

# Songs for Snare Drum

Reflection

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## Overview

In this paper, I shall explore the piece *Reflection*, from my compositional collection. The aim is to show the various techniques used for both its composition and performance, and to explore the various conceptual bases on which it is built.

## Introduction

*Reflection* is a piece that is built around a numerical system. This at once stifled and encouraged creativity in subtly different ways, and provided not only an interesting challenge compositionally, but enabled me to produce some rhythmically unique phrasing that I may not have otherwise uncovered.

*Reflection* shares a lot in common with an earlier piece of mine, *Dekatría*,<sup>1</sup> which began as an exploration of mathematical systems of composition. *Reflection* is based on the twelve digits of pi, which serves as a starting point for the accent placements within the piece. Taking a 16<sup>th</sup> note subdivision in the time signature of 4/4, *Reflection* forms its phrases by producing numbered note groupings corresponding to the first twelve digits of pi. 3.141, for example, becomes a group of three 16<sup>th</sup> notes, followed by a single accent, followed by a group of four, and so on, with the first note of each group being accented.

The first twelve digits are as follows: 3.14159265359. This corresponds to a repeating accent pattern that follows that numerical sequence. In the example below, the first twelve bars of the piece are shown in their base form, annotated to show each note grouping. Each time the numerical sequence restarts has been highlighted by lowering the bracket of the 3:

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<sup>1</sup> (Curtis, 2022)

*Twelve digits of pi cycling forwards*

Above, we see the accent placements in accord with the numbered groupings, defined by the first twelve digits of pi. This twelve-digit sequence repeats, with the first digit, 3, displaced each time against the 4/4 meter. One full sequence contains 53 16<sup>th</sup> notes, and so the accent pattern repeats every 53 notes. The accent pattern that runs from the first beat of the first bar repeats exactly from the sixth 16<sup>th</sup> note of bar 4, 54 16<sup>th</sup> notes later. This pattern continues unabated until it resolves, with the last grouping of the last group of 9 ending on the last 16<sup>th</sup> note of the bar. This occurs at the end of bar 53, with the full sequence repeating 16 times.

From bar 54, the same process is applied, but with the twelve digits running in reverse order: 953562951413. This again continues until its resolution point at the end of the 106<sup>th</sup> bar, with the sequence ending on the last 16<sup>th</sup> note of the piece. In total, the 53-note sequence repeats 16 times forwards and 16 times backwards, and this provides the position for every accent across 1,696 16<sup>th</sup> notes and 106 bars.<sup>2</sup>

This process is a streamlined version of the one used to compose the piece *Dekatría*. In that piece, a whole array of numerical sequences were used to place accents, flams, diddles, and other vocabularic elements in a mathematically diverse way. Here, the process was applied once to produce the position of the accents, which remained fixed throughout the entire compositional process.

## Structure

Having completed the basic structure, the method changed from a mathematical system to a musical one. In *Dekatría*, all of the sections were made to be the same length, but that system was not applied here. Instead, I began with a certain vocabularic idea and continued with it to a logical pause within the musical phrasing, and this approach produced several sections of various lengths. As these sections became more established, I refocused the vocabulary within them to become more coherent, and a dual-pronged process occurred in which I simultaneously refined the

<sup>2</sup> The final piece is 108 bars in length, the first of which are a two-bar bass drum intro.

vocabulary to better reflect each section, and refined the section placements to better reflect the use of vocabulary.

This process of gradually chipping away at a piece is somewhat characteristic of my approach generally. It allows me to slowly build a piece that is internally coherent, and with which I am intimately familiar, having refined and revisited each bar, passage, and section many times.

Having produced a long piece of work, one of the challenges was to retain interest. Within the meter and using recognised snare drum vocabulary over such a long piece, repetition is inevitable and the phrases risk becoming stale. To alleviate this risk, the third, fifth, and seventh sections were modulated into swing time, with the others all remaining straight. This produced an effective contrast between the straight sections, which retained a degree of modern rudimental vocabulary, and the swung sections, which adopted a style akin to Scottish pipe drumming, and further added contrast to a long piece.

Throughout this process, each section developed its character, as well as its own set of challenges. Depending on the alignment of the pre-defined accents within each section, musically coherent phrases were, at times, difficult to create. With the accent positions fixed, the challenge was to produce musically coherent phrasing around them without sounding forced or constrictive. This challenge was made easier or more difficult depending on the character of each section.

$\text{♩} = 77$   
(Percussion)

3

5

7

9

11

12

*p*

*f p staccato*

*f*

Above, the first section is shown with its finalised vocabulary. When compared with the annotated version above, the accent placements can be seen to retain their original positions. The opening section was kept relatively simple, retaining a steady 16<sup>th</sup> note subdivision and using various ornamentation – flams, drags, and diddles – to decorate the accents within a sustained single stroke roll. The use of *frisé de 4* in the final three measures of the section begins to increase the intensity, which grows in the second section.

The first major change occurs in the third section, which sees the first modulation to swing time:

29 *mp* *<f* *mf*

32

34 *f*

36

In this section, the symbol above the 29<sup>th</sup> bar modulates the 16<sup>th</sup> notes into a swing interpretation, in which consecutive 16<sup>th</sup> notes are treated as if they are the first and third notes of a 16<sup>th</sup> note triplet. This gives a constant shuffle feel to the 16<sup>th</sup> note subdivision. This modulation creates a marching effect reminiscent of the Scottish pipe drumming tradition. The rolls from the previous two sections have changed from open double strokes to buzz rolls to reflect this stylistic change, and the rhythms have altered to a triplet subdivision. This means that the buzzed quarter note on the third beat of bar 29 is played using six buzz strokes in a sextuple rhythm, emphasising the swung march feel.

This effect is reprised and developed in the fifth and seventh sections, providing a contrast between the straight and swung passages.

## Vocabulary

The vocabulary utilised in *Reflection* is, in places, difficult to define. It borrows ideas from both traditional and modern rudimental drumming, French rudimental drumming, orchestral drumming, and Scottish pipe drumming. There are elements of each throughout most sections, with a high degree of cross-over.

The swung sections generally apply a combination of traditional rudimental and Scottish pipe drumming to produce the characteristic liting sound, while contemporary and French vocabulary generally define the straight sections. It is to this latter idea that I shall first turn.

For my current purposes, I shall define modern rudimental drumming as taking the concepts of the ancient tradition, expanding the conceptual ideas, and applying the vocabulary in non-traditional ways. The ancient tradition, based as it was on a functional role within military settings,

is both consistent and recognisable in its application of the rudimental vocabulary, and it is this consistency that defines the rudimental tradition, and indeed the very rudiments themselves, today.

Since the latter works of Pratt, and through the likes of Tompkins and Becker, Goute and Lefèvre, the rudimental discipline of today has, in many ways, come a long way; not in a way that makes it necessarily superior, but something of a conceptual departure from its point of origin. To see this, we can explore the following passage:

The musical score consists of four staves, numbered 22 to 27. Each staff shows a sequence of rhythmic patterns on a single line. Below the notes are letters 'R' and 'L' indicating right and left hand strokes. Dynamic markings include *f*, *p sub.*, *mp*, and *f mp sub.*. Articulation includes accents (>) and slurs. Staff 22 starts with a 6-stroke roll (RLRLRL) and a drag figure (LRLRL). Staff 23 features a 9-stroke roll (RLRLRLRLRL) and a flamacue (RLRLRLRLRL). Staff 24 contains several 3-stroke rolls (RLRLRL) and a 6-stroke roll (RLRLRLRLRL). Staff 25 has more 3-stroke rolls. Staff 26 features 3-stroke rolls and a 6-stroke roll, ending with a drag figure (LRLRL). Staff 27 continues with various rhythmic patterns, including a 3-stroke roll and a drag figure.

The passage above, taken from the straight second section of the piece, demonstrates numerous concepts. Bars 22, 24, 25, and 26 all feature French frisé figures that serve as small rhythmic jolts within the underlying 16<sup>th</sup> note subdivision. It is interesting to note that none of the frisé in this particular passage contain accents, with most existing within an unaccented figure or, as in the case of bar 26, occurring immediately before an accent.

There are elements of the ancient tradition present as well; bar 23 features a typical 9-stroke roll into a flamacue, characterised by the accent on the second 16<sup>th</sup> note of the fourth beat. The second beat of bar 22 features a standard 6-stroke roll, and the drag figure at the end of the section is also a typical rudimental conclusion.

However, some elements are more difficult to define, and thus fall under what we might describe as the modern tradition. The ample use of frisé, whilst certainly a hallmark of the ancient French tradition, is applied here in a way similar to how accents may be applied. The simple presence of a frisé, such as the frisé occurring on every third 16<sup>th</sup> note through bar 26, acts as natural points of rhythmic emphasis even when lacking an accent, an effect I have utilised in many of my pieces elsewhere, and one more prevalent in Tompkins than in the works of Quinchon, or Raynaud.

Likewise, the 32<sup>nd</sup> note paradiddle-diddle at the end of the 25<sup>th</sup> measure is somewhat atypical of the traditional repertoire, as is the use of accented and ornamented single strokes running along the bottom line from the end of bar 26 to the end of the passage.

Perhaps the most ‘modern’ rudimental vocabulary is found at the climax of the piece. Running from bar 102 to the end, the six-bar final section, shown below, features a consistent 32<sup>nd</sup> note

roll, played as accented single strokes and decorated with *frisé de 4*, 32<sup>nd</sup> note sextuplets, and even a 32<sup>nd</sup> note 12-tuplet.<sup>3</sup>

102 *mp sub.*

103 *f mp sub.*

104 *f mp sub.*

105 *f mp sub.*

106

107 *f*

This final section represents the climax of a gradual building of intensity throughout the final few sections, and the vocabulary it uses, though containing recognised figures like the single stroke roll and *frisé*, is not typical of any rudimental tradition. This section was written for dramatic effect, with the integrated *frisé* giving the single stroke 32<sup>nd</sup> notes the effect of revving like a car engine.

Though not strictly traditional, the vocabulary within the swung sections is generally far more typical. Based on the Scottish pipe drumming model, it uses vocabulary in a way that emphasises its swung nature, giving a characteristic loping rhythm.

<sup>3</sup> Perhaps we should call this a duodecuplet, or a duodecuplet?

85  
p  
R R L R R L R L R L L R L L R L L R L

87  
L R L R L R L L R R R L R L R L R R L R

89  
L L R L L L L R L R L mf

90  
R R L R L L R L R L R L R L R L R L R L R L

The passage from bar 85 above is all swung and features a selection of vocabulary typical to both the Scottish and American rudimental traditions. Most obvious are the ratamacues of the 89<sup>th</sup> and 90<sup>th</sup> bars, the triplets of which flow nicely with the underlying swing feel. All of the rolls are again played as closed buzz strokes on a triplet subdivision in the Scottish style, and the use of rests, flams, and drags emphasise a degree of syncopation which, combined with the swung 16<sup>th</sup> notes, further references a Scottish march.

As a general description, *Reflection* follows a contoured dynamic, with each section increasing or decreasing the intensity with its use of subdivisions. The swung passage shown above is relatively calm, emphasising the lilting swing, while the section that follows, shown below, bolsters the intensity with sustained 32<sup>nd</sup> notes:

92  
f mp  
L R L R L R L R R L L R L R R L L R R L L R L R R L L

93  
R R L L R R L R L L R L R R L L R R L L R R L L R R L L R f

The passage above, which follows directly from the previously shown section, uses 32<sup>nd</sup> note paradiddle variations, which change to 32<sup>nd</sup> note singles in the bars that follow.

### Accompaniment

The accompaniment for *Reflection* changes depending on both the function of the section and the level of intensity being expressed. As with the other pieces, the accompanying parts comprise a high-pitched woodblock, a mid-pitched taiko drum, and a low-pitched bass drum. During the recordings of these pieces, the taiko's part was played using a conga.

(Percussion)

Snare Drum

Marching Bass Drum

Taiko Drum

Wood Block

*mp*

3

R L R L R L R L R L R L R L R L

5

R L R L R L R L R L R L R L R L

Above, we see the opening section including all accompanying parts. This section expresses a low level of intensity, with a generally quiet dynamic and a lack of density within the phrasing. The bass drum plays a solemn cadence on the second and fourth beats, whilst the taiko and woodblocks play a simple repeating pattern around this. A recurring feature of the accompaniments in this piece is introduced in the fifth measure, with the choreographed pause on the fourth beat. These synchronised pauses occur multiple times throughout the piece and add a sense of cohesion to draw the different parts together.



The image displays three systems of musical notation, each consisting of four staves. The first system (measures 16-17) features a snare drum staff with a complex rhythmic pattern including a triplet and various rests, a Taiko drum staff with a similar pattern, and two accompaniment staves. The second system (measures 18-19) shows a woodblock staff with a dense pick-up figure, a bass drum staff with steady 8th notes, and two accompaniment staves. The third system (measures 20-21) features a snare drum staff with a pattern of triplets and rests, a Taiko drum staff with a similar pattern, and two accompaniment staves. Dynamics markings include *f*, *p sub.*, and *mp*.

Above, the section running from the sixteenth measure demonstrates numerous devices. Firstly, the Taiko drum on the third staff matches the snare drum's rhythm, emphasising the main phrase of that bar.

Following that, in bar 17, the woodblock on the bottom staff anticipates an increase in intensity with a dense pick-up figure that contrasts with the similar phrase on the snare drum. This leads into a passage of increased intensity from bar 18, in which the taiko plays a much denser and driving figure, supported by steady 8<sup>th</sup> notes on the bass drum. To offset this increase in density, the woodblock plays a much sparser passage, despite setting up the initial increase in intensity. Things settle down in bars 20 and 21, with the bass drum reverting to a quarter note pulse while the taiko and woodblock play off each other.

The main point here is that the intensity of the passage is driven solely by how the accompaniment is employed. The same snare drum phrases can be made to sound driving and intense or laid back

and serene depending on what the accompanying parts are doing. Through this passage, we progress from a relatively tranquil section, into a much more intense section, and then stabilise somewhere in between for the final two bars of the measure; all of this is achieved through changes in the use of the accompanying parts.

The image shows a musical score for three percussion instruments: snare drum, bass drum, and taiko drum, covering measures 90 and 91. The snare drum part (top staff) features a complex rhythmic pattern with accents and triplets, with the following sequence of notes: R, R L R L, L R L, R L R L R, L R L R, L R L R L R, R L. The bass drum part (middle staff) plays a steady eighth-note pattern, marked with a mezzo-piano (*mp*) dynamic. The taiko drum part (bottom staff) plays a pattern of eighth notes, with a synchronized stop on the final 16th note of the second beat of bar 91.

The two measures shown above are the last in the final swing section, just before the piece's climax. Across the snare line, we see ratamacue, flam-a-cue, and triplet figures that are very reminiscent of the Scottish pipe drumming tradition, fitting nicely with the swung meter of this section. The bass drum on the second staff plays constant (straight) 8<sup>th</sup> notes, whilst the taiko on the third line swings the 16<sup>th</sup> notes in a way very similar to two of my marches, *The Highland Sling* and *Coldstream Dance*.<sup>4</sup> This passage also demonstrates a reprise of the device introduced previously, with the synchronised stop on the final 16<sup>th</sup> note of the second beat of bar 91.

*Reflection* is what we might think of as a conceptual piece in many ways. Its accents are placed entirely by a numerical sequence; it alternates between straight and swung sections; it alternates between contemporary and traditional rudimental vocabulary; it uses the accompaniments to bolster or suppress the intensity. It is a piece that had its musical phrases placed around the pre-defined accent positions, which, compositionally, puts the cart before the horse. As stated in this essay's introduction, this led to challenges, but also a degree of creativity.

Thematically, *Reflection* seeks to express its eponym. The act of reflection can yield surprising insights, or it can yield passivity and calm, and both of these ideas are expressed through the thematic nature of each section. It is intended to convey a journey with various discoveries, with a humble beginning and a definitive (though undefined) destination. It is also a further exploration of the use of numbers within musical – and especially rhythmic – composition, an idea to which, I am sure, I shall return in the future.

## Performance Considerations

As an ensemble performance, I first recorded this piece using a large bass drum, conga, and a pair of woodblocks to accompany a 6.5" deep aluminium snare drum. This format allowed for sufficient separation of the accompanying parts, and a balance of tone and depth on the snare drum versatile enough to handle the contrasting sections.

Though this is a long piece, there are only a few particularly challenging sections. Performers working on this piece may begin by familiarising themselves with some key pieces of vocabulary that occur throughout. We can consider these to be short frisé variations, paradiddle combinations,

<sup>4</sup> (Curtis, Contemporary Marches for Snare Drum, 2023)

and accented single strokes. Though there are many different figures and phrases through this piece's 107 bar-span, much of comprises traditional rudimental vocabulary that should be somewhat familiar to most percussionists.

The frisé is a French rudiment that comprises a short figure of single strokes, given as a number. A frisé of 4, therefore, comprises four single strokes within a certain rhythm, usually (but not necessarily) beginning or culminating in an accent.

20 *f* *p sub.*

21 *p sub.*

The passage above demonstrates this concept, with frisé of 3 comprising two 32<sup>nd</sup> notes and a 16<sup>th</sup> note (bar 20), and frisé of 4, here presented as a 32<sup>nd</sup> note triplet followed by a 16<sup>th</sup> note (bar 21). These frisé occur independently of the accents, sometimes anticipating them, sometimes following them, and others staying independent from them. Passages like this one occur frequently throughout *Reflection*, and the ability to easily recognise these figures, as well as the technical familiarity to clearly articulate them, will ease progress throughout all sections of this piece.

I have discussed in various places the need to avoid tension across the top of the hand when playing difficult passages, and this idea holds here. The *frisé de 4* in bar 20 require the playing of three 32<sup>nd</sup> notes within the space of a single 16<sup>th</sup> note. At a quarter note tempo of 77 bpm, this produces a short, fast flurry of notes that should nevertheless remain articulated. Ironically, considering the speed of these phrases, the tendency will be to rush the three notes of the triplet, crushing them into something that sounds more like a closed drag. Retaining a relaxed hand and allowing the triplet to breathe can prevent this from happening, and also lessen the strain on the performer physically. As with all technical challenges, slow, focused repetition will bring familiarity.

This piece also features sections of paradiddle combinations in a 32<sup>nd</sup> note subdivision.

47 *f* *mp sub.*

48 *mp sub.*

49 *mp sub.*

The passage shown above is typical of numerous sections through this piece, and comprises accented paradiddles, here interspersed with frisé, flams, and drags. As a general concept, various paradiddle combinations are employed to voice numbered note groupings. Here, by paradiddle combination, I mean two single strokes (*pa-ra*) followed by a certain number of double strokes. The first single stroke is always accented, and the subsequent strokes create a textured transition to the next accent. In the opening bar of this passage, counting the 16<sup>th</sup> notes, we see a 5-3-5-3 combination, voiced using 32<sup>nd</sup> note paradiddle figures with an accent marking the beginning of each grouping.

This is a sticking concept often employed to voice accent figures and is something to which I was first exposed through the work of Gary Chaffee. As a general idea, the concept first determines the note groupings that separate accents, and then determines a specific sticking style to progress between them. Extended paradiddle combinations – paradiddle-diddles, double and triple paradiddles, and so on – represent a particularly effective way of doing this, and are used numerous times throughout this piece.

Similarly, this piece utilises accented single strokes in the same vein. The technical difference lies simply in the use of sticking, and not in the application of concept.

96 *p*

97

98 *f* *p sub.* *mp*

100

101 *f*

Detailed description of the musical score: The score consists of six staves of music for snare drum, numbered 96 through 101. Each staff begins with a double bar line and a half note. The notes are quarter notes, and the sticking patterns are indicated by 'L' and 'R' below the notes. Dynamic markings include *p* (piano), *f* (forte), *p sub.* (pianissimo), and *mp* (mezzo-piano). Accents (>) are placed above specific notes. A five-measure slur is present in bar 98. The score ends with a double bar line in bar 101.

The passage above demonstrates this concept, with accent groupings voiced as 32<sup>nd</sup> note single strokes.

In both cases, the performer will benefit first from understanding the concept being applied, and then in familiarising themselves with the technical aspect of performing. Whether paradiddle or single stroke, it is important to understand that they are being used as a vehicle for the accents. To this end, it is therefore important to retain a clear distinction between accented strokes and unaccented strokes. As with many aspects of technical vocabulary, stick height control plays an important role, such that accents should be played from a much greater height than the taps. When performing this passage and others like it, I have developed a near-horizontal stick height for the unaccented strokes, which allows for a very distinct accent when using a larger stroke height.

Aise from these three considerations – frisé, paradiddle combinations, and accented singles – there is little in this piece to trouble a seasoned snare drummer on a technical level. The constant 4/4 meter, supported by accompaniments that complement it, allows for a march-like cadence through all 107 bars.