with fingers

Bass *8va*

mf

Synth.

Accord. *mf*

mf

f

mf

T frantic, bubbling

t.tr.

The musical score is arranged in a system with the following instruments and parts:

- Fl. (Flute):** Starts at measure 194 with a melodic line. A dynamic marking of *f* is present.
- Cl. (Clarinet):** Features triplet patterns in the first two measures, followed by a complex rhythmic pattern. A dynamic marking of *mp espress.* is present.
- Perc. (Percussion):** Includes a section labeled "5 temple blocks, muted floor tom" with a dynamic marking of *mf*.
- Vib. (Vibraphone):** Remains silent throughout the section.
- E. Gtr. (Electric Guitar):** Plays a melodic line with a dynamic marking of *f*.
- Bass:** Remains silent throughout the section.
- Synth. (Synthesizer):** Plays a complex, rhythmic bass line with a dynamic marking of *mp espress.* and includes fingering numbers (5).
- Accord. (Accordion):** Features a melodic line with a dynamic marking of *f* and a complex rhythmic pattern with a dynamic marking of *mp espress.* and fingering numbers (6).

The musical score is arranged in a standard orchestral layout with the following parts and details:

- Fl. (Flute):** Starts at measure 197 with a trill (t.tr.) and a forte (*f*) dynamic. A box labeled 'U' with the instruction 'mechanical, precise' is placed above the staff.
- Cl. (Clarinet):** Features a melodic line with triplets and a *mp* dynamic.
- Perc. (Percussion):** Includes 'rim' hits in the first two measures and a triplet of notes in the final measure. Dynamics range from *mp* to *mf*. A box specifies 'muted floor tom, metal tube, ceramic bowl'.
- Vib. (Vibraphone):** Remains silent throughout the section.
- E. Gtr. (Electric Guitar):** Starts with a forte (*f*) dynamic and a clean, muted tone using a plectrum. A *mp* dynamic is indicated later.
- Bass:** Features a melodic line with a *mf* dynamic, transitioning to a triplet of notes in the final measure with a *mf* dynamic. The instruction 'clean, with fingers' is present.
- Synth. (Synthesizer):** Plays a melodic line with a *mf* dynamic, featuring a triplet of notes.
- Accord. (Accordion):** Features a melodic line with triplets and sextuplets, maintaining a *mp* dynamic.

shimmering, expressive

201.

Fl.

Cl.

Perc.

Vib.

E. Gtr.

Bass

Synth.

Accord.

V

stilted, mysterious

204.

f

ff

f

mf

f

unmuted

with plectrum

with fingers

3

3

3

3

3

3

W shimmering, expressive

stilted, mysterious

mechanical, airy

Fl. *ff* *fff* *mf* *fff* *mf* *fff* *mf* *fff* *mf* *fff* *mf*

Cl. *ff* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff*

207 flz. *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.*

breath *breath* *breath* *breath* *breath* *breath* *breath* *breath* *breath* *breath* *breath*

Perc. *mf* *mf* *mf* *mf* *mf*

Vib. *ff* *ff* *ff* *ff* *ff*

flz. *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.*

flz. *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.*

E. Gtr. *ff* *f* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff*

Bass *ff* *ff* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff* *fff*

with plectrum *with fingers* *with plectrum*

Synth. *mf* *mf* *mf* *mf* *mf*

Accord. *ff* *ff* *fff* *mf* *fff* *mf* *fff* *mf* *fff* *mf* *fff* *mf*

white noise *air (out)* *air (out)* *air (out)* *air (out)* *air (out)* *air (out)* *air (out)* *air (out)* *air (out)* *air (out)*

220

Fl. *flz.* *fff* *mf* *flz.* *fff* *mf* *flz.* *fff* *mf* *flz.* *fff* *mf*

Cl. *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.* *flz.*

Perc. *mf* *mf* *mf* *mf*

Vib.

E. Gtr. *♭* *♭* *♭* *♭*

Bass *♭* *♭* *♭* *♭*

Synth. *mf* *mf* *mf* *mf*

Accord. *air (out)* *fff* *mf* *fff* *mf* *fff* *mf* *fff* *mf*

Time signatures: 2/4, 6/4, 2/4, 7/4, 2/4, 8/4, 2/4, 9/4, 2/4.

228

Fl. *flz.* *fff* *mf* *flz.* *fff* *mf* *flz.* *fff* *mf*

Cl. *flz.* *flz.* *flz.* *flz.*

Perc. *mf* *mf* *mf* motor: on full

Vib. *mp* harmoniser

E. Gtr. *pp*

Bass

Synth. *mf* *mf* *mf*

Accord. *fff* *mf* *fff* *mf* *fff* *mf* air (out)

Detailed description: This is a page of a musical score for page 37, starting at measure 228. The score is arranged in a system with eight staves. The top two staves are for Flute (Fl.) and Clarinet (Cl.), both in 2/4 time. The Flute part features a melodic line with dynamics ranging from *fff* to *mf*, marked with *flz.* (flautando) and *breath* markings. The Clarinet part is mostly silent, with *flz.* markings. The third staff is for Percussion (Perc.) in 2/4 time, playing a sustained note with *mf* dynamics and a motor that turns on in the final measure. The fourth staff is for Vibraphone (Vib.) in 2/4 time, which is silent. The fifth and sixth staves are for Electric Guitar (E. Gtr.) and Bass, both in 2/4 time, playing sustained notes with *pp* dynamics. The seventh staff is for Synth. in 2/4 time, playing a sustained note with *mf* dynamics. The eighth staff is for Accordion in 2/4 time, with a melodic line and dynamics ranging from *fff* to *mf*, marked with *air (out)*. The score concludes with a double bar line and repeat dots.

Ben Gaunt

Three Catalysts

for trumpet and percussion

I - Constant

II - Changing

III - Absent

Three Catalysts was commissioned by trumpeter George Morton.

The opening trumpet material is almost identical in all three movements. In each movement, the percussion material acts as a catalyst, transforming the trumpet melody to unexpected conclusions.

Year of Composition: 2012

Duration: c. 6'

Transposed Score

Techniques

Trumpet

t **k** **tss** **t-k** **boo**

"t" and "k" vocal consonants through trumpet should sound mechanical
 vocal sound through trumpet should sound like steam
 rapid alteration between "t" and "k" vocal consonants
 sing "boo" through trumpet start at a high pitch and descend

flurry **t. tr**

cross note heads indicate key clicks
 flurry indicates rapid tremolando
 timbral/microtonal trill

open **sing**

rapid, high, undefined notes using harmonic series as short and fast as possible
 box text indicates fingering (and hence, which harmonic series)
 note above bracket indicates length
 imitate previous technique whilst singing down the trumpet use "t" and "k" consonant sounds

Percussion

Congas

H

H indicates heel of hand in centre
 marcato indicates slap on rim
 cross note head indicates scrape skin with fingers

Vibraphone

deadstroke

smooth transition from pedal to no pedal

Temple Blocks

flurry

flurry indicates rapid alteration between different temple blocks
 the brackets indicate which temple blocks to play

Three Catalysts I - Constant

Ben Gaunt

jazzy, brassy ♩=100

Trumpet in Bb

Congas (w/ hands)

6

Trumpet in Bb

Congas (w/ hands)

12

Trumpet in Bb

Congas (w/ hands)

gradually more mechanical

17

Trumpet in Bb

Congas (w/ hands)

22

mp *f* *mp*

mf *H* *mf* *H*

28

mf *mp* *p* *mp*

mp *p* *mp* *mf* *H*

33

f *mp* *mf* *p*

mp *p* *mp* *H*

38

mf *mp* *mf* *p*

mf *H* *H* *mp* *H*

43

mf p mf p mp p

48

mechanical

mf p mp

tss k t tss tss

mp p mp

53

p mp

k k k t tss k tss t t boo tss tss t k tss k t k

p mp

58

pp

boo k t k tss k t k t k tss t k k boo tss t k t k t t t boo t k tss k t k t k k k tss

pp

II - Changing

sleazy, mysterious ♩=100
con sord. harmon

Trumpet in B♭

Vibraphone

mf p mp mf p mp mf

mf mf mf

Ped. Ped. Ped.

6

p mp mf > p < mf

mp mf mp

Ped.

11

mp p f mp p

mf mf

Ped. Ped.

2

16

mf *pp*

mp *mf* *p* *mp*

quasi rit.

Ped. *

21

p *mp* *p* *mp*

mp *mp* *p*

Ped. *

Ped. *

25

p *mf* *p* *mf* *pp*

mp *mf* *mf*

Ped. *

Ped. *

29

f *p* *mf* *p*

mf *p* *mf*

Ped. *

Ped. *

33 +

mf *mp* *f* *mp*

mf *mp* *mf p* *f*

Ped. * Ped. * Ped. * Ped.

37 + + + + +

mf *mp* *mp* *p* *mf* *p*

mp *mf*

Ped. * Ped. *

42 + + + + +

mf *mp* *mf*

f *mf*

Ped. Ped.

47 + + + + +

mf *mp* *mp*

mp

Ped. Ped.

4

52

p *p*

p *pp* Ped.

III - Absent

smooth, relaxed ♩=100

loosen valves
con sord. straight

Trumpet in Bb

flurry

mp

p

Temple Blocks

p

6

flurry

mp

p

mp

p

mp

flurry

mp

12

p

mp

mf

p

pp

p

flurry

pp

18

gradually more agitated

mp

p

mp

p

mp

p

flurry

mp

24

p

mf

mf

f

t-k

sing

flurry

mp

2

29

agitated

mf

f

mf

flurry

sing

t-k

33

f

mf

flurry

sing

t-k

37

mp

mf

flurry

sing

t-k

41

f

ff

flurry

sing

t-k

45

ff

f

mf

flurry

sing

t-k

49

mp

p

mp

p

flurry

flurry

independant quasi rit.

Ben Gaunt

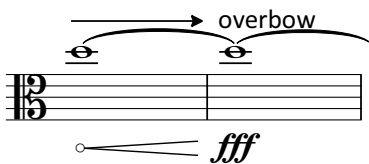
Cataclysm
for orchestra

Transposed Score

2 Fl.
2 Ob.
1 Cl. in B \flat
1 B. Cl. in B \flat
2 Bsn.
4 Hn. in F
3 Tpt. in B \flat
3 Tbn.
1 Tba.
Percussion 1 - Bass Drum, Vibraphone, 3 Suspended Cymbals
Percussion 2 - Glockenspiel, 2 Timbales
Percussion 3 - 4 Tom Toms, Tam Tam
Cel.
Vln. I
Vln. II
Vla.
Vc.
Db.

Year of Composition: 2013

Duration: c. 7'



bow with extreme pressure to produce a violent, cracked sound
often the sound produced will be an octave below the written pitch
arrows indicate a smooth transition (from normal pressure to overbow pressure)



play as many notes as possible, around the given pitch
the aim is to create a 'bubbling' effect

e.g. the E on the left will be performed as shown on the right:
move up and down as you please, but do not stray too far
from the original note



etc.

Cataclysm

A

$\text{♩} = 108$ bold, aggressive

anxious, burbling (l'istesso tempo sempre)

This musical score is for a section titled 'Cataclysm' by Ben Gaunt. It is marked with a tempo of 108 beats per minute, described as 'bold, aggressive'. The music is in 4/4 time and features a complex, 'anxious, burbling' texture. The score is divided into several systems of staves:

- Flutes:** Flute I and Flute II.
- Oboes:** Oboe I and Oboe II.
- Clarinets:** Clarinet in B \flat and Bass Clarinet in B \flat .
- Bassoons:** Bassoon I and Bassoon II.
- Horns:** Horn in F I, II, III, and IV.
- Trumpets:** Trumpet in B \flat I, II, and III.
- Trombones:** Trombone I, II, and III.
- Tuba:** Tuba.
- Percussion:** Percussion I (Bass Drum, Vibraphone, 3 Suspended Cymbals), Percussion II (Glockenspiel, 2 Timbales), and Percussion III (4 Toms, Tam Tam). Specific instructions include 'Bass Drum', 'Glockenspiel', and '4 Toms w/ soft sticks'.
- Celesta:** Celesta.
- Strings:** Violin I, Violin II, Viola, Violoncello, and Double Bass. The string parts include dynamic markings like *p* and *ord.* (ordine).

The score is heavily annotated with performance directions such as *fff* (fortissimo), *flurry*, and *ord.* (ordine). The overall character is one of intense, chaotic energy.

B

dark, menacing

C

delicate, sparkling

2

19

Fl. I *ppp* *p* *pp*

Fl. II *ppp* *p* *pp*

Ob. I

Ob. II

Cl. *ppp* *p* *ppp* *p* *ppp* *pp* bisbig. *pp*

B. Cl. *ppp* *p* *ppp* *p* *ppp* *mp* bisbig. *pp*

Bsn. I *ppp* *p* *ppp* *p* *ppp* *pp* *p*

Bsn. II *ppp* *p* *ppp* *p* *ppp*

Hn. I *ppp*

Hn. II *ppp*

Hn. III *ppp*

Hn. IV *ppp*

Tpt. I *ppp*

Tpt. II *ppp*

Tpt. III *ppp*

Tbn. I *ppp* *pp* *pp* *pp* con sord. *p*

Tbn. II *ppp* *pp* *pp*

Tbn. III *ppp* *pp* *pp*

Tba. *ppp*

Vibraphone

Vib. *pp* *pp* *pp* *pp*

Glock. *p* *pp*

4 Toms *p* *p* *p* *p*

Cel. *p* *pp* *pp*

Vln. I *ppp* *p* *p* *p* *pp*

Vln. II *ppp* *p* *p* *p* *pp*

Vla. *ppp* *p* *ppp* *p* *ppp* *mp*

Vc. *ppp* *p* *ppp* *p* *ppp* *f espress.*

Db. *pizz.* *p* *mp*

This page of the musical score, numbered 3, contains the following instruments and parts:

- Flutes:** Fl. I (starting at measure 35), Fl. II
- Oboes:** Ob. I, Ob. II
- Woodwinds:** Cl. (with *bisbig.* markings), B. Cl., Bsn. I, Bsn. II
- Brass:** Hn. I-IV, Tpt. I-III, Tbn. I-III, Tba.
- Other Instruments:** Vib., Glock., 4 Toms, Cel.
- Strings:** Vln. I, Vln. II, Vla., Vc., Db.

The score includes various musical markings and dynamics:

- Dynamics: *pp* (pianissimo), *p* (piano), *mp* (mezzo-piano)
- Articulation: *bisbig.* (whispered)
- Phrasing: Slurs and ties connecting notes across measures.

D

tense, malevolent

This page contains the musical score for measures 47 through 54. The instruments and their parts are as follows:

- Flutes (Fl. I, II):** Fl. I has a melodic line starting in measure 47 with dynamics *p* and *mp*. Fl. II has a rhythmic accompaniment with dynamics *mp* and *p*.
- Oboes (Ob. I, II):** Both oboes play a rhythmic accompaniment with dynamics *mp* and *mf*.
- Clarinets (Cl.):** Clarinet I has a melodic line starting in measure 47 with dynamics *p* and *mp*.
- Bass Clarinet (B. Cl.):** Bass Clarinet I has a melodic line starting in measure 47 with dynamics *p* and *mp*.
- Bassoons (Bsn. I, II):** Both bassoons play a rhythmic accompaniment with dynamics *p* and *mp*.
- Horns (Hn. I-IV):** All four horns play sustained notes with dynamics *p* and *mp*.
- Trumpets (Tpt. I-III):** All three trumpets play sustained notes with dynamics *p* and *mp*.
- Trombones (Tbn. I-III):** All three trombones play sustained notes with dynamics *p* and *mp*.
- Tuba (Tba.):** The tuba plays a rhythmic accompaniment with dynamics *mp* and *mp*.
- Vibraphone (Vib.):** The vibraphone plays sustained notes with dynamics *mp* and *mp*.
- Glockenspiel (Glock.):** The glockenspiel plays sustained notes with dynamics *mp* and *mp*.
- 4 Tomms (4 Toms):** The four tomms play sustained notes with dynamics *mp* and *mp*.
- Cello (Cel.):** The cello part is mostly silent.
- Violins (Vln. I, II):** Violin I has a melodic line starting in measure 47 with dynamics *p* and *mp*. Violin II has a rhythmic accompaniment with dynamics *mp* and *mp*.
- Viola (Via.):** The viola plays a rhythmic accompaniment with dynamics *mp* and *mf*.
- Violoncello (Vc.):** The violoncello plays a rhythmic accompaniment with dynamics *mp* and *mp*.
- Double Bass (Db.):** The double bass plays a rhythmic accompaniment with dynamics *mp* and *mp*.

E
powerful, expansive

61

Fl. I

Fl. II

Ob. I

Ob. II

Cl.

B. Cl.

Bsn. I

Bsn. II

Hn. I

Hn. II

Hn. III

Hn. IV

Tpt. I

Tpt. II

Tpt. III

Tbn. I

Tbn. II

Tbn. III

Tba.

Vib.

Timb.

4 Toms

Cel.

Vln. I

Vln. II

Vla.

Vc.

Db.

mp

mf

f

senza sord.

rim

3 Suspended Cymbals

sempre l.v.

arco

pizz.

F
brutal, broad

This page of a musical score, numbered 6, contains the following instruments and parts:

- Flutes (Fl. I, II):** Part of a woodwind quintet, playing melodic lines with trills and slurs.
- Oboes (Ob. I, II):** Playing melodic lines with trills and slurs, marked *molto vib.*
- Clarinets (Cl.):** Playing melodic lines with trills and slurs.
- Bassoons (Bsn. I, II):** Playing melodic lines with trills and slurs.
- Horns (Hn. I-IV):** Playing sustained notes with dynamic markings.
- Trumpets (Tpt. I-III):** Playing melodic lines with trills and slurs, marked *con sord.*
- Trombones (Tbn. I-III):** Playing melodic lines with trills and slurs.
- Tuba (Tba.):** Playing a melodic line with trills and slurs.
- 3 Susp. Cym.:** Playing a rhythmic pattern.
- Timb. II:** Playing a rhythmic pattern.
- 4 Toms:** Playing a rhythmic pattern.
- Celli (Cel.):** Playing a rhythmic pattern.
- Violins (Vln. I, II):** Playing melodic lines with trills and slurs.
- Viola (Via.):** Playing a melodic line with trills and slurs.
- Violoncello (Vc.):** Playing a melodic line with trills and slurs.
- Double Bass (Db.):** Playing a melodic line with trills and slurs, marked *arco*.

The score includes various musical notations such as dynamics (*f*, *ff*), articulation (trills, slurs), and performance instructions like *molto vib.* and *arco*. A box labeled **F** with the text "brutal, broad" is positioned at the top right of the page.

This page of a musical score, numbered 7, features a variety of instruments. The woodwinds section includes Flute I and II, Oboe I and II, Clarinet, Bass Clarinet, Bassoon I and II, Horn I-IV, Trumpet I-III, and Trombone I-III with Tuba. The percussion section includes 3 Suspended Cymbals, Timpani, and 4 Tom-toms. The string section includes Violin I and II, Viola, Violoncello, and Double Bass. The score is marked with dynamic levels such as *ff*, *f*, *f*, *fff*, *p*, and *mf*. Performance instructions include *cuivré* for brass instruments and *Bass Drum* and *Tam-tam* for percussion. The score is divided into measures, with a key signature change and time signature change occurring in the final measures of the page.

This page of a musical score, page 113, contains the following instruments and parts:

- Fl. I
- Fl. II
- Ob. I
- Ob. II
- Cl.
- B. Cl.
- Bsn. I
- Bsn. II
- Hn. I (with *sim.* marking)
- Hn. II (with *sim.* marking)
- Hn. III (with *sim.* marking)
- Hn. IV (with *sim.* marking)
- Tpt. I
- Tpt. II
- Tpt. III
- Tbn. I
- Tbn. II
- Tbn. III
- Tba.
- B. D.
- Timb.
- T. C.
- Cel.
- Vln. I
- Vln. II
- Vla.
- Vc.
- Db.

The score includes various dynamic markings such as *ff*, *p*, and *sim.* (sustained). The music is written in a complex rhythmic style with many sixteenth and thirty-second notes.

Ben Gaunt

The Old Cataclysm Blues
for ensemble

The Old Cataclysm Blues

The Old Cataclysm Blues was commissioned by Ensemble 10/10 as part of the Sound and Music Portfolio programme. It received two performances in October 2013, the second of which was part of the New Music North West festival.

I've been haunted for a long time by *Metropolis* – not the Fritz Lang masterpiece, but an anime film that contains a particularly memorable scene: a huge explosion occurs, accompanied by Ray Charles' wonderful rendition of 'I Can't Stop Loving You' – a moment so bizarre, moving, and dramatic, I doubt I'll ever forget it. *The Old Cataclysm Blues* is inspired by that scene.

Year of Composition: 2013

Duration: c. 7'

Techniques

key click + air (unpitched) [bassoon] remove the reed and make a 'sh' air sound down the crook, whilst clicking keys as quickly as possible

valve click [trumpet] press and release valve keys as quickly as possible

tap body [double bass] tap the body of the instrument with fingers as quickly as possible

half pressure buzz [double bass] pluck the open string as normal, but press on the string with small amount of pressure, which should result in a buzzing sound as the string vibrates against the fingerboard

slap [double bass] slap all four strings with hand

air (unpitched) [trumpet] make a *tssss* air sound

The Old Cataclysm Blues

Ben Gaunt

mysterious, bluesy ♩=80

imperceptible accel. to ♩=100 at bar 49

The score is arranged in six staves, each with a specific instrument and performance instructions:

- Clarinet in Bb:** Treble clef, 4/4, 3/4, and 4/4 time signatures. Dynamics include *ppp* and *pp*. Performance notes include "remove reed" and "key click + air (unpitched)".
- Bassoon:** Bass clef, 4/4, 3/4, and 4/4 time signatures. Dynamics include *ppp* and *pp*. Performance notes include "sh" and "con sord (harmon)".
- Trumpet in Bb:** Treble clef, 4/4, 3/4, and 4/4 time signatures. Dynamics include *pp* and *ppp*. Performance notes include "valve click" and "con sord (harmon)".
- Violin:** Treble clef, 4/4, 3/4, and 4/4 time signatures. Performance notes include "sul pont.", "ord.", and "s.p.". The staff contains rests for most of the piece.
- Violoncello:** Bass clef, 4/4, 3/4, and 4/4 time signatures. Dynamics include *ppp* and *pp*. Performance notes include "sul pont.", "ord.", and "s.p.". The staff contains rests for most of the piece.
- Double Bass:** Bass clef, 4/4, 3/4, and 4/4 time signatures. Dynamics include *ppp*. Performance notes include "tap body".

8

Cl. *ppp* *ppp*

Bsn. *ppp* *ppp* *ppp*

Tpt. *pp* *pp* *pp* *pp* *pp*

Vln. *ppp* *ppp* *ppp*

Vc. s.p. ord. s.p. ord. s.p. ord. *ppp* *ppp*

Db.

17

Cl. *pp* *pp*

Bsn. *ppp* *ppp*

Tpt. *p* *pp* *p* *pp*

Vln. *pp* *pp*

Vc. *pp* *pp* s.p. ord. s.p. ord.

Db. *pp* *pp*

26

Cl.

Musical staff for Clarinet (Cl.) in treble clef. It features a melodic line with slurs and dynamic markings of *pp* (pianissimo) in the first and third measures. The staff is divided into four measures.

Bsn.

Musical staff for Bassoon (Bsn.) in bass clef. It contains mostly rests, with a triplet of notes in the second measure marked *ppp* (pianississimo). The staff is divided into four measures.

Tpt.

Musical staff for Trumpet (Tpt.) in treble clef. It features a melodic line with slurs, dynamic markings of *p* (piano) and *pp* (pianissimo), and a triplet of notes in the second measure. The staff is divided into four measures.

Vln.

Musical staff for Violin (Vln.) in treble clef. It features a melodic line with slurs and dynamic markings of *pp* (pianissimo) in the first and third measures. The staff is divided into four measures.

Vc.

Musical staff for Viola (Vc.) in treble clef. It features a melodic line with slurs, dynamic markings of *pp* (pianissimo), and markings for *s.p.* (sordina) and *ord.* (ordina). The staff is divided into four measures.

Db.

Musical staff for Double Bass (Db.) in bass clef. It contains mostly rests, with a triplet of notes in the third measure marked *pp* (pianissimo). The staff is divided into four measures.

35

Cl.

Bsn.

Tpt.

Vln.

Vc.

Db.

pp

ppp

p

pp

pp

ppp

pp

ppp

pp

ppp

ord.

s.p.

+

+

3

3

42

Cl.

Bsn.

Tpt.

Vln.

Vc.

Db.

pp

ppp

pp

pp

ppp

pp

ppp

mp

p

p

pp

mp

pp

pp

ppp

attach reed

ord.

s.p.

pizz.

sul D

sul G

molto vib.

t.tr

3

3

3

3

5

3

51

f. ff.

f. ff.

7

mp

pp

p

mp

+

3

3

7

7

3

sul E

sul A

arco

sul A

pizz.

mp

p

p

Cl.

Bsn.

Tpt.

Vln.

Vc.

Db.

8

58

Cl. *t.tr.* *p* *mp* *p* *t.tr.*

Bsn. *pp* *<p>* *<>* *<>*

Tpt. *mp*

Vln. *molto vib.* *mp* *mp* *molto vib.* *3* *3* *7* *3* *3* *sul A* *sul D*

Vc. *arco* *mp* *p* *sul D* *pizz.* *mp* *arco* *mp*

Db. *p* *3* *p*

65 *t.tr.*

Cl. *mf* *p*

Bsn. *pp* *<p>* *mp*

Tpt. *mf* 3 3

Vln. *mp* 7 3 *pizz.* *mf* *arco*

Vc. *p* *sul G* *molto vib.* *mf* *ord. vib.*

Db. *p* *pizz.* *half pressure buzz* *mf*

72

Cl.

Bsn.

Tpt.

Vln.

Vc.

Db.

mf *p* *mf* *p*

mp *mf* *mp* *mf*

mp *mf* *mp* *mf*

mp *mf* *mp* *mf*

mp *mf* *mp* *mf*

3 3

3 3

3 3

pizz. arco pizz.

molto vib. ord. vib. molto vib.

half pressure buzz half pressure buzz

mp *mf* *mp* *mf*

80

Cl. *f* *mp* *p* *f* *mp* *p* flz.

Bsn. *mp* *f* *p* *f* *p*

Tpt. *f* *f* 3

Vln. arco *mp* pizz. *f* arco *mf* *fp* *mf* pizz. *f* arco *mf* *fp* *mf*

Vc. ord. vib. *mp* ord. *f* ord. *f* ord.

Db. slap *f* sul E *mf* slap *f* sul E *mf*

Detailed description: This is a page of a musical score for a chamber ensemble. It features six staves: Clarinet (Cl.), Bassoon (Bsn.), Trumpet (Tpt.), Violin (Vln.), Viola (Vc.), and Double Bass (Db.). The score is divided into four measures. The first measure is in 2/4 time, the second in 3/4, and the last two in 4/4. The Clarinet part starts with a dynamic of *f*, then *mp*, and *p*, with a *flz.* marking. The Bassoon part has dynamics of *mp*, *f*, and *p*. The Trumpet part has a *f* dynamic and includes triplet markings. The Violin part alternates between *arco* and *pizz.* with dynamics of *mp*, *f*, *mf*, *fp*, and *mf*. The Viola part is marked *ord. vib.* and *ord.* with dynamics of *mp* and *f*. The Double Bass part includes *slap* and *sul E* markings with dynamics of *f* and *mf*.

89

Cl.

f *mp* *p* *ff* *p* *ff* *p*

Bsn.

f *p* *ff* *ff*

Tpt.

f *ff* *ff*

Vln.

pizz. arco *f* *mf* *fp* *mf* *ff* *f* *ff* *f*

Vc.

f *ff* *f* *ff* *f*

Db.

slap *f* sul E *mf* slap *ff* tap body *mf* slap *ff* *mf*

flz.

3

7

3

3

+

ord.

o

o

o

o

96

Cl.

Bsn.

Tpt.

Vln.

Vc.

Db.

ff *p* *ff* *p* *ff*

flz.

flz.

flz.

flz.

ff *f* *ff* *f* *ff*

ff *mf* *ff* *mf* *ff*

chaotic Dixie ♩=160

14

102

Cl. *6* *6* detached, bouncy swing *f* *ff*

Bsn. flz. *f* *ff*

Tpt. flz. *f*

Vln. -----

Vc. o ord. 3 *f* *ff*

Db. slap *f* *ff*

Detailed description: This is a page of a musical score for a piece titled "chaotic Dixie" with a tempo of 160 beats per minute. The score is for a six-piece band: Clarinet (Cl.), Bassoon (Bsn.), Trumpet (Tpt.), Violin (Vln.), Viola (Vc.), and Double Bass (Db.). The piece begins at measure 102. The Clarinet part starts with a sixteenth-note tremolo (marked with a '6') and then moves to a "detached, bouncy swing" style with triplet eighth notes. The Bassoon, Trumpet, and Double Bass parts feature "flz." (flautando) markings and slaps. The Viola part has an "ord. 3" (ordered triplet) marking. Dynamics range from *f* (forte) to *ff* (fortissimo). The score is written in a key signature of one flat (Bb) and uses various time signatures: 2/4, 3/4, and 4/4.

109

Cl. *ff f* *ff mf* *ff mf*

Bsn. *ff* *f* *ff mf* *ff mf*

Tpt. *ff* *mf* *ff* *f*³

Vln. *f* *ff* *mf* *ff* *f*
detached, bouncy swing

Vc. *ff* *mf* *ff*

Db. *ff f* *ff mf* *ff mf*

flz. pizz. arco

slap ord. 3

16

116

Cl. *ff* *mf* *ff* *mp*

Bsn. *ff* *mf* *ff* *mp*

Tpt. *ff* *mf* *ff* *mp*

Vln. *ff* *mf* *ff* *mp*

Vc. *ff* *mp*

Db. *ff* *mf* *ff* *mp*

flz.

pizz.

arco

ord.

slap

3

9

123

Cl. *ff mp* 3 3 3 3 3 3 3 3 3 3 9

Bsn. *ff mp* flz. 3

Tpt. *ff mp* flz. 3 3 3

Vln. *ff mp* pizz. arco 3 3 3 3 3 3

Vc. *ff* ord. 3 3

Db. *ff mp* slap 3 3

Detailed description of the musical score: The score is for measures 123-127. It features six staves: Clarinet (Cl.), Bassoon (Bsn.), Trumpet (Tpt.), Violin (Vln.), Viola (Vc.), and Double Bass (Db.). The key signature has one flat (B-flat major or D minor) and the time signature is 4/4. The Clarinet part starts with a forte (ff) dynamic and includes several triplet markings. The Bassoon part includes a flautando (flz.) marking and dynamic changes from ff to mp. The Trumpet part also includes flz. markings and dynamic changes. The Violin part starts with pizzicato (pizz.) and forte (ff) dynamics, then switches to arco and includes triplet markings. The Viola part starts with forte (ff) and includes an ordered triplet (ord. 3) marking. The Double Bass part includes a slap marking and dynamic changes from ff to mp, with triplet markings. The score concludes with a double bar line at measure 127.

130

Cl.

ff *p* *ff* *p*

Bsn.

flz.

ff *p* *ff* *p*

Tpt.

flz.

ff *p* *ff*

Vln.

pizz.

arco

ff *p* *ff* *p*

Vc.

ff *ff*

Db.

slap

ff *p* *ff* *p*

Detailed description of the musical score: The score is for measures 130-133. It features six staves: Clarinet (Cl.), Bassoon (Bsn.), Trumpet (Tpt.), Violin (Vln.), Viola (Vc.), and Double Bass (Db.). The music is in a key with one flat and a 4/4 time signature that changes to 3/4 for measures 131 and 132, then returns to 4/4 for measure 133. The Clarinet part starts with a forte (ff) dynamic and a triplet of eighth notes, followed by a piano (p) section with a long note. The Bassoon part has a flautando (flz.) marking and a triplet of eighth notes. The Trumpet part has a flautando (flz.) marking and a triplet of eighth notes. The Violin part has a pizzicato (pizz.) marking and a triplet of eighth notes, followed by an arco section. The Viola part has a forte (ff) dynamic and a triplet of eighth notes. The Double Bass part has a slap marking and a triplet of eighth notes. The score includes various dynamic markings (ff, p) and articulation markings (flz., pizz., arco, slap).

136

Cl. *ff p*

Bsn. *ff p* flz.

Tpt. *p* *ff* *p* flz.

Vln. *ff* *p* arco pizz.

Vc. *ff* ord. *p*

Db. *ff p* slap

Detailed description: This is a page of a musical score for a woodwind and string ensemble. It features six staves: Clarinet (Cl.), Bassoon (Bsn.), Trumpet (Tpt.), Violin (Vln.), Viola (Vc.), and Double Bass (Db.). The score is divided into measures, with a double bar line at measure 136. The key signature has one sharp (F#) and the time signature is 4/4. The Clarinet part starts with a triplet of eighth notes and continues with various rhythmic patterns, including triplets and a 9-measure rest. The Bassoon part has a similar triplet start and includes a 'flz.' (flautando) marking. The Trumpet part is mostly silent, with some notes and a 'flz.' marking. The Violin part begins with a triplet and includes 'pizz.' (pizzicato) and 'arco' markings. The Viola part has a few notes and an 'ord.' (ordine) marking. The Double Bass part starts with a triplet and includes a 'slap' marking. Dynamics range from *ff* (fortissimo) to *p* (piano). Articulations like slurs and accents are used throughout.

142

Cl. *ff pp* *ff pp*

Bsn. *ff pp* *ff pp*

Tpt. *ff pp* *ff*

Vln. *ff* *mp* *ff pp*

Vc. *ff* *mp* *ff*

Db. *ff pp* *ff pp*

flz. pizz. arco ord. slap

9

149

Cl. *ff pp*

Bsn. *ff pp*

Tpt. *pp ff*

Vln. *ff pp*

Vc. *ff pp*

Db. *ff pp*

flz.

pizz.

arco

ord.

slap

22

155

Cl.

Bsn.

Tpt.

Vln.

Vc.

Db.

rall.

ff

flz.

pp

ff

flz.

pizz.

arco

ff

ff

slap

ff

162

Cl. *ff*

Bsn. flz. *ff*

Tpt. flz. *ff*

Vln. pizz. arco *ff*

Vc. o *ff*

Db. slap *ff*

remove reed

ord.

Detailed description: This page of a musical score, numbered 162, features six staves for different instruments. The Clarinet (Cl.) and Bassoon (Bsn.) parts are marked *ff* and include trills and triplets. The Bassoon part also has a 'flz.' (flautando) instruction. The Trumpet (Tpt.) part is marked *ff* and includes a 'flz.' instruction. The Violin (Vln.) part starts with a pizzicato (*pizz.*) section and then moves to arco, marked *ff*. The Viola (Vc.) part is marked *ff* and includes a 'ord.' (ordine) instruction. The Double Bass (Db.) part is marked *ff* and includes a 'slap' instruction. The score includes various musical notations such as trills, triplets, and slurs. Performance instructions like 'remove reed' and 'ord.' are placed near the end of the staves. The tempo is indicated as $\text{♩} = 80$ and the mood is 'relaxed, ethereal'.

170

Cl. *mf* *mp* *p* *ppp*

Bsn. key click + air (unpitched) sh *ppp* sh *ppp* sh *ppp*

Tpt. *mf* *mp* *p* *pp* air (unpitched) *ts ppp*

Vln. *mf* *mp* *p*

Vc. *mf* *mp* *p* *ppp* ord. s.p.

Db. tap body *ppp*

Ben Gaunt
Rachel Davies

Revolution
for mezzo soprano and ensemble

Revolution was written for the Sounds of the Engine House ensemble, for their inaugural concert at Bridgewater Hall as part of the 'A Little Bite Music' concert series. It received a further four performances as part of the Voices of the North Tour, funded by Sound and Music.

The result of a collaboration with Manchester-based poet Rachel Davies, *Revolution* is a response to the Victorian machines that reside in the Power Hall at the Museum of Science and Industry.

The singing style is light and lyrical; not too operatic.

Year of Composition: 2013

Duration: c. 6'

Transposed Score

Revolution

Rachel Davies

Ben Gaunt

mechanical, precise ♩=88

Oboe

Clarinet in B \flat

Percussion
2 muted toms, sizzle cymbal, claves
(use same pair of mallets for toms, sizzle cymbal and vibraphone)

Vibraphone

Mezzo-soprano

Violoncello
pizz. mv w w w w w w w w
p

9

Ob.

Cl.

Perc.

Vib.
dead stroke
mp *p* *mp* *p* *mp* *p* *mp* *p*

M-S.

Vc.
mv w w w w w w w w
mp *p*

16

Ob.

Cl.

Perc.

Vib.

M-S.

Vc.

pp *mp* *p* *pp* *mp* *p*

mp *p* *mp* *p* *mp*

mp *p* *mv* *mv* *mv* *mv*

21

Ob.

Cl.

Perc.

Vib.

M-S.

Vc.

p *mp* *p* *mp* *p* *mp*

pp *mp* *p* *pp* *mp*

p *mp* *p* *mp*

mp *p* *mv* *mv* *mv* *mv*

25 fluid, intricate (l'istesso tempo sempre)

Ob. *pp* *mp* *pp*

Cl. *pp* *mp* *pp*

Perc. 2 muted toms on the rim *pp* *mp* *pp*

Vib.

M-S. unpitched hiss *p* *mp* *p* unpitched consonant attack *mf* *p* *mp* *p*
 sh t k k t k t sh

Vc. tap instrument body *mp* *p* *mp* *p*

Ob. *mp* *pp* *mp*

Cl. *mp* *pp* *mp*

Perc. *mp* *pp* *mp*

Vib.

M-S. *p* *mf* *p* *mp* *p* *mf*
 k k t k t sh k t k k

Vc. *mp* *p*

34

Ob. *pp* *mp* *pp* *mp*

Cl. *pp* *mp* *pp* *mp*

Perc. *pp* *mp* *pp* *p*

Vib.

M-S. *p* *mp* *p* *mf* *p* *mp* *p* *mf*
sh t k k sh k k

Vc. *mp* *p* *mp* *p*

38

Ob. *pp* *mp* *pp* *mp* *pp* *mp*

Cl. *pp* *mp* *pp* *mp* *pp* *mp*

Perc. *pp* *p*

Vib.

M-S. *p* *mp* *p* *mf* *p* *mp* *p* *p* *mp* *p*
sh k sh sh

Vc. *mp* *p* *mp* *p* *mp* *p*

rhythmic, brutal

43

Ob. *pp* *mp* *pp* *mp* *p* *mp* *p* *mp*

Cl. *mp* *mp* *mp* *p* *mp* *p* *mp*

Perc. sizzle cymbal

Vib. *mp*

M-S. *mp* *mp* *mf* *mp* *mf*
 sh sh sh arms (sh) legs joints (sh) teeth arms

Vc. *mp* *p* *mp* *p* *mp* *p* *mf*

47

Ob. *p* *mf* *mp* *p* *mf* *mp* *p* *mf* *f* *mp* *p* *mf*

Cl. *p* *mf* *mp* *p* *mf* *mp* *p* *mf* *f* *mp* *p* *mf*

Perc. *mf* *mp* *mf*

Vib.

M-S. *mp* *mf* *mp* *mf* *mp* *mf* *mp* *mf* *mp*
 (sh) legs joints (sh) teeth arms legs (sh) joints teeth arms (sh) legs

Vc. *p* *mf* *p* *mf* *p* *mf* *f* *mf* *mp* *p* *mf*

52

Ob. *mv* *f p mp* *p mf* *f p mp* *p mf f* *p mp*

Cl. *mv* *f p mp* *p mf* *f p mp* *p mf f* *p mp*

Perc. *on the rim* *p mp* *mf* *p mp* *mf f* *p mp*

Vib.

M-S. *mf* *mp* *mf* *mp* *mf* *mp*
 joints teeth arms (sh) legs joints teeth arms (sh) legs joints teeth arms

Vc. *f p mp* *p mf* *f p mp* *p mf* *mp* *p mf f* *p mf*

57

Ob. *mv* *p mf f* *p mp* *p mf f* *ff p mp*

Cl. *mv* *p mf f* *p mp* *p mf f* *ff p mp*

Perc. *mf f* *p mp* *mf f* *ff p*

Vib.

M-S. *mp* *mf* *mp* *mf*
 (sh) legs joints teeth arms (sh) legs joints teeth breath(e)

Vc. *mp p mf f* *p mf* *mp p mf f* *ff p mf*

$\overset{\frown}{\text{3}} = \text{stilted, awkward} (\text{♩}=132)$

62

Ob. *mf*

Cl. *mf*

Perc. *mp*

Vib.

M-S. ing

Vc.

68

Ob. *mf*

Cl. *mf*, *mv*

Perc.

Vib.

M-S. *mf* breath - - ing

Vc. *mf*

73

Ob. *mf*

Cl. *mf*

Perc.

Vib.

M-S. *mf* *mf*
breath - ing heart - beat

Vc. *mf* *mf*

79

Ob.

Cl. *mf* *mf*
tr *b₂* *b₂*

Perc.

Vib.

M-S. *mf* *mp*
rhy - thm

Vc. *mf*

84

Ob. *mf* *mv* *mf*

Cl. *mf* *mf*

Perc. stop stop

Vib.

M-S. *mf*
suck squeeze

Vc. *mf* *mf*

90

urgent, energetic (l'istesso tempo sim.)

Ob. *mf* *mf*

Cl. *mf* *mf*

Perc. stop stop **claves** *mf*

Vib.

M-S. *f espress.*
blow blow feed the en - gine feed the gear - box

Vc. *mf*

95

Ob. 

Cl. 

Perc. 

Vib. 

M.S. 

Vc. 

100

Ob. 

Cl. 

Perc. 

Vib. 

M.S. 

Vc. 

105

Ob. *mf*

Cl. *mf*

Perc. *mf*

Vib.

M-S. gas steam pow-er bod-y parts

Vc. *f* *mf* *f* *mf*

110

Ob. *mf*

Cl. *mf*

Perc. *mf*

Vib.

M-S. pis-tons punch-ing crank shafts shaft-ing

Vc. *f* *mf*

114

Ob.

Cl.

Perc.

Vib.

M-S.
speech be - comes ir - rel - e - vant

Vc.

mf

mp

117 **do not conduct, singer controls tempo, heavy rubato**

Ob.

Cl.

Perc.

Vib.

M-S.
mf gradual dim. to end
tongues lie use - less ear - drums nu - anced ma - chine speak is the

Vc.

p

pp

123

Ob.

Cl.

Perc.

Vib.

M-S.

Vc.

voice of com - merce in - stru - ments of their own sur - viv - al peo - ple are

130

Ob.

Cl.

Perc.

Vib.

M-S.

Vc.

sac - ri - ficed to the god of prof - it hu man - i - ty de - voured by its

136

Ob.

Cl.

Perc.

Vib.

M.S.

Vc.

own cre - a - tion as-sim-i - la-tion dom-i - na-tion there's a kind of mu-sic here

gradually more spoken

spoken

142 **conducted** (♩=132)

Ob.

Cl.

Perc.

Vib.

M.S.

Vc.

mf

mf

pp

pp

mp

strike cymbal with clave

sung (slightly whispery)

a death knell_ sound ing_

pizz.

p

mv

Ben Gaunt

Zenir Nadith

for soprano saxophone and piano

Zenir Nadith was written for saxophonist Anthony Brown and pianist Leo Nicholson.

Zenir Nadith is a study in speed and density. As the saxophone material becomes slower, the piano material becomes faster. A small central section features both instruments playing in rhythmic unison.

Year of Composition: 2013

Duration: c. 6'

Transposed Score

for Anthony Brown and Leo Nicholson

Zenir Nadith

frantic, explosive ♩=100

Ben Gaunt

Soprano Saxophone

Trills on B-flat and B-natural. Dynamics: *fff dim.*

Piano

8va. *fff*
Ped.

Sop. Sax.

2. Eighth-note runs with accents.

Pno.

Rests in both hands.

Sop. Sax.

3. Eighth-note runs with accents and fingering: 7 7 7 7 6 6 6 6.

Pno.

Rests in both hands.

Sop. Sax. *5* *5* *5* *5* *p* *ff* *3* *3* *3* *3*

Pno. *ff*

Sop. Sax. *8* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *3* *p* *ff*

Pno.

Sop. Sax. *12* *3* *3* *3* *3* *p* *f* *p* *f*

Pno. *f* *8va*

intense, expressive
(l'istesso tempo sempre)

16

Sop. Sax.

p *f* *p* *mf*

Pno.

mf

8va

ad. lib. pedal
(unless otherwise indicated)

20

Sop. Sax.

mp *f* *mp* *f* *p*

Pno.

f *mp*

24

Sop. Sax.

ff *p* *mf*

Pno.

ff *mp*

mysterious, insidious

28

Sop. Sax.

mf *mp* *mf* *pp*

Pno.

pp

33

Sop. Sax.

mp *p*

Pno.

p

39

Sop. Sax.

mf *mp* *p* *mp*

Pno.

mp *p* *mp*

44

Sop. Sax. *mf* *p* *f* *mp*

Pno. *mf* *p* *f* *mf* *mp*

49

dramatic, bold

Sop. Sax. *f* *mf* *p* *mf* *p*

Pno. *f* *mf* *mp* *p* *mp* *mf* *p*

55

Sop. Sax. *f* *p* *f* *mf* *p*

Pno. *f* *p* *f* *p*

61

Sop. Sax. *mp* *p* *mf* *p* *mp*

Pno. *mp* *p* *mf* *p* *mp*

simple, tense

66

Sop. Sax. *pp*

Pno. *pp*

aggressive, expansive

73

Sop. Sax. *ff*

Pno. *ff*

79

Sop. Sax. *f*

Pno. *f*

84

Sop. Sax. *mf*

Pno. *mf*

89

Sop. Sax. *mp*

Pno. *mp*

94

Sop. Sax.

Pno.

p

p

Ped.

99

Sop. Sax.

Pno.

pp

delicate, creepy

Ped.

104

Sop. Sax.

Pno.

sim.

109

Sop. Sax. *p cresc.*

Pno. *p cresc.*

8^{va} 8^{va} 8^{va} 8^{va}

8^{vb} 8^{vb} 8^{vb}

Ped. sim.

114

Sop. Sax. *mp cresc.*

Pno. *mp cresc.*

8^{va} 8^{va} 8^{va} 8^{va}

Ped. sim.

119

Sop. Sax. *mf cresc.*

Pno. *mf cresc.*

8^{va} sim.

Ped. sim.

energetic, powerful

Sop. Sax. 124 *f cresc.*

Pno. *f cresc.* senza pedal

Sop. Sax. 128 *ff cresc.*

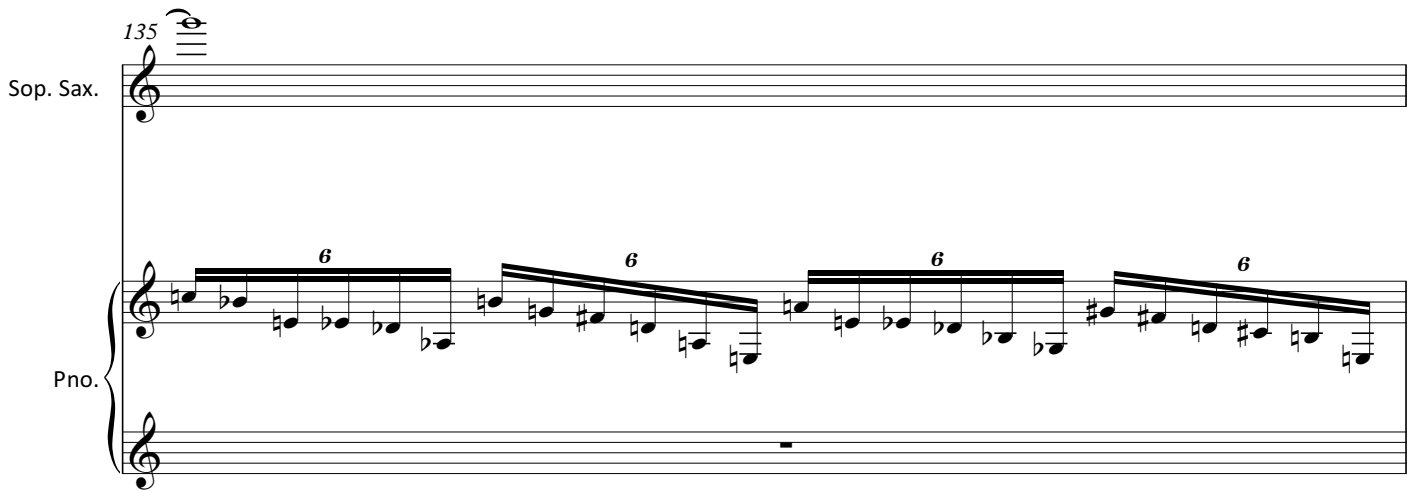
Pno. *sim.* *ff cresc.*

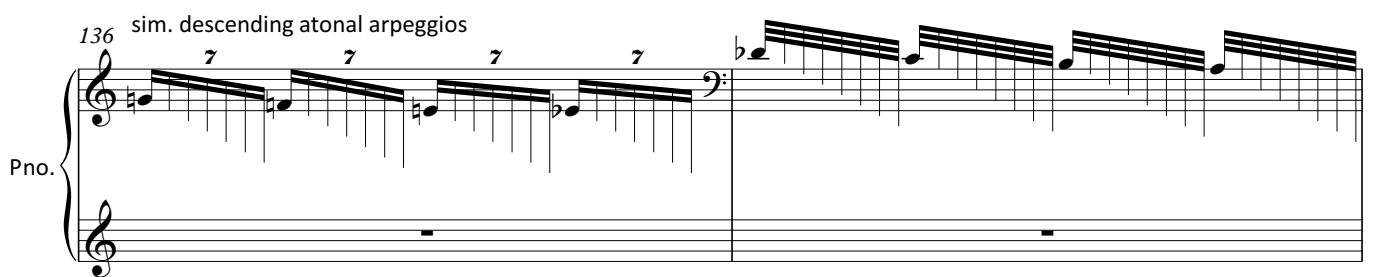
visceral, brutal
molto vib.

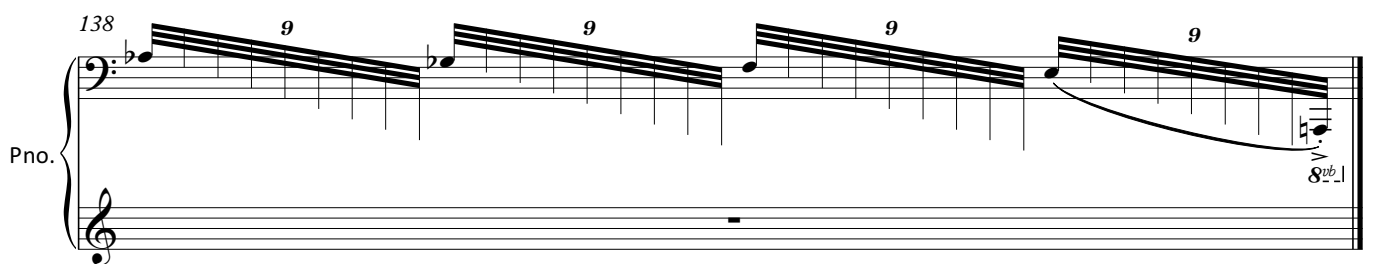
Sop. Sax. 131 *fff*

Pno. *fff* use both hands when necessary

134  Sop. Sax. 11
Pno. *sim.* 5

135  Sop. Sax.
Pno. 6

136 *sim. descending atonal arpeggios*  Pno. 7

138  Pno. 9 *8th 1*

Ben Gaunt

Factory Detritus

for piano four hands

Factory Detritus was commissioned by Gary O'Shea, and performed by the commissioner and the composer at the University of Sheffield NME concert, 5th of November, 2013.

A machine operates in a factory for 10 seconds, and then stops.

A machine operates in a factory for 20 seconds, and then stops.

A machine operates in a factory for 30 seconds, and then stops.

A machine operates in a factory for 40 seconds, and then stops.

Year of Composition: 2013

Duration: c. 6'

Factory Detritus

for piano four hands

Ben Gaunt

manic, mechanical

* $\text{♩} = 110$
8va
ff
3
10"

* $\text{♩} = 100$
ff
3
10"
gradually depress pedal Ped.

* both pianists should begin their boxed notation simultaneously, and repeat the box for the given length of time, with no pause inbetween each repetition

2

2 **calm, peaceful** ♩=60

musical score for measures 2-5, marked "calm, peaceful" with a tempo of 60. It features piano (I) and bass (II) staves. The piano part has dynamics *mp* and *pp*, with triplets and slurs. The bass part has dynamics *p*, *mp*, *pp*, and *f*, with a "smack underside" instruction and a triplet. Pedal markings are present at the end of the first and fourth measures.

manic, mechanical

musical score for measures 8-11, marked "manic, mechanical" with a tempo of 120 for the piano part and 130 for the bass part. It features piano (I) and bass (II) staves. The piano part has a dynamic of *ff* and includes a "8va" marking. The bass part has a dynamic of *ff* and includes a "gradually depress pedal" instruction. Pedal markings are present at the end of the first and fourth measures.

*silently depress notes

9 calm, peaceful ♩=60

Musical score for measures 9-13. The piece is in 4/4 time with a tempo of 60 beats per minute. The score is written for piano and includes dynamic markings such as *mp*, *p*, and *f*. It features various musical techniques including triplets, a quintuplet, and pedaling. The right hand has a melodic line with triplets and a quintuplet, while the left hand provides harmonic support with a quintuplet and a triplet.

Musical score for measures 14-18. The piece continues in 4/4 time. The score includes dynamic markings such as *mp*, *f*, and *pp*. It features a quintuplet in the right hand and a triplet in the left hand. The right hand has a melodic line with a quintuplet and a triplet, while the left hand provides harmonic support with a quintuplet and a triplet. The score ends with a *pp* dynamic marking.

manic, mechanical

4

20

♩=90

30"

♩=110

30"

21 calm, peaceful ♩=60

26

mp *f* *p* *f* *f*

mp *p*

Ped. Ped. 8^{va}

31

mf *mp* *p*

mf *f* *mp* *p* *pp* *p*

Ped. Ped.

manic, mechanical

6

37 $\text{♩} = 120$ 40"

ff

3 3

40"

gradually depress pedal ----- Ped.

Detailed description: This system shows the right hand part of measures 37-40. It begins with a treble clef and a key signature of one sharp (F#). The tempo is marked as quarter note = 120. The music starts with a fortissimo (ff) dynamic. The right hand features a series of chords and triplets. A fermata is placed over the final chord of measure 40. A horizontal line with an arrow indicates the duration of the piece, ending at 40 seconds. A pedal instruction 'gradually depress pedal' is shown with a dashed line leading to a 'Ped.' symbol.

$\text{♩} = 100$ 40"

ff

3 3 3

40"

gradually depress pedal ----- Ped.

Detailed description: This system shows the left hand part of measures 37-40. It begins with a bass clef and a key signature of one sharp (F#). The tempo is marked as quarter note = 100. The music starts with a fortissimo (ff) dynamic. The left hand features a series of chords and triplets. A fermata is placed over the final chord of measure 40. A horizontal line with an arrow indicates the duration of the piece, ending at 40 seconds. A pedal instruction 'gradually depress pedal' is shown with a dashed line leading to a 'Ped.' symbol.

38 calm, peaceful $\text{♩} = 60$

mf

mp

f

3 3

5 5

3 3

3 3 3

5

Ped.

Ped.

Detailed description: This system shows the right hand part of measures 38-41. It begins with a treble clef and a key signature of one sharp (F#). The tempo is marked as quarter note = 60. The music starts with a mezzo-forte (mf) dynamic. The right hand features a series of chords and triplets. A fermata is placed over the final chord of measure 41. A horizontal line with an arrow indicates the duration of the piece, ending at 40 seconds. A pedal instruction 'gradually depress pedal' is shown with a dashed line leading to a 'Ped.' symbol.

p

mp

mf

f

3 3 3

3 3 3

5

Ped.

Ped.

Detailed description: This system shows the left hand part of measures 38-41. It begins with a bass clef and a key signature of one sharp (F#). The tempo is marked as quarter note = 60. The music starts with a piano (p) dynamic. The left hand features a series of chords and triplets. A fermata is placed over the final chord of measure 41. A horizontal line with an arrow indicates the duration of the piece, ending at 40 seconds. A pedal instruction 'gradually depress pedal' is shown with a dashed line leading to a 'Ped.' symbol.

43

f *mp* *f* *mf*

5 5 3

ped.

48

mp *f* *mf* *mp* *mf* *mp*

p *mp* *f* *mp* *mp*

3 5 5 3

ped.

The image shows a page of musical notation for two piano parts, labeled I and II. Part I is in the upper system, and Part II is in the lower system. Both parts are in 2/4 time. Part I begins with a treble clef and a key signature of one sharp (F#). It features a complex rhythmic pattern of eighth and sixteenth notes, often grouped in threes. The first measure has a dynamic marking of *f*. The second measure has a dynamic marking of *ff*. The piece concludes with a double bar line and repeat dots. Part II is in the lower system, starting with a bass clef. It begins with a dynamic marking of *f*. The lower staff of Part II contains a complex, multi-layered rhythmic pattern, possibly representing a tremolo or a very fast repeated note figure. A dashed line labeled *8vb* is positioned below the lower staff of Part II, indicating an octave reduction for the lower register.

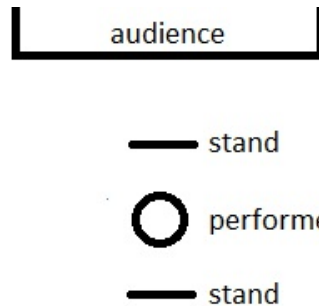
Ben Gaunt

Residuum VIII
for solo trombone

The Inflation Ritual

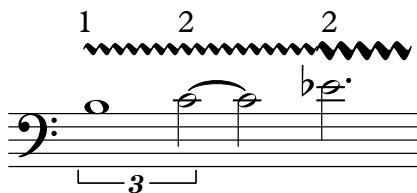
The Inflation Ritual is made up of 16 movements, that grow in length, range and complexity. The final movement extends too far, and deflates as a result. The work was composed by trombonist Heider Nasralla, written in 2014, and performed in Copenhagen on the 28th July 2014.

The piece requires two music stands, one solotone mute and one snare drum. Initially, the performer faces away from the audience, and plays the first five movements using the mute. The performer then turns around; both music stands are setup to facilitate this:



The performer plays the following four movements, muted, facing the audience. The performer removes the mute and plays the following four movements open. The performer turns on the snare, and plays the final three movements into the drum, resulting in a distorted sound. The performer is invited to treat each movement with a sense of theatricality: remove the mute deliberately and ceremoniously, switch the snare on audibly, take long pauses between each movement, and page turn slowly and with reverence.

The piece is approximately fifteen minutes long, and is constructed from eight distinct ideas, each with their own techniques and performance directions. These are described below:



Initially tentative, this idea becomes dramatic and expressive by the end of the piece. The numbers indicate the speed of vibrato (1 is very slow, 4 is very fast) and the wavy lines indicate the width of vibrato (the thin line is standard vibrato, the thick line is a wider vibrato.)



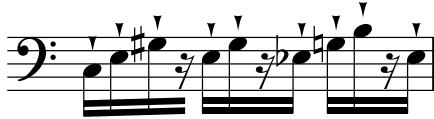
This idea is to be played robotically and with rhythmic accuracy, imitating machinery. The cross notehead indicates an unpitched air noise, down the instrument. The k noteheads indicate an unpitched k consonant sound, down the instrument.



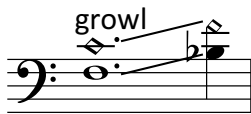
Tongue as rapidly as possible, while sliding between the indicated pitches. This idea should be performed with energy. (Breathe when necessary.)



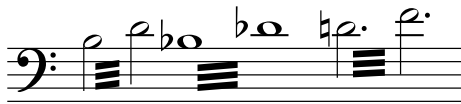
Rapidly slide upwards from the indicated pitch. Do not aim for a specific final pitch.



This idea is cheeky and scherzo-like. It should be performed with rhythmic accuracy.



The diamond noteheads indicate pitches to be sung. Simultaneously, the notes below should be played, while growling. The resultant effect should be like a motorbike engine accelerating.



The performer should attempt to move from one tremolando to the next as smoothly as possible.



oo-ee

While playing, the performer should smoothly alternate between an 'oo' mouthshape and an 'ee' mouthshape.

for Heider Nasralla

Residuum VIII for Trombone

1

The Inflation Ritual

♩=60 **senza misura**
con sord. solotone
face away from audience

I

Ben Gaunt

3

The musical notation consists of a single bass clef staff. It begins with a treble clef-like symbol (a stylized 'C' with a dot) and a fermata. Above the staff, there is a wavy line representing a tremolo or vibrato, with the number '3' above it. The staff continues with a long horizontal line, ending with a fermata. Below the staff, there is a dynamic marking 'p' (piano) with a hairpin shape indicating a crescendo or decrescendo.

||

3

2

p

III

Musical score for a bass clef instrument, featuring a wavy line, triplets, and dynamic markings.

The score consists of a single staff with a bass clef. The notation includes:

- A triplet of eighth notes: \bar{e} , $\flat\bar{e}$, $\bar{b}\bar{e}$.
- A quarter note \bar{e} .
- A wavy line above a quarter note $\sharp\bar{e}$.
- A slur over two quarter notes: \bar{e} and \bar{e} .
- A triplet of eighth notes: \bar{e} , \bar{e} , \bar{e} .
- A quarter rest.
- A quarter note \bar{e} .
- A quarter note \bar{e} .
- A half note \bar{e} .

Dynamic markings below the staff indicate a crescendo from *pp* to *mp* and a decrescendo to *p*, followed by a return to *pp*.

IV

Musical score for bass clef. The piece is marked **IV**. The score includes dynamic markings: *pp* (pianissimo), *mp* (mezzo-piano), and *p* (piano). The notation features several triplets (marked with '3') and a tremolo passage (marked with '1' and '2'). A crescendo line is present, starting from *pp* and reaching *p* at the end of the piece.

V

Musical staff with bass clef. The staff contains a sequence of notes: a half note G2, a half note G2, a quarter note G2, a quarter note F#2, a quarter note E2, a quarter note D2, and a quarter note C2. This is followed by a triplet of eighth notes: G2, G2, G2. Then, a quarter note G2, a quarter note F#2, a quarter note E2, and a quarter note D2. A slur covers the last four notes, with a wavy line above it. The slur is labeled with a '4' above the first note and a '3' above the last note. Dynamics are indicated by a *pp* (pianissimo) marking under the first two notes, a *mp* (mezzo-piano) marking under the eighth-note triplet, a *p* (piano) marking under the first note of the slur, and a *mf* (mezzo-forte) marking under the last note of the slur.

Musical staff with bass clef. The staff contains a sequence of notes: a half note G2, a half note G2, a quarter note G2, a quarter note F#2, a quarter note E2, and a quarter note D2. A slur covers the last four notes, with a wavy line above it labeled with a '2'. This is followed by a quarter note G2, a quarter note F#2, and a quarter note E2. A slur covers the last three notes, labeled with a '3'. The staff ends with a quarter note G2. Dynamics are indicated by a *pp* (pianissimo) marking under the last note of the piece.

VI

turn to face
audience

pp *mp* *p*

mf *p*

VII

Musical staff with bass clef. Dynamics: *pp*, *mp*, *p*. Musical notations include triplets (marked with '3'), a tremolo (marked with '2'), and a triplet (marked with '3').

Musical staff with bass clef. Dynamics: *mf*, *pp*. Musical notations include a tremolo (marked with '1'), a triplet (marked with '3'), and a triplet (marked with '3').

VIII

pp mp p mp p

This musical staff features a bass clef and contains several triplet markings. The dynamics are marked as *pp*, *mp*, *p*, *mp*, and *p* from left to right. The notation includes various note values, rests, and a final triplet of chords.

mf mp

This musical staff includes fingering numbers 4 and 2 above the notes. The dynamics are marked as *mf* and *mp*. The staff contains a series of notes with slurs and a final triplet of chords.

p mp p

This musical staff features a bass clef and contains triplet markings. The dynamics are marked as *p*, *mp*, and *p* from left to right. The notation includes various note values, rests, and a final triplet of notes.

IX

pp mp

p mf mp

mf

p mp pp

X

senza sord.

pp *mp* *p* *mf*

p *mf*

f *mf*

p *mp*

p *pp* *p*

XI

Musical staff 1: Bass clef, *pp* dynamics, triplets, and sixteenth notes.

Musical staff 2: Bass clef, *mf* and *p* dynamics, *growl* and *ord.* markings, slurs, and triplets.

Musical staff 3: Bass clef, *f* and *mf* dynamics, fingerings (4, 2, 4, 1, 2), slurs, and triplets.

Musical staff 4: Bass clef, *p* and *mf* dynamics, *growl* and *ord.* markings, slurs, and triplets.

Musical staff 5: Bass clef, *p* dynamics, triplets, and sixteenth notes.

A musical score for a bass clef instrument, likely a double bass. The score consists of a single line of music with a key signature of one sharp (F#) and a common time signature (C). The piece begins with a series of eighth notes, followed by a triplet of eighth notes. The music continues with a mix of eighth and quarter notes, including another triplet of eighth notes. The piece concludes with a final note marked with a fermata. The dynamic marking *pp* (pianissimo) is placed at the end of the line. Below the staff, there are two horizontal lines.

XII

Musical staff with bass clef. It features several triplet markings (3) over groups of notes. The dynamics are marked as *pp* (pianissimo) and *p* (piano).

Musical staff with bass clef. It includes a *growl* marking over a note and an *ord.* (order) marking over a sequence of notes. Dynamics are marked as *mf* (mezzo-forte) and *p* (piano).

Musical staff with bass clef. It shows fingerings 2, 3, 2, 3, 4, 3 above a series of notes. Dynamics are marked as *mf* (mezzo-forte) and *f* (forte).

Musical staff with bass clef. It features fingerings 2, 2, 3 above notes. Dynamics are marked as *mp* (mezzo-piano) and *mf* (mezzo-forte).

Musical staff with bass clef. It includes a *growl* marking over a note. Dynamics are marked as *p* (piano) and *mf* (mezzo-forte).

ord.

Musical staff 1: Bass clef, first system. It begins with a triplet of eighth notes. The staff continues with a melodic line featuring various intervals and accidentals. A second triplet of eighth notes appears later in the system. The system concludes with a dynamic marking *p*.

Musical staff 2: Bass clef, second system. This system is characterized by a rhythmic pattern of eighth notes, many of which are marked with a cross (x) to indicate natural harmonics. It features three distinct triplet markings over eighth notes. The system ends with a dynamic marking *pp*.

Musical staff 3: Bass clef, third system. This system continues the rhythmic pattern of eighth notes with natural harmonics (marked with x). It concludes with a half note followed by a fermata, indicating a sustained or held note.

XIII

First system of musical notation in bass clef. It features a series of chords and melodic lines. The first part has a *pp* dynamic, followed by a *p* dynamic, and then another *pp* dynamic. There are three triplet markings (indicated by a '3' in a bracket) over groups of notes.

Second system of musical notation in bass clef. It includes a triplet marking. Above the staff, there are markings for 'growl' and 'ord.' with arrows pointing to specific notes. The dynamics are *mf*, *p*, *mf*, and *p* in sequence.

Third system of musical notation in bass clef. It features a series of chords with upward-pointing accents. A long slur covers the final part of the system.

Fourth system of musical notation in bass clef. It includes a wavy line above the staff with numbers 2, 4, 2, 1, and 2 above it. The dynamics are *mf*, *ff*, and *f*. There are triplet markings (indicated by a '3' in a bracket) under some notes.

Fifth system of musical notation in bass clef. It starts with a triplet marking (indicated by a '3' above a wavy line). The dynamics are *mf* and *p*.

growl ord.

mf *p* *mf*

This musical staff features a series of notes with slurs and dynamic markings. The first section is marked *mf*, followed by a section marked *p*, and then another *mf* section. The notes are connected by slurs, and there are triplets indicated by a '3' over a bracket. The word 'growl' is written above the first triplet, and 'ord.' is written above the second triplet. The staff ends with a double bar line.

mp

This musical staff contains notes with slurs and dynamic markings. The first section is marked *mp*. The notes are connected by slurs, and there are triplets indicated by a '3' over a bracket. The staff ends with a double bar line.

p

This musical staff contains notes with slurs and dynamic markings. The first section is marked *p*. The notes are connected by slurs, and there are triplets indicated by a '3' over a bracket. The staff ends with a double bar line.

audibly turn on snare

ppp

This musical staff contains notes with slurs and dynamic markings. The first section is marked *ppp*. The notes are connected by slurs, and there are triplets indicated by a '3' over a bracket. The word 'audibly turn on snare' is written above the staff. The staff ends with a double bar line.

XIV

play into snare drum

Musical staff with bass clef. The staff contains a sequence of notes and rests. Dynamics are indicated below the staff: *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*. There are two triplet markings (3) over groups of notes.

Musical staff with bass clef. The staff contains notes and rests. Performance instructions include "growl" and "ord." above notes. Dynamics are indicated below the staff: *p*, *mf*, *p*, *mf*. There are slurs and accents over notes.

Musical staff with bass clef. The staff contains notes and rests. Dynamics are indicated below the staff: *p*. There are slurs and accents over notes.

Musical staff with bass clef. The staff contains notes and rests. Dynamics are indicated below the staff: *mf*, *mp*, *f*. There are slurs and accents over notes.

Musical staff with bass clef. The staff contains notes and rests. Dynamics are indicated below the staff: *ff*, *f*, *mf*. There are slurs and accents over notes.

Musical staff with bass clef. The first measure contains a half note chord with a slur above it. The second measure contains a triplet of eighth notes with a slur above it. The third measure contains a triplet of eighth notes with a slur above it. The fourth measure contains a triplet of eighth notes with a slur above it. The fifth measure contains a triplet of eighth notes with a slur above it. The sixth measure contains a triplet of eighth notes with a slur above it. The seventh measure contains a half note chord with a slur above it. The eighth measure contains a half note chord with a slur above it. The ninth measure contains a half note chord with a slur above it. The tenth measure contains a half note chord with a slur above it. Dynamic markings: *p* under the first measure, *mf* under the seventh measure, and *p* under the tenth measure.

Musical staff with bass clef. The first measure contains a half note chord with a slur above it and the instruction "growl" above it. The second measure contains a half note chord with a slur above it and the instruction "ord." above it. The third measure contains a triplet of eighth notes with a slur above it. The fourth measure contains a triplet of eighth notes with a slur above it. The fifth measure contains a triplet of eighth notes with a slur above it. The sixth measure contains a triplet of eighth notes with a slur above it. The seventh measure contains a triplet of eighth notes with a slur above it. The eighth measure contains a triplet of eighth notes with a slur above it. The ninth measure contains a triplet of eighth notes with a slur above it. The tenth measure contains a triplet of eighth notes with a slur above it. Dynamic marking: *mf* under the first measure.

Musical staff with bass clef. The first measure contains a half note chord with a slur above it. The second measure contains a triplet of eighth notes with a slur above it. The third measure contains a triplet of eighth notes with a slur above it. The fourth measure contains a half note chord with a slur above it. The fifth measure contains a triplet of eighth notes with a slur above it. The sixth measure contains a triplet of eighth notes with a slur above it. The seventh measure contains a half note chord with a slur above it. The eighth measure contains a triplet of eighth notes with a slur above it. The ninth measure contains a triplet of eighth notes with a slur above it. The tenth measure contains a half note chord with a slur above it. Dynamic markings: *p* under the first measure, *pp* under the second measure, *p* under the fourth measure, and *pp* under the sixth measure.

Musical staff with bass clef. The first measure contains a half note chord with a slur above it. The second measure contains a half note chord with a slur above it. The third measure contains a half note chord with a slur above it. The fourth measure contains a triplet of eighth notes with a slur above it. The fifth measure contains a triplet of eighth notes with a slur above it. The sixth measure contains a half note chord with a slur above it. The seventh measure contains a half note chord with a slur above it. The eighth measure contains a half note chord with a slur above it. The ninth measure contains a half note chord with a slur above it. The tenth measure contains a half note chord with a slur above it. Dynamic markings: *p* under the first measure and *pp* under the fourth measure.

XV

Musical staff with bass clef. It features several triplet markings (indicated by a '3' above a bracket) and dynamic markings. The first dynamic is *pp* (pianissimo).

Musical staff with bass clef. It includes triplet markings, a *mf* (mezzo-forte) dynamic, a *p* (piano) dynamic, and a *mf* dynamic. There are also performance instructions: "growl" above a note and "ord." (order) above a note. A vocal line "oo-ee" is written below the staff with a slur.

Musical staff with bass clef. It shows notes with slurs and dynamic markings: *mp* (mezzo-piano), *mp*, *p* (piano), and *mf*. There are two instances of the vocal line "oo-ee" written below the staff.

Musical staff with bass clef. It features notes with slurs and a dynamic marking of *p* (piano).

Musical staff with bass clef. It includes notes with slurs, triplet markings (indicated by a '3' above a bracket), and dynamic markings of *mf* (mezzo-forte). There are also markings for groups of 2 and 3 notes.

2 1 2 3

ff *f* *mf*

3

p *mf* *p* *mp*

oo-ee

growl ord.

oo-ee oo-ee

mp *mp* *mf*

p

3

pp

3

XVI

Musical staff with bass clef. It features a series of notes with dynamic markings *pp*, *p*, and *mp*. There are two triplet markings (3) over groups of notes.

Musical staff with bass clef. It includes dynamic markings *p*, *mf*, and *mp*. There are triplet markings (3) and vocal markings: "growl" above a note and "ord." above a note with a slur. Below the staff, the text "oo-ee" is written under a slur, and "oo-ee" is written under a slur with a *mp* dynamic marking.

Musical staff with bass clef. It features dynamic markings *mp* and *p*. Below the staff, there are three instances of the text "oo-ee" with slurs and *mp* dynamic markings.

Musical staff with bass clef. It includes dynamic markings *mf* and *p*. The staff contains various musical notations, including slurs and accents.

Musical staff with bass clef. It features a large slur over the staff and a dynamic marking *ff*. There is a "4" marking above a note and a wavy line indicating a tremolo effect.

2 3 2 3 2 3 4

mf *ff*

90"

Rhythm A Rhythm B

fff *gliss.*

Over 90 seconds, descend from the high D# to the low F#, performing a mixture of Rhythm A and Rhythm B. Make the descent as smooth as possible. Avoid slowing down. Gradually move away from snare.

When you have finished the descent, ceremoniously and audibly turn off the snare, ending the piece.

Ben Gaunt

Filling Rubin's Vase

for ensemble

Filling Rubin's Vase for Sarah Nicolls, Oren Marshall and members of the London Sinfonietta.

Filling Rubin's Vase was performed at Huddersfield Contemporary Music Festival 2014, and recorded by NMC, as part of the Sound and Music Higher Education Programme.

Rubin's Vase is an optical illusion named after the Danish psychologist, Edgar Rubin. Two faces are shown in profile, and the negative space between them forms the shape of a vase. In *Filling Rubin's Vase*, the work alternates between low and high material. A middle register (between middle C and the octave above) is not explored until the end; the 'negative pitch space' between the low and high material is filled.

Year of Composition: 2014

Duration: 10'

Techniques

general			strings		
tr	mv	air	clb.	s	body
all trills are a semitone	molto vibrato	unpitched air sound	col legno battuto	scratch bow (extra bow pressure)	knock body of instrument with hand

winds	bassoon	accordion	tuba
flz.	△	gs	coin
flutter tongue	play highest note possible, try and maintain a constant pitch	low cluster, as loud and raucous as possible	strike instrument with coin

piano		
scrape	pick scrape	♯
scrape bottom string with metal object resulting in a raucous sound	scrape bottom string very fast with guitar pick resulting in a high-pitched sound (no resonance)	smack sustain pedal with enough force to make a percussive sound

arco	→	clb.
arrows indicate gradual transition (in this case, from arco to col legno battuto)		

B morose, drowsy ♩=120

Pno.
30
ff pp ff pp
3 3
8va

Accord.
ff pp ff pp

Vla.
3
ff ffpp ff

Tba.
mp mf mp mf mp p mf

Bsn.
tr
mp mf mp mf mf p mf

Db.
mp mf mp mf mp p mf

Detailed description: This is a page of a musical score for a symphony orchestra, page 5. The score is in a key with one sharp (F#) and a common time signature. It begins at measure 30. The instruments are Piano (Pno.), Accordions (Accord.), Viola (Vla.), Trombone (Tba.), Bassoon (Bsn.), and Double Bass (Db.). The tempo is marked 'morose, drowsy' with a quarter note equal to 120 beats per minute. The score features various dynamic markings such as fortissimo (ff), pianissimo (pp), mezzo-forte (mf), mezzo-piano (mp), and piano (p). There are also articulation marks like accents and slurs. The Pno. part includes a section marked '8va' (octave up) with triplets. The Tba. and Bsn. parts feature trills. The Db. part has a series of slurs with dynamic changes. The time signature changes from 5/4 to 4/4, then to 2/4, 4/4, 3/4, 2/4, 4/4, and 3/4.

39

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

f *mf* *p* *mp* *f* *mp* *mf* *mp* *mf* *mp* *p* *mf*

f *mf* *p* *mp* *f* *mp* *mf* *mp* *mf* *mf* *p* *mf*

f *mf* *p* *mp* *f* *mp* *mf* *mp* *mf* *mp* *p* *mf*

Detailed description: This page of a musical score, numbered 39, features six staves. The top two staves are for Piano (Pno.) and Accordion (Accord.), both in treble clef. The third staff is for Viola (Vla.) in treble clef. The bottom three staves are for Trombone (Tba.), Bassoon (Bsn.), and Double Bass (Db.), all in bass clef. The time signature changes frequently across the measures: 3/4, 4/4, 2/4, 4/4, 3/4, 4/4, 2/4, 4/4, 3/4, 4/4, 2/4, 4/4. The Trombone, Bassoon, and Double Bass parts include dynamic markings: *f*, *mf*, *p*, *mp*, *f*, *mp*, *mf*, *mp*, *mf*, *mp*, *p*, *mf*. The Trombone and Bassoon parts also feature trills. The Double Bass part includes slurs and accents.

C delicate, ethereal (l'istesso tempo sempre)

51

Pno. *pp*
8^{va}

air (unpitched)

Accord. *f*

Vla. *p* sempre
sul tasto

Tba. *p*

Bsn. *p*

Db. *p*

sim. pedal every arpeggio

5

5

58

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

8

3

3

3

3

3

3

5

6

5

5

f

f

3

3

3

2/4

2/4

2/4

2/4

2/4

2/4

D mechanical, precise

65

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

mf mp f p mf f mf mp f p mf f mf mp f p mf f

mf < f < f mf > p mf < f < f mf > p mf < f < f mf > p mf < f < f mf > p

mp < f mf mp < f mf mp < f mf mp < f

air mv coin air mv coin

pizz. pizz.

72

Pno.

Accord.

Vla.

Tba. *mf mp f p mf f mf mp f p mf f mf mp f p mf f*
air *mv* coin air *mv* coin air *mv* coin

Bsn. *mf < f < f mf > p mf < f < f mf > p mf < f < f mf > p mf < f < f mf > p*

Db. *mf mp f mf mp f mf mp f mf*

E shimmering, celestial

78

Pno.

f
pick scrape

mf

8va-7

Red.

pp

p

mf

Vla.

f

mf

Tba.

air

mf *mp* *f* *p* *mf* *f* *mf* *mp*

coin

mv

Bsn.

mf *f* *f* *mf* *p* *mf* *f* *f* *mf* *p*

Db.

mp *f* *mf* *mp* *f*

83 *p* *mf* *p* *mf* *p*

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

f

84 85 86

Detailed description: This page of a musical score contains six staves. The top staff is for Piano (Pno.), featuring a melodic line with triplets and dynamic markings of *p* and *mf*. The second staff is for Accordion (Accord.), with sustained chords and dynamic markings of *p* and *mf*. The third staff is for Viola (Vla.), with sustained chords and dynamic markings of *p* and *mf*. The bottom three staves (Tuba, Bassoon, and Double Bass) are mostly silent, with rests. A dynamic marking of *f* is placed below the second staff in the third measure. The score is divided into four measures, with time signatures changing from 7/4 to 4/4, then 5/4, and finally 6/4.

87 *mf* *p* *mf* *p* *mf* *p*

Pno.

f *f* *f*

8^{va}-1

Accord.

mf *p* *mf* *p* *mf* *p*

Vla.

mf *p* *mf* *p* *mf* *p*

Tba.

Bsn.

Db.

F motionless, echoing

The musical score consists of six staves, each representing a different instrument. The Pno. staff (top) features a melodic line with triplets and a dynamic marking of *mf*. The Accord. staff has sustained chords with a *mf* dynamic. The Vla. staff also has sustained chords with a *mf* dynamic. The Tba. staff has a melodic line with a dynamic range from *pp* to *f*, including a section marked 'air'. The Bsn. staff has a melodic line with a dynamic range from *f* to *pp*, including a section marked '9'. The Db. staff has a melodic line with a dynamic range from *f* to *pp* to *f*, including sections marked 'arco', 'clb.', and 'pizz.'. The score is in 4/4 time and includes various time signature changes (5/4, 3/4) and articulations like slurs and accents.

99

Pno.

Accord.

Vla.

Tba. ord. *pp* *f* *f* *pp*

Bsn. *pp* *f* key click ord. *f*

Db. arco *f* clb. pizz. *pp* *f*

G strict

106

Pno.

ff dim. 3 (f) 3 (mf)

8va-1 Ped. Ped. 3 Ped. Ped. 3 Ped. Ped.

Accord.

ff dim. 3 (f) 3 (mf)

air gs air gs air

Vla.

ff dim. 3 (f) 3 (mf)

pizz. arco pizz. arco

Tba.

Bsn.

pp

Db.

114

Pno.

3 (mp) (p) 3 pp

Ped. Ped.

8va

gs (mp) (p) pp

Accord.

Vla.

pizz. arco (mp) (p) pp

Tba.

mf f flz.

Bsn.

f flz. ord. mf

Db.

arco 3 3 mf

I frantic, energetic ♩=180

121

Pno.

ff pp ————— ff pp ————— ff pp

Accord.

pp ————— ff

Vla.

pp ————— ff

Tba.

ord. mf > < > < > mf f flz. ord.

Bsn.

mf > < > < > f flz. ord. mf > < > < > f ord.

Db.

mf ————— ff ————— mf > < > < > < >

Detailed description: This page of a musical score begins at measure 121. It features six staves: Piano (Pno.), Accordion (Accord.), Viola (Vla.), Trombone (Tba.), Bassoon (Bsn.), and Double Bass (Db.). The Piano part has two staves; the upper staff is mostly silent until measure 125, where it plays a melodic line with dynamics *ff pp*, *ff*, *pp*, and *ff pp*. The lower staff provides accompaniment. The Accordion part is silent until measure 125, then plays a melodic line with dynamics *pp* and *ff*. The Viola part is silent until measure 125, then plays a triplet of eighth notes with dynamics *pp* and *ff*. The Trombone part starts with a *mf* dynamic, followed by *f*, and includes a *flz.* (flourish) section. The Bassoon part starts with a *mf* dynamic, followed by *f*, and includes a *flz.* section. The Double Bass part starts with a *mf* dynamic, followed by *ff*, and includes a *flz.* section. The score includes various musical notations such as slurs, accents, and dynamic markings.

127

Pno.

ff pp ff pp ff pp ff pp ff pp ff

Accord.

pp ff pp pp pp ff pp ff pp ff ff pp ff

Vla.

ffpp ff ff pp ff pp ff ffpp ff ff pp ff

Tba.

Bsn.

Db.

133

Pno.

pp ————— ff pp ————— 3 ————— ff pp ————— ff pp ————— ff pp ————— ff pp ————— ff pp ————— 3 ————— ff pp ————— ff

Accord.

pp ————— 3 ————— pp ————— ff pp < ff > pp ————— ff ————— pp < ff > pp ————— 3 ————— pp ————— ff pp < ff > pp

Vla.

pp ————— 3 ————— 3 ————— ff ————— ffpp ————— ff ————— ff > pp ff > pp ————— 3 ————— 3 ————— ff ————— ffpp ————— ff

Tba.

Bsn.

Db.

J morose, drowsy ♩=120

140

Pno.

pp ————— ff pp ————— ff pp ————— ff ³ ³ ^{8va}

Accord.

ff

Vla.

ff > pp ff ————— pp ————— ff

Tba.

mp mf mp mf mp p mf

Bsn.

tr tr tr tr tr tr tr

mp ————— mf ————— mp ————— mf ————— mf ————— p ————— mf —————

Db.

mp < mf < mp < mf < mp < p < mf

149

Pno.

8^{va}

3 3 5

Ped.

air (unpitched)

ff

Accord.

Vla.

sul tasto

p sempre

Tba.

f mf p mp f mp mf p

Bsn.

tr

f mf p mp f mp mf p

Db.

f mf p mp f mp mf p

158

Pno.

— \wedge sim. pedal every arpeggio

Accord.

Vla.

Tba.

Bsn.

Db.

L mechanical, precise

165

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

mf mp f p mf f mf mp f p mf f mf mp f

mf < f < f mf > p mf < f < f mf > p mf < f < f mf > p mf < f

mp f mf mp f mf mp f mf

M shimmering, celestial

172

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

f
pick scrape

pp

f

mv coin air *mv* coin air *mv* coin air

p *mf* *f* *mf* *mp* *f* *p* *mf* *f* *mf* *mp* *f* *p* *mf* *f* *mf* *mp*

f *mf* *p* *mf* *f* *f* *mf* *p* *mf* *f* *f* *mf* *p* *mf* *f* *f* *mf* *p*

body body body

mp *f* *mf* *mp* *f* *mf* *mp* *f* *mf*

178

mf *p* *mf* *p*

Ped.

p *mf* *p* *mf* *p*

mf *p* *mf* *p*

mf *p* *mf* *p*

f

8va-

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

7/4 4/4 4/4 5/4 6/4

182

mf *p* *mf* *p* *mf*

Pno.

f *f* *f*

8^{va} 8^{va} 8^{va}

Accord.

mf *p* *mf* *p* *mf*

Vla.

mf *p* *mf* *p* *mf*

Tba.

air

f

Bsn.

pp

Db.

Detailed description: This page of a musical score, numbered 182, features six staves. The top staff (Piano) contains a complex rhythmic pattern of eighth notes with triplets, marked with dynamics *mf* and *p*. The second staff (Piano) features octaves (8^{va}) with a forte (*f*) dynamic. The third staff (Accordions) has sustained chords with dynamics *mf* and *p*. The fourth staff (Viola) has sustained chords with dynamics *mf* and *p*. The fifth staff (Tuba) has a melodic line with triplets and a forte (*f*) dynamic, marked 'air'. The sixth staff (Bassoon) has a melodic line with a pianissimo (*pp*) dynamic. The bottom staff (Double Bass) is mostly silent. The score is divided into measures with changing time signatures: 6/4, 5/4, 3/4, 4/4, 3/4, and 4/4.

187

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

ord.

air

ord.

key click

pizz.

arco

clb.

f *pp* *f* *pp* *f* *f* *pp* *f* *f* *f* *pp* *f* *f* *f* *f* *f*

O strict

194

Pno.

ff dim. (f) (mf) (mp)

8^{va} Ped. 3

8^{va}-1 Ped. 3

Accord.

ff dim. (f) (mf) (mp)

air gs

Vla.

ff dim. (f) (mf) (mp)

pizz. arco 3

Tba.

Bsn.

ord.

Db.

pizz. 3 3 3 f pp

202

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

pp

pp

p

pp

p

pp

pp *cresc.*

mp

mp

mp

pp *cresc.*

p

mp

ped.

ped.

air

gs

pizz.

mv

flz.

half valve gliss.

mv

tr

flz.

tr

arco

pizz.

arco

b^s

3

pizz.

arco

P motionless, echoing

209

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

The musical score consists of six staves. The Pno. staff has two treble clefs. The Accord. staff has two treble clefs. The Vla. staff has one treble clef. The Tba., Bsn., and Db. staves have one bass clef each. The score is divided into measures 209, 210, 211, and 212. Measure 209 is in 5/4 time. Measure 210 is in 4/4 time. Measure 211 is in 4/4 time. Measure 212 is in 5/4 time. The Pno. part features a triplet of eighth notes in measure 210, starting with a *pp* dynamic and ending with a *f* dynamic. The Accord. part features a triplet of eighth notes in measure 210, starting with a *f* dynamic and ending with a *pp* dynamic, followed by a key click in measure 211 and a seventh-note triplet in measure 212. The Vla. part features a triplet of eighth notes in measure 211, starting with a *f* dynamic and ending with a *pp* dynamic. The Tba. part features a triplet of eighth notes in measure 209, starting with a *mf* dynamic and ending with a *ff* dynamic. The Bsn. part features a triplet of eighth notes in measure 209, starting with a *mf* dynamic and ending with a *ff* dynamic. The Db. part features a triplet of eighth notes in measure 209, starting with a *mf* dynamic and ending with a *ff* dynamic.

pp *f*

f *pp* *f* key click

pizz *f* *pp*

flz. *mf* *f* *ff* flz. mv

flz. *mf* *f* *ff* flz. tr

s pizz. arco 3 pizz. arco s *mf* *f* *ff*

Q smooth, relaxed

mechanical, precise

Pno.
216
5/4 → 4/4
pp $\begin{matrix} \nearrow \\ \text{9} \\ \searrow \end{matrix}$ f
mf
mute with LH (#5)

Accord.
ord.
5/4 → 4/4
f $\begin{matrix} \nearrow \\ \text{3} \\ \searrow \end{matrix}$ pp
mp mf
gs

Vla.
arco → clb
f
mf $\begin{matrix} \nearrow \\ \text{pizz} \\ \searrow \end{matrix}$ f

Tba.
half valve gliss.
mf mp mf mp

Bsn.
pp mp pp mp pp

Db.
pizz. arco pizz. arco
f mp f mp

227

Pno.

mp mf mp mf mp mf mp mf mp

Accord.

air gs air gs air gs air gs

f mp mf f mp mf f mp mf f mp mf f mp mf

Vla.

mf f mf f mf f

Tba.

p

Bsn.

pp

Db.

p

S morose, wailing

234

Pno.
 mp mf mp mf mp p mf

Accord.
 mp mf mp mf mp p mf

Vla.
 arco
 mp mf mp mf mp p mf

Tba.
 mp p pp

Bsn.
 3 3 3 3 3

Db.
 mp p mp p mp

Time signatures: 2/4, 4/4, 3/4, 2/4, 4/4

T falling, stumbling

246 *tr* ~~~~~

Pno. *f*

Accord. *f*

Vla. *f*

Tba. *mf* *pp* *mf* *pp* *mf* *pp* *mp* *mf*

Bsn. *mf* *pp* *mf* *p* *mf* *pp* *mf* *pp* *mf* *pp* *mf* *pp* *mf*

Db. *mf* *pp* *mf* *pp* *mf* *pp* *mf* *pp*

U bright, pulsating

strict

251

Pno. *mf* *mp*

Accord. *mf* *mf*

Vla. *mf* *f* *mf* *mv*

Tba. *pp* *pp* *mv*

Bsn. *pp* *pp*

Db. *mf* *mp* *pp* *pizz.*

V motionless, echoing

smooth, relaxed 37

257

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

pp *f* *f* *pp* *f* *f* *pp* *mf* *ff* *ff* *pp* *f*

9 7 ord. key click

flz. half valve gliss. mv half valve gliss.

trm flz. arco pizz. arco pizz. arco pizz.

3 3 3

W mechanical, precise

delicate, ethereal

morose, wailing

265

Pno.

mf
mute with LH

mp mf

mp

mf f

tr

tr

Accord.

mp mf f mp mf f mp

mf f

Vla.

pizz

mf f

mf f

arco

mf f

Tba.

mp

mp mf p

Bsn.

mp pp

p

3 3

Db.

arco

mp

mp mf



falling, stumbling

bright, pulsating

urgent, strict

274

Piano score for Pno., Accord., Vla., Tba., Bsn., and Db. The score is divided into three measures with time signatures 4/4, 2/4, and 7/4. Dynamics include *f*, *ff*, *mp*, *mf*, and *mv*. Performance instructions include *ped.*, *air*, *gs*, *pizz.*, *arco*, *flz.*, *tr*, *half valve gliss.*, and *s*. Articulation includes accents and slurs. Fingerings and breathings are indicated with numbers and symbols.

Pno.
 Measure 1 (4/4): Rest.
 Measure 2 (2/4): *f* (ped.)
 Measure 3 (7/4): *ff* (*8va-7*) (ped.)

Accord.
 Measure 1 (4/4): Rest.
 Measure 2 (2/4): *f* (ped.)
 Measure 3 (7/4): *ff* (ped.)

Vla.
 Measure 1 (4/4): Rest.
 Measure 2 (2/4): *f* (ped.)
 Measure 3 (7/4): *ff* (ped.)

Tba.
 Measure 1 (4/4): *f* (triple), *mp*
 Measure 2 (2/4): Rest.
 Measure 3 (7/4): *ff* (*mv*)

Bsn.
 Measure 1 (4/4): *f* (triple), *mp*, *f*
 Measure 2 (2/4): Rest.
 Measure 3 (7/4): *ff* (*tr*)

Db.
 Measure 1 (4/4): *f* (triple), *mp*
 Measure 2 (2/4): Rest.
 Measure 3 (7/4): *ff* (*pizz.*, *arco*, *s*)

accel.

Y

♩=180

278

Pno.

Red. 3

air

Accord.

Vla. pizz. arco

Tba.

Bsn.

Db. pizz. arco

fff

fff

fff

fff

fff

fff

281

Pno.

Accord.

Vla.

Tba.

Bsn.

Db.

remove reed

Detailed description: This is a page of a musical score for a woodwind and piano ensemble. The page is numbered 41 in the top right corner and 281 at the beginning of the first staff. The score consists of six staves, each with a different instrument label to its left: Pno. (Piano), Accord. (Accordion), Vla. (Viola), Tba. (Tuba), Bsn. (Bassoon), and Db. (Double Bass). The Pno. and Accord. staves are grouped together with a brace on the left. The Pno. staff has a treble clef and a bass clef, with notes in the treble and rests in the bass. The Accord. staff has a treble clef and a bass clef, with notes in the treble and rests in the bass. The Vla. staff has a treble clef and notes in the treble. The Tba. staff has a bass clef and notes in the bass. The Bsn. staff has a bass clef and notes in the bass, with the instruction 'remove reed' written above the staff in the final measure. The Db. staff has a treble clef and notes in the treble. All staves show a rhythmic pattern of eighth notes and rests, with some accidentals (sharps) in the Vla. and Tba. parts.

Z massive, raucous ♩=120

287

Pno. *fff* scrape

8^{vb} Ped.

Accord. *fff*

Vla. s → ord.

Tba. improvise high-pitched squeaks and squeals

Bsn. play reed as high as possible *fff*

Db. *fff*