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## Minimalism and the guitar

Melissa Claire Branson  
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# **Minimalism and the Guitar**

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**Edith Cowan University**

**2011**

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## **ABSTRACT**

This dissertation aims to investigate musical minimalism and its influence on the classical guitar repertoire. Minimalism is defined through a taxonomy of minimalist techniques and the use of minimalist techniques is then traced through a preliminary survey of the guitar repertoire. While classical minimalists Steve Reich and Terry Riley have written several guitar works, the true pioneer of minimalism on the guitar is shown to be Cuban composer Leo Brouwer. Use of minimalist techniques is also particularly prevalent among Australian composers, including Nigel Westlake, Peter Sculthorpe, Robert Davidson, and Phillip Houghton. Curiously, a large number of guitar works employ minimalist techniques in evocation of landscapes. Additionally, minimalist techniques have been used extensively in the burgeoning genre of guitar ensemble, including works by Leo Brouwer, Steve Reich, David Pritchard, and Joe Duddell.

# Contents

<b>DECLARATION.....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>iii</b>
<b>ABSTRACT.....</b>	<b>iv</b>
<b>Contents.....</b>	<b>v</b>
<b>Table of Figures .....</b>	<b>vii</b>
<b>1 Introduction.....</b>	<b>1</b>
<b>2 Minimalism: A Background .....</b>	<b>4</b>
<b>2.1 Defining Minimalism.....</b>	<b>4</b>
<b>2.1 A Taxonomy of Minimalist Techniques .....</b>	<b>5</b>
2.2.1 Extensive Repetition .....	6
2.2.2 Gradual Variation.....	6
2.2.3 Additive and Subtractive Processes .....	6
2.2.4 Cross-Fading or Dovetailing .....	6
2.2.5 Phasing.....	6
2.2.6 Harmonies.....	7
2.2.7 Slow Rate of Harmonic Change.....	7
<b>2.3 Minimalism vs. Post-Minimalism .....</b>	<b>7</b>
<b>3 Minimalism in the Works of Leo Brouwer .....</b>	<b>9</b>
<b>3.1 Leo Brouwer .....</b>	<b>9</b>
3.1.1 La Espiral Eterna.....	9
3.1.2 El Decameron Negro .....	11
3.1.3 Acerca del Cielo, el Aire y la Sonrisa .....	13
3.1.4 Cuban Landscape with Rain .....	15
3.1.5 Cuban Landscape with Rumba.....	18
<b>4 Classical Minimalists and the Guitar.....</b>	<b>19</b>
<b>4.1 La Monte Young .....</b>	<b>19</b>
<b>4.2 Terry Riley .....</b>	<b>19</b>
4.2.1 Ascención.....	19
<b>4.3 Steve Reich.....</b>	<b>20</b>
4.3.1 Electric Counterpoint.....	21
4.3.2 Nagoya Guitars.....	24



<b>5</b>	<b>Australian Composers and Minimalism.....</b>	<b>25</b>
5.1	<b>Nigel Westlake.....</b>	<b>25</b>
5.1.1	The Hinchinbrook Riffs.....	25
5.2	<b>Peter Sculthorpe.....</b>	<b>28</b>
5.2.1	From Kakadu.....	28
5.2.2	Nourlangie.....	30
5.3	<b>Robert Davidson.....</b>	<b>31</b>
5.3.1	Landscape.....	31
5.4	<b>Phillip Houghton.....</b>	<b>33</b>
5.4.1	Wave Radiance.....	33
5.4.2	Ophelia.....	34
<b>6</b>	<b>Other Minimalist Works.....</b>	<b>36</b>
6.1	<b>David Pritchard.....</b>	<b>36</b>
6.1.1	Clockworks.....	36
6.1.2	Stairs.....	37
6.2	<b>Other Works for Guitar Ensemble.....</b>	<b>39</b>
6.2.1	Domino Figures.....	39
6.2.2	Freaky Dancer.....	40
<b>7</b>	<b>Conclusion.....</b>	<b>41</b>
<b>8</b>	<b>Bibliography.....</b>	<b>43</b>
<b>9</b>	<b>Discography.....</b>	<b>46</b>
<b>10</b>	<b>Scores.....</b>	<b>47</b>

## Table of Figures

Figure 1: Three note cells at the beginning of <i>La Espiral Eterna</i> .....	10
Figure 2: Influence of Afro-Cuban drumming styles in the 'D' section .....	11
Figure 3: Linear additive process at the beginning of Movement 2.....	11
Figure 4: The additive and subtractive processes used in Section 'C' .....	12
Figure 5: Development of the motif in Section 'G'.....	13
Figure 6: Extended techniques used on the guitar: glass slides and hand percussion.	14
Figure 7: Use of dovetailing in the melody .....	14
Figure 8: Block additive process in <i>Cuban Landscape with Rain</i> .....	15
Figure 9: Dovetailing in the first and second guitar parts .....	16
Figure 10: Extensive repetition creates the imagery of rain falling .....	17
Figure 11: Block additive process at the beginning of <i>Cuban Landscape with Rumba</i>	18
Figure 12: Extensive repetition in <i>Ascención</i> .....	20
Figure 13: Opening of <i>Electric Counterpoint</i> .....	21
Figure 14: Textural richness is created in the third movement.....	22
Figure 15: Block additive process in the third movement.....	23
Figure 16: Master drummer concept in <i>Electric Counterpoint</i> .....	23
Figure 17: Opening measures in <i>Nagoya Guitars</i> .....	24
Figure 18: Isorhythm in the first 12 bars of <i>The Hinchinbrook Riffs</i> .....	26
Figure 19: Process of gradual metamorphosis from mm.86-105.....	27
Figure 20: Pitch content from mm. 86-105.....	27
Figure 21: Gradual variation of an ad hoc kind at mm.105-112 .....	28
Figure 22: Growth by accretion in “Comodo,” from Sculthorpe’s <i>From Kakadu</i> .....	29
Figure 23: Additive and subtractive processes, mm. 73-80 in “Comodo” .....	29
Figure 24: Rhythmic cells in <i>Nourlangie</i> with the pentatonic scale of melody above .	30
Figure 25: <i>Nourlangie</i> , mm.100-112 .....	31
Figure 26: Intricate rhythmic patterning in <i>Landscape</i> .....	32
Figure 27: Process of gradual harmonic metamorphosis in <i>Landscape</i> .....	33
Figure 28: Dovetailing in <i>Wave Radiance</i> .....	34
Figure 29: Repetition and bass string drones in Movement 1 of <i>Ophelia</i> .....	34
Figure 30: Extensive repetition in Movement 4 of <i>Ophelia</i> .....	35
Figure 31: Repetitive patterns at the beginning of <i>Clockwork 1</i> .....	36
Figure 32: Repetitive figures in the middle section of <i>Clockwork 3</i> .....	36
Figure 33: Use of isorhythm in <i>Stairs</i> .....	38
Figure 34: Changing harmonies in Section ‘C’ of <i>Stairs</i> .....	39
Figure 35: Opening of <i>Domino Figures</i> .....	40
Figure 36: Cross rhythms in the opening of <i>Freaky Dancer</i> .....	40

# 1 Introduction

A vast amount of new music for the guitar can be seen to employ minimalist compositional techniques or aesthetics. This dissertation seeks to explore, describe, and catalogue the influence of minimalism upon the guitar repertoire. It also suggests possible reasons for the intriguing affinity of the guitar with this genre.

Certainly, the guitar has participated in most of the mainstream stylistic developments of the latter twentieth century, demonstrating that it has become far more widely accepted as a serious instrument in the western tradition. The guitar in the late nineteenth and early twentieth centuries existed on the fringes of mainstream practice. Very few prominent composers of that time wrote works for the guitar. Partly, this may be due to the limitations of the instrument itself, such as the awkwardness of guitar music written in any key beyond the instrument's limited range. Typically guitar music restricted itself to those keys that can capitalise on the use of open strings, key signatures with no more than four sharps, and rarely more than two flats. Certainly, it is difficult to execute Wagnerian chromaticism on the guitar, or to sustain a long musical line in a key such as G flat major. The guitar seems to have garnered a reputation as a difficult instrument to write for, an opinion famously expressed by Berlioz in his *Grand traité d'instrumentation et d'orchestration modernes* (1843), where he noted that "it is almost impossible to write well for the guitar without being a player on the instrument."<sup>1</sup>

As the late nineteenth-century saw the emergence of the composer as a distinct professional role (separate from the performer), the guitar became a more marginalised musical instrument. Even in the early twentieth century, when Andres Segovia was achieving greater acceptance for the classical guitar on concert platforms, few works were written for the instrument by leading composers of the time (partly because of Segovia's own conservative musical tastes). The scenario was only overturned in the latter half of the twentieth century, through the efforts of prominent figures such as Julian Bream who commissioned many works for guitar by leading composers such as Britten, Walton, Henze, Tippett, and Maxwell Davies, among others. However, there has also been an explosion of new repertoire for the guitar written by player-composers. Arguably, player-composers never stopped writing for the guitar. It is only now that their works appear to participate in mainstream stylistic

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<sup>1</sup> Harvey Turnbull and Paul Sparks, "Guitar, §5 The Early Six String Guitar," in *The New Grove Dictionary of Music*, 2<sup>nd</sup> ed., ed. Stanley Sadie (London: Macmillan, 2001), 565.

movements, rather than being archaic throw-backs to a previous age.

Minimalism is one genre of the late twentieth-century that appears to have found a niche in the guitar repertoire. Arguably, minimalist techniques are ideally suited to the instrument, yet less hampered by its restricted tonal reach—indeed turning this into a point of strength, for instance, with the exploitation of open string drones. Moreover, with a greater focus on texture and timbre, minimalist styles can also capitalise on the guitar’s strengths in terms of the variety of timbral possibilities. As player-composer Leo Brouwer expresses, “we are millionaires, in terms of repertoire, colour and expressiveness!”<sup>2</sup>

One other possible connection between minimalism and the guitar is that both span the divide between mainstream western art music and popular culture. As Brouwer suggests, “the twentieth century has a strong connection to the guitar, because among other reasons, the guitar exists in all manifestations of popular culture in this century.”<sup>3</sup>

Despite the widespread nature of minimalist-influenced guitar works, there is very little literature specifically addressing this connection. An article specifically addressing minimalist music for guitar was published in *Guitar Review* in 2002.<sup>4</sup> There are also articles specifically addressing the guitar music of Leo Brouwer in other issues of *Guitar Review*. There are, of course, numerous sources outlining the history of minimalism and minimalist composition techniques. General information exists about those mainstream composers who have written minimalist-influenced guitar works, although this information often specifically addresses only these pieces.

The application of minimalist techniques and aesthetics to the guitar has been explored by many composers, some of whom are the leading composers of the minimalist genre (namely Terry Riley and Steve Reich). While minimalism had its beginnings in the United States, its influences are heard also on the other side of the world in the works of Australian composers such as Nigel Westlake and Peter Sculthorpe, among others. Moreover, many guitar player-composers have also been active in composing works utilising these same techniques. In particular, Leo Brouwer is a major guitar player-composer who has significantly contributed to the late twentieth century guitar repertoire. Similarly, David Pritchard has composed several

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<sup>2</sup> Constance McKenna, “An Interview with Leo Brouwer,” *Guitar Review* 75 (Fall 1988): 16.

<sup>3</sup> Rodolfo Betancourt, “A Close Encounter with Leo Brouwer,” *Guitar Review* 112 (Spring 1998): 4.

<sup>4</sup> Stephen Greisgraber and Kristoffer Ricat, “Minimalism, Post Minimalism, and the Guitar,” *Guitar Review* 124 (Winter 2002): 1-28.

albums of minimalist pieces for solo guitar and guitar ensemble. Although not discussed in this dissertation, Domenic Frasca and Marc Mellits are mentioned in the *Guitar Review* article by Greisgraber and Ricat as being two modern player-composers who have used minimalist composition techniques and combined them with the use of electric guitars, electronics pedals, and even guitars with 10 strings.

The structure of this dissertation will provide information on major minimalist composers for guitar, as well as systematically address some of the major minimalist works for solo guitar and guitar ensemble. Chapter 2 provides background information on the genre of minimalism as well as a taxonomy of minimalist techniques. Chapter 3 provides an overview of the earliest minimal compositions for the guitar by Leo Brouwer. In Chapter 4, works by two classical minimalists, Terry Riley and Steve Reich are brought to the forefront. Chapter 5 brings the focus back to Australia, with a survey of minimalist-influenced guitar works by four of the nation's most well-known composers – Nigel Westlake, Peter Sculthorpe, Robert Davidson and Phillip Houghton.

In the final chapter, several works for guitar ensemble are explored, including those by Pritchard, Siegel, and Duddell.

Through this dissertation, it is hoped that a greater understanding of the minimalist repertoire for classical guitar will be developed, and greater insight gained into the reasons underlying the curious affinity of this instrument with musical minimalism.

## 2 Minimalism: A Background

### 2.1 Defining Minimalism

Minimalism is one of the twentieth century's most influential movements in music and art. It has become known by many different names: 'trance music', 'systems music', 'process music', 'solid-state music', 'repetitive music', and 'structuralist music'.<sup>5</sup> Whatever the name, it began as a way of reacting against the serial and atonal music that was a product of composers like Stockhausen and Boulez.<sup>6</sup> The movement sought to adopt the concept of 'less is more'. The premise was to simplify music and strip it back to its essential building blocks, hence creating music with a simplified harmonic, rhythmic and melodic vocabulary. This was a huge contrast to the atonal, rhythmically-complex works of musical modernism.

Three American composers were highly involved in the creation of the minimalist movement: namely La Monte Young, Terry Riley, and Steve Reich. As Alex Ross says in his book *The Rest is Noise*, they created "a purely American art, free of modernist anxiety and inflected with pop optimism."<sup>7</sup>

With its open-endedness and limitless possibilities, minimalist music has the ability to suppress the passing of time and cause the listener to savour the moment. Quite often, minimalist music is labelled as 'trance music' because it puts the listener into a trance-like state. One can often find this sort of music being played in nightclubs.

The classical minimalists (particularly Reich and Riley) drew explicit influence from non-Western musical sources, these included the music of Africa, Indonesia, and India, where they observed successful musical practices incorporating extensive repetition and intricate musical patterning that was previously foreign to the Western tradition. An example of West African influence can be found in the music of Steve Reich. He exploits the idea of a master drummer setting up a groove and passing it around a group. This is seen in Reich's *Electric Counterpoint* where the live guitar will set up figures which are then passed around the other guitars, repeated extensively to

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<sup>5</sup> Dan Warburton, "A Working Terminology for Minimal Music," <http://www.paristransatlantic.com/magazine/archives/minimalism.html> (accessed May 31, 2011).

<sup>6</sup> Keith Potter, "Minimalism," In *Grove Music Online, Oxford Music Online*, <http://0-www.oxfordmusiconline.com.library.ecu.edu.au/subscriber/article/grove/music/40603> (accessed May 29, 2011).

<sup>7</sup> Alex Ross, *The Rest is Noise: Listening to the Twentieth Century*, (New York: Picador, 2007), 517.

create a groove, and then expanded upon. Similarly, Terry Riley spent some time with Ravi Shankar, an Indian musician. Shankar introduced the *rāga* to Riley and its influence has been felt in his pieces and well-documented ever since. While the *rāga* is rhythmically complex, it has a small number of melodic notes, and is often based upon a single scale.<sup>8</sup>

The harmonic structure of modal jazz has also played a part in developing this genre, as well as the more modern rock style of music. It is also worth noting that the harmonies of Impressionist composers, such as Ravel and Debussy were also inspirational for the minimalists who were moving away from atonal and serial music.

## 2.2 A Taxonomy of Minimalist Techniques

Not only are there a number of different names for minimalist music, it is also difficult to define. Dan Warburton, in his essay “A Working Terminology for Minimal Music”, suggests that perhaps the best two descriptions for minimalist music are ‘systems music’ and ‘process music’. Process music refers to the earlier works in this genre where the compositions are structurally defined by a single transparent transformational process. Systems music refers to music that encompasses more than one single linear process. It is the use of multiple processes that makes it different from process music.<sup>9</sup>

There is no single technical or stylistic feature which is unique to minimalism alone, however, it is a combination of techniques.<sup>10</sup> As such, in this dissertation, minimalism will be defined by the taxonomy of minimalist techniques that follows. The list of possibilities is extensive, but the ones that are mentioned in this dissertation are considered to be the most significant. They are: extensive repetition, gradual variation, additive or subtractive processes, cross-fading or dove-tailing, phasing, triadic and consonant harmonies, and a slow rate of harmonic change. These are explained in further detail below. A key feature of all minimalist techniques is the idea of gradual metamorphosis, with change occurring over broad time spans.

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<sup>8</sup> Richard Widdess, “Rāga,” In *Grove Music Online, Oxford Music Online*, <http://0-www.oxfordmusiconline.com.library.ecu.edu.au/subscriber/article/grove/music/48150> (accessed June 8, 2011).

<sup>9</sup> Warburton, *A Working Terminology for Minimal Music*.

<sup>10</sup> Richard Taruskin, *The Oxford History of Western Music*. (New York: Oxford University Press, 2005), 351.

### **2.2.1 Extensive Repetition**

A key feature in many minimalist works is the use of repetition. This creates a trancelike state and allows any processes applied to be easily perceptible. Through the use of extensively repeating motives (or simple rhythmic ideas), interesting rhythmic patterning can emerge—including cross-rhythms, isorhythms,<sup>11</sup> and hocketing.

### **2.2.2 Gradual Variation**

Gradual introduction of new thematic ideas, harmonies and rhythms create a seamless metamorphosis from one section to another. This stands in contrast to splicing, which creates a sudden change.

### **2.2.3 Additive and Subtractive Processes**

There are different types of additive processes, including linear additive process, block additive process, and textural additive process. Linear additive process relates to the growth of a melodic line. A small number of notes are gradually repeated and expanded upon with subsequent repeats, in turn creating a longer melody. Reich refers to block additive process as “replacing rests by beats”. In this process a target rhythm is crafted out of silence by gradually repeating it and adding in extra notes with each repetition until the final full rhythm is reached. The concept of textural additive process involves voices being gradually brought in until a thicker texture is created. The textural additive process is common to many minimalist guitar ensemble pieces.

### **2.2.4 Cross-Fading or Dovetailing**

Musical ideas are brought into a work *sotto voce*, gradually increasing in volume, while the other voice remains constant, or decreases in volume. This technique could be seen to have been derived from audio-engineering. Quite often, music is faded in whilst another is faded out, bringing a subtle and gradual change of style and mood.

### **2.2.5 Phasing**

There are different concepts relating to phasing. One involves Reich’s type of phasing. Two voices initially play the same motif in time with each other and gradually one voice speeds up such that it overtakes the other by a semiquaver increment. This process is repeated numerous times, creating a strange effect of the music shifting in and out of time. The other idea of phasing is a variety of isorhythm, consisting of the cross-rhythms between a repeating motif and the prevailing metre. The rhythmic

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<sup>11</sup> By “isorhythm” I refer to type of cross rhythm resulting from the interaction of a repeating motive and the prevailing metre. As such, the repeating motive will come in and out of phase with the metre.



interplay that occurs results in the motif coming periodically in and out of phase with the metric patterns.

### **2.2.6 Harmonies**

The reintroduction of tonality is common in minimalist music. Works are either diatonic or modal. A smaller number of notes are used in the composition of a piece. Also, phrases are short and memorable to make the applied processes easily perceptible. Harmonies found in minimalist music are often inspired by composers like Ravel and Debussy, particularly in the use of chord extensions, as commonly seen in jazz.

### **2.2.7 Slow Rate of Harmonic Change**

Minimalist music does not have a complex harmonic structure. In many cases, standard chord progressions are not used, and it is not uncommon to hear a piece stay on one chord for a long time - which is similar to modal jazz. Through gradual variation, and additive and subtractive processes, the harmonies will subtly change and move the music in different directions. Sometimes, this will lead to unrelated and unexpected keys.

## **2.3 Minimalism vs. Post-Minimalism**

For the purpose of clarity, it is important to highlight the difference between minimalism, as already outlined above, and post-minimalism.

The style of post-minimalism developed in the early 1980s, about 25 years after minimalism. Its influences spanned a wider range of music than in the minimalist movement. Rock, jazz, world music, folk, sound art, noise and Romantic gestures were all present in the works of the post-minimalists. Post-minimalism took the music of minimalists and loosened their formal structures.<sup>12</sup> American music writer, Kyle Gann, defines post-minimalism as the search for greater harmonic and rhythmic complexity by composers. Storytelling and emotional expression take precedence over technique.<sup>13</sup> Nevertheless, post-minimalist music continues to use many of the compositional techniques outlined above, however, minimalist techniques may also be

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<sup>12</sup> "Post-Minimalism," <http://www.allmusic.com/explore/style/post-minimalism-d12149> (accessed October 31, 2011).

<sup>13</sup> "Minimalism and post minimalism," <http://plingaploug.info/Minimalism-and-post-minimalism.php> (accessed October 31, 2011).

present at the same time as other musical qualities not associated with classical minimalism, such as greater harmonic complexity, or the introduction of splicing (sudden contrasts of style and texture).

In the survey of the guitar literature that follows, many of the works could strictly speaking, be classified as post-minimalist. For the purposes of this dissertation, however, such distinctions are considered unhelpful. If one or more minimalist techniques are present, then a work is considered to be influenced by musical minimalism.

## 3 Minimalism in the Works of Leo Brouwer

### 3.1 Leo Brouwer

In the late twentieth century, the guitar player-composer experienced a rise in popularity. One of the modern classical guitar's greatest player-composer exponents is Leo Brouwer. This Cuban guitarist has a multi-faceted musical career. He is well respected as a performer, composer, teacher, and conductor. His compositions have been influential to many guitarists.

Brouwer's development as a composer has naturally seen him undergo a number of stylistic changes. One of his most popular styles is that of the 'new simplicity' phase in the 1970s. In this phase, Brouwer drew his harmonic language from the impressionist composers and used non-Western musical sources for inspiration.<sup>14</sup>

Brouwer can be credited with being the first player-composer to systematically apply minimalist techniques to the guitar. Many of his solo works from the late 1960s to late 1980s utilise minimalist techniques, for example *Canticum* (1968), *La Espiral Eterna* (1971), *Parabola* (1973), *Tarantos* (1974), *El Decameron Negro* (1981), and *Cuban Landscape with Bells* (1987). Brouwer also composed ensemble pieces making use of similar techniques. *Acerca del Cielo, el aire y la sonrisa* (1979), *Cuban Landscape with Rain* (1984) and *Cuban Landscape with Rumba* (1985) are three popular works for ensemble that fit into this category.

Through a simple analysis of some of his works, it is evident that Brouwer systematically exploited the use of the minimalist techniques of extensive repetition, gradual variation, dovetailing, and additive and subtractive processes. It is also evident that rhythms from African music influence some of his compositions. What follows is a brief survey of his most significant works employing minimalist techniques.

#### 3.1.1 *La Espiral Eterna*

Literally translated to mean "the eternal spiral", this is different to many of Brouwer's well known works for guitar. Composed in 1971, *La Espiral Eterna* is placed at the beginning of his 'new simplicity' compositional phase. The piece begins with a three-note cell which is repeated extensively for the remainder of the work. This example

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<sup>14</sup> Betancourt, "A Close Encounter with Leo Brouwer", 4.

can be seen in **Figure 1**. As the music progresses, the three-note cell expands and contracts in length, with the addition and subtraction of pitches often only a semitone or several tones apart. The speed and number of repetitions for each ‘cell’ are determined by the performer and their desires. Overall, this creates the imagery of a gas cloud, rapidly rotating and gathering shape as gravity pulls it together.<sup>15</sup>

**Figure 1: Three note cells at the beginning of *La Espiral Eterna***

Another interesting point worth noting is that in the ‘D section’ of *La Espiral Eterna*, a widely spaced cluster of notes is maintained while the right hand articulates rhythmic patterns derived from Afro-Cuban drumming styles (see **Figure 2**).<sup>16</sup> There are several reasons for this being interesting. Firstly, as mentioned in Chapter 2, African music heavily influenced many minimalist composers and the influence of rhythms from the non-Western world can be found in many minimalist compositions. Secondly, Leo Brouwer’s homeland was Cuba, and he feels a strong attraction to his country and its culture. Many of his works from the ‘new simplicity’ phase demonstrate his Afro-Cuban roots. Thirdly, this is a significant departure in the guitar repertoire through its pure exploitation of a textural effect through extended techniques - the guitar is used as a percussion instrument.

<sup>15</sup> Eduardo Fernández, “Cosmology in Sounds on Leo Brouwer’s *La Espiral Eterna*,” *Guitar Review* 112 (Spring 1998): 8-10.

<sup>16</sup> Paul Century, “Leo Brouwer: A Portrait of the Artist in Socialist Cuba,” *Latin American Music Review* (Autumn-Winter 1987): 159.

Figure 2: Influence of Afro-Cuban drumming styles in the 'D' section

Figure 2 consists of two musical excerpts. The first excerpt, labeled '1', has a tempo of 10'' - 15'' and a metronome marking of ♩ = 60-72. It features a treble clef staff with a key signature of one flat and a 7/8 time signature. The music includes a circled '1' above a note and a circled '5' below a note. Performance instructions include 'pos. fija' (fixed pos. / in d. Lage bleiben) and 'improvisar sobre las notas y las figuraciones' (improvise on notes and figures / über die Noten und Figuren improvisieren). The second excerpt, labeled '2', has a tempo of 40'' - 45'' and a metronome marking of ♩ = 92. It features a treble clef staff with a key signature of one flat and a 7/8 time signature. The music includes a circled '2' above a note and a circled '5' below a note. Performance instructions include 'stacc.' (staccato), 'sfz' (sforzando), '(moy corto) (very short) (sehr kurz)', and '(sim.)' (similato). The excerpt concludes with a 'segue' section and a guitar tablature for the final measures, showing fret numbers 1, 3, 2, 5, and 0.

### 3.1.2 El Decameron Negro

Brouwer's landmark composition, *El Decameron Negro* (1981), was written towards the end of Brouwer's 'new-simplicity' phase, and was premiered by the American guitarist, Sharon Isbin. While *El Decameron Negro* is not classed as a minimalist work, the piece employs several minimalist compositional techniques. The second movement, in particular, demonstrates these techniques.

Linear additive process is found at the very beginning of the second movement, "The Flight of the Lovers Through the Valley of Echoes". The opening motif is made up of four different pitches (as shown in **Figure 3**). This is repeated three times and, with each repetition, it grows in length, with the addition of extra pitches.

Figure 3: Linear additive process at the beginning of movement 2

Figure 3 shows the beginning of movement 2, labeled 'A' and 'Declamato pesante'. The music is in a key signature of one flat and a 2/4 time signature. It features a treble clef staff with a key signature of one flat and a 2/4 time signature. The music includes a circled '2' above a note and a circled '5' below a note. Performance instructions include 'd. vibrar' (dotted vibrato). The music is characterized by a linear additive process, where the motif grows in length with each repetition, adding extra pitches.

The opening motif is transformed in different ways throughout the rest of the movement. In Section 'C' a motif reminiscent of that in Section 'A' is introduced and is subjected to further additive and subtractive processes (**Figure 4**). The motif slowly develops, gathering volume and momentum until it reaches its climatic bar - an A major arpeggio in second inversion, spanning three octaves on the guitar. From this

point, Brouwer uses subtractive processes to reduce the number of notes being played, from six quavers, to four, then three and, finally, two.

Figure 4: The additive and subtractive processes used in Section 'C'

**C** Primer Galope de los Amantes  
 Poco a poco accel. ---  
 (C) [×4] 4 6  
 pp (2º, 3º, 4º, = rapido)  
 8 10 [×4] 20  
 (cresc. 3º et 4º)  
 [×4] 11 [×4] [×4] [×4] 4  
 f molto 14 (3) 6 dim. poco a poco  
 [×4] [×4] 3 2 (2) (2)  
 pp 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
 crescendo

Another example of additive processes can be seen in Section 'G'. The original opening motif is taken and transformed into a fast, 'galloping' melody, evoking the image of the two lovers riding at top speed on horseback. In this section, the melodic line grows in length and rhythmic complexity. The textural ability of the guitar is explored with extreme contrasts from *f* to *pp* (see Figure 5 on next page).

Figure 5: Development of the motif in Section 'G'

**G** Por el Valle de los Ecos

Rapido (galopante) (eco) ( como resonancia)  
 simile

*f* *resonante (eguale)* *Psub. legato* *pp* *fsub.* *marcato (eguale)*

*Psub.* *pp* *fsub. (simile)*

*Psub.* *f* *fsub.*

*Psub.* *f* *fsub.*

### 3.1.3 Acerca del Cielo, el Aire y la Sonrisa

This ensemble piece by Brouwer was written in 1979, during Brouwer's 'new-simplicity' phase. It was originally intended for a guitar quartet, with an unspecified number of strings. The 1993 published edition, however, was re-written for eight guitars (with a standard number of strings). While the whole work is not entirely minimalist, Brouwer does use some minimalist techniques. Dovetailing and isorhythms are used in conjunction with the use of extended techniques on the guitar. Some of these include the use of glass slides on the strings to create the sound of crickets chirping, and repetitive harmonics layered in each part to create a 'wall' of sound (see **Figure 6**). These techniques combined together in the introduction of *Acerca del Cielo* create interesting avant-garde-like textures which change suddenly to the *canzona* section at measure 12 (**Figure 7**). The sudden contrast from the introduction to the *canzona* is post-minimalist in style, but the music that takes place at measure 12 is much more tonal. Guitars 3-8 share the melody, which is comprised of single notes, fading in and out to the next. Brouwer is quite extreme with his use of dynamics, indicating that the guitars with the melody crescendo from *ppp* to *ff* and decrescendo back down to *ppp* again.

**Figure 6: Extended techniques used on the guitar: glass slides and hand percussion**

The musical score for Figure 6 consists of eight staves, labeled I through VIII. Staves I through VI are for guitars, and staves VII and VIII are for percussion (Pst). The score is in 4/4 time. Above the guitar staves, there are six glass slide markings: a downward-pointing triangle with '3"', '2"', '3"', '4"', '3"', and '6" 10"' written above it. The guitar parts feature various techniques:
 

- Staff I: M.G. XXX, *ff molto*, 11, *> mf*
- Staff II: M.G. XXV, *ff molto*, 8, *> mf*
- Staff III: M.G. XXII, *ff molto*, 6, *> mf*
- Staff IV: M.G. XIX, *ff molto*, 5, *> mf*
- Staff V: M.G. XXXV, *ff molto*, 9, *> mf*
- Staff VI: M.G. XXXII, *ff molto*, 7, *> mf*
- Staff VII: Pst, *mf*
- Staff VIII: Pst, *mf*

**Figure 7: Use of dovetailing in the melody**

The musical score for Figure 7 is titled 'Canzona' with a tempo of 58-60 and the instruction 'simplice (con sentimento popolare)'. It is in 3/4 time. The score is divided into two systems. The first system (measures 11-16) and the second system (measures 17-22) show dovetailing between guitars.
 

- System 1 (measures 11-16):
  - Staff I-II: *div.*, *f*, *mp dolce*
  - Staff III-IV: *div.*, *unis.*, *ppp*, *ff*
  - Staff V-VI: *ppp*
  - Staff VII-VIII: *f*
- System 2 (measures 17-22):
  - Staff I-II: *ppp*, *pp*
  - Staff III-IV: *ppp*, *pp*
  - Staff V-VI: *ff*, *ppp*
  - Staff VII-VIII: *pp*, *f*, *pp*

**Figure 7** also demonstrates the use of a type of isorhythm. Guitars 1 and 2 play in unison with rhythmic patterns that change every two measures throughout the course of the *canzona* section. These rhythms move in and out of phase with the prevailing metre, as outlined by the crotchet beats.



### 3.1.4 Cuban Landscape with Rain

Brouwer has written a series of *Cuban Landscape* works, all of which make use of minimalist techniques to help tell the stories of Cuba, his native homeland. The use of various processes in *Cuban Landscape with Rain* (1984) help to create the imagery of rain falling. The most obvious techniques used in this work include additive and subtractive processes, extensive repetition, and dovetailing.

The piece begins simply with a single note in the guitar 1 part (**Figure 8**). With further repetitions, the other players in the ensemble join in on other beats, and the piece begins to gather energy, until every quaver beat has a note to it. This could be referred to as ‘block additive process’, or as Reich calls it, ‘replacing rests by beats’.

Figure 8: Block additive process in *Cuban Landscape with Rain*

The musical score for Figure 8 is divided into two systems. The first system, labeled 'A' and 'Moderato' with a tempo of 60-66, consists of four staves (I, II, III, IV). Staff I begins with a single note on the first beat, which is repeated four times (indicated by 'x4'). Staff II enters on the second beat, also with a single note repeated four times. Staff III enters on the third beat, and Staff IV enters on the fourth beat. Each staff has a dynamic marking of 'p' (piano). The first system ends with a fermata over the fourth measure, followed by a 'lv.' (live) marking and a 4/1 time signature change. The second system, starting at measure 6, shows all four staves playing. Staves I, II, and III play a rhythmic pattern of eighth notes, while Staff IV plays a bass line. The first two measures of the second system are marked 'lv. sempre' (live, sempre) and 'x4'. The final measure of the second system is marked 'cresc. poco a poco' (crescendo, poco a poco).

Similarly to *Acerca*, Brouwer makes use of dovetailing in *Cuban Landscape with Rain*. This technique can be found in the B-D sections of the work between the first and second guitar parts. While the third and fourth guitars create a textural backdrop of soft, repetitive semiquavers, the other two guitars play feather-light tremolo, fading in and out at separate times to each other (see **Figure 9**). This dovetailing is also similar to that found in works by Reich.

Figure 9: Dovetailing in the first and second guitar parts

The musical score is divided into three systems, each with four staves. The first system (measures 9-13) is marked "Poco più mosso" with a tempo of 80. It features a key signature of one sharp (F#) and a 3/4 time signature. The first two staves show melodic lines with dovetailing, while the third and fourth staves play a rhythmic accompaniment. A first ending bracket labeled "B" spans measures 11-13. The second system (measures 14-19) continues the dovetailing in the first two staves, with dynamic markings ranging from *ppp* to *f*. The third and fourth staves continue the accompaniment. The third system (measures 20-23) features a second ending bracket labeled "C" spanning measures 21-23. The first two staves show melodic lines with dovetailing, and the third and fourth staves play the accompaniment. The score includes various dynamic markings such as *ppp*, *mp*, *mf*, *f*, and *pp sempre*, as well as performance instructions like "Poco più mosso" and "x4".

Figure 10: Extensive repetition creates the imagery of rain falling

**F** *Più presto possibile*

**G** *Agitato*  
*Bartok pizz., irregolare*

**H** *Bartok pizz. a nat.*  
*rall.*

The creation of different textures is also a key point of focus for Brouwer. In the final section of *Cuban Landscape with Rain* (Figure 10 above), Brouwer once again makes use of dovetailed entries and repetitive cells of notes. The resultant effect creates the image of rain falling slowly and lightly, gradually building to a more torrential downpour. The section culminates with Bartok pizzicato played across all four parts in the ensemble.

### 3.1.5 Cuban Landscape with Rumba

Written just one year after *Cuban Landscape with Rain*, Brouwer composed another piece in the same vein: *Cuban Landscape with Rumba* (1985). This piece uses Reich's popular technique of block additive process. The piece begins simply with guitar 3 playing quavers on the beat. Every four measures, other players in the quartet enter with new rhythmic material - often playing on the offbeat, or sixteenth note subdivisions of the prevailing meter (see **Figure 11**). After the first 16 measures, all four guitarists are playing rhythmic patterns, which are repeated extensively and gradually varied over time to create new and exciting grooves.

Figure 11: Block additive process at the beginning of *Cuban Landscape with Rumba*

The musical score for 'Cuban Landscape with Rumba' illustrates the block additive process. It consists of four staves, each labeled 'Sord.' (Sordano). The first staff (Guitar 1) plays a simple quaver pattern on the beat. The second staff (Guitar 2) remains silent. The third staff (Guitar 3) enters with a more complex rhythmic pattern. The fourth staff (Guitar 4) remains silent. This pattern repeats every four measures. In the second system, the third staff includes a 'dim.' (diminuendo) marking. The third system shows all four guitarists playing rhythmic patterns, with the first staff playing a pattern of eighth notes and the second staff playing a pattern of eighth notes with a dotted quarter note.

## 4 Classical Minimalists and the Guitar

### 4.1 La Monte Young

As mentioned in the introduction, La Monte Young is one of the first minimalist composers. Young's early works display his fascination with stripping a piece back to almost nothing at all. Early experimental works began with the use of long drones. Modelled on his piece *for Brass* (1957), the piece *for Guitar* (1958) explored drones, as well as silences and staccato notes.<sup>17</sup> What fascinated Young was the decay of notes and specific intervals. While *for Guitar* is not actually classed as minimalist per se, it is still considered to be an important transitional work in the development of the minimalist aesthetic on guitar.

### 4.2 Terry Riley

Terry Riley drew inspiration from Young's compositional ideas and developed upon them by re-introducing tonality and the repetition of small patterns.<sup>18</sup> His most influential and well-known work was *In C* (1964). The piece is to be performed by multiple instruments. Performances have been attempted with guitars involved, however, they have not been very successful. Despite this, Riley has composed works for the guitar, exploiting the instrument's natural affinity with minimalist techniques. These works do not appear in his repertoire until the 1980s, almost twenty years after he began building upon Young's style. Riley's guitar piece *Ascención* (1993) is part of a series of pieces on the album *The Book of Abbeyozzud*, recorded by classical guitarist, David Tanenbaum. Although written in the late twentieth century, and so largely a post-minimalist work, *Ascención* features the use of repetitive textures, gradual variation and the ideas of harmony which were common to minimalist compositions, but not those of serialist composers. The piece also demonstrates the use of non-Western musical sources.

#### 4.1.1 *Ascención*

In an interview in the Fall 1995 issue of *Guitar Review*, Riley reveals that most of

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<sup>17</sup> La Monte Young, "Notes," [http://www.diapasongallery.org/archive/01\\_06\\_20.html](http://www.diapasongallery.org/archive/01_06_20.html) (accessed May 31, 2011).

<sup>18</sup> Keith Potter, *Four Musical Minimalists*. (Cambridge: Cambridge University Press, 2000), 147.

*Ascención* is based on a mode of a rāga scale called *Ahiri*.<sup>19</sup> Having spent time studying with Indian rāga master Pandit Pran Nath<sup>20</sup>, the influence of the rāga can be heard in many of his works, including the middle of *Ascención*, as noted by the non-standard key signature (F#, C#, A#). Also worth noting is the use of extensive repetition in the final section of the piece (**Figure 12**). An ostinato bassline is played while the upper voices move around in block chords, varying every few measures.

**Figure 12: Extensive repetition in *Ascención***

## 4.2 Steve Reich

The other of the earlier-mentioned classical minimalists is Steve Reich. His name is known worldwide, and his famous essay, “Music as a Gradual Process”, stresses the importance of ‘process’ in composing in a minimalist style. His works explore phasing in its most extreme form and the use of block additive processes.<sup>21</sup> Reich’s works for guitar can be deceptively simple. Two of his guitar works *Electric Counterpoint* (1987) and *Nagoya Guitars* (1994) appear straightforward, but to perform them to a high

<sup>19</sup> David Tanenbaum, “Terry Riley Talks About His First Guitar Piece - *Ascención*,” *Guitar Review* 103: 11.

<sup>20</sup> Christoph Cox & Daniel Warner, *Audio Culture: Readings in Modern Music*. (New York: Continuum International Publishing Group Inc, 2004), 308.

<sup>21</sup> Warburton. *A Working Terminology for Minimal Music*.

standard requires many hours of disciplined practice.

#### 4.2.1 *Electric Counterpoint*

Originally recorded by Pat Metheny, *Electric Counterpoint* is a well-known work in the minimalist repertoire for guitar. The piece can be performed either live with 11 guitarists and 2 electric bassists, or with 10 guitar parts and 2 bass parts pre-recorded to tape/CD, and a live guitarist playing the 'lead' part.

As mentioned earlier, dovetailing is found commonly in works by Reich and *Electric Counterpoint* is no exception. The opening of the first movement begins with pulsing quavers across all of the parts, which fade in and out with extreme dynamic changes.

Figure 13: Opening of *Electric Counterpoint*

The image displays a musical score for the opening of the first movement of *Electric Counterpoint*. The score is written for 11 guitar parts (Gt. 1 through Gt. 10) and two bass parts (B. Gt. 1+2). The key signature is one sharp (F#), and the time signature is 4/4. The score begins at measure 21, marked with a box containing the number 2. The 'Live' part is a single melodic line that starts with a 'fade out' and then enters with a 'p' (piano) dynamic, followed by a 'fade in' and a 'f' (forte) dynamic. The guitar parts (Gt. 1-10) are arranged in a dovetailing pattern, with each part entering and exiting the texture at different points. The bass parts (B. Gt. 1+2) provide a steady, pulsing accompaniment. The score is characterized by its minimalist style, with a focus on rhythmic patterns and dynamic contrast.

It is also a characteristic of minimalist compositions to contain harmonies that change gradually and slowly. This is seen in the first movement with the gradual change of pitches in the pulsing quavers (above in **Figure 13**).

Another harmonic technique apparent is the use of modal, non-functional chord changes. For example, in the third movement, there is no harmonic progression, the chords merely move up one semitone for several measures, and then

back down again. This occurs multiple times, increasing the feeling of excitement toward the end of Movement 3 (see **Figure 14**).

Rhythmically, it is worth noting the textural richness that Reich creates in the third movement. Reich has put some of the parts in 12/8 and others are in 3/2. This creates a catchy 3 against 4 cross-rhythm. Furthermore, Reich adds rests in different places for every player, creating a strange hocketing<sup>22</sup> effect. All players must listen carefully to each other to ensure that this effect is properly created (**Figure 14**).

**Figure 14: Textural richness is created in the third movement**

The image displays a musical score for a string ensemble, divided into two systems. The first system covers measures 95 and 96, and the second system covers measures 97 and 98. The score includes parts for a Live ensemble (top staff), four guitar parts (Gt. 1-4), three guitar parts (Gt. 5-7), and two bass guitar parts (B. Gt. 1-2). The notation is complex, featuring various rhythmic patterns and rests across the different parts, which is characteristic of the hocketing effect mentioned in the text. The key signature is three flats (B-flat, E-flat, A-flat), and the time signature is 3/2. The score is written in a standard musical notation with treble and bass clefs.

<sup>22</sup> Hocketing is the sonic effect produced when a melody is divided between different voices (or instruments). It is a prevalent feature of motets in the 14<sup>th</sup> century.



West African drumming was a large influence on the minimalist movement. In particular, the idea of a 'Master Drummer' is one which Reich makes use of in his works. In the first and third movements of *Electric Counterpoint*, there are moments where the live guitar begins setting up a groove, which is taken on board by the first guitarist and repeated extensively. Once the pattern is established, the live guitar creates a new pattern for the second guitarist, then the third, the fourth, and so on. While Reich is setting up these grooves, he is also using the block additive process technique. He creates parts gradually from silence. An example of this can be seen in the live guitar part at measure 72 of the third movement (see **Figure 15**).

**Figure 15: Block additive process in the third movement**

The musical score for Figure 15 illustrates the block additive process in the third movement. It features five staves: Live, Gt. 1, Gt. 2, Gt. 3, and Gt. 4. Measure 71 shows the Live part fading out and Gt. 1 playing a pattern. Measure 72 shows the Live part fading in and Gt. 3 playing a pattern.

Once the groove has been established, the live guitar then begins doing its own thing, combining parts of each pattern together to create a new pattern. **Figure 16** demonstrates this idea.

**Figure 16: Master drummer concept in *Electric Counterpoint***

The musical score for Figure 16 illustrates the master drummer concept in *Electric Counterpoint*. It features five staves: Live, Gt. 1, Gt. 2, Gt. 3, and Gt. 4. Measure 74 shows the Live part playing a complex pattern and Gt. 1 playing a pattern.

### 4.2.2 Nagoya Guitars

Originally written for two marimbas then later re-arranged for guitar, *Nagoya Guitars* (1994) is a challenging guitar duet. It has been recorded by numerous guitar duos, including David Tanenbaum and Scott Tennant. The first obvious compositional technique used in *Nagoya Guitars* is block additive process in the second guitar part.

Figure 17: Opening measures in *Nagoya Guitars*

The musical score for the opening measures of *Nagoya Guitars* is presented in three systems. The tempo is marked as ♩ = 96-108. The key signature is one flat (B-flat), and the time signature is 2/4. The score is for two guitars, both in D standard tuning (6-D). The first system (measures 1-3) shows Guitar 1 playing a melodic line with a first ending (3x) and Guitar 2 playing a rhythmic pattern with a first ending (3x). The second system (measures 5-9) shows Guitar 1 continuing the melodic line with first endings (3x) and Guitar 2 playing a more complex rhythmic pattern with first endings (3x). The third system (measures 15-16) shows Guitar 1 playing a melodic line with a first ending (2x) and Guitar 2 playing a rhythmic pattern with a first ending (2x). Dynamic markings include *mf* and *f*.

As seen in **Figure 17**, the first guitar sets up the main motif. The second guitarist gradually creates the same groove in their part, by crafting it out of silence over a series of 8 bars. It is also interesting to note that the guitars are not playing in unison with the riff, rather, the second guitarist is out of sync. This creates an interesting rhythmic effect.

## 5 Australian Composers and Minimalism

Works composed in the last twenty years in Australia also draw upon the same minimalist techniques. Nigel Westlake, Peter Sculthorpe, Robert Davidson and Phillip Houghton are several prominent composers writing for guitar. They do not pigeonhole themselves into the category of 'minimalist', however, their works make use of many of the previously-mentioned techniques. These techniques employed in their works often evoke images of the Australian landscape. While Westlake says that this is unintentional in his writing<sup>23</sup>, it is still interesting that there is a connection between the style of music and the 'timelessness, simplicity and beauty of the Australian landscape'.<sup>24</sup>

### 5.1 Nigel Westlake

Perth born composer, Nigel Westlake has experienced a fulfilling career so far, having received APRA awards for many of his instrumental works. In addition to this, he is a film-music composer and writes for orchestral settings, as well as small chamber ensembles and soloists. Westlake's music is an eclectic mix of influences from art music and popular music. It resonates with classical, jazz, and rock influences.<sup>25</sup> Many of his works use a slow rate of harmonic change, and there is motivic nature in much of his music. This comes from the influence of African and Indian music. In an interview, Westlake said "originality and clarity are the qualities I admire most in composition...however...all my work is derived in one way or another from music I've been inspired by".<sup>26</sup>

#### 5.1.1 *The Hinchinbrook Riffs*

This piece was inspired by the water and life on Hinchinbrook Island, off the north-eastern coast of Queensland. After his visit to the island in the 1970s, Westlake heard different riffs in his head, riffs which he wrote down and then turned into a piece -

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<sup>23</sup> Jillian Graham, "Collaboration in Creation: An Interview with Nigel Westlake," *Context* 20: 53.

<sup>24</sup> Melbourne Guitar Quartet, "Four Elements Concert Programme," <http://www.mgq.com.au/Documents/Concert%20Programme.pdf> (accessed April 20, 2011).

<sup>25</sup> Philip Cooney, "An Introduction to the Music of Nigel Westlake," <http://www.rimshot.com.au/philipcooneysarticle.htm> (accessed April 16, 2011).

<sup>26</sup> Graham, "Collaboration in Creation: An Interview with Nigel Westlake," 52.

originally for his band, and later rewritten for guitar with digital delay in 2003. This piece has been recorded by several Australian guitarists – Tim Kain (2004), Craig Ogden (2006) and Slava Grigoryan (2006).

Harmonies in *The Hinchinbrook Riffs* are triadic and consonant; this ties in with popular culture, and with many contemporary guitarists today. The use of digital delay in *The Hinchinbrook Riffs* allows for the creation of beautiful textures, evocative of the wind and waves, lush tropical gorges and rugged mountain peaks.

Throughout the piece, Westlake uses interesting, intricate cross-rhythms (isorhythms). An example of this can be found in the opening. The rhythmic motif of five semiquavers in length is repeated six times in a two bar span (see **Figure 18**). This isorhythm comes in and out of phase with the principal crotchet beat, creating a catchy rhythmic groove. The resultant two-bar span is treated as a rhythmic ostinati, which is repeated six times, with slow harmonic changes.

**Figure 18: Isorhythm in the first 12 bars of *The Hinchinbrook Riffs***



Throughout *The Hinchinbrook Riffs*, repeating rhythmic ideas provide a unified background canvas over which gradually changing pitch and harmonic ideas are overlaid. These processes of gradual change are usually tonal, but often not functionally harmonic. Similarly, they can consist of a logical patterned process or simply more ad hoc changes of chord, unified by common pitches.

In the following examples, a rigorous process of gradual metamorphosis is illustrated, whereby a four-bar pattern is gradually altered over five iterations. In each iteration, what actually changes is quite minimal, being only one or two key notes (which the performer must bring out). Otherwise, the four bar rhythmic pattern and several common tones create unity throughout this passage. The process of gradual

metamorphosis from mm.86-105 can be seen in **Figure 19**, and the logic of this gradually changing pitch content is illustrated in **Figure 20**.

**Figure 19: Process of gradual metamorphosis from mm.86-105**

**Figure 20: Pitch content from mm.86-105**

MEASURE	COMMON PITCHES	CHANGING PITCHES
86 – 89	D, E, A, F#	G#
90 – 93	D, E, A, F#	E
94 – 97	D, E, A, F#	B
98 – 101	D, E, A	G
102 – 105	A, G, D, E	B

**Figure 21** illustrates a more ad hoc process of gradual variation. A small motif begins a five-beat span, which creates metric conflict with the prevailing common time meter, producing a kind of isorhythm. Within this five-beat span, small motivic units are repeated and varied in rather ad hoc fashion.

Figure 21: Gradual variation of an ad hoc kind at mm.105-112

The image shows two staves of musical notation. The first staff is labeled with a boxed '151' and begins with a forte 'f' dynamic. It contains a series of rhythmic patterns, primarily eighth and sixteenth notes, with many slurs and accents. The second staff is labeled with a boxed '155' and includes a '1/2 C III' marking above it. It continues the rhythmic patterns from the first staff, also featuring slurs and accents. The notation is dense and complex, characteristic of Peter Sculthorpe's style.

## 5.2 Peter Sculthorpe

When thinking of influential Australian composers in recent decades, one cannot overlook the immeasurable contribution that Peter Sculthorpe has made. Sculthorpe draws influence from the Australian landscapes, Aboriginal and Torres-Strait Islander folk songs, Balinese gamelan and other similar sources. In some ways, Sculthorpe can be seen as a post-minimalist composer. Many of his works which involve the guitar contain minimalist composition techniques. One of these techniques is a process of gradual metamorphosis through repetition with variations. English music critic, Wilfrid Mellers has called this technique "growth by accretion."<sup>27</sup> Michael Hannan has claimed that this relates figuratively to the "spaciousness and terrifying sameness" seen in Australian landscapes<sup>28</sup> (paralleling similar observations by other international composers in relation to Australian music).<sup>29</sup>

### 5.2.1 From Kakadu

As the name implies, "growth by accretion" often implies a texture that gradually accrues in rhythmic complexity, or thickens through the gradual addition of rhythmic counterpoint. The use of this technique can be found in Sculthorpe's solo guitar suite, *From Kakadu*. In particular, growth by accretion can sometimes involve gradual variation of a somewhat ad hoc nature, as in the opening of the second movement - "Comodo," (see **Figure 22**). At other times, the processes of gradual change are more

<sup>27</sup> According to Deborah Hayes, *Peter Sculthorpe: A Bio-Bibliography* (Westport, Conn.: Greenwood Press, 1993), 17, this term was coined by Wilfred Mellers, "New Worlds, Old Wildernesses: Peter Sculthorpe and the Ecology of Music," *The Atlantic* 268/2 (Aug 1991): 95. Hannan gives a more detailed explanation of the technique in "Peter Sculthorpe," in *Australian Composition*, 137, although he doesn't actually use the phrase. Sculthorpe also adopts the term in *Sun Music*, 68.

<sup>28</sup> Michael Hannan, *Peter Sculthorpe: His Music and Ideas, 1929-1979* (St Lucia: University of Queensland Press, 1982), 142.

<sup>29</sup> Such as Tippett, Crumb, Lutoslawski, and Berio. See Sculthorpe, *Sun Music*, 199.

systematic, as in the classic additive and subtractive processes shown in **Figure 23** (also from “Comodo”).

**Figure 22: Growth by accretion in “Comodo,”** from Sculthorpe’s *From Kakadu*

**Figure 23: Additive and subtractive processes, mm.73-80 in “Comodo”**

### 5.2.2 *Nourlangie*

In addition to Sculthorpe's solo guitar works, he has also composed works for guitar, strings, and percussion. These works, *Nourlangie* (1989) and *Tropic* (1992) make use of another classic minimalist technique: the extensive repetition of cells of three notes (**Figure 24**). This is a technique which Sculthorpe favours in both works. With the cells continually repeating, interesting cross-rhythms are formed with the prevailing meter. The use of non-Western musical sources is common in Minimalist and post-minimalist music, so it is also worth noting in *Nourlangie* the use of textures and harmonies reminiscent of Balinese gamelan. Superimposed over the top of the repetitive three note cells are traditional Aboriginal and Torres-Strait Island folk song melodies (**Figure 25** on next page).

**Figure 24: Rhythmic cells in *Nourlangie* with the pentatonic scale of melody above**

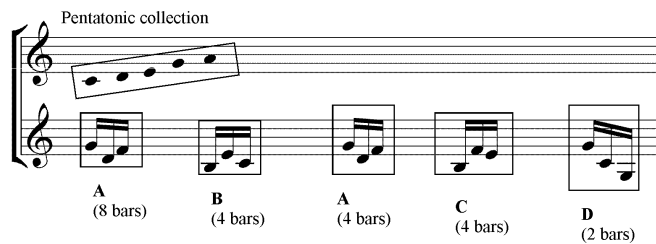




Figure 25: *Nourlangie*, mm.100-112

Poco estatico

The musical score for *Nourlangie*, mm. 100-112, is presented in three systems. The first system includes parts for Percussion (Pc.), Guitar (Gt.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vc.), and Double Bass (Db.). The percussion part has a single note at the beginning. The guitar part has a forte (*f*) dynamic and a long sustained chord. The violin I part has a piano-piano (*pp*) dynamic and a melodic line. The violin II part has a piano-piano (*pp*) dynamic and a rhythmic accompaniment. The viola and double bass parts have a forte (*f*) dynamic and a single note at the beginning. The second system shows the continuation of the melodic and rhythmic lines. The third system shows the final measures with trills and triplets in the guitar and violin I parts.

### 5.3 Robert Davidson

Queenslander, Robert Davidson is a composer, bassist, university lecturer and regular performer. His influences come from different sources, however it is interesting to note that he has spent time studying composition with Terry Riley in California. In addition, Davidson has spent time studying South Indian vocal music in Kerala, India.

#### 5.3.1 *Landscape*

Davidson composed *Landscape* (2000) after being inspired by the world rushing past his eyes, whilst driving at high speed through the mountainous areas of Queensland. This piece has been re-arranged in many different ways: for guitar with string quartet, for guitar duo, and finally for guitar quartet. The Melbourne Guitar Quartet has recorded this piece on their latest album, *Toccata* (2011), and their use of the guitar's varying textures helps to evoke Davidson's imagery effectively.

Similarly to Westlake's *The Hinchinbrook Riffs*, Davidson displays an obsession with intricate rhythmic patterning. His harmonies are also primarily triadic, and he progresses through non-functional techniques of gradual metamorphosis.

As already mentioned, *Landscape* uses extensive rhythmic patterning. The piece begins with a basic three-bar rhythmic ostinati, which is comprised of complex isorhythmic patterns (as shown in **Figure 26**). For instance, in the Violin 2 part, the basic melodic cell of three semiquavers in length is repeated extensively, until it comes back into phase with beat one of the prevailing meter after precisely three bars. Similar patterns are seen in each of the other parts, creating a complex layered rhythmic tapestry. The overall effect of these patterns creates a fast, driving rhythm, helping to evoke the images of the landscape rushing past at high speeds.

**Figure 26: Intricate rhythmic patterning in *Landscape***

Above this intricately patterned rhythmic canvas, the harmonies change slowly in non-functional ways. When all the notes used in each cycle are placed into table form, one can see chords with extensions - very similar to the harmonies found in the music of Impressionist and Jazz composers, who were both significant influences in the Minimalist genre. With each new harmonic cycle, only two notes at a time are changed, other pitch content comprising common notes (see **Figure 27**). This is highly reminiscent of the processes of harmonic metamorphosis, seen in much of Reich's music.

**Figure 27: Process of gradual harmonic metamorphosis in *Landscape***

MEASURE	COMMON PITCHES	CHANGING PITCHES
1 – 6	G, Bb, A, C	D, F#
7 – 9	G, Bb, A, C	F, E
10 – 12	G, Bb, A, C	D, F#
13 – 15	G, Bb, A, C	F, E
16 – 18	G, E, A	D, F#, C#, B ♮
19 – 21	G, D, F#, A, E	Bb
22 – 24	G, Bb, D, A, C, E	F ♮
25 – 36	G, D, A, C, E	F#, B ♮

## 5.4 Phillip Houghton

Phillip Houghton belongs to the ranks of self-taught player-composers. His music has been played by many, from school students through to internationally acclaimed artists like John Williams and Slava Grigoryan. His early musical interests are extremely eclectic, and while not deliberately trying to imitate American minimalist techniques, some of his works embrace minimalist compositional techniques. His music exploits the natural minimalist tendencies of the guitar. Works by Houghton often employ a slow rate of harmonic change, use the open strings of the guitar as drones, and focus on the expressive potential of textural concerns.

### 5.4.1 *Wave Radiance*

In the guitar duo, *Wave Radiance* (2002), textural concerns are forefront. The first guitar remains playing pulsing quavers on the same chord for the first sixty-eight measures. As Houghton notes “this piece is basically about the transition of colour and dynamic.”<sup>30</sup> Although, he also adds that, “it was not my intention to write a minimalist work”<sup>31</sup> *Wave Radiance* is minimalist in many ways. After a brief introduction, the pulsing quavers occur in measure ten, where they continue through to sixty-eight (see **Figure 28**). This figure also demonstrates the use of varying dynamic levels and tone colours on the guitar (tasto and ponticello) in order to create the mood, while both guitars play repetitive quavers. The use of gradual crescendos and decrescendos can

<sup>30</sup> Phillip Houghton, program note to *Wave Radiance - Colour: The Skin of Resonance* (Australia: Moonstone Music Publication, 2002), 2.

<sup>31</sup> Ibid.

be referred to as ‘dovetailing’, which is basically overlapping pattern work combined with dynamic variations.

Figure 28: Dovetailing in *Wave Radiance*

10 *molto pont (to tasto)*  
*PPP*  
 (gb 1 repeats bar 10 until bar 68)

(Players: exploit the "sonic" (texture/sonority) of the plucked notes so as to match the gradual flow of colour — see performance notes)

13 *tasto* *f* *(to molto pont)*  
*molto pont (to tasto)*  
*PPP*  
 (no thumb) a m (until bar 47)

#### 5.4.2 *Ophelia*

In his composition for solo guitar, *Ophelia* (2004), Houghton essentially notates an improvisation that exploits the natural idiomatic resources of the guitar, particularly in the use of open string drones, extensive repetition, and explicit exploitation of timbral and textural contrasts by exploring the sound a guitar can produce by moving the right hand along the neck towards the fretboard (see **Figure 29** and **Figure 30**). On his 2011 recording – *Departure* - Simon Powis demonstrates these full timbral qualities of the guitar. In the composition of *Ophelia*, Houghton also employs an unusual scordatura, tuning the bottom two strings of the guitar down to Eb and G. This scordatura facilitates darker, more dissonant sonorities which evoke the story of Ophelia’s struggle and tragic demise.

Figure 29: Repetition and bass string drones in Movement 1 of *Ophelia*

Figure 29 shows three systems of musical notation for Movement 1 of *Ophelia*. The first system (measures 1-4) features a top line with a *mp* dynamic and a bass line with a *mf* dynamic. The bass line includes a circled 5 and a circled 6, with a note marked "like a shock". Above the first system, there are annotations: "ord", "(to poco tasto)", and "poco tasto". The second system (measures 5-8) includes a circled 5 and a circled 6, with a note marked "LV sim". Above the second system, there are annotations: "i m a m (sim)", "(to ord)", and "mp". The third system (measures 9-12) includes a circled 6 and a circled 5, with a note marked "all ff". Above the third system, there are annotations: "ord", "pesante, brutal, ugly", and "f".

Figure 30: Extensive repetition in Movement 4 of *Ophelia*

Figure 30 shows three systems of musical notation for Movement 4 of *Ophelia*. The first system (measures 1-7) features a *mf* dynamic and a *poco tasto* marking. Above the first system, there are annotations: "poco tasto", "(to ord)", and "ord". Below the first system, there is an annotation: "begin like diving into a pool". The second system (measures 8-11) includes a circled 3 and a circled 2, with a note marked "poco cresc on repeat and shift to ord". Above the second system, there are annotations: "P (tasto on repeat)". The third system (measures 12-15) includes a circled 4 and a circled 3, with a note marked "ord mp". Above the third system, there are annotations: "CII", "4", and "4".

## 6 Other Minimalist Works

### 6.1 David Pritchard

David Pritchard is an American guitar player-composer who has also been writing in a minimalist style. Pritchard has released several albums of solo guitar and ensemble settings with pop-infused, minimal-style compositions. Major albums in this style include *Air Patterns* (1990), *Unassigned Territory* (1999) and *Velocity* (2005).

#### 6.1.1 *Clockworks*

Pritchard has composed some short pieces for solo guitar. *Clockworks* (1994) is a collection of four short pieces which demonstrate this. In the foreword, Pritchard mentions that *Clockworks* explores his love of repetitive patterns which underpin melodic lines (see **Figure 31** and **Figure 32**).

**Figure 31: Repetitive patterns at the beginning of *Clockwork 1***



**Figure 32: Repetitive figures in the middle section of *Clockwork 3***



### 6.1.2 *Stairs*

*Stairs* (1998), a work for guitar quartet, is also based around slowly shifting harmonies and repeating patterns. It is also interesting when looking at Pritchard's work, *Stairs*, to note the use of interesting isorhythms. The 'B' section in particular is noteworthy. It is written in 9/8, with the melodic idea played by Guitars 1 and 2 being a seven-quaver long pattern. Guitars 3 and 4 play an ostinato figure (see **Figure 33**). The isorhythm comes in and out of phase with the prevailing meter: this creates a catchy rhythmic groove. This use of isorhythm occurs at different points throughout *Stairs*.

As mentioned above, there are slowly changing harmonies in Pritchard's piece and many of his works on his album are in this style. For example, the first change in harmony occurs at section 'C' when there is a Bb bass note introduced. This acts as a transitional passage into section 'D', which is in A major (**Figure 34**).

Figure 33: Use of isorhythm in *Stairs*

B

The musical score is presented in three systems, each containing four staves. The notation is as follows:

- Staff 1 (Soprano):** Treble clef, 3/8 time signature. It features a melodic line with eighth notes and rests, exhibiting a repeating rhythmic pattern.
- Staff 2 (Alto):** Treble clef, 3/8 time signature. It features a melodic line with eighth notes and rests, mirroring the rhythmic pattern of the soprano staff.
- Staff 3 (Tenor):** Treble clef, 3/8 time signature. It features a melodic line with eighth notes and rests, mirroring the rhythmic pattern of the soprano staff.
- Staff 4 (Bass):** Treble clef, 3/8 time signature. It features a melodic line with eighth notes and rests, mirroring the rhythmic pattern of the soprano staff.

The score is divided into three systems by vertical bar lines. The first system spans two measures, the second system spans three measures, and the third system spans three measures. The rhythmic pattern in all staves is consistent, demonstrating isorhythm. The notation includes various note values (quarter, eighth, and sixteenth notes) and rests, with some notes marked with a circled '5' or '7'.



Figure 34: Changing harmonies in Section 'C' of *Stairs*

The image shows a musical score for Section 'C' of *Stairs*. It consists of four staves. The first two staves are in 4/4 time and feature a melodic line with a '4X' marking above the first measure. The last two staves are in 3/8 time and feature a rhythmic accompaniment. The score is divided into two sections, 'C' and 'D', by a vertical line. Section 'C' spans the first two measures of each staff, and Section 'D' spans the next two. Dynamics include 'mf' (mezzo-forte) and a circled 'c' (crescendo) marking. The score includes various musical notations such as notes, rests, and accidentals.

## 6.2 Other Works for Guitar Ensemble

Pritchard is not the only composer to have experimented with minimalist techniques in an ensemble setting. Danish composer, Wayne Siegel, and English Composer, Joe Duddell have also both written for guitar ensembles and employed techniques such as extensive repetition, the use of gradual variation, and isorhythms in the compositional process. Similarly to Pritchard's *Stairs*, these pieces rely on ensemble players focusing on timbre and dynamics to create interesting textures.

### 6.2.1 Domino Figures

Siegel's *Domino Figures* (for 10 – 100 guitars) borrows the ideas that Terry Riley used in the composition of *In C* - the piece which is credited as being one of the first truly minimalist works. This piece is similar to *In C* as it is based on different cells of notes (**Figure 35** on next page). These cells are repeated by multiple performers, and they demonstrate a gradual rate of change. Unlike *In C*, each player executes each figure in their own time, with no defined underlying pulse. What matters is that each figure is played for a specific number of seconds before being passed onto the next player. According to the performance notes by Siegel, this creates a sonic effect not normally associated with the guitar. The large number of guitarists performing the same figure in different tempi produces massive, sustained choral textures, and they evolve and change slowly, creating a spatial effect.

This idea of repetitive textures without a specific pulse is similar to the concept Brouwer uses in *La Espiral Eterna*, as he also specifies that the speed and duration of each ‘cell’ of notes is dependent on the performer’s taste. This differs to Sculthorpe’s style where a definite tempo results in isorhythms created from repetitive ‘cells’.

Figure 35: Opening of *Domino Figures*

Freely (Andantino - Allegro)

The score consists of ten measures of music in a 4/4 time signature. The first measure is marked *p* and *im* (accents on the first and third notes), with a duration of 9". The second measure is marked *mp* and *im*, with a duration of 8". The third measure is marked *mf* and *p im*, with a duration of 8". The fourth measure is marked *mf* and *p im*, with a duration of 8". The fifth measure is marked *mf* and *p im*, with a duration of 7". The sixth measure is marked *mf* and *p im*, with a duration of 7". The seventh measure is marked *mf* and *p im*, with a duration of 9". The eighth measure is marked *mf* and *p im*, with a duration of 8". The ninth measure is marked *f* and *i* (accent on the first note), with a duration of 7". The tenth measure is marked *f* and *i*, with a duration of 7".

let all notes ring ...

## 6.2 Freaky Dancer

*Freaky Dancer* (2003) is more post-minimalist than minimalist, because it has sudden contrasts in themes, tempi and dynamics. However, there is still a minimalist influence in Duddell’s writing. The opening of this quartet work is quite complex as there are some interesting cross-rhythms (Figure 36). There are multiple layers to the cross-rhythms, resulting in a very rich textural sound. Duddell also favours the use of extensive repetition in his work, and this opening cross-rhythm is looped for quite a while, before changing suddenly to new thematic material. The second theme is also repeated extensively before changing once more.

Figure 36: Cross rhythms in the opening of *Freaky Dancer*

Tempo I. Graceful but Mechanical ♩ = c. 54

The score is for a quartet and features five staves: Vibraphone, Guitar 1, Guitar 2, Guitar 3, and Guitar 4. The music is in 4/4 time and marked *mp*. The Vibraphone part consists of a sequence of eighth notes with accents on every other note. The four guitar parts play a complex cross-rhythm pattern, with some notes beamed in groups of three, creating a dense, layered texture.

## 7 Conclusion

There has been tremendous growth in the amount of repertoire for the classical guitar in the last several decades. From my research, it has become evident that minimalist-inspired compositions have formed a large portion of recently composed music for guitar. This dissertation cannot claim to be a completely comprehensive collection of minimalist works for guitar, but rather, an outline of some of the more prominent works played by currently performing guitarists. Amongst the pieces mentioned, there has been a large focus on works from the United States and Australia. From this selection of works, this dissertation has also presented an interesting potential avenue of research:

Brian Eno suggests that minimalism represents “a drift away from narrative and towards landscape, from performed event to sonic space.”<sup>32</sup> It is evident through analysis of works that there is an apparent link between minimalist music and the Australian landscape. The works explored in this dissertation all present nature as a recurring theme, whether it be relating to the water, the landscape, or the wildlife in Australia. The music reflects the timeless, cyclical nature of the Australian landscape.

As mentioned at the start of the conclusion, there has been a growth in minimalist repertoire for solo and ensemble guitarists. Several reasons could potentially exist for this growth:

Firstly, the player-composer has come back into prominence (after experiencing a period of inactivity in the nineteenth century). There is an almost improvisatory quality to minimalist-inspired music, and the guitar is an instrument which is conducive to improvisation in all genres. Furthermore, with minimalist music characteristically being made up of a small number of notes, extensively repeated patterns and textural variation, it is well suited to the guitar. Classical guitarists find it difficult to play chromatic harmonies, so single-note lines with varying dynamics and tone colours are much easier to play. As Brouwer said, “we are millionaires in terms of repertoire, colour and expressiveness!”<sup>33</sup>

Secondly, the concept of guitar ensembles is a new phenomenon, which has increased in popularity over the last few decades. Minimalist music in a guitar ensemble situation is successful because it allows for the creation of different textures

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<sup>32</sup> Ross, *The Rest Is Noise*, 517.

<sup>33</sup> McKenna, “An Interview with Leo Brouwer,” 16.

and varying dynamic levels. Multiple dynamics and textures would be impossible to create on one instrument alone.

Thirdly, minimalist music entered mainstream popular culture in the mid-late twentieth century. This was roughly around the same time that the guitar was entering into mainstream culture with rock and jazz music. It seems only natural for the guitar and minimalism to have combined together successfully to produce a long-lasting and effective musical style.

It seems fitting to return to the words of Leo Brouwer, who notes that “the twentieth century has a strong connection to the guitar, because among other reasons, the guitar exists in all manifestations of popular culture in this century.”<sup>34</sup> Beyond this, the classical guitar’s participation in a mainstream musical genre such as minimalism is definitive proof that it no longer exists solely on the fringes of the Western tradition but has made a valuable contribution to mainstream musical culture.

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<sup>34</sup> Betancourt, “A Close Encounter with Leo Brouwer”, 4.

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