

**A Twentieth- and Twenty-First-Century Piano Étude Soundworld:  
Obsessions and self-portraiture in Philip Glass's *Twenty Piano Études***

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of the requirements for the degree of Doctor in Music Performance

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## Declaration

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## Table of Contents

<b>Declaration</b>	<b>i</b>
<b>Table of Contents</b>	<b>ii</b>
<b>Acknowledgements</b>	<b>iii</b>
<b>Abstract</b>	<b>iv</b>
<b>Audio Track Listing</b>	<b>vi</b>
<b>List of Music Examples</b>	<b>ix</b>
<b>List of Tables</b>	<b>xiii</b>
<b>List of Illustrations</b>	<b>xiv</b>
<b>Preface</b>	<b>xv</b>
<b>Introduction</b>	<b>1</b>
i. Literature review	3
ii. Methodology	9
iii. Limitations	11
<b>Part I: Chapter I History of the Piano Étude</b>	<b>13</b>
i. Cross-Fertilisation: From rudimentary to extreme	14
ii. Mid to late twentieth-century experimentation	17
iii. Entering the twenty-first century	20
<b>Chapter II Obsessions</b>	<b>25</b>
i. The trajectory of the traditional étude	26
ii. Intervallic obsessions	31
iii. Rhythmic obsessions	40
iv. Étude evolution	49
<b>Part II: Chapter III The Origins of a Soundworld</b>	<b>55</b>
i. Minimalism or maximalism?	55
ii. Nadia Boulanger: A merging of cultures in Paris	66
iii. Ravi Shankar: A musical awakening	71
<b>Chapter IV Philip Glass, <i>Twenty Piano Études</i></b>	<b>77</b>
i. The keyboard	78
ii. Étude beginnings	81
iii. Book I <i>Twenty Piano Études</i> : Obsessions	85
iv. Book II <i>Twenty Piano Études</i> : Obsessions	108
v. Performance considerations	128
vi. Programming the études	134
<b>Conclusion</b>	<b>139</b>
<b>Bibliography</b>	<b>143</b>
Web sources	149
Recordings	152

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## Abstract

Philip Glass's *Twenty Piano Études* are a monumental contemporary contribution to the piano étude genre with notable composers throughout history using the oeuvre as a means of creating their own distinctive pianistic vocabulary. While there is much literature available on Glass's operatic and chamber works, little scholarly attention has been given to his solo piano music. His set of piano études was published in 2014 and literature on these piano studies is scant.

The premise of the thesis positions piano étude writing at the fore of a composer's creative output. Given the extensive period of time dedicated to étude collections, often composed over a decade or more, this thesis explores the capability of an étude and presents it as a burgeoning genre indicative of a composer's collective soundworld. In order to investigate Glass's *Twenty Piano Études*, the studies are placed within the context of the wider twentieth- and twenty-first-century piano étude genre. Through consideration of an étude's deep level of purpose, one which examines studies as an embodiment of obsessive practice, emerging trends between an array of composers appear. Rhythmic, harmonic and intervallic virtuosic obsessions are presented using examples by composers and composer-pianists including Unsuk Chin, Marc-André Hamelin, Nikolai Kapustin, György Ligeti, Hélène de Montgeroult, Terry Riley and Igor Stravinsky.

Glass's association with the early minimalist movement is the subject of much academic discussion, therefore the significance of Glass's études is inspected from both minimalist and non-minimalist perspectives. A complete performance of all twenty études in 2022 at the National Concert Hall, Dublin, and a recording of the collection in 2023 offers a unique performer's interpretation and an audio track listing is presented alongside the thesis.

The research sheds new light on how Glass's *Twenty Piano Études* and the wider contemporary piano étude can be interpreted from scholarly and performance perspectives. The études are presented as key to understanding the scope of a composer's soundworld, ultimately unveiling an intimate self-portrait of its composer.

## Audio Track Listing

Audio Track 1	Example 1.1 Philip Glass, Étude No.1 (0:00-0:18)	86
	Example 1.2 Philip Glass, Étude No.1 (0:39-0:44)	87
	Example 1.3 Philip Glass, Étude No.1 (3:24-3:34)	87
Audio Track 2	Example 2.1 Philip Glass, Étude No.2 (0:00-0:14)	88
	Example 2.2 Philip Glass, Étude No.2 (3:22-3:35)	88
	Example 2.3 Philip Glass, Étude No.2 (5:47-6:12)	89
Audio Track 3	Example 3.1 Philip Glass, Étude No.3 (0:11-0:23)	90
	Example 3.2 Philip Glass, Étude No.3 (1:00-1:16)	91
	Example 3.3 Philip Glass, Étude No.3 (3:29-3:49)	92
	Example 3.4 Philip Glass, Étude No.3 (3:40-3:49)	131
Audio Track 4	Example 4.1 Philip Glass, Étude No.4 (0:15-0:18)	93
	Example 4.2 Philip Glass, Étude No.4 (1:12-1:23)	93
	Example 4.3 Philip Glass, Étude No.4 (0:37-0:42)	94
Audio Track 5	Example 5.1 Philip Glass, Étude No.5 (0:00-0:17)	95
	Example 5.2 Philip Glass, Étude No.5 (6:49-7:02)	95
	Example 5.3 Philip Glass, Étude No.5 (1:58-2:38)	96
Audio Track 6	Example 6.1 Philip Glass, Étude No.6 (0:00-0:13)	97
	Example 6.2 Philip Glass, Étude No.6 (0:52-1:01)	97
	Example 6.3 Philip Glass, Étude No.6 (2:26-2:47)	98
	Example 6.4 Philip Glass, Étude No.6 (4:39-4:45)	99
Audio Track 7	Example 7.1 Philip Glass, Étude No.7 (0:00-0:09)	100
	Example 7.2 Philip Glass, Étude No.7 (0:45-0:52)	100
	Example 7.3 Philip Glass, Étude No.7 (3:22-3:43)	101
Audio Track 8	Example 8.1 Philip Glass, Étude No.8 (0:00-0:24)	102
	Example 8.2 Philip Glass, Étude No.8 (2:18-2:36)	102
	Example 8.3 Philip Glass, Étude No.8 (5:17-5:37)	103



Audio Track 9	Example 9.1 Philip Glass Étude No.9 (0:06-0:13)	104
	Example 9.2 Philip Glass Étude No.9 (0:35-0:42)	104
	Example 9.3 Philip Glass, Étude No.9 (1:05-1:11)	104
	Example 9.4 Philip Glass, Étude No.9 (1:34-1:41)	104
	Example 9.5 Philip Glass, Étude No.9 (2:05-2:53)	105
Audio Track 10	Example 10.1 Philip Glass, Étude No.10 (1:13-1:26)	106
	Example 10.2 Philip Glass, Étude No.10 (1:10-1:13)	107
Audio Track 11	Example 11.1 Philip Glass, Étude No.11 (6:23-6:31)	108
	Example 11.2 Philip Glass, Étude No.11 (1:22-1:35)	109
Audio Track 12	Example 12.1 Philip Glass, Étude No.12 (1:43-1:50)	110
	Example 12.2 Philip Glass, Étude No.12 (0:09-0:13)	110
	Example 12.3 Philip Glass, Étude No.12 (4:10- 4:15)	111
	Example 12.4 Philip Glass, Étude No.12 (4:32-4:42)	111
Audio Track 13	Example 13.1 Philip Glass, Étude No.13 (0:06-0:12)	112
	Example 13.2 Philip Glass, Étude No.13 (0:23-0:26)	112
	Example 13.3 Philip Glass, Étude No.13 (2:45-2:58)	113
Audio Track 14	Example 14.1 Philip Glass, Étude No.14 (0:14-0:17)	114
	Example 14.2 Philip Glass, Étude No.14 (5:44-5:47)	114
	Example 14.3 Philip Glass, Étude No.14 (0:26-0:39)	114
Audio Track 15	Example 15.1 Philip Glass, Étude No.15 (0:00-0:03)	115
	Example 15.2 Philip Glass, Étude No.15 (1:27-1:30)	115
	Example 15.3 Philip Glass, Étude No.15 (2:31-2:34)	116
	Example 15.4 Philip Glass, Étude No.15 (3:49-3:51)	116
	Example 15.5 Philip Glass, Étude No.15 (4:41-4:46)	117
Audio Track 16	Example 16.1 Philip Glass, Étude No.16 (0:00-0:10)	103
	Example 16.2 Philip Glass, Étude No.16 (0:00-0:17)	118
	Example 16.3 Philip Glass, Étude No.16 (0:55-1:13)	119

Audio Track 17	Example 17.1 Philip Glass, Étude No.17 (0:06-0:15)	120
	Example 17.2 Philip Glass, Étude No.17 (3:42-3:54)	121
Audio Track 18	Example 18.1 Philip Glass, Étude No.18 (0:07-0:17)	122
	Example 18.2 Philip Glass, Étude No.18 (1:13-1:29)	122
Audio Track 19	Example 19.1 Philip Glass, Étude No.19 (0:00-0:06)	123
	Example 19.2 Philip Glass, Étude No.19 (0:16-0:20)	123
	Example 19.3 Philip Glass, Étude No.19 (2:08-2:11)	124
	Example 19.4 Philip Glass, Étude No.19 (2:14-2:17)	124
	Example 19.5 Philip Glass, Étude No.19 (0:38-0:41)	124
	Example 19.6 Philip Glass, Étude No.19 (1:35-1:38)	125
	Example 19.7 Philip Glass, Étude No.19 (5:15 into Audio Track 20)	125
	Example 19.8 Philip Glass, Étude No.19 (2:00-2:14)	129
Audio Track 20	Example 20.1 Philip Glass, Étude No.20 (0:00-0:17)	126
	Example 20.2 Philip Glass, Étude No.20 (3:16-3:26)	128

## List of Musical Examples

### Chapter II

Example 2.1 Hélène de Montgeroult, Étude No.107 in D minor, bars 1-5	28
Example 2.2 Fryderyk Chopin, Étude Op.10, No.12 in C minor, bars 1-6	28
Example 2.3 Hélène de Montgeroult, Étude No.41 in E Flat Major, bars 1-6	30
Example 2.4 Fryderyk Chopin, Étude Op.25, No.1 in A Flat Major, bars 1-6	30
Example 2.5 Alexander Scriabin, Étude Op.65, No.1, bars 3-6	33
Example 2.6 Alexander Scriabin, Étude Op.65, No.2, bars 33-35	33
Example 2.7 Alexander Scriabin, Étude Op.65, No.3, bars 1-6	33
Example 2.8 György Ligeti, Piano Étude No.2 'Cordes à vide', bars 5-8	34
Example 2.9 György Ligeti, Piano Étude No.2 'Cordes à vide', bar 36	35
Example 2.10 György Ligeti, Piano Étude No.2 'Cordes à vide', bar 32	35
Example 2.11 Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.1 'Allegro', bars 10-11	37
Example 2.12 Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.1 'Allegro', bars 67-68	37
Example 2.13 Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.2 'Allegro', bars 15-17	38
Example 2.14 Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.3 'Animato', bars 1-2	38
Example 2.15 Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.4 'Vivace', bars 106-107	39
Example 2.16 Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.5 'Animato', bars 39-40	39
Example 2.17 Igor Stravinsky, Quatre Études, Op.7, IV 'Vivo', bars 1-4	41
Example 2.18 Igor Stravinsky, Étude for Pianola, bars 65-67	42
Example 2.19 György Ligeti, Piano Étude No.4 'Fanfares', bars 157-160	44
Example 2.20 György Ligeti, Piano Étude No.11 'En Suspens', bars 1-2	44
Example 2.21 György Ligeti, Piano Étude No.11 'En Suspens', bars 1, 5, 9, 13	45
Example 2.22 Unsuk Chin, Étude No.5 'Toccata', bars 1-9	47
Example 2.23 Unsuk Chin, Étude No.5 'Toccata', bars 18-26	48
Example 2.24 Fryderyk Chopin, Étude Op.10, No.2, bars 1-2	50
Example 2.25 Fryderyk Chopin, Étude Op.25, No.4, bars 1-2	50

Example 2.26 Fryderyk Chopin, Étude Op. 25, No. 11, bars 1-6	51
Example 2.27 Marc-André Hamelin, Étude No. 1: Triple Étude (after Chopin), bars 1-2	51
<b>Chapter IV</b>	
Example 4.1 Philip Glass, Étude No.1, bars 1-5	86
Example 4.2 Philip Glass, Étude No.1, bars 18-21	87
Example 4.3 Philip Glass, Étude No.1, bars 74-81	87
Example 4.4 Philip Glass, Étude No.2, bars 1-5	88
Example 4.5 Philip Glass, Étude No.2, bars 41-45	88
Example 4.6 Philip Glass, Étude No.2, bars 71-80	89
Example 4.7 Philip Glass, Étude No.3, bars 5-16	90
Example 4.8 Philip Glass, Étude No.3, bars 33-45	91
Example 4.9 Philip Glass, Étude No.3, bars 89-104	92
Example 4.10 Philip Glass, Étude No.4, bars 9-12	93
Example 4.11 Philip Glass, Étude No.4, bars 51-59	93
Example 4.12 Philip Glass, Étude No.4, bars 19-24	94
Example 4.13 Philip Glass, Étude No.5, bars 1-5	95
Example 4.14 Philip Glass, Étude No.5, bars 75-78	95
Example 4.15 Philip Glass, Étude No.5, bars 35-45	96
Example 4.16 Philip Glass, Étude No.6, bars 1-6	97
Example 4.17 Philip Glass, Étude No.6, bars 15-19	97
Example 4.18 Philip Glass, Étude No.6, bars 37-43	98
Example 4.19 Philip Glass, Étude No.6, bars 49-50 into bar 51	99
Example 4.20 Philip Glass, Étude No.7, bars 1-3	100
Example 4.21 Philip Glass, Étude No.7, bars 10-12	100
Example 4.22 Philip Glass, Étude No.7, bars 43-51	101
Example 4.23 Philip Glass, Étude No.8, bars 1-10	102
Example 4.24 Philip Glass, Étude No.8, bars 43-51	102
Example 4.25 Philip Glass, Étude No.8, bars 87-91	103
Example 4.26 Philip Glass, Étude No.16, bars 1-8	103
Example 4.27 Philip Glass, Étude No.9, bars 5-7	104
Example 4.28 Philip Glass, Étude No.9, bar 14	104

Example 4.29 Philip Glass, Étude No.9, bar 23	104
Example 4.30 Philip Glass, Étude No.9, bar 32	104
Example 4.31 Philip Glass, Étude No.9, bars 41-56	105
Example 4.32 Philip Glass, Étude No.10, bars 45-52	106
Example 4.33 Philip Glass, Étude No.10, bars 41-44	107
Example 4.34 Philip Glass, Étude No.11, bars 141-146	108
Example 4.35 Philip Glass, Étude No.11, bars 31-38	109
Example 4.36 Philip Glass, Étude No.12, bars 35-38	110
Example 4.37 Philip Glass, Étude No.12, bars 5-7	110
Example 4.38 Philip Glass, Étude No.12, bars 84-86	111
Example 4.39 Philip Glass, Étude No.12, bars 94-96	111
Example 4.40 Philip Glass, Étude No.13, bars 4-6	112
Example 4.41 Philip Glass, Étude No.13, bars 10-11	112
Example 4.42 Philip Glass, Étude No.13 bars 56-63	113
Example 4.43 Philip Glass, Étude No.14, bar 3	114
Example 4.44 Philip Glass, Étude No.14, bar 64	114
Example 4.45 Philip Glass, Étude No.14, bars 8-10	114
Example 4.46 Philip Glass, Étude No.15, bar 1	115
Example 4.47 Philip Glass, Étude No.15, bar 23	115
Example 4.48 Philip Glass, Étude No.15, bar 37	116
Example 4.49 Philip Glass, Étude No.15, bar 53	116
Example 4.50 Philip Glass, Étude No.15, bars 87-88	117
Example 4.51 Philip Glass, Étude No.16, bars 1-7	118
Example 4.52 Philip Glass, Étude No.16, bars 20-27	119
Example 4.53 Philip Glass, Étude No.17, bars 5-12	120
Example 4.54 Philip Glass, Étude No.17, bars 85-90	121
Example 4.55 Philip Glass, Étude No.18, bars 3-6	122
Example 4.56 Philip Glass, Étude No.18, bars 16-18, bars 19-22	122
Example 4.57 Philip Glass, Étude No.19, bars 1-3	123
Example 4.58 Philip Glass, Étude No.19, bars 10-12	123
Example 4.59 Philip Glass, Étude No.19, bars 65-66	124

Example 4.60 Philip Glass, Étude No.19, bars 69-70	124
Example 4.61 Philip Glass, Étude No.19, bars 25-26	124
Example 4.62 Philip Glass, Étude No.19, bars 53-54	125
Example 4.63 Philip Glass, Étude No.19, bar 175	125
Example 4.64 Philip Glass, Étude No.20, bar 1	125
Example 4.65 Philip Glass, Étude No.20, bars 1-4	126
Example 4.66 Claude Debussy, Douze Étude XI, 'Pour les arpèges composés', bars 1-2	127
Example 4.67 Philip Glass, Étude No.20, bars 35-39	128
Example 4.68 Philip Glass, Étude No.19, bars 61-66	129
Example 4.69 Philip Glass, Étude No.3, bars 97-102	131

## List of Tables

### Chapter III

Table 3.1	Kyle Gann's defining features of early minimalist music	57
-----------	---	----

### Chapter IV

Table 4.1	Key Signatures of Book One and Book Two	85
Table 4.2	Number of quaver beats in Philip Glass, <i>Étude No.3</i>	91
Table 4.3	Harmonic fluctuations in Philip Glass, <i>Étude No.16</i>	118
Table 4.4	Key progressions in Philip Glass, <i>Étude No.17</i>	119
Table 4.5	Selection of metronome speeds for Philip Glass, <i>Étude No.10</i>	133
Table 4.6	Programming of Philip Glass's <i>Twenty Piano Études</i>	135

## List of Illustrations

### Chapter IV

Illustration 4.1	Philip Glass timeline (1991-2012)	83
------------------	-----------------------------------	----



## Preface

The Audio Track Listing and recording will be released on Delphian Records in 2024 as Máire Carroll: Philip Glass Complete Piano Études.

Musical examples included in this thesis have been taken from the following editions:

Title	Publication details	Available online
Hélène de Montgeroult, Études No. 41 & No.107	(Paris: Pelicieu, 1816)	imslp.org
Fryderyk Chopin, Études Op.10, No.2 & No.12	(Krakow: Polskie Wydawnictwo Muzyczne, 1971)	imslp.org
Fryderyk Chopin, Études Op.25, No.1, No.4 & No.11	(Krakow: Polskie Wydawnictwo Muzyczne, 1971)	imslp.org
Alexander Scriabin, Études Op.65, No.1-No.3	(Moscow: Muzgiz, 1953)	imslp.org
György Ligeti, Piano Études No.2, No.4 & No.11	(Paris: Schott Music, 2000)	
Nikolai Kapustin, Five Études in Different Intervals Op.68, Étude No.1-No.5	(Moscow: A-RAM, 2004)	
Igor Stravinsky, Quatre Études, Op.7, IV ‘Vivo’	(Moscow: P. Jurgenson, 1910)	imslp.org
Igor Stravinsky, Étude for Pianola	(Moscow: P. Jurgenson, 1910)	imslp.org
Unsuk Chin, Étude No.5 ‘Tocatta’	(London: Boosey & Hawkes, 2022)	
Marc-André Hamelin, Étude No. 1: Triple Étude (after Chopin)	(New York: C. F. Peters, 2010)	
Claude Debussy, Douze Étude XI, ‘Pour les arpèges composés’	(Paris: Durand & Cie., 1916)	imslp.org

### Chapter IV: Use of Philip Glass’s Études for Piano (Étude No.1-No.20)

Etudes for Piano by Philip Glass

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## Introduction

An authentic personal style cannot be achieved without a solid technique at its base.<sup>1</sup>

My initial interest in the modern piano étude stemmed from my personal dedication to learning, performing and recording Philip Glass's *Twenty Piano Études*: a collection of works composed across two decades between 1991 and 2012.<sup>2</sup> However, this was not an isolated and unilateral endeavour. Études were introduced to me by my first piano teacher as 'studies' to develop my technique. While I enjoyed the challenging nature of the étude, I was curious as to how most studies managed to serve technical purposes and yet also capture a specific mood. Throughout my undergraduate studies, it was obligatory to perform piano études as part of the performance exam syllabus.<sup>3</sup>

As a contemporary pianist with a specific dedication to new music, I am curious about the soundworlds created over time by composers enticed by the piano étude genre. Through exploration of scores and recordings of notable twenty-first-century étude composers, I discovered the piano études of Korean composer, Unsuk Chin. Originally intended to be a set of twelve piano études, Chin has thus far published six of these études which she composed between 1995 and 2003.<sup>4</sup> The study and performance of these six études has been an ongoing project, in addition to this research, with my anticipation of Chin's remaining final six études being released this decade.<sup>5</sup>

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<sup>1</sup> Philip Glass, *Words Without Music: A Memoir* (London: Faber and Faber, 2015), 145.

<sup>2</sup> While working on this thesis, I was preparing for my first full performance of the complete Philip Glass Piano Études at the National Concert Hall, Dublin on 2 November and 9 November 2022. The recording of the complete études took place in January 2023 at St Peter's Church, Drogheda on a Steinway B and will be released on Delphian Records in 2024.

<sup>3</sup> The Royal Academy of Music, London (RAM) syllabus (c2015). This included pianists having to perform two contrasting piano études at the end of Years 2 and 3 on the BMus performance course.

<sup>4</sup> I performed Unsuk Chin's *Étude No.5* at the New Ross Piano Festival on 23 September 2022.

<sup>5</sup> See Chapter I, 20-21 and Chapter II, 46-48.

While nineteenth-century composers developed spellbinding étude personalities, twentieth- and twenty-first-century composers sought to explore contrasting contributions to the genre and to progress this new characteristic of the piano étude. Traditionally, it was customary for composer-pianists to perform and/or record their own études. The significance of this decision for today's contemporary composers arises throughout the research.

American composer Philip Glass has a uniquely distinct musical voice which echoes throughout his piano études. Glass's soundworld is inspired by his training in Paris during the 1960s with Nadia Boulanger, his experiences in India working with sitar player Ravi Shankar and his collaborations across various musical and nonmusical art forms.<sup>6</sup> Glass's *Twenty Piano Études*, twenty fragments of his identity, have helped him to create 'the sound of a lifetime'.<sup>7</sup>

It is important to highlight that, by the culmination of composing his études in 2012, Glass's music had reached a new peak of international fame, particularly with regard to his work as an opera composer.<sup>8</sup> Since Glass's publication of his *Twenty Piano Études* in 2015, pianists across the world have delighted in performing and recording his studies which are now considered a ground-breaking contribution to the twenty-first-century piano repertoire. Throughout the entire work there are echoes of alter egos with striking homages to Rachmaninoff in No.11, Liszt in No.6 and Schubert in No.20 with lyricism and intimacy at the core of these piano works. There are also glimpses of Eastern European and Russian sounds merged with the stylistic idiosyncrasies which have become famously associated with

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<sup>6</sup> See Chapter III, 66 and 71.

<sup>7</sup> Steven W. Thrasher, 'Philip Glass's Etudes: the sound of a lifetime', *The Guardian*, 8 December 2014.

<sup>8</sup> Glass's portrait trilogy including *Einstein on the Beach* (1976), *Satyagraha* (1980) and *Akhnaten* (1983) is inspired by three visionaries of history: Albert Einstein, Mahatma Gandhi and the pharaoh Akhnaten. Glass described these operas as 'portraits of people who change the world through the power of ideas rather than through the force of arms'. Geoffrey J. Smith and Nicola Walker Smith, *American Originals: Interviews with 25 Contemporary Composers* (Boston: Faber and Faber, 1995), 130.

Glass. Despite these influences on Glass, they never threaten to disturb the main source of each étude's individual expressive personality. As a composer particularly dedicated to composing for voice, his sensitivity to the musical line permeates throughout his étude writing. The fluidity of the piano études is an instantly recognisable trademark of Glass's soundworld.

The result of composers such as Glass having given the étude oeuvre a strong identity throughout the last two centuries can be seen and heard in the concert hall. Virtuosity and brilliance are considered the predominant traits of the étude.<sup>9</sup> While the original purpose of the piano étude was to train fingers to a sufficient level of perfection, today's audience delights in observing a virtuoso pianist train his or her fingers in front of a crowd.

### **i. Literature Review**

The thesis offers an original exploration and comparative study of the modern piano étude, presenting the work as a catalogue for future pianists and academics interested in twentieth- and twenty-first-century piano études. Such an overview is not yet in existence.

Naomi Woo's dissertation, published in 2019, "'The Practicality of the impossible": Studies in 20th and 21st Century Piano Études', explores how the expanse and limitation of virtuosic embodiment in musical performance is yet to be extensively explored within musicology. The specific focus of her dissertation is 'the way that keyboard études, in particular, attempt to transcend, alter, or question the body's limits.'<sup>10</sup>

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<sup>9</sup> Naomi Woo, "'The Practicality of the impossible": Studies in 20th and 21st Century Piano Études' (PhD dissertation, University of Cambridge, 2019), 15.

<sup>10</sup> *Ibid.*, 4.

Through Woo's examination of piano études by John Cage, György Ligeti, Conlon Nancarrow and Nicole Lizée, Woo uses a different body of theoretical literature in relation to each composer.<sup>11</sup> In doing this, she comes to understand how étude compositions pushed musicians to the extremity of the human body. Woo presents a powerful argument of the piano étude as 'an experimental genre, pushing at the limits of the body and the possible'.<sup>12</sup> Her work discovers remarkable similarities between the étude and more experimental genres and was useful in considering how various mediums and extremities have inspired four composers' études.<sup>13</sup>

Eun Young Kang's dissertation 'Late Twentieth-Century Piano Concert Etudes: A Style Study', also examines four late-twentieth-century composers' styles and explores how each of the composers has been influenced by the traditional genre of the étude.<sup>14</sup> This thesis was particularly helpful in considering these four composers' étude collections alongside their other piano works. Kang aptly compares each set of études to another work by the same composer, for example, Ligeti's *Études pour piano, Premier Livre* with Ligeti's *Musica Ricercata*.<sup>15</sup> Kang uses examples of non-étude work for comparative purposes, emphasising the virtuosic and difficult nature of these études compared with other compositions.

Investigating a twentieth- and twenty-first-century composer's collection of études (through scores and recordings) and examining the existing scholarly research on such collections was a foundation for this thesis. Recent available literature based on an entire set or sets of piano

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<sup>11</sup> Theoretical literature discussed includes utopian, futuristic and anarchist thought, queer theory and psychoanalysis, posthumanism, materialism and disability studies. Woo, "The Practicality of the impossible": Studies in 20th and 21st Century Piano Études.'

<sup>12</sup> Ibid., 248.

<sup>13</sup> Ibid., 110.

<sup>14</sup> Eun Young Kang, 'Late Twentieth-Century Piano Concert Etudes: A Style Study' (DMA dissertation, University of Cincinnati, 2010), 98. The four composers investigated are John Cage, William Bolcolm, John Corigliano and György Ligeti.

<sup>15</sup> Ibid., 95-96.

études includes Bogdan Claudiu Dulu's, 'Redefining virtuosity in Marc-André Hamelin's 12 Études in All the Minor Keys'.<sup>16</sup> Dulu's extensive research is the first academic study addressing Hamelin's études No.5 – No.10. He investigates Hamelin's career as a 'composer-pianist', a once popular yet now diminished tradition of the nineteenth century.<sup>17</sup> An example based on two full collections of études is Ruby Wang's, 'Fusion of Classical Virtuosity and Jazz Techniques in the Etudes of Nikolai Kapustin: Eight Concert Etudes, OP. 40, and Five Etudes in Different Intervals, OP. 68.'<sup>18</sup>

Thus far, scholarly research on Philip Glass's Twenty Piano Études is non-existent. This dissertation is the first academic study to address Glass's complete piano étude collection. Attention has been given to scholarly work on Glass's other keyboard compositions, his ensemble works and his operas. Philip John Hoch's dissertation, 'Transcribing Philip Glass's Glassworks: Historiography, Case Study, Methodology',<sup>19</sup> delves into Hoch's interest in transcribing *Glassworks*, a work originally written for large ensemble.<sup>20</sup> Having heard a successful transcription of Glass's *Mad Rush* in 2019, Hoch explores Glass's minimalistic style in relation to creating his own transcription of *Glassworks*. A chapter on the programming of this work amongst other traditional compositions of the organ repertoire is an insightful addition.<sup>21</sup>

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<sup>16</sup> Bogdan Claudiu Dulu, 'Redefining virtuosity in Marc-André Hamelin's 12 Études in All the Minor Keys' (DMA dissertation, University of British Columbia, 2015).

<sup>17</sup> Composer-pianists throughout the nineteenth century include Charles-Valentin Alkan, Ferruccio Busoni, Samuil Feinberg, Louise Farrenc, Leopold Godowsky, Nikolai Medtner, Sergei Rachmaninoff and Alexander Scriabin.

<sup>18</sup> Ruby Wang, 'Fusion of Classical Virtuosity and Jazz Techniques in the Etudes of Nikolai Kapustin: Eight Concert Etudes, OP. 40, and Five Etudes in Different Intervals, OP. 68' (DMA dissertation, University of South Carolina, 2014).

<sup>19</sup> Philip John Hoch, 'Transcribing Philip Glass's Glassworks: Historiography, Case Study, Methodology' (DMA dissertation, University of California, 2021).

<sup>20</sup> *Glassworks* is scored for synthesizer, flutes, clarinets, saxophones, French horns, viola and cello. Ibid, 37.

<sup>21</sup> Ibid., 79. See Chapter IV, 134-138.

Lena G. Weinberg's dissertation on Glass's first opera *Einstein on the Beach* is examined in 'Opera behind the Myth: An Archival Examination of Einstein on the Beach.'<sup>22</sup> This opera was a watershed moment for the perception of Glass's music and the American minimalist style to which Glass was linked. Weinberg investigates the success of the opera and its rise from the 'downtown' New York scene to the international opera stage.

References to Glass's musical style and his significant contribution to the early minimalist movement to which he has become irrevocably connected is widely discussed throughout academic research. Scholarly work by Nicholas Cook, Rebecca Marie Doran Eaton and Susan McClary all prove valuable in developing a method to decode the meaning of minimalist techniques with specific reference to film scores.<sup>23</sup> Susan McClary's 'Rap, Minimalism and Structures of Time in late Twentieth-Century Culture' attempts to answer the question 'why is repetition so prevalent in music of the late 20<sup>th</sup> century?'.<sup>24</sup> Through a perceptive consideration of the direction of all music over a period of hundred years, including Glass's music, McClary argues that differing genres sound astonishingly similar. These sources proved invaluable in understanding the role that culture has played regarding the music of the twenty-first century and how Glass's developing soundworld has ultimately been influenced by such.<sup>25</sup>

Tristian Evans's chapter in *The Ashgate Research Companion to Minimalist and Postminimalist Music* summarises recent stylistic developments and discusses varying

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<sup>22</sup> Lena G. Weinberg, 'Opera behind the Myth: An Archival Examination of Einstein on the Beach.' (DMA dissertation, University of Michigan, 2016).

<sup>23</sup> Nicholas Cook, 'Theorizing Musical Meaning', *Music Theory Spectrum*, 23 (2001), 170-179; Susan McClary, 'Minima Romantica,' in Daniel Goldmark, Lawrence Kramer and Richard Leppert (eds.), *Beyond the Soundtrack: Representing Music in Cinema* (Berkeley: University of California Press, 2007), 48-65; Rebecca Marie Doran Eaton, 'Marking Minimalism: Minimal Music as a Sign of Machines and Mathematics in Multimedia', *Music and the Moving Image*, 7 (2014), 3-23.

<sup>24</sup> Susan McClary, 'Rap, Minimalism, and Structures of Time in late Twentieth-Century Culture', in Christoph Cox and Daniel Warner (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum International Publishing Group, 2004), 289.

<sup>25</sup> See Chapter III, 62-63.



existing typologies in the field. Evans presents a hermeneutic approach by integrating various key theories including those by Rebecca Leydon, Nicholas Cook, Gilles Deleuze and Michel Foucault.<sup>26</sup> His model proved useful when investigating Glass's piano études as an extension of minimalist tendencies. Robert Fink's *Repeating Ourselves* includes a revisionist account of minimalism with significant reference to Terry Riley, Steve Reich and Glass, associating repetitive styles of music to the postwar evolution of American mass consumerism.<sup>27</sup> His chapter regarding the culture of repetition provides a comprehensive basis of the scope of the beginnings of minimalism and the critical discourse surrounding the movement.

As a current ongoing étude collection, Unsuk Chin's *Six Piano Études* have received academic attention over the last decade. Soo Jyung Kim's 'A Study of Unsuk Chin's Piano Etudes' includes a thorough analysis of Chin's six études with specific attention given to the overtone series and whole-tone scales used throughout the études.<sup>28</sup> Andrew Zhou's thesis, 'Godlike Recompense?: (Re)actions in the Piano Studies and Etudes of Hans Abrahamsen, Unsuk Chin, and Pascal Dusapin', examines three sets of piano études from the late twentieth century.<sup>29</sup> Through discussions with performers and Chin herself, Zhou provides new insights on the origin of Chin's études. His fascinating account of Chin's editing of her études No.1 to No.4, between their 1995 and 2003 versions, affords the reader the opportunity to understand the depth of difficulty present in her piano études.<sup>30</sup> Chin was honoured at the prestigious

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<sup>26</sup> Tristian Evans, 'Analysing Minimalist and Postminimalist Music: an overview of methodologies', in Keith Potter, Kyle Gann and Pwyll ap Siôn (eds.), *The Ashgate Research Companion to Minimalist and Postminimalist Music* (London: Routledge, 2013), 255.

<sup>27</sup> Robert Fink, *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley: University of California Press, 2005).

<sup>28</sup> Soo Jyung Kim's, 'A Study of Unsuk Chin's Piano Etudes' (DMA dissertation, University of Georgia, 2012), 17-18.

<sup>29</sup> Andrew Zhou, 'Godlike Recompense?: (Re)actions in the Piano Studies and Etudes of Hans Abrahamsen, Unsuk Chin, and Pascal Dusapin' (DMA dissertation, Cornell University, 2019).

<sup>30</sup> *Ibid.*, 145.

festival *Présences de Radio France* in 2023 where fifteen of her works were performed.<sup>31</sup> It can be expected that her work will continue to gain further scholarly recognition.

Miyoun Jang focuses on the études of Unsuk Chin and her Hungarian teacher György Ligeti in her thesis ‘A Comparative Study of Piano Etudes by György Sandor Ligeti and Unsuk Chin: A Technical and Stylistic Guide to Mastering the Difficulties of Their Etudes’.<sup>32</sup> By comparing Chin’s études with Ligeti’s, the author demonstrates the influence of the teacher on the student, including meter and rhythms such as aksak rhythm.<sup>33</sup> Jang’s performance and practice guide to both sets of études is accessible and practical to those unfamiliar with such works and a reminder of the gravity of role a mentor can play in encouraging a soundworld.<sup>34</sup>

The practice of composers functioning as both composer and pianist and, on occasion, recording artist is referenced throughout the thesis. Robert Rimm’s book, *The Composer-Pianists: Hamelin and The Eight*, offers an insight into the history of composer-pianists while focusing on eight interrelated composers, as well as living composer Marc-André Hamelin. However, as Rimm’s book was published in 2001, there is little information regarding twenty-first-century contributions to the genre aside from a chapter dedicated to Marc-André Hamelin, an advocator of these eight composers.<sup>35</sup>

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<sup>31</sup> The festival took place on 7-12 February 2023 and featured works including *Concerto for Violin, No.2*, *Double Concerto for piano, percussion and ensemble* and *Gradus ad Infinitum*. Anon, ‘Festival Présences 2023 Unsuk Chin’, <<https://www.calameo.com/read/0062964529db5ce99c8f1?page=1>> [accessed 22 May 2023].

<sup>32</sup> Miyoun Jang, ‘A Comparative Study of Piano Etudes by György Sandor Ligeti and Unsuk Chin: A Technical and Stylistic Guide to Mastering the Difficulties of Their Etudes’ (DMA dissertation, University of North Texas, 2018).

<sup>33</sup> Chapter II, 43-44.

<sup>34</sup> Glass’s studies with his two mentors, Nadia Boulanger and Ravi Shankar, are discussed in Chapter III, 66 and 71.

<sup>35</sup> Marc-André Hamelin’s *12 Études in All the Minor Keys* were completed in 2012. Robert Rimm, *The Composer-Pianists: Hamelin and The Eight* (Portland: Amadeus Press, 2002). Several of the composers mentioned in Rimm’s book, *The Composer-Pianists: Hamelin and The Eight*, are discussed in this thesis. See Chapter I, 20 and Chapter II, 49-52.

## ii. Methodology

The methodology employed for this research was extensive. Given the respective musical examples compared and explored in understanding the trajectory of the piano étude, the use of recordings (including recordings by multiple pianists) and examining of scores was imperative to the research. While writing this thesis, I was simultaneously preparing for a complete performance across two evenings at the National Concert Hall, Dublin, of Glass's *Twenty Piano Études* as well as a recording, which is due for release in 2024. This has resulted in a unique performer's perspective of Glass's études. As the nature of these studies is born from technical pursuits, surpassing such obstacles has been the most imperative part of understanding the étude itself.

Philip Glass is a living twenty-first-century composer who has used technology as a significant role in the reception and access to his scores, performances, recordings, interviews and musical life. Social media has played a role in this research. Glass is active weekly across all social media platforms with a team regularly communicating with his audience and updating content on his website, Twitter, Instagram and Facebook pages. As well as these platforms, Glass has given numerous interviews throughout his lifetime, recorded a documentary and released a memoir.<sup>36</sup> As scholarly research on Glass's piano études is meagre, these sources have been an asset in understanding his musical voice through his collaborators and the background to the development of his soundworld.

This thesis is two-fold in approach. Part I investigates the transition of the piano étude, exploring its origin and development over time, while highlighting several of the main contributors to the genre over the past two hundred years. Specific attention is giving to

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<sup>36</sup> Glass's documentary 'Glass: A Portrait of Philip in Twelve Parts' (2007), and his memoir *Words Without Music* (2015) have been critically acclaimed, offering an insight into his life, work and collaborators.

twentieth- and twenty-first-century composers, however, new comparisons between the étude music of French composer Hélène de Montgeroult and Fryderyk Chopin are considered.<sup>37</sup> The thesis catalogues the modern piano étude with a trend emerging between several techniques employed by a wide range of composers from different backgrounds. The composer's mission for his or her études is called into question. The thesis explores the obsessive nature at the root of these collections of works, including rhythmic and intervallic obsessions, which have dominated a composer's compositional output over a considerable, transformative period. Investigations are interspersed with case study demonstrations from a variety of piano études. This demonstrates how the étude is more than simply a musical offering and documents the significance of an étude collection for a composer's output. The idea of such technical pieces offering an insight into the mind and soundworld of a composer at the time of composition is at the core of the research.

Part II of the thesis continues the thread of Part I with specific reference to one composer and one recently completed body of work, published less than ten years ago: Glass's *Twenty Piano Études*. Glass dedicated over twenty years to the completion of his work, an extraordinary period of time to dedicate to one major body of work. The impact of this mammoth collection of études on pianists worldwide has been substantial with over fifteen recordings of the études being released by 2017, only three years after their publication.<sup>38</sup>

As Rebecca M. Doran Eaton concludes from Nicolas Cook's 'Theorizing Musical Meaning', 'music holds the potential for a number of meanings informed by its attributes; a culture chooses amongst them'.<sup>39</sup> With this in mind, Chapter III investigates the influence of global

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<sup>37</sup> See Chapter II, 26-31.

<sup>38</sup> Richard Guérin, 'The Piano Etudes – Recordings', < <https://philipglass.com/glassnotes/the-piano-etudes-recordings/> > [accessed 3 May 2023].

<sup>39</sup> Eaton, 'Marking Minimalism: Minimal Music as a Sign of Machines and Mathematics in Multimedia', 3; Cook, 'Theorizing Musical Meaning', 179.

culture, non-Western music and Glass's contemporaries, prior to the composition of his *Twenty Piano Études*. The critical reception of Glass's work throughout his career has been varied, not least due to his association with minimalism and Chapter III considers Glass from a minimalist and non-minimalist perspective.

Chapter IV positions the greater role of the keyboard within Glass's musical landscape. This chapter delves into the *Twenty Piano Études*, offering a compositional and performance history, while placing the studies in the context of Glass's soundworld. A detailed account of each of the twenty études is considered from a performer's perspective and I investigate the technical challenges within the set of études. On this journey of performing and recording the complete études, I question how these challenges might enhance a pianist's technique both physically and practically. An accompanying audio track listing is included. Using scores, my own recording and personal experience as a pianist, the thesis contributes to the field of artistic research and performance practice.

### **iii. Limitations**

Given the scope and breadth of the topic, limits were put in place during the research so that the modern piano étude could be explored as efficiently and inclusively as possible. One contemporary étude composer's work alone was examined in detail for this thesis. While Part I of this research offers an array of examples, focusing on the extensive capabilities within modern piano étude literature, emphasis is predominantly given to étude collections. There is little investigation into other piano works of the composers mentioned.

The history and position of the composer-pianist is referenced and considered in comparison to the piano étude genre. It becomes apparent throughout the research how various composers were interested in performing their own études as well as composing. Several étude

composers maintained, and continue to maintain, a high level of piano proficiency throughout their careers. At various points throughout this project there were further opportunities for research into a composer's wider catalogue of piano works, and further comparative possibilities between composers. Due to the nature and timeframe of the thesis, this could not be included.

Études embody the spirit of the experimental composer, particularly given such substantial periods of composition. However, an étude's full potential lies within the understanding of a composer's overarching soundworld. The thesis offers a comprehensive view of the modern piano étude so that pianists, musicians and academics will view the piano étude as more than a technical study or concert showpiece. Most importantly this thesis exists as a source of inspiration for pianists to explore the adventurous and transcendental world of the modern piano étude, to be encouraged to play the music and to be fearless.

## Part I

### Chapter I: History of the piano étude

Flashy passagework changes with the times; technical accomplishment is only of value when it serves a higher purpose.<sup>1</sup>

This chapter investigates the historical genre of the étude with special attention given to twentieth- and twenty-first-century contributions. Several of the composers discussed have emerged as belonging to the composer-pianist category. While the composer-pianist practice gained immense popularity in the late nineteenth century, the twentieth century saw a decline in such multi-tasking enterprise.<sup>2</sup> However, this thesis demonstrates how a number of modern piano étude composers have returned to this trend with ambitious étude compositions demonstrating both a composer's compositional talents and his or her performance abilities.

In its simplest form, an étude is a piece of music intended to improve piano technique, usually by focusing on one particular technical challenge. Despite their practical and technical nature, études have become some of the most poetically refined works in the piano repertoire.

Pianists have often been fascinated by the odyssey of an étude composer and his or her commitment to a genre which has experienced continuous revolution throughout history, demanding spirit and perseverance from both composer and performer. It is intriguing to note the extensive periods of time that composers have committed to this obsessive discipline: Franz Liszt dedicated twenty-six years, Bela Bartók eleven years, György Ligeti ten years and Philip Glass twenty years. Meanwhile Unsuk Chin's contribution to the genre is currently

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<sup>1</sup> Robert Schumann, *Gesammelte Schriften über Musik und Musiker*, 5th edn, 2 vols, ed. Martin Kreisig (Leipzig: Breitkopf und Härtel, 1914), ii, 165; quoted in John Daverio, *Crossing Paths: Schubert, Schumann, and Brahms* (Oxford and New York: Oxford University Press, 2002), 94.

<sup>2</sup> American composer and pianist, Noam Sivan explains how twentieth-century composers became more focused on the 'ideas' of composition rather than the need to perform the works themselves. Ray Lustig, 'Both Sides Now: Bringing Back the Pianist-Composer', <<http://journal.juilliard.edu/journal/both-sides-now-bringing-back-pianist-composer>> [accessed 9 February 2023].

ongoing and she has completed six études thus far.<sup>3</sup> Therefore these étude collections, composed over prolonged periods of time, can be viewed as a record of a composer's evolution.

### **i. Cross-Fertilisation: From rudimentary to extreme**

The tradition of writing études as character pieces emerged in the early-nineteenth century with the rapidly growing popularity of the piano.<sup>4</sup> Collections published by the virtuoso pianist Muzio Clementi (especially his *Gradus ad Parnassum*, 1817) were emulated by other composer-pianists, including Carl Czerny whose étude collection, *The School of Velocity*, is still widely used in piano training today.<sup>5</sup> While the earliest origins of the piano étude were in training and pedagogy with technical exercises as their main purpose, by the nineteenth century the piano étude had a superpower: 'a personality'.

This watershed moment was marked by composer and pianist Fryderyk Chopin who elevated the student study into a work of artistry and poetry, transforming piano exercises into dazzling concert pieces. By February 1836, Robert Schumann wrote an article, published in *Neue Zeitschrift für Music*, highlighting the success of Chopin's études stating 'in Chopin, imagination and technique share dominion side by side'.<sup>6</sup> Schumann describes Chopin as one of five composers 'who are clearly the most important writers of études'.<sup>7</sup> Chopin's Op.10

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<sup>3</sup> Unsuk Chin has expressed her desire to complete a total of twelve piano études, similar to Chopin and Debussy. However, she aims to complete her collection once she believes her musical style has matured. Miyoung Jang, 'A Comparative Study of Piano Etudes by György Sandor Ligeti and Unsuk Chin: A Technical and Stylistic Guide to Mastering the Difficulties of Their Etudes' (DMA dissertation, University of North Texas, 2018), 3.

<sup>4</sup> Edyth Wagner, 'Piano Section of MTNA: History of the Piano Etude', *American Music Teacher*, 9 (1959), 12.

<sup>5</sup> Marten Noorduyn, 'Czerny's 'impossible' metronome marks', *The Musical Times*, 154 (2013), 19.

<sup>6</sup> Robert Schumann, 'Some piano studies arranged according to their technical aims', *Neue Zeitschrift für Musik* 4 (1836), 45-46; quoted in Simon Finlow, 'The twenty-seven etudes and their antecedents' in Jim Samson (ed.), *The Cambridge Companion to Chopin* (Cambridge: Cambridge University Press, 1992), 51.

<sup>7</sup> The five étude composers listed in Schumann's article are Fryderyk Chopin, J. S. Bach, Muzio Clementi, Johann Baptist Cramer and Ignaz Moscheles. *Ibid.*, 51.



and Op. 25 études remain amongst the most popular works written for piano and are regularly recorded and performed in concert halls across the world.

Chopin's Op.10 studies were dedicated to his friend and colleague, Hungarian composer Franz Liszt, whose performance of Chopin's études was highly admired by the composer.<sup>8</sup> In turn, Liszt elevated the étude genre to a level of technical prowess and beauty with his notoriously demanding 'Transcendental Études'. He began composing the études in 1826 at just thirteen years of age.<sup>9</sup> Similar to Glass's *Twenty Piano Études* which took over two decades to complete, it took Liszt until 1837 to complete the 'Transcendental Études' with the third and final version appearing in 1852. These pieces are dedicated to Czerny, Liszt's Viennese piano teacher and prolific étude composer.<sup>10</sup>

The early twentieth century saw the publication of several significant collections of études in which composer-pianists continued to explore extended techniques. Composed in 1915, amidst the First World War and the composers personal struggle with cancer, Claude Debussy's *Douze Études* for piano conform to a one facet of technique per étude tradition.<sup>11</sup> These works, occasionally humorous, demonstrate unorthodox structures, focusing on unusual harmonies and resonances, rather than technical demands. Debussy's études are among the first to be individually titled according to their technical basis.<sup>12</sup> Interestingly the publication details suggest that Debussy never intended this collection to be performed in its entirety.<sup>13</sup>

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<sup>8</sup> Edward N. Waters, 'Chopin by Liszt', *The Musical Quarterly*, 47 (1961), 173.

<sup>9</sup> Alan Walker, 'Liszt and the Keyboard', *The Musical Times*, 118 (1977), 717.

<sup>10</sup> *Ibid.*, 717.

<sup>11</sup> Lucas Wong, 'Humour in late Debussy: multiple perspectives on "Douze études"', *The Musical Times*, 157 (2016), 77-78.

<sup>12</sup> Henry Scott, 'William Bolcom's "Twelve New Etudes for Piano"' (DMA dissertation, Louisiana State University and Agricultural & Mechanical College, 1994), 2.

<sup>13</sup> Wong, 'Humour in late Debussy: multiple perspectives on "Douze études"', 77.

Despite Debussy's conscientious organisation of two sets of six études separated by intervals and single notes, *Douze Études* indicates that the choice of programming of the études is ultimately the decision of the performer.<sup>14</sup> Similar to Debussy's twelve, Glass's collection of twenty études indicates no directions for the performer as to how the pieces must be performed in concert. Glass himself has chosen to programme his pieces in unusual and alternating groupings.<sup>15</sup>

During the same period as Debussy, Sergei Rachmaninoff completed his two sets of ferociously difficult études. Op.33 and Op.39 were composed during 1911 and 1915-1916, prior to his emigration to North America. Rachmaninoff titled the pieces *Études-Tableaux* meaning 'study pictures'. Widely regarded as one of the last great representatives of Romanticism in Russian classical music, Rachmaninoff declared himself unable to comprehend modern music.<sup>16</sup> According to Oskar von Riesemann, the literary collaborator of *Rachmaninoff's Recollections*, the most striking changes in the composer's harmonic compositional style occur in both sets of études.<sup>17</sup> It appears as though Rachmaninoff's experimentation within the étude genre enabled this new compositional direction.

A true composer-pianist, Rachmaninoff is regarded as one of the most virtuosic pianists of all time. Oskar von Riesemann considers Rachmaninoff to be the most gifted at performing his own music: 'You will not find many pianists, if any at all, who are able to compete with him in the playing of some of his own piano pieces.'<sup>18</sup> After emigrating to America, his career centred on performing as a concert soloist. In 1923, across four consecutive months,

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<sup>14</sup> Ibid., 77.

<sup>15</sup> Philip Glass, 'Program: The Complete Piano Études by Philip Glass', <<https://live.stanford.edu/sites/default/files/events/program-notes/GlassNotes.pdf>> [accessed 26 April 2021].

<sup>16</sup> Joseph Yasser, 'Progressive Tendencies in Rachmaninoff's Music', *Tempo*, 22 (1951-1952), 11.

<sup>17</sup> Oskar von Riesemann, *Rachmaninoff's Recollections told to Oskar von Riesemann*, trans. Mrs Dolly Rutherford (New York: The Macmillan Co., 1934), 236-237. Yasser, 'Progressive Tendencies in Rachmaninoff's Music', 20.

<sup>18</sup> Riesemann, *Rachmaninoff's Recollections told to Oskar von Riesemann*, 236.

Rachmaninoff gave seventy-five concerts.<sup>19</sup> When the topic of piano technique was discussed with Rachmaninoff in 1923, he commented ‘One hears a great deal about the danger of too much technique in America, which seems to be absurd. To my mind, the first thing a pupil should seek is as much technique as he can possibly comprehend.’<sup>20</sup>

Hungarian composer Béla Bartók experimented with the *étude* genre differently from Rachmaninoff and Debussy and he composed *Mikrokosmos* from 1926 to 1937.<sup>21</sup>

*Mikrokosmos* consists of 153 piano exercises for beginner to advanced pianist.<sup>22</sup> From the earliest of these exercises, Bartók uses uncommon metres and unfamiliar rhythmic formations. While merging the ideas of piano exercises and concert études, Bartók created virtuosic and dissonant piano pieces based on Eastern European folk-music.<sup>23</sup> Here Bartók uses a separation technique in which one hand plays on black keys and the other hand on white. Ligeti later used this same technique in his *Piano Étude No.1 ‘Désordre’* in which his right-hand plays on the white keys and his left hand on the black keys. This style of partition technique is also found in the akadinda music in Uganda and sees musicians playing the xylophone from opposite sides.<sup>24</sup> This means that one percussion musician would play on the ‘white’ xylophone keys and another on the ‘black’. Bartók suggested that *Mikrokosmos* should be studied alongside other piano-related études.<sup>25</sup>

## ii. Mid to late twentieth-century experimentation

French American composer Louise Talma composed her Six Études in 1954 and these mark Talma’s first exploration into the world of serialism. Each of the six pieces employs a

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<sup>19</sup> Stephen Walsh, ‘Sergei Rachmaninoff 1873 – 1943’, *Tempo*, 105 (1973), 13.

<sup>20</sup> Sergei Rachmaninov, ‘New Lights on the Art of the Piano,’ *The Etude*, 41 (1923), 223.

<sup>21</sup> Béla Bartók’s *Mikrokosmos* consists of 6 volumes in total and are organised throughout the volumes in ascending order of difficulty.

<sup>22</sup> Edyth Wagner, ‘History of the Piano Etude: PART III’, *American Music Teacher*, 9 (1960), 17.

<sup>23</sup> John Ogden, ‘Bartók’s Mikrokosmos’, *Tempo*, 65 (1963), 2.

<sup>24</sup> Stephen Andrew Taylor, ‘Ligeti, Africa and Polyrythm’, *The World of Music*, 45 (2003), 92.

<sup>25</sup> Ogden, ‘Bartók’s Mikrokosmos’, 4.

different twelve-tone set. Talma believed her compositions belong to three different compositional periods. Her works up to 1954, including the Six Études, are neoclassical in style while from 1954 to 1960 she considered her works to be serial.<sup>26</sup> However, after the 1960s she viewed her use of serialism as remarkably basic. Both Talma and Glass studied composition with Nadia Boulanger in Paris, with Talma studying with Boulanger over the course of eleven years.<sup>27</sup> Boulanger played an important pioneering role in the training of musicians and the composition and transmission of music throughout the twentieth century.<sup>28</sup>

John Cage offered a noteworthy contribution to the étude oeuvre for multiple instruments. His *Études Australes* are based on star charts and were composed between 1974 and 1975. The études were conceived as duets for two independent hands and are some of the most difficult pieces in the piano repertory.<sup>29</sup> Cage's *Freeman Études* for violin were composed in 1980 with the goal of being as difficult as humanly possible, with a performance of the work presenting an example of 'the practicality of the impossible'.<sup>30</sup>

By the eighteenth étude Cage deemed the studies too difficult to complete and so abandoned the project. When he later decided in 1989 that he wished to complete the set, Cage had forgotten much of the original complex compositional process.<sup>31</sup> He contacted musicologist James Pritchett for his assistance. Pritchett had previously completed a doctoral dissertation on the original *Freeman Études* which included rebuilding the scores using Cage's own notes

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<sup>26</sup> Helen Walker-Hill, liner notes to *Music of Louise Talma*, Theresa Bogard, CD, New World Records, NWCR833, 2007.

<sup>27</sup> Anon, 'Louise Juliette Talma', <<https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/talma-louise-juliette>> [accessed 22 April 2021].

<sup>28</sup> See Chapter III, 66.

<sup>29</sup> Andrew Clements, 'Cage: Etudes Australes – review', *The Guardian*, 19 January 2012.

<sup>30</sup> James Pritchett, 'The completion of John Cage's Freeman Etudes', *Perspectives of New Music*, 32 (1994), 264.

<sup>31</sup> *Ibid.*, 265.

and documents.<sup>32</sup> Cage chose to include Pritchett's name on the final score of his *Freeman Études*.<sup>33</sup>

The three books of *Études* by György Ligeti (1985, 1988–94, 1995) are widely acknowledged as milestone contributions to the modern piano repertoire.<sup>34</sup> Ligeti received the Grawemeyer Award in 1986 for his *Études pour Piano*.<sup>35</sup> These études are perhaps closest to the old tradition, once again concentrating on one technique per piece. Similar to Glass, Ligeti took inspiration for his Piano *Études* and Piano Concerto from further afield exploring African polyphony and polyrhythm.<sup>36</sup> Both Ligeti and Glass use African influences in their work. The concept of constant syncopation including off-beat phrasing and cross-rhythm is widely used in African music with repetition as its core principle.<sup>37</sup> Both the soundworlds and personalities within the music of Glass and Ligeti remain distinctive despite similar inspirations and influences on their work. African rhythms, intervallic obsessions, jazz influences and the music of Chopin, Debussy and Nancarrow have greatly influenced Ligeti's piano études.<sup>38</sup>

Newly-composed piano études are still of interest in the contemporary era. William Bolcom was awarded the Pulitzer Prize for his *Twelve New Études for Piano* in 1988.<sup>39</sup> This set succeeded an earlier collection of études entitled *Twelve Études*, which was released in 1971.<sup>40</sup> There are significant contrasts between the later set of études with his original set

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<sup>32</sup> Ibid., 265.

<sup>33</sup> Ibid., 265.

<sup>34</sup> Denys Bouliane and Anouk Lang, 'Ligeti's Six "Études Pour Piano": The Fine Art of Composing Using Cultural Referents', *Theory and Practice*, 31 (2006), 159.

<sup>35</sup> Ligeti's protégé Unsuk Chin won the Grawemeyer Award in 2004.

<sup>36</sup> Taylor, 'Ligeti, Africa and Polyrhythm', 88-90.

<sup>37</sup> Jay Rahn, 'Turning the Analysis around: Africa-Derived Rhythms and Europe-Derived Music Theory', *Black Music Research Journal*, 16 (1996), 71.

<sup>38</sup> Mayron K. Tsong, 'Études pour piano, premier livre of György Ligeti: studies in compositional and pianism' (MMus dissertation, Rice University, 2001), ii.

<sup>39</sup> Henry Scott, 'William Bolcom's "Twelve New Etudes for Piano"', 1.

<sup>40</sup> Ran Dank, 'William Bolcom's "Twelve New Études" (1988): Theoretical and Interpretative Analysis' (DMA dissertation, City University of New York, 2017), 3.

following the musical style of Bolcom's teacher Pierre Boulez.<sup>41</sup> The prizewinning collection highlights the change in musical direction which Bolcom undertook as a composer over the course of seventeen years.

### **iii. Entering the Twenty-First Century**

Canadian pianist and composer Marc-André Hamelin has also offered a unique contemporary contribution to the *étude* catalogue with his *12 Études in All the Minor Keys*.<sup>42</sup> It is a mammoth collection of *études* spanning more than two decades, composed between 1986 and 2009. A regular performer of his own piano compositions, Hamelin has championed and recorded his *étude* collection demonstrating how relevant the *étude* genre can be for modern audiences and composer-pianists.<sup>43</sup> Hamelin did not compose his *études* at the piano: 'The Etudes also weren't an easy task because I composed the pieces away from the piano. And, truthfully, I didn't always realise the extent of the difficulties that I was creating for the pianist, especially in the earliest pieces.'<sup>44</sup> The pianistic challenges of Hamelin's studies are perhaps indicative of his compositional methods and his decision not to use a piano.

Korean composer Unsuk Chin holds a unique place among prominent composers who have established powerful individual musical voices at the start of a new century, delicately merged between Eastern and Western traditions. Her soundworld is a synthesis of the early twentieth-century European music tradition with Balinese Gamelan and electronic music influences

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<sup>41</sup> Scott, 'William Bolcom's "Twelve New Etudes for Piano"', 5.

<sup>42</sup> See Chapter II, 49-52.

<sup>43</sup> Jory Debenham, 'Review: Piano Music by Marc-André Hamelin', *Notes*, 70 (2013), 187.

<sup>44</sup> Geoffrey Newman, 'The Great Canadian Artists: An Interview with Marc-André Hamelin', <<https://www.vanclassicalmusic.com/the-great-canadian-artists-an-interview-with-marcandr-hamelin>> [accessed 15 April 2021].

strongly at play within her *étude* collection.<sup>45</sup> Chin studied with Ligeti in Hamburg.<sup>46</sup> Her set of six Piano *Études* was composed between 1995 and 2003 and is a successor to *études* by Ligeti, whose music had a significant impact on Chin's own treatment of the genre. Inspired by electronic music and composing away from the piano, Chin uses layers of repeated patterns throughout the *études*, reflecting her experiments in sound through her electro-acoustic work. Chin does not consider her *études* to be a source of training for pianists but instead she views her pieces as artistic contributions:

First and foremost, my etudes are meant to be music, and my purpose was not the purpose of a pedagogue. However, at the same time in my etudes there are obviously things pianists can learn from them, such as training independency of fingers and mind through the challenges of polyrhythm and intricate polyphony, for instance.<sup>47</sup>

Chin understands the complexity of the *étude* genre and the dual purpose her *études* serve, both as musical gems and rudimentary formative studies.

Irish composer Kevin Volans is a South African-born Irish composer and pianist. He studied with Karlheinz Stockhausen and Mauricio Kagel in Cologne in the 1970s. Volans later became associated with the *Neue Einfachheit* (New Simplicity) movement in the city.<sup>48</sup> It is notable that the majority of Volans's solo piano music consists of *études*. He released his album *Études* in 2022 with pianist Jill Richards.<sup>49</sup> His body of work includes *Three Structural Etudes* (2004), *Three Rhythmic Etudes* (2003), *3 Books of Piano pieces for 'Young' Players*

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<sup>45</sup> Boosey & Hawkes, 'UnsuK Chin on UnsuK Chin', <[https://www.boosey.com/podcast/UnsuK-Chin-on-UnsuK-Chin/100716 podcast/video](https://www.boosey.com/podcast/UnsuK-Chin-on-UnsuK-Chin/100716%20podcast/video)> [accessed 13 February 2023].

<sup>46</sup> Clemens J. Setz, 'On the Piano Etudes of UnsuK Chin' <<https://www.musicandliterature.org/features/2018/5/28/on-the-ipiano-etudesi-of-unsuK-chin>> [accessed 26 April 2021].

<sup>47</sup> UnsuK Chin in conversation with Soo Kyung Kim. Soo Jyung Kim's, 'A Study of UnsuK Chin's Piano Etudes' (DMA dissertation, University of Georgia, 2012), 1.

<sup>48</sup> The *Neue Einfachheit* movement consists of a group of younger German composers in 1970s who were banded together to describe their musical style. Hans-Jürgen von Bose, Hans-Christian von Dadelsen and Detlev Müller-Siemens are among those composers associated with the movement. Christopher Fox, 'Neue Einfachheit', *Grove Music Online. Oxford Music Online* (Oxford University Press), <<https://doi.org/10.1093/gmo/9781561592630.article.51675>> [accessed 2 February 2023].

<sup>49</sup> Volans's album *Études* with Jill Richards and Kevin Volans was released on Diatribe records in June 2022. See Chapter II, 52-53.

(2012), *Marabi Nights* (2016) and his thirteen piano études. Mary Rorich describes Volans ‘As a pianist of considerable virtuosity, it is hardly surprising that Kevin Volans has turned his creative attention to the topic of the etude.’<sup>50</sup>

For wide-ranging reasons, the inclusion of music of other cultures and ethnic groups is a common trend in contemporary music. Similar to John Cage and György Ligeti, Volans has been influenced by African music and has explored the use of African musical elements throughout his work. Jamie Marie Thierman investigates six composers from different backgrounds, offering a subjective stance on this topic. Through the six composers’ works and recordings, Thierman discusses how each of them have managed to merge African influences within their own soundworlds.<sup>51</sup> As considerably more composers have been inspired by non-Western musical traditions over the past few decades, not least with étude additions, Thierman concludes ‘We are far from reaching the limits of inspiration from African music.’<sup>52</sup> It is also apparent that we are far from reaching the limits of non-Western traditions as a whole.

There are several other contributions to the contemporary piano étude canon which have received much scholarly attention. *Quatre Études de rythme*, composed by Olivier Messiaen in 1949 and 1950, is perhaps one of the most researched and discussed étude collections of the modern era.<sup>53</sup> Canadian composer Nicole Lizée’s set of études, *Hitchcock Études*, is influenced by the composer’s passion in exploring the sounds of malfunctioning electronic

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<sup>50</sup> Mary Rorich, ‘Three Rhythmic Etudes, Kevin Volans: score review’, *South African Journal of Musicology*, 25 (2005), 155.

<sup>51</sup> These six composers are John Cage, György Ligeti, Steve Reich, David Fanshawe, Joshua Uzoigwe and Kevin Volans. Jamie Marie Thierman, ‘The Integration of African Musical Elements into Western Classical Music’ (DMA dissertation, University of California, 2015), 2.

<sup>52</sup> *Ibid.*, 61.

<sup>53</sup> Recent research includes Yves Balmer, Thomas Lacôte and Christopher Brent Murray, ‘Messiaen the Borrower: Decomposing Debussy through the deforming prism’, *Journal of the American Musicological Society*, 69 (2016), 699-791 and Paul McNulty, ‘Olivier Messiaen: The Reluctant Avant-gardist - a Historical, Contextual and Analytical Study of the *Quatre études de rythme* and the *Livre d’orgue*’ (PhD dissertation, Durham University, 2014).



equipment, offering the pianist a unique challenge of merging speech rhythms alongside the piano score. Lizée's études have recently been researched in detail.<sup>54</sup> Other notable composers who have added to the modern piano étude catalogue include Terry Riley, Nikolai Kapustin, John Corigliano, Hans Abrahamsen, David Rakowski, Daisuke Asakura and Maurice Ohana.<sup>55</sup>

Over time, étude collections have served as increasingly ambitious projects for composers to test their compositional limits and, perhaps more importantly, for pianists to test their degree of fearlessness. It has also afforded numerous composer-pianists the opportunity to perform and record their own work. Naomi Woo's thesis challenges the concept of the étude and its purpose as a body of work, showcasing the significant differences that exist between their original and contemporary purposes.

As a genre, études composed in the last century pose especially interesting problems. On the one hand, the genre seems an outdated relic of 19th century romantic pianism and virtuosity, tied to its origins in the concert études—or Grandes Études—of Fryderyk Chopin and Franz Liszt. On the other hand, contemporary études often offer a subversive take on technique, the instrument of the piano, performance practice, and musical institutions.<sup>56</sup>

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<sup>54</sup> Naomi Woo's thesis includes an informative comparison of four modern composers: John Cage, György Ligeti, Conlon Nancarrow and Nicole Lizée. Naomi Woo, "'The Practicality of the impossible": Studies in 20th and 21st Century Piano Études' (PhD dissertation, University of Cambridge, 2019).

<sup>55</sup> Terry Riley's Keyboard Studies are discussed in Chapter II, 53-54. Nikolai Kapustin's étude collections are discussed in Chapter II, 36-40. John Corigliano's *Etude Fantasy* consists of five études combined into one movement without a pause. Eun Young Kang, 'Late Twentieth-Century Piano Concert Etudes: A Style Study' (DMA dissertation, University of Cincinnati, 2010), 50-51. Hans Abrahamsen composed *Ten Studies*, between 1984-1998, which became the basis of several chamber and orchestral works. Andrew Zhou, 'Godlike Recompense?: (Re)actions in the Piano Studies and Etudes of Hans Abrahamsen, Unsuk Chin, and Pascal Dusapin' (DMA dissertation, Cornell University, 2019), 1. David Rakowski composed over one hundred études between 1988 and 2010. In 2010, once he had finished his last étude, he began his next challenge of composing one hundred preludes for piano. With a dedication to études and preludes, two genres which often share commonalities, Rakowski explained how his interest in short piano pieces was a desire "to escape" larger compositions. Yoonsook Song, 'Analytical observations and performance suggestions for selected preludes from David Rakowski's Préludes Book I' (DMA dissertation, University of Georgia, 2019). Japanese composer, Daisuke Asakura's seven études were composed for each disc of his Quantum Mechanics Rainbow series; 'List of Étude composers', <<https://en-academic.com/dic.nsf/enwiki/7444346>> [accessed 2 February 2023]. Maurice Ohana's Études d'interprétation were completed in 1985 and released posthumously; Peter Grahame Woolf, 'Maurice Ohana', <<http://www.musicweb-international.com/classrev/2000/july00/ohana.htm>> [accessed 2 February 2023].

<sup>56</sup> Woo, "'The Practicality of the impossible": Studies in 20th and 21st Century Piano Études', 4-5.

It is notable that the works explored in this thesis rarely deploy extended techniques. The focus of the étude, including the contemporary works considered, appears to be solely centered on the possibilities at the keyboard, despite differing compositional approaches throughout the étude genre and an expansion of technical demands. Provided both performer and audience remain interested in the spectacle, études will serve a higher purpose than purely technique training alone. The most work-focused études often manage to maintain a relationship to performance. The dominating virtuosic features that enthrall and attract have been born from obsessive musical ideas.

## Chapter II Obsessions

More genuine piano music than the Étude there cannot be. The essence of the piano has in it become music.<sup>1</sup>

Études offer an intimate insight into the mind and heart of the composer. Étude material is often filled with repetitive, recurring patterns, either harmonic or technical or both. Such material has been obsessively created by the composer and nurtured over time through constant repetition on behalf of the performer to gain total dominance of the score. The characteristic features of the development of the étude genre, particularly in the piano music of the twentieth and twenty-first centuries, can be distinguished by a flexible balance of tradition, innovation and ambition. With the concert étude becoming a virtuosic performative sensation in the late nineteenth century, coupled with changing cultural tides and connectivity, a wider range of possibilities became available to a composer. Experimentation is at the core of the modern piano étude.

This chapter highlights the trajectory of the traditional étude, delving into the genre in 1816, with Hélène de Montgeroult in Paris and the publication of her monumental work *Cours Complet* and concludes with Terry Riley's recording *Keyboard Studies* released in 2022. Intervallic and rhythmic obsessions often command the spirit of a study, and these patterns are explored with reference to twentieth- and twenty-first-century composers who found novel approaches to previous traditional methods. By the beginning of the twenty-first century, the modern piano étude has come full circle. It looks to the past and yet it offers a mode of amalgamating and regenerating material in an authentic, original manner with the pianist (and

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<sup>1</sup> Oscar Bie, *A History of the Pianoforte and Pianoforte Players*, trans. E. E. Kellett and E. W. Naylor (London: J. A. Dent & Sons, 1899), 207; quoted in Simon Finlow, 'The twenty-seven études and their antecedents' in Jim Samson (ed.), *The Cambridge Companion to Chopin* (Cambridge: Cambridge University Press, 1992), 59.

occasionally the composer-pianist) at the helm of its success. While the *étude* does not necessarily control the performer, the performer must always learn how to control the *étude*.

### **i. Trajectory of the traditional *étude***

Prior to Chopin's three sets of piano *études* that were composed in the 1830s (Op.10, Op.25 and a set of three *études* without opus number), French pianist and composer Hélène de Montgeroult (1764-1836) had contributed to the genre with her three-part teaching method *Cours complet pour l'enseignement du Forté Piano: conduisant progressivement des premiere éléments aux plus grandes difficultés*.<sup>2</sup> This monumental cycle began in 1788 for her student Johann Baptist Cramer, with the entire set completed in 1812. This is one of the first examples of a collection of methods for piano such as *études* and exercises completed across several decades.

A student of Clementi and Dussek, Montgeroult's life spanned the French Revolution, and she was witness to a significant period of musical transformation, including the development of the fortepiano, during her lifetime.<sup>3</sup> Alongside French composer Louis Adam, Montgeroult is credited with the development of French piano technique particularly from harpsichord playing to fortepiano in the late eighteenth century.<sup>4</sup> Montgeroult bought an Érard fortepiano in 1802 and with its use of multiple pedals she was able to explore a range of timbres through

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<sup>2</sup> Montgeroult's *Cours complet* remains her most monumental work. Volume I includes 972 exercises and Volume II includes 114 progressive studies and several other pieces to illustrate piano technique and musical style. (Paris: Pelicieu, 1816).

<sup>3</sup> Helen Thomas, 'Hélène de Montgeroult written by Dr Helen Thomas', <<https://www.illuminatewomensmusic.co.uk/illuminate-blog/helene-de-montgeroult-written-by-dr-helen-thomas>> [accessed 20 January 2023].

<sup>4</sup> Tristram Pugin, 'Through the Spectrum: The New Intimacy in French Music (I)', *Tempo*, 212 (2000), 12.

her playing and composition.<sup>5</sup> She has been described by her biographer Jérôme Dorival as ‘the missing link between Mozart and Chopin’.<sup>6</sup>

Many of the études in *Cours complet* hark to the romantic pianistic era with expressive legato lines and sweeping melodies. These études are an ode to both Classical and Romantic aesthetics. Throughout the oeuvre, Montgeroult focuses on technical fingerings and hand positions with clear instructions for the performer above each étude. The phrase ‘l’art de bien chanter’ meaning ‘the art of singing well’ appears throughout her score. In volumes two and three, Montgeroult’s pieces are not simply pedagogical exercises; they have entered the concert repertoire and have been recorded by several pianists in recent years.<sup>7</sup>

From the opening bars of Montgeroult’s Étude No.107 in D minor (Example 2.1) and Chopin’s Revolutionary Étude in C minor (Example 2.2), there is an immediate audible resemblance throughout the études in both character and rhythm. The studies are in different keys, yet they have a similar ternary structure. They present challenging left-hand semiquaver motifs throughout and use dotted rhythms in the right hand to dramatic effect.

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<sup>5</sup> Deborah Hayes and Nicolas Horvath, liner notes to Hélène de Montgeroult, *Montgeroult Complete Piano Sonatas*, Nicolas Horvath, CD, Grand Piano, GP885-86, 2021.

Beethoven had received an Érard Fortepiano in Vienna in 1803. Tilman Skowronek ‘Beethoven’s Erard Piano: Its Influence on His Compositions and on Viennese Fortepiano Building’, *Early Music*, 30 (2002), 523.

<sup>6</sup> Jérôme Dorival, *Hélène de Montgeroult – La Marquise et la Marseillaise* (Lyon, Éditions Symétrie, 2006); quoted in Rebecca Franks, ‘Who was Hélène de Montgeroult? How the piano saved the French composer’s life in revolutionary France’,

<<https://www.classical-music.com/features/artists/helene-de-montgeroult/>> [accessed 23 May 2023].

<sup>7</sup> British pianist Clare Hammond released *Hélène de Montgeroult Études* on BIS records in 2022. Hélène de Montgeroult, *Hélène de Montgeroult Études*, Clare Hammond, CD, BIS records, BIS-2603 SACD, 2022. Edna Stern released *Hélène de Montgeroult* on Orchid Classics in 2017. Hélène de Montgeroult, *Hélène de Montgeroult*, Edna Stern, CD, Orchid Classics, ORC100063, 2017.

Example 2.1 H el ene de Montgeroult,  tude No. 107 in D minor,  tude de main gauche (Study of the left hand), bars 1-5



Example 2.2 Fryderyk Chopin,  tude Op.10, No.12 in C minor, bars 1-6



Chopin allegedly composed his famous Revolutionary  tude in September 1831, when news of the capture of Warsaw by the Russian army had spread. It was late September 1831, the

same month as the capture of Warsaw, when Chopin arrived in Paris.<sup>8</sup> Meanwhile Montgeroult's *Cours complet*, including her Étude No.107, had already been in publication in France for more than twenty years.

There are strong resemblances to other études between Montgeroult and Chopin's collections including Montgeroult's Étude No.41 in E Flat Major and Chopin's Op.25 No.1 in A Flat Major. On examination of the scores, the études require a legato, cantabile right-hand line with long repeated notes amidst a flourishing sweep of semiquavers. While Montgeroult's étude requires the right hand to maintain the smooth semiquaver rippling texture throughout the étude (Example 2.3), Chopin uses both hands to create a fuller sound amongst the legato repeated notes (Example 2.4).

From a performance perspective, while playing the études, the musical direction feels similar in both, with the higher notes of the melody being similarly drawn out through the deliberately marked phrasing. Both pieces have an upbeat to the melodic line. While Montgeroult's Étude No.41 is phrased in one bar and Chopin's Op.25 No.1 is phrased in two bars, the bass notes in étude No.41 (Example 2.3) held across the bar create a build-up of tension, giving her étude a two-bar-phrase feel throughout.

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<sup>8</sup> Jolanta T. Pekacz, 'Deconstructing a "National Composer": Chopin and Polish Exiles in Paris, 1831-49', *19th-Century Music*, 24 (2000), 167.



Example 2.3 Hélène de Montgeroult, Étude No.41, in E Flat Major, bars 1-6

N° 76 : p  
MODERATO  
Con espressione.  
p  
Mez F  
sf.  
Cres.  
p

Example 2.4 Fryderyk Chopin, Étude Op.25, No.1 in A Flat Major, bars 1-6

Allegro sostenuto (♩ = 104)  
Op. 25 - Nr 1  
13  
p  
f  
f.  
\* f.  
\*  
2  
f.  
\* f.  
\* f.  
\*  
5  
f.  
\* f.  
\* f.  
\* f.  
\* f.  
\* f.  
\*



Montgeroult's piano études are testament to her contribution to the stylistic advances of Chopin. Significantly, her études are evidence that a romantic style of pianism was being cultivated in Paris during the French Revolution, long before the popularity of Schumann and Mendelssohn. While her biographer Jérôme Dorival has contributed to awareness of her work and life, little exists by way of scholarly work on these études and her studies are yet to be extensively researched and examined.<sup>9</sup> A full comparative investigation between the études of Hélène de Montgeroult with Chopin and Schumann would be of huge value to performers and scholars alike.

## ii. Intervallic obsessions

Alexander Scriabin established himself as a composer with a desire to seek harmonic meaning between ethereal worlds. Scriabin composed *Three Études*, Op. 65 in 1912 during an extensive period of creation in which he was attempting to complete his unfinished project *Mysterium*.<sup>10</sup> Inspired by Symbolism and his fascination with the ongoing creative movement in Russia to express mystic ideas through music, Scriabin's late period compositions (beginning in 1910) including his Op.65, were based on his new system of harmony.<sup>11</sup>

In a letter from Scriabin to a friend, he wrote:

The *Mysterium* will have enormous simplification. Everybody thinks that I make everything more and more complex. I do, but in order to surmount complexity, to move away from it. I must attain the summit of complexity in order to become simple. In the *Preparatory Act* [of the *Mysterium*] I will have two-note harmonies and unisons.<sup>12</sup>

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<sup>9</sup> At the Conservatoire National Supérieur de Musique et de Danse de Paris, Florence Badol-Bertrand and Jérôme Dorival organised a two-day symposium on Hélène de Montgeroult in 2014. Florence Badol-Bertrand, 'Hélène de Montgeroult, pianiste, compositrice et pédagogue', <[https://www.youtube.com/watch?v=Z\\_vCr6Totw0&t=156s](https://www.youtube.com/watch?v=Z_vCr6Totw0&t=156s)> [accessed 23 May 2023].

<sup>10</sup> Lana Forman, 'The positivistic mysticism of Alexander Scriabin: an analysis of the three études, Op.65' (MA dissertation, York University, Toronto, 2017), 1.

<sup>11</sup> Michael Kaykov, 'Three Etudes Op. 65: Alexander Scriabin's Late Period Harmonic Innovations', *International Review of the Aesthetics and Sociology of Music*, 51 (2020), 224.

<sup>12</sup> Alexander Scriabin, Letters of 20 March and 21 October 1908, S. S. Grechishkin and A. V. Lavrov, 'Biograficheskiye istochniki romana Bryusova "Ognenniy angel"', *Wiener Slawistischer Almanach* 1 (1978),

During this period, Scriabin became close friends with poets, painters and philosophers. One of Scriabin's contemporaries who greatly inspired him was Wassily Kandinsky, who encouraged Scriabin in his theories on music and colour. Scriabin, along with Schoenberg, was one of several musical contributors to *The Blue Rider*, the pioneering magazine that Kandinsky and Franz Marc edited and published in Munich in 1912.<sup>13</sup>

Scriabin had hoped to present *Mysterium*, his extravagant new performance experience, across seven days and nights in India, in which he planned to create a futuristic and inclusive space for the audience and performer.<sup>14</sup> 'There will not be a single spectator. All will be participants. The work requires special people, special artists and a completely new culture.'<sup>15</sup> However, his plan never materialised and Scriabin died tragically in January 1915 with the work remaining uncompleted.

In *Three Études*, Op.65, using a new non-diatonic harmonic system similar to his other late works, Scriabin developed a technique throughout all three pieces, focusing on one intervallic technique per étude.<sup>16</sup> The restrictions on interval use in each of these three piano pieces is not found elsewhere in Scriabin's piano music. These included major ninths in No.1 (Example 2.5), major sevenths in No.2 (Example 2.6) and perfect fifths in No.3 (Example 2.7). Limiting the right-hand intervals to ninths, sevenths and fifths created the need to make the top two voices the primary sonority. This new direction of harmonic thought resulted in Scriabin creating a clear texture and often minimalistic effect throughout the pieces.<sup>17</sup> This led to a

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part 2, 83-84; quoted in Simon Morrison, *Russian Opera and the Symbolist Movement* (Berkeley: University of California Press, 2002), 229.

<sup>13</sup> Franz Marc and Wassily Kandinsky, *Der Blaue Reiter Almanac* (Munich: Reinhard Piper & Co. Verlag, 1912).

<sup>14</sup> Simon Morrison, 'Skryabin and the Impossible', *Journal of the American Musicological Society*, 51 (1998), 284.

<sup>15</sup> *Ibid.*, 292.

<sup>16</sup> Other late piano works by Scriabin include his Piano Sonata Op.70, No.10 (1913), *Vers la flame*, Op.72 (1914) and *Five Preludes*, Op.74 (1914).

<sup>17</sup> Kaykov, 'Three Etudes Op. 65: Alexander Scriabin's Late Period Harmonic Innovations', 230.

soundworld throughout the études which is more dissonant and harmonically progressive than his other late period works.

Example 2.5. Harmonic major ninths. Alexander Scriabin, Étude Op.65, No.1, bars 3-6

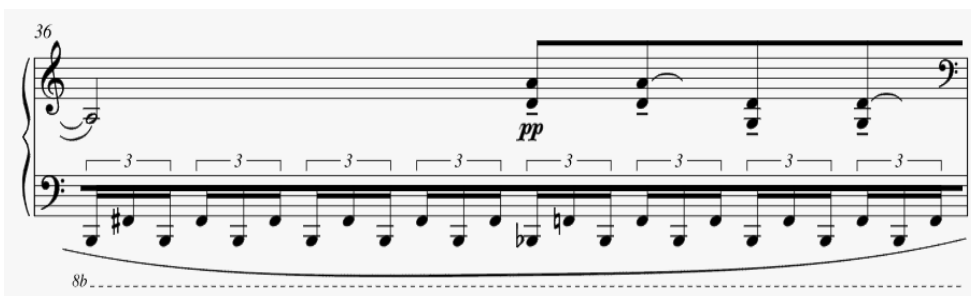
Example 2.6 Major sevenths. Alexander Scriabin, Étude Op.65, No.2, bars 33-35

Example 2.7 Perfect fifths. Alexander Scriabin, Étude Op.65, No.3, bars 1-6

The *Three Études*, Op.65 indicate a clear progression for Scriabin in clarity of musical texture and harmonic structures. The evolution of such structures rapidly accelerated during the last decade of his life, spurred by Scriabin's growing interest in symbolism and mysticism. Using recurring and obsessive intervallic practices within his Op.65, Scriabin experimented with new techniques, not least with the numerical meaning in his intervallic choices.<sup>18</sup>

Intervallic obsessions such as these feature prominently throughout the étude canon with composers such as Scriabin, Chopin, Liszt and Kapustin each concentrating on specific intervals including thirds, fifths, sixths, sevenths, octaves and ninths. Following Chopin's étude publications in the 1830s, György Ligeti continued this tradition more than one hundred and fifty years later with his *Piano Étude No.2* 'Cordes à vide'. The harmonic structure of the piece is based on superimposing fifths throughout the material. Using the interval of a fifth in *Étude No.2*, Ligeti created melodic lines by mimicking the open strings of a violin (Example 2.8).

Example 2.8 Open strings on a violin. György Ligeti, *Piano Étude No.2* 'Cordes à vide', bar 36

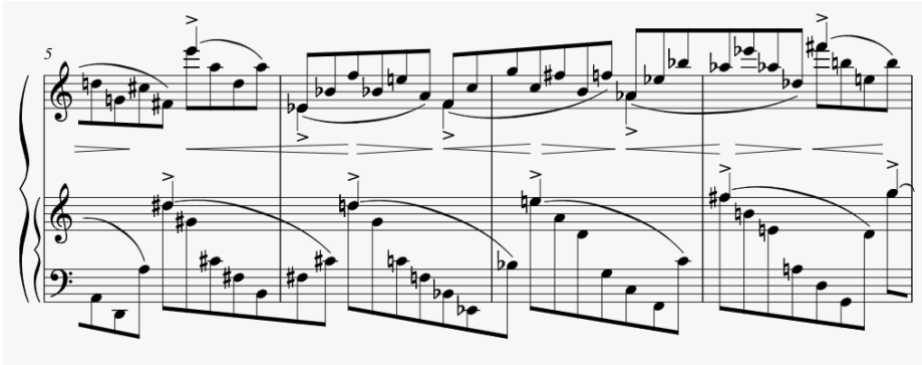


Ligeti often experiments with the possibility of creating transcendental melodic and rhythmic patterns using several voices. Combining groups of melodic fifths between the hands and

<sup>18</sup> Lana Forman suggests that Scriabin was inspired by Blavatsky's *The Secret Doctrine* (which Scriabin is rumoured to have kept on his bedside table for over ten years) and that the order of intervals is significant. In a letter to his friend Leonid Sabaneev, Scriabin discusses his études in fifths, ninths, and sevenths, however, he published the études in an order more akin to the cosmic ideas discussed in *The Secret Doctrine*. Forman, 'The positivistic mysticism of Alexander Scriabin: an analysis of the three études, Op.65', 67.

displacing the accents, Ligeti creates a slow polyrhythm throughout Étude No.2 (Example 2.9).

Example 2.9 Groups of melodic fifths. György Ligeti, Piano Étude No.2 ‘Cordes à vide’, bars 5-8



As the phrases in both hands are not similar in length, the undulating nature of the piece gains momentum and the groups become increasingly complex with Ligeti creating a multitude of textures and flourishing harp-like passages. With the two hands working in isolation to one another, the étude becomes increasingly virtuosic. A final horn call near the conclusion of the piece, *Cantabile, quasi un corno da lontano*, translates to ‘Singing, like a distant horn’ (Example 2.10).

Example 2.10 Musical direction for performer. György Ligeti, Piano Étude No.2 ‘Cordes à vide’, bar 32

Ligeti has explored an array of compositional techniques with odes to other instruments. Denys Bouliane and Anouk Lang consider Ligeti's *Étude No.11* to be akin to the romantic mood created in the opening of Debussy's *Douze Étude XI*, 'Pour les arpèges composés'.<sup>19</sup> Such variety contributes to an imaginative soundworld being created throughout his *étude*.

The *études* of Russian composer Nikolai Kapustin's (1937-2020) have proven to be a unique and innovative addition to the piano *étude* canon. *Five Études in Different Intervals*, Op.68 were composed in 1992 and follow a similar principal employed by Ligeti and Scriabin in using one specific interval per piece.<sup>20</sup> Kapustin has developed a unique soundworld by fusing classical and jazz elements throughout his music. A composer and skilled pianist, Kapustin recorded several solo albums and a series of recordings entitled 'Kapustin plays Kapustin' which were released between 1986 and 2009.<sup>21</sup> Devoted to composing piano *études* throughout his career, Kapustin wrote three sets of *études*: *Eight Concert Études*, Op.40 (1984), *Three Études*, Op.67 (1991), and *Five Études in Different Intervals*, Op.68 (1992). He added a standalone *étude* to his *étude* collection in 2013 entitled *Étude Courte mais Transcendante pour piano*, Op.149.

Kapustin's third set of *études*, *Five Etudes in Different Intervals*, Op.68, marries classical formal structures within the Russian pianistic tradition with jazz and blues inspired melodic and rhythmic idioms. Each *étude* is notably longer than those in his earlier set *Eight Concert Études*, Op.40 and they require even further technical demands on the performer than his previous compositions.

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<sup>19</sup> Denys Bouliane and Anouk Lang, 'Ligeti's Six "Etudes Pour Piano": The Fine Art of Composing Using Cultural Referents', *Theory and Practice*, 31 (2006), 172. Debussy's *Douze Étude XI*, 'Pour les arpèges composés' is also considered in relation to Glass's *Piano Étude*, No.20. See Chapter IV, 127.

<sup>20</sup> Ruby Wang, 'Fusion of Classical Virtuosity and Jazz Techniques in the Etudes of Nikolai Kapustin: Eight Concert Etudes, OP. 40, and Five Etudes in Different Intervals, OP. 68' (DMA dissertation, University of South Carolina, 2014), 79.

<sup>21</sup> Yanjing Gu, 'A Pedagogical Guide to Kapustin's Eight Concert Études, Op. 40' (DMA dissertation, West Virginia University, 2019), 18.

Étude No.1 'Allegro', focuses on the right hand playing almost exclusively in either minor seconds (Example 2.11) or, at a later stage in the piece, its inversion, the major seventh. The inversion often appears as syncopated major sevenths in the left hand (Example 2.12). The continuous chromatic line in the right hand is supported by wide broken chord leaps in the left hand.

Example 2.11 Minor seconds. Nikolai Kapustin, Five Études in Different Intervals Op 68, Étude No.1 'Allegro', bars 10-11

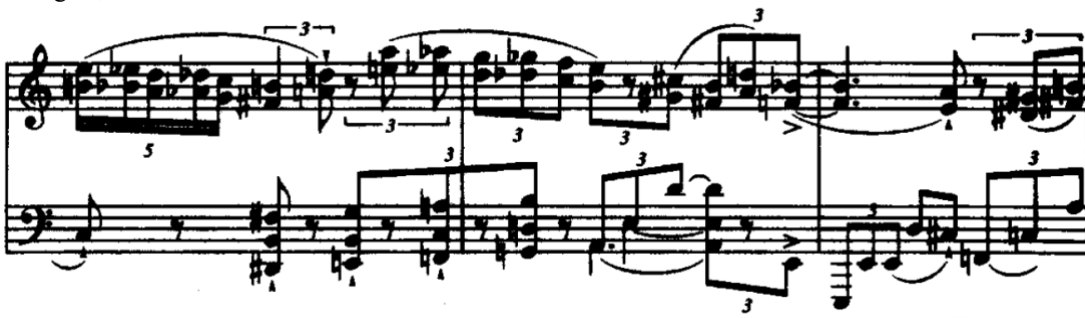


Example 2.12. Syncopated major sevenths in the left hand. Nikolai Kapustin, Five Études in Different Intervals Op 68, Étude No.1 'Allegro', bars 67-68



Étude No.2 'Allegro' concentrates on fourths and fifths. In this piece, Kapustin uses parallel fourths and fifths with displaced accents adding to the rhythmic complexity of the piece (Example 2.13).

Example 2.13. Fourths and Fifths. Nikolai Kapustin Five Études in Different Intervals Op 68, Étude No.2 'Allegro', bars 15-17



Étude No.3 'Animato' opens with an immediate punchy, jazz-like melody in sixths in the right hand. The left hand provides the rhythmic structure to the piece with repetitive broken octaves (Example 2.14).

Example 2.14 Sixths. Nikolai Kapustin Five Études in Different Intervals Op 68, Étude No.3 'Animato', bars 1-2

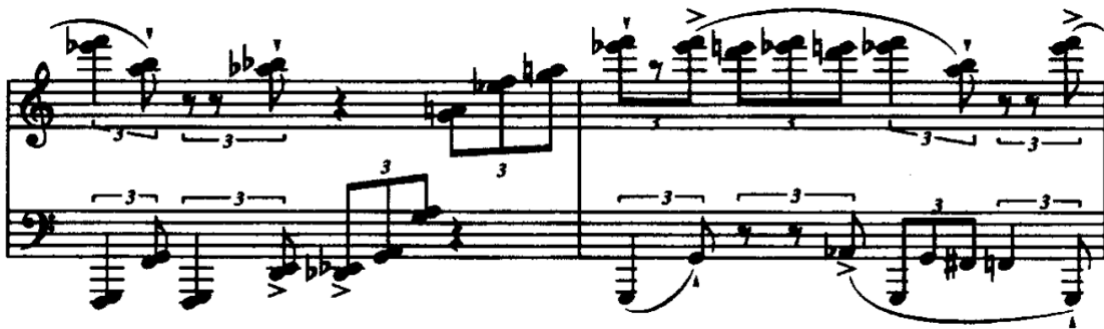


Returning to the interval of a second in Étude No.4 'Vivace', Kapustin creates layers of bubbling textures using major seconds instead of minor seconds (Example 2.15). Ruby Wang suggests that the syncopated elements of this étude are reminiscent of Leonard Bernstein's *West Side Story*.<sup>22</sup>

<sup>22</sup> Wang, 'Fusion of Classical Virtuosity and Jazz Techniques in the Etudes of Nikolai Kapustin', 86.



Example 2.15 Major seconds. Nikolai Kapustin Five Études in Different Intervals Op 68, Étude No.4 'Vivace', bars 106-107



The finale of the set, Étude No.5 'Animato' is a tour de force, full of cascading octaves. Once these strenuous octaves are underway, Kapustin sets up a new challenge for the performer with repeated left hand chord notes (Example 2.16).

Jed Distler describes the études:

Its main ingredients superficially resemble Gottschalk's paraphrases on national themes, the guileless melodic sweetness of Moszkowski's *La Jongleuse*, the celebrated repeated notes of Liszt's Sixth Hungarian Rhapsody, the finale of Prokofiev's Seventh Sonata, Miles Davis's *So What*, and just about any up-tempo Erroll Garner recording you can name.<sup>23</sup>

Example 2.16 Octaves. Nikolai Kapustin Five Études in Different Intervals Op 68, Étude No.5 'Animato', bars 39-40



<sup>23</sup> Jed Distler, liner notes to Nikolai Kapustin, *Nikolai Kapustin Piano Music*, Marc-André Hamelin, CD, Hyperion, CDA67433, 2004.

Kapustin's collection of études successfully combines fiendishly difficult technical problems with a playful and dazzling compositional spirit full of classical and jazz sounds. Recalling the intervallic obsessions of composers such as Debussy, Scriabin and Ligeti, Kapustin has contributed to the étude canon in a creative and modern fashion.

### **iii. Rhythmic obsessions**

Rhythmic obsessions primarily dominate an array of well-known modern piano études. Several of Glass's piano études including Étude No.6, No.10 and No.15 are stylistically typical endurance-testing études dominated by rhythmic intent.<sup>24</sup>

Igor Stravinsky, one of the most prolific twentieth-century composers, wrote his *Quatre études*, Op. 7 in 1908. Despite his shift from post-romanticism to neo-classicism (c1920-1954) which subsequently developed into serialism (c1954-1968),<sup>25</sup> Stravinsky's style throughout all three musical periods of his life includes Russian folk inflections, rhythmic drive and orchestral virtuosity. These four short étude fragments mirror Stravinsky's inspiration from nineteenth-century composers such as Scriabin and Rachmaninoff and represent his traditional nationalistic style. However, the fourth and final étude (*Vivo*) hints at the composer's later developed identity with the percussive nature of the piece and the merciless syncopated nature throughout (Example 2.17).

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<sup>24</sup> See Chapter IV, 85-128.

<sup>25</sup> Kyle Szabo explores the middle 'Neoclassical' period of Stravinsky's compositional style beginning with an understanding of the composer's 'Russian' period. He argues that Stravinsky's compositional transition was also inspired by changing interests in literature and culture. Kyle Szabo, 'The evolution of style in the neoclassical works of Stravinsky' (DMA dissertation, James Madison University, 2011), 1-10.

Example 2.17 Igor Stravinsky, *Quatre études*, Op.7, IV, *Vivo*, bars 1-4

IV.

**Vivo. M.M.  $\sigma = 76$**

Piano. *mp*

*stacc. sempre*

Perhaps Stravinsky's greatest experimentation with the *étude* genre is seen in his *Étude pour pianola* composed in 1917 almost a decade after his *Quatre études*.<sup>26</sup> During the same period, Stravinsky was also working on *Les Noces* and initially experimented with including four pianolas in this work.<sup>27</sup> However, due to emerging impracticalities, Stravinsky opted for four pianos and percussion in the final score in 1923.<sup>28</sup> Mark McFarland offers an insight into this otherwise unresearched piece, including Stravinsky's history with the instrument and its significance for Stravinsky's later works. McFarland states that 'Stravinsky was attracted to the pianola because of the instrument's ability to eliminate performers' "arbitrary interpretations".<sup>29</sup>

<sup>26</sup> Stravinsky's *Étude pour pianola*, was first published on music roll in 1921 and premiered the same year by Reginald Reynolds at Aeolian Hall in London. Recording available on Youtube: Juergen Hocker, 'Igor Stravinsky', <<https://www.youtube.com/watch?v=7hum6PgRk6k>> [accessed 7 February 2023].

<sup>27</sup> Mark McFarland, 'Stravinsky and the Pianola: A Relationship Reconsidered', *La Revue de Musicologie*, 97 (2011), 93.

<sup>28</sup> Margarita Mazo, 'Stravinsky's *Les Noces* and Russian Village Wedding Ritual', *Journal of the American Musicological Society*, 43 (1990), 120.

<sup>29</sup> McFarland, 'Stravinsky and the Pianola: A Relationship Reconsidered', 87.

The original score consists of six staves, therefore requiring three pianists to perform the étude, an impossible task for one pianist alone and an ambitious project for any composer (Example 2.18).

Example 2.18 Igor Stravinsky, *Étude for Pianola*, bars 65-67

*Étude pour pianola* experienced several transformations during and after Stravinsky's lifetime. The piece gained popularity in 1928 when Stravinsky reorchestrated the piece together with his *Three Pieces for String Quartet*. The étude was renamed 'Madrid', and the orchestration of all four pieces, titled *Quatre études pour orchestre*, was premiered in 1930.

Stravinsky's son, Soulima Stravinsky, later rearranged the orchestral score into a version for two pianos which included the original work's material.<sup>30</sup>

*Étude pour pianola* was one of the first compositions for pianola to include dynamic gradings.<sup>31</sup> In 1916, the year prior to the étude's composition, Stravinsky travelled to Spain with Sergei Diaghilev and the Ballets Russes.<sup>32</sup> During his travels with the company, he was inspired to compose a work in a Spanish idiom. Discussing his *Quatre études pour orchestra*, he explained: 'This piece was inspired by the surprising results of the mixture of strains from the mechanical pianos and orchestrinas in the streets and little night taverns of Madrid.'<sup>33</sup> Through multiple experimentations, the étude for pianola helped pave the way to Stravinsky's developed soundworld.

Ligeti's set of études is built around polyrhythms.<sup>34</sup> With a wide range of inspirations at play throughout Ligeti's later career including jazz influences and Conlon Nancarrow's *Studies for Player Piano*, Ligeti was committed to developing complex melodic and polyrhythmic structures throughout his piano pieces. Such influences shaped his piano études and permeate through all of his later work, particularly after decisively changing musical direction in the early 1980s. The Études also reflect Ligeti's interest in 'puzzles, paradoxes and illusion'.<sup>35</sup> Many of the études feature the aksak juxtaposition of two plus three or three plus two and their extensions.<sup>36</sup> His Étude No.4, 'Fanfares', offers the most prominent aksak reference than

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<sup>30</sup> Paul Jacobs, liner notes to *Stravinsky Music for Four Hands*, Paul Jacobs and Ursula Oppens, CD, Arbiter records, 155, 2008.

<sup>31</sup> The Aeolian Company of London, makers of player pianos, demonstrated a new patent for a mechanical piano that could create dynamics. Stravinsky was introduced to the instrument when he visited Aeolian Hall in 1914. Ibid.

<sup>32</sup> Ibid.

<sup>33</sup> Igor Stravinsky; quoted in Jacobs, *Stravinsky Music for Four Hands*.

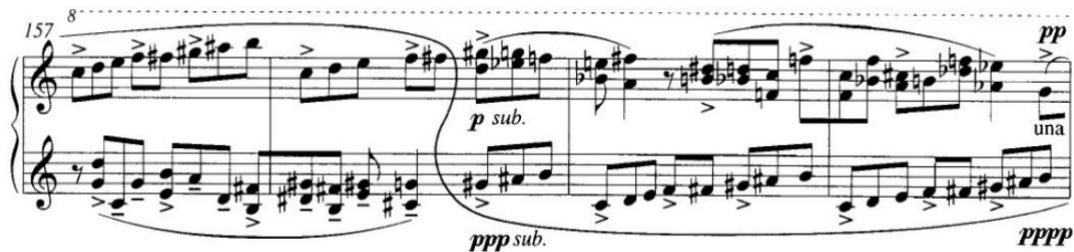
<sup>34</sup> See page Chapter I, 19 for information on Ligeti's étude collection and Chapter II, 34-35, for details on Ligeti's *Piano Étude No.2*, 'Cordes à vide'.

<sup>35</sup> Richard Steinitz, *György Ligeti: Music of the Imagination* (London: Faber and Faber, 2003), 278.

<sup>36</sup> Aksak is a pattern in the rhythmic structure of folk and vernacular traditional music of the Middle East, particularly Turkey, Iran, Afghanistan and of the Balkans. It primarily focuses on the 2+3, 2+2+3 etc. rhythm combinations with 3+3+2 or 2+3+3 producing 8/8 units.

any others in the set, with a strong Bartók resemblance (Example 2.19). Shifting accentuation throughout the study drives the rhythmic force.

Example 2.19 György Ligeti, *Étude No.4 'Fanfares'*, bars 157-160



Ligeti's *Étude No. 11 'En Suspens'*, from Book 2, effectively demonstrates the interweaving of conflicting rhythms. In *Étude No.11*, Ligeti places the 6/4 time signature in the right hand and the 12/8 time signature in the left hand (Example 2.20). From this, it can be deduced that there are six beats per bar in the right hand and four in the left.

Example 2.20 György Ligeti, *Étude No.11 'En Suspens'*, bars 1-2



Rhythmically, the piece consists of two to three aksak patterns grouped in three phrases totalling twenty-five beats. The repetition of this pattern results in each new phrase beginning one beat later in the bar (Example 2.21). These irregular phrase-lengths and accents create an ethereal and, on occasion, jazz-like harmony.

Example 2.21 New phrase begins one beat later in the bar. György Ligeti, Étude No.11 'En Suspens', bars 1, 5, 9, 13

Andante con moto, ♩ = 98,

6/4 (12/8) | *p* *grazioso*  
*pp* *sempre*  
*pochiss. ped.*

Bar 1

5  
*mp*

Bar 5

9  
1 2 3

Bar 9

13  
1 2 3 4 8  
*pp*

Bar 13

Unsuik Chin's *Étude No.5 'Toccata'* encompasses both harmonic and rhythmic obsessive tendencies offering a powerful display of her soundworld. This distinct soundworld is characterised by its imaginative harmony associated with the overtone series and whole-tone scales as well as its use of complex rhythmic patterns derived from the European classical tradition and inspired by Balinese gamelan music. Mathematical puzzles and rhythmic intricacies are littered throughout her piano études, with each study being characterised by a 'Ligeti-like interplay of order and chaos'.<sup>37</sup>

John Caldwell describes a toccata as 'A piece intended primarily as a display of manual dexterity, often free in form and almost always for a solo keyboard instrument.'<sup>38</sup>

Interestingly, a toccata requires a similar hand action to the techniques used by Balinese gamelan players. While a gamelan player will use a 'gamel', a hammer, to hit the instrument, for a 'Toccata' style of performance, a pianist will use his or her hands as hammers to hit the piano keys.<sup>39</sup> Chin uses the piano as a percussive instrument in *Étude No.5*, mirroring the Balinese gamelan style. From a performer's perspective, the hand positioning at the piano, rhythmic intricacies including multiple accented syncopated notes and precise finger action between the hands are reminiscent of the gamelan action (Example 2.22). While this suggestion has not been previously considered from a scholarly perspective, envisaging the Balinese soundscape could prove helpful for the pianist before beginning the étude.

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<sup>37</sup> Gavin Dixon, 'Contemporary Composer: Unsuik Chin', <<https://www.gramophone.co.uk/features/article/contemporary-composer-unsuk-chin>> [accessed 22 May 2023].

<sup>38</sup> John Caldwell, 'Toccata', in *Grove Music Online. Oxford Music Online*, <<https://doi.org/10.1093/gmo/9781561592630.article.28035>> [accessed 28 May 2023].

<sup>39</sup> The word Gamelan derives from gamel, a Javanese word for a type of hammer and refers to striking. Sarah Weiss, 'A Brief Introduction to Gamelan Music', <<https://yalegamelan.yale.edu/brief-introduction-gamelan-music>> [accessed 16 May 2023].



Example 2.22 Unsuk Chin, Étude No.5 'Toccata', bars 1-9

**5. Toccata**

$\text{♩} = c 104-116$

The musical score for '5. Toccata' by Unsuk Chin, bars 1-9, is presented in three systems. The first system contains bars 1-4, the second system contains bars 5-8, and the third system contains bar 9. The music is written in treble clef with a common time signature. The first system begins with a piano (*p*) dynamic marking, which changes to mezzo-piano (*mp*) in the second system. The score features a single melodic line in the right hand, with a bass line in the left hand. The first eight bars establish a C dominant seventh chord (C, E, G, B Flat) as a motif. The ninth bar shows a modulation to a D dominant seventh chord (D, F Sharp, A, C).

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Étude No.5 is Chin's only piano étude whose form can primarily be explained through its use of harmony. Her interest in the overtone series is immediately presented with the Toccata centred around two pitch centres, a major second apart, C and B Flat. Chin uses the first eight bars of the étude to establish the C overtone series (Example 2.22). She treats the C dominant seventh chord (C, E, G, B Flat) as a motif throughout the étude.

Chin creates overlapping harmonies mirroring Balinese harmonic techniques, moving between the A section of the étude with a C dominant seventh chord (C, E, G, B Flat) to the B section with a D dominant seventh chord (D, F Sharp, A, C). She navigates this through use of a G common tone, as heard in the left hand (Example 2.23). The G is the fifth of the C, and the D is the fifth of the G, therefore modulating to the dominant of the dominant.

Example 2.23 Unsuk Chin, Étude No.5 ‘Tocatta’, bars 18-26

31

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The soundworld of the study is created by Chin’s elaborate use of two pitch centres. As well as a methodical harmonic compositional approach, Chin elevates the complexity of the étude using metric ambiguity and creating virtuosic pianism. Chin’s first edition of the full collection of six études was released in 2022.<sup>40</sup> Prior to this, her first six études, also published by Boosey & Hawkes, were released individually as handwritten scores proving particularly difficult on initial study. This complete edition highlights the demand for a printed score and the recognised importance of Chin’s work within the étude genre.

<sup>40</sup> The first edition of the complete set of six includes a composer, publisher and performance note. Unsuk Chin, *Chin Piano Etudes* (London, Boosey & Hawkes, 2022).

#### iv. Étude Evolution

With experimentation and creativity at the forefront of étude composition, it is apparent that there are innumerable ways to contribute to the étude genre through specific harmonic, intervallic and/or rhythmic stylistic compositional methods. However, as the étude has developed over time, composers have not necessarily remained strict to techniques such as one key per étude or one technique per étude. Stravinsky's *Étude pour Pianola*, published for music roll in 1921, and for three performers, is an excellent example of innovative étude development.<sup>41</sup> Composers have continued to experiment with the étude using previously-composed works through transcription and recreating material in the form of arrangements as well as working across other mediums.

In a truly unique offering, Marc-André Hamelin's virtuosic *12 Études in All the Minor Keys* is a ground-breaking addition to the modern piano étude catalogue. The Edition Peters score is presented in two halves and is a collection of twelve pieces composed between 1986 and 2009. However, it differs from other contemporary étude collections as Hamelin's set of studies is split between original compositions and arrangements.<sup>42</sup> He remains true to the original genre with one pianistic and/or technical challenge per piece and the influences and echoes of Debussy, Paganini, Tchaikovsky and Rossini are dominant throughout the work. Hamelin's own recording of the études is a mixture of musicality, technical prowess and humour as he presents his own material interwoven with other famous piano material.<sup>43</sup> This skilful contribution brings the étude genre to new heights.

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<sup>41</sup> See Chapter II, 42-43.

<sup>42</sup> Richard Van Dyke, 'Reviewed Work: 12 Etudes in all the Minor Keys by Marc-André Hamelin', *American Music Teacher*, 61 (2011), 63.

<sup>43</sup> Marc-André Hamelin's recording of *12 Études in All the Minor Keys*, was released on Hyperion records in 2000 [Hyperion CDA67411/2]. The recording was nominated for a Grammy® Award in 2001.

Hamelin's Étude No.1 'Triple Étude (After Chopin)' is a radical and creative amalgamation of three Chopin Études: Op.10, No.2, Op. 25, No.4 and Op.25, No. 11 (Examples 2.24-2.27). His idea for this dramatic fusion of pieces stemmed from Godowsky's publication of Chopin's Études between 1894 and 1914 which showed a sketch merging all three Chopin études.<sup>44</sup> Unfortunately Godowsky's manuscript remains undiscovered and is likely to have been destroyed during the First World War.

Example 2.24 Fryderyk Chopin, Étude Op.10, No.2, bars 1-2

Example 2.25 Fryderyk Chopin, Étude Op.25, No.4, bars 1-2

<sup>44</sup> Jory Debenham, 'Review: Piano Music by Marc-André Hamelin', *Notes*, 70 (2013), 187.

Example 2.26 Fryderyk Chopin, Étude Op. 25, No. 11, bars 1-6

Lento

Op. 25-Nr 11

*p*

*pp*

Allegro con brio ( $\text{♩} = 69$ )

*f* *risoluto*

*sf*

Example 2.27 Marc-André Hamelin, Étude No. 1: Triple Étude (after Chopin), bars 1-2

Allegretto scherzando  $\text{♩} = 108-112$

*sempre legato*

*p*

*legato possibile*

*quasi senza pedale e sempre con somma chiarezza*

In this étude, Hamelin describes his inspiration behind the étude and his requirements for pianists studying and/or performing his Triple Étude as follows:

The *Triple Étude (after Chopin)* was written at the suggestion of my friend Donald Manildi who, on the basis of my reworking of Op 10 No 5 (Étude No 10 in this collection) thought that I could perhaps come up with something approaching Godowsky's contrapuntal feat. I took great pleasure in writing this little piece, especially after realizing that the first eight bars fit so well together. It gets considerably more complicated afterwards, since all three studies have widely different structures and harmonic

rhythms; it therefore becomes necessary for one of them to dominate at any time, while the other two are made to conform to it. All three of them do precisely that here, in turn.<sup>45</sup>

While little academic research had been done on Hamelin's music prior to the publication of his études in 2010, Hamelin's *12 Études in All the Minor Keys* have begun to receive academic attention in the past decade.<sup>46</sup> As Marc-André Hamelin continues to compose and perform, further research on current and future compositions can be expected.<sup>47</sup>

In 2022 composer Kevin Volans released an album entitled *Études* which included a performance of six of his thirteen piano études.<sup>48</sup> This came as an addition to his album *violin: piano* which featured Volans's Étude No.9 in 2015.<sup>49</sup> Similarly, to Marc-André Hamelin, Volans reworked material for his piano études. However, unlike Hamelin reworking another composer's material, Volans sought to transcribe his own original compositions, dating back as far as the 1980s, and used parts of this material as inspiration for his études. His Fourth Étude mirrors the second movement of Volans's *String Quartet No. 9, Shiva Dances* (2004). While the String quartet's original thematic material is pared down almost to a single chord, the piano étude recording similarly presents a tranquil and solitary offering which, when surrounded by five of his other études, is hugely effective. Non-Western influences are present in Volans's *Shiva Dances* with the composer describing his work 'When Shiva is portrayed dancing (as Nataraj) He is depicted in a circle of flames crushing a small figure - the ego - underfoot. You get the impression he dances on the spot, not moving around at

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<sup>45</sup> Marc-André Hamelin, liner notes to *Marc-André Hamelin Études*, CD, Hyperion, CDA67789, 2010.

<sup>46</sup> See Chapter I, 5.

<sup>47</sup> Robert Rimm ponders whether Hamelin will occupy a lasting place compositionally alongside the nineteenth-century composer-pianist giants. Robert Rimm, *The Composer-Pianists: Hamelin and The Eight* (Portland: Amadeus Press, 2002), 189.

<sup>48</sup> Kevin Volans, *Études*, Jill Richards & Kevin Volans, CD, Diatribe Records, DIACD036, 2022.

<sup>49</sup> On both albums *Études* and *violin: piano*, South African pianist, Jill Richards, performs Volans's piano études. All six piano études on *Études* were composed in the 2000s. Mark Fitzgerald, 'Sometimes Startled', <<https://journalofmusic.com/reviews/sometimes-startled>> [accessed 8 February 2023].

all.<sup>50</sup> Meanwhile Volans's First Étude uses material from his 1993 opera *The Man with Footsoles of Wine* (this also appeared in Volans's Third Quartet, *The Songlines*).<sup>51</sup>

Offering a fascinating experience for the listener, Volans paired his piano études with recordings of himself performing four of Liszt's piano solo works: *Liebestod*, *Transcendental Étude No.11*, *Harmonies du Soir*, *Aux cyprès de la Villa d'Este: Threnody I* and *Les jeux d'eaux à la Villa d'Este*.<sup>52</sup> While this composer-pianist is not responsible for the étude performances on the album, he uses the last four tracks on the album to present his audience with a thoughtful insight into his musical direction over the past four decades merging two sides of the spectrum: composer and pianist.

Terry Riley, a founder of the American minimalist movement, released a recording entitled *Keyboard Studies* in 2022.<sup>53</sup> The recording includes three mid-1960s works interpreted by pianist John Tilbury.<sup>54</sup> The liner notes for the recording state that these are 'Archive recordings made in Hamburg in the late 1970s or early 80s – full details forgotten.'<sup>55</sup> The three pieces on the recording, all played on keyboards, date from the years 1964-1965 during the same period that Riley composed his seminal work *In C*, which premiered in November 1964 and is regarded as a landmark work of the minimalist aesthetic. While Riley notated *Keyboard Study No.1 & 2*, both studies do not have full scores and therefore their durations may vary (similar to *In C*); while *Keyboard Study No. 1*, is played on piano alone, *Keyboard*

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<sup>50</sup> Kevin Volans, 'String Quartet No 9 "Shiva Dances" (2004) (Shiva Dances)', <<https://www.wisemusicclassical.com/work/36438/String-Quartet-No-9-Shiva-Dances--Kevin-Volans/>> [accessed 11 February 2023].

<sup>51</sup> Fitzgerald, 'Sometimes Startled'.

<sup>52</sup> Liner notes on the album explain how the Liszt recordings were made over twenty years ago and taken from Volans's private recording collection. Ibid.

<sup>53</sup> See Chapter III, 55. Terry Riley, *Keyboard Studies*, John Tilbury, CD, Another Timbre, AT193, 2022.

<sup>54</sup> The studies have been a part of Tilbury's solo repertoire for a significant portion of the last quarter of the twentieth century. Bill Meyer, 'Essential New Music: Terry Riley/John Tilbury's "Keyboard Studies"' <<https://magnetmagazine.com/2022/06/24/essential-new-music-terry-riley-john-tilburys-keyboard-studies>> [accessed 3 March 2023].

<sup>55</sup> John Eyles, 'Terry Riley: Keyboard Studies', <<https://www.allaboutjazz.com/keyboard-studies-terry-riley-another-timbre>> [accessed 22 February 2023].

*Study No. 2* includes piano, electric organ, harpsichord, and celeste.<sup>56</sup> Both pieces were originally intended as piano exercises for ideas he had at the time and each piece requires a notable level of improvisation on behalf of the interpreter.<sup>57</sup>

In addition to his ground-breaking work *In C*, Riley's *Keyboard Study No.1 & 2* are among the most frequently performed pieces in Riley's catalogue of twentieth-century works.<sup>58</sup> This is possibly due to the fact that the studies give performers the opportunity to rearrange and interpretate their repetitive components therefore resulting in a large number of pianists playing and recording the works. *Keyboard Studies* offers a new dimension to Tilbury's musical world and this 2022 recording simultaneously presents a fresh and modern interpretation of some of Riley's most important work despite being recorded over forty or possibly fifty years previously.

Both Volans's and Riley's recordings in 2022 successfully demonstrate how the modern piano étude can adapt and exist alongside famous grandioso repertoire of the past. The evolution of the étude is perpetual.

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<sup>56</sup> Christian Carey, 'John Tilbury Plays Terry Riley', <<https://www.sequenza21.com/2022/07/john-tilbury-plays-terry-riley/>> [accessed 3 March 2023].

<sup>57</sup> Bradford Bailey, 'Terry Riley', <<https://www.soundohm.com/product/keyboard-studies-1>> [accessed 22 February 2023].

<sup>58</sup> 'Terry Riley "Keyboard Studies" played by John Tilbury', <<https://boomkat.com/products/keyboard-studies-played-by-john-tilbury>> [accessed 3 March 2023].



## Part II

### Chapter III: The Origins of a Soundworld

A sound is high or low, soft or loud, of a certain timbre, lasts a certain length of time, and has an envelope.<sup>1</sup>

Before investigating Philip Glass's *Twenty Piano Études*, it is necessary to understand the influence of minimalism as one of the most important facets of Glass's collective soundworld. Originating in the United States of America in the 1960s, a minimalistic compositional style emerged, veering away from the avant-garde atonal style that had become dominant up until this period.<sup>2</sup> The four vanguard composers of minimalist music were all born within two years of each other: La Monte Young (*b* 1935), Terry Riley (*b* 1935), Steve Reich (*b* 1936) and Philip Glass (*b* 1937). All four composers were brought up in the Western classical tradition and studied music at two of the most prestigious classical music schools in the United States.<sup>3</sup> However, while these four composers returned to an established method focused on rhythm and pitch, they succeeded in creating distinctive music that existed outside of their current establishment. Each of the composers was influenced by non-Western musical styles including Indian raga, African drumming and Balinese Gamelan.

#### i. Minimalist or Maximalist?

The term minimalism has been the subject of much academic conversation and debate. Scholars including Wim Mertens and Daniel Warburton have questioned the suitability of the term, suggesting other titles such as 'process music', 'repetitive music', 'acoustical art',

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<sup>1</sup> John Cage, *Silence: Lectures and Writings* (London: Marion Boyars, 2009), 49.

<sup>2</sup> Frances Wilson, 'Four American Minimalists', <<https://interlude.hk/four-american-minimalists/>> [accessed 22 February 2023].

<sup>3</sup> La Monte Young and Terry Riley studied at the University of California, Berkeley; Steve Reich and Philip Glass studied at the Juilliard School of Music, New York.

‘trance music’, ‘meditative music’ and ‘structuralist music.’<sup>4</sup> Ann Glazer Niren argues that ‘there are probably as many explanations of this term as there are scholars who have attempted to define it’.<sup>5</sup> Meanwhile, Elaine Broad considers minimalism as an aesthetic distinguished by ‘the conception of the *non-narrative work-in-progress*’.<sup>6</sup> According to this definition, minimalism represents a new way of listening to music, concentrating on the process of the music rather than the end result. The activity of listening to music is considered least important, with very minute changes in rhythm, texture, and/or harmony becoming the focus of the work.

Robert Fink regards the experimental music of the 1960s, including the music of Terry Riley, Steve Reich and Philip Glass as ‘pulse-pattern minimalism’.<sup>7</sup> Jonathan W. Bernard describes works from this period, such as Terry Riley’s *In C* (1964) and Steve Reich’s *It’s Gonna Rain* (1965), as marking a noticeable shift in the direction of art music.<sup>8</sup> He questions the suitability of labelling composers such as Glass, Reich, John Adams and Michael Torke as either minimalist or post minimalist.<sup>9</sup> Bernard attempts to categorise composers into two groupings: they either purposefully start out as minimalist composers and are composing music that can be traced back to the original movement or they arrive at minimalism after the movement has been developed, offering their response. However, it becomes apparent that this tactic is

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<sup>4</sup> Wim Mertens, *American Minimal Music: La Monte Young, Terry Riley, Steve Reich, Philip Glass* (London: Kahn & Averill, 1983; New York: Alexander Broude, 1983), 11-16; Daniel Warburton, ‘Aspects of Organization in the ‘Sextet’ of Steve Reich’ (PhD dissertation, University of Rochester, 1987), 1-4.

<sup>5</sup> Ann Glazer Niren, ‘An Examination of Minimalist Tendencies in Two Early Works by Terry Riley’, paper presented at First International Conference on Music and Minimalism, University of Wales, Bangor, 31 August 2007, 1.

<sup>6</sup> Elaine Broad, ‘A New X? An Examination of the Aesthetic Foundations of Early Minimalism’, *Music Research Forum*, 5 (1990), 51-52; quoted in Timothy A. Johnson, ‘Minimalism: Aesthetic, Style, or Technique?’, *The Musical Quarterly*, 78 (1994), 744.

<sup>7</sup> Robert Fink, *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley: University of California Press, 2005), 20.

<sup>8</sup> Jonathan W. Bernard, ‘Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music’, *American Music*, 21 (2003), 114.

<sup>9</sup> *Ibid.*, 127.

unsubstantial when considering a wider grouping, highlighting the complexity of the argument.

Kyle Gann attempts to pinpoint the defining features of early minimalist music and breaks these into twelve identifiable strands (Table 3.1) while also making clear that his list is not exhaustive.<sup>10</sup>

Table 3.1 Kyle Gann’s defining features of early minimalist music

Number	Technique	Explanation	Examples	Glass parallel
1.	Static Harmony	Idea of staying on one chord, or to move between one or two chords.	Steve Reich: <i>Piano Phrase</i>	Glass’s early works focused on one scale rather than a chord.
2.	Repetition	Most stereotypical aspect of the term.	Terry Riley’s Tape pieces: <i>Mescaline Mix &amp; The Gift</i>	Glass’s <i>Glassworks</i> (1982)
3.	Additive Process	Begin with basic repeated pattern. Add on to the phrase (1, 1+2, 1+2+3). Or begin with a silent recurring pattern and add notes with each recurrence.	Carl Stone: <i>Shing Kee</i>	Glass: <i>Music in Fifths</i> (1969)
4.	Phase-shifting	Two identical phrases beginning at the same speed but at slightly different tempos, and so the phrases go out of sync.	Steve Reich’s works of the 1960s & 1970s: <i>It’s Gonna Rain, Drumming, Piano Phase</i>	
5.	Permutational process	Idea of using less apparent melodic progressions, turning instead to different groupings of pitches.	Jon Gibson: <i>Melody</i>  Tom Johnson: <i>Nine Bells</i>	
6.	Steady beat	Most pieces relied on a rhythmic quaver pulse. ‘Near-universal’ trait to never use a variety of rhythms. <sup>11</sup>	Pulse-based: Glass: <i>Arabesque in Memoriam</i>  Drone-based: La Monte Young: <i>Trio for Strings</i>	Glass: <i>Glassworks, Mad Rush</i> (1979)

<sup>10</sup> A conclusive summary of Gann’s findings is presented in Table 3.1. It also includes my own added column on the right referencing Glass’s parallel techniques or examples where relevant. Kyle Gann, ‘Thankless Attempts at a Definition of Minimalism’, in Christoph Cox and Daniel Warner (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum International Publishing Group, 2004), 300-302.

<sup>11</sup> There are several composers who were interested in drones with no pulse. Therefore, Gann argues that ‘steady-beat-minimalism’ can be divided between pulse-based music and drone-based music. Gann, ‘Thankless Attempts at a Definition of Minimalism’, 301.

7.	Static instrumentation	Concept within early minimalist ensembles of all players playing at the same time. Based on the concept of music as a ritual in which all participants participate equally.	Theatre of Eternal Music  Steve Reich Ensemble	Philip Glass Ensemble
8.	Linear transformation	Connected with Number 3: Additive Process. Idea of going from one musical state to another: Maximum harmony to maximum dissonance etc.	James Tenney: <i>Chromatic Canon</i>  <i>Special Canon for Conlon Nancarrow</i>	
9.	Metamusic	Coined by Reich as soft melodies created by the overtones of played notes. This had become an unintended side-effect of the music in the 1970s.	Steve Reich: <i>Octet</i>	
10.	Pure tuning	Slowed-down exploration of pure frequency ratios and intervals outside the 12-pitch piano scale.	La Monte Young & Tony Conrad's music explored pure tuning while Steve Reich was more interested in the equal-tempered scale.	Glass is more interested in the equal-tempered scale
11.	Influence of non-Western cultures	No European influence for examples of repetition or harmonic stasis so American composers looked to the East for inspiration.	La Monte Young & Terry Riley were inspired by Indian classical music.  Steve Reich studied African drumming.	Glass was inspired by Indian classical music
12.	Audible structure	Gann's final consideration is that the structure within some of the early classic minimalist pieces is easily identifiable.	Terry Riley: <i>In C</i>  Harold Budd: <i>The Pavilion of Dreams</i>	Glass: <i>Einstein on the Beach</i> (Premiered in 1976)

By the 1980s Glass and Reich made their stance on minimalism clear with Glass adamant that 'the word minimal should be stamped out'.<sup>12</sup> Many of the composers most associated indelibly by minimalism, such as Glass and Reich, 'deplore the label', while some younger composers, such as John Adams, have accepted it.<sup>13</sup> In more recent times, Glass

<sup>12</sup> Tim Page, 'Dialogue with Philip Glass and Steve Reich (1980)', in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 50. Meanwhile, in an interview with Reich, when asked how he would define the term, he stated, 'I don't. I steer away from that whole thing. Minimalism is not a word that I made up ...'. William Duckworth, *Talking Music: Conversations with John Cage, Philip Glass, Laurie Anderson, and Five Generations of American Experimental Composers* (New York: Da Capo Press, 1999), 293.

<sup>13</sup> Timothy A. Johnson, 'Minimalism: Aesthetic, Style, or Technique?', *The Musical Quarterly*, 78 (1994), 742.

acknowledges the term with the distinction that it only applies to his earliest pieces, those up to and including his opera *Einstein on the Beach*:

I've always thought of *Einstein* as the end of a cycle of work that had begun with the highly reductive, repetitive music which characterized the early days of the compositions for my ensemble ... The pieces that came afterward would represent a new chapter.<sup>14</sup>

Perhaps one of the reasons Glass is reluctant to be tied to the title is because, by definition, minimalism is much broader than the ideas suggested above. The possibilities within the landscape of minimalism are endless and cannot be reduced to one term. While Glass does not use all of the techniques of minimalism, he uses some of them.<sup>15</sup> The wide-ranging terminology exists while carrying unique connotations for each composer, one does not negate the other. Richard Guérin makes clear Glass's indifference with this controversial title:

The new musical style that Glass was evolving was eventually dubbed "minimalism." Glass himself never liked the term and preferred to speak of himself as a composer of "music with repetitive structures." Much of his early work was based on the extended reiteration of brief, elegant melodic fragments that wove in and out of an aural tapestry. Or, to put it another way, it immersed a listener in a sort of sonic weather that twists, turns, surrounds, develops.<sup>16</sup>

In order to investigate Glass's *Twenty Piano Études* and the soundworld in which these studies exist, it is not possible to avoid Glass's relationship to the minimalistic movement, despite his negative feelings on the use of the label minimalism with reference to his own work.

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<sup>14</sup> Philip Glass, *Words Without Music* (London: Faber & Faber, 2015), 302.

<sup>15</sup> See Table 3.1, 57-58.

<sup>16</sup> Richard Guérin, 'Philip Glass Biography', <<https://philipglass.com/biography/>> [accessed 22 February 2023].

Both Glass and Reich studied at the Juilliard School of Music in New York in 1958 and they initially began working in a similar compositional manner with works such as Glass's *Music in Five Parts* and Reich's *Four Organs*. Glass and Reich have written books exploring minimalist practices in the past, contributing a vital perspective on their own music up to this point.<sup>17</sup> The comparisons continued as both composers formed their own ensembles with the primary goal of performing their own music. In 1966, Steve Reich founded his own ensemble of four musicians while, in 1968, Glass founded the Philip Glass Ensemble in New York City as a laboratory for his music. However, while Reich was influenced by the Second World War and wrote music that reflected society at the time, Glass had a different goal. Glass was involved in a variety of different musical spheres, working in the field of film and theatre. His early introduction to various art forms enabled him to reach a wider audience.<sup>18</sup>

In March 1976, Steve Reich finished his most extended concert piece, *Music for Eighteen Musicians*, and he premiered it to high acclaim at New York's Town Hall on 24 April. In the same week, Philip Glass and Robert Wilson released *Einstein on the Beach* to a fascinated preview audience in Greenwich Village.<sup>19</sup> In April 1979, three years after both premieres, John Rockwell presented his opinion on the current state of musical trends in an animated review of Reich's *Music for Eighteen Musicians* and Glass's *Einstein on the Beach*:

But, in fact, these works by Steve Reich and Philip Glass are the newest and best representatives of what has been called "trance music," and trance music is nothing less than the adaptation of non-Western notions of musical stasis to a highly organized, rhythmic, structured Western sensibility.<sup>20</sup>

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<sup>17</sup> Glass's book focuses on his trilogy of operas and provides an autobiographical account of his development as a composer through these works. Philip Glass, *Opera on the Beach* (London: Faber and Faber, 1988). Reich's book offers an analytical guide to many of his works, including a detailed explanation of his compositional technique. Steve Reich, *Writings About Music* (New York: New York University Press, 1974).

<sup>18</sup> Kristin Alicia Force, 'La Monte Young, Terry Riley, Steve Reich, Philip Glass: The Evolution of Minimalism and audience response' (MA dissertation, University of Ottawa, 2004), 47.

<sup>19</sup> Fink, *Repeating Ourselves*, 26.

<sup>20</sup> John Rockwell, 'Steve Reich and Philip Glass Find a New Way', *Rolling Stone*, 289 (1979), 95; quoted in Fink, *Repeating Ourselves*, 34.

During the 1960s and 1970s, minimalist music became an avant-garde sensation and the music of the era filtered into the world of film as minimalist soundtracks became increasingly popular. Genres that utilised minimalist scores included short and experimental films, documentaries and foreign films.<sup>21</sup>

Many composers have experimented with minimalist elements to generate a motor-like quality in their compositions. Works by American composer, John Adams, including *Short Ride in a Fast Machine* (1986) and *Road Movies* (1995) are evidence of this. Adams describes the first movement of *Road Movies* in his programme notes as ‘a relaxed drive down a not unfamiliar road. Material is recirculated in a sequence of recalls that suggest a rondo form.’<sup>22</sup> The third and final movement also has a motor purpose with Adams considering the movement ‘for four wheel drives only, a big perpetual motion machine called “40% Swing”.’<sup>23</sup> Glass himself enjoys speaking of his music as being like ‘the motor on a space machine.’<sup>24</sup> He considers rhythmic cycles as being a repetition of two or more different rhythmic patterns, which will eventually lead back to the original starting points (albeit dependent on the length of the pattern). Marking one complete cycle, this creates what Glass calls a ‘wheels inside wheels’ effect.<sup>25</sup>

The undeniable rhythmic pulsation and motor movement of Glass’s works in film have long been linked to the concept of travel.<sup>26</sup> Rebecca M. Doran Eaton investigates minimalist

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<sup>21</sup> Rebecca Marie Doran Eaton, ‘Unheard Minimalisms: The Functions of the Minimalist Technique in Film Scores’ (PhD dissertation, University of Texas, 2008), 48.

<sup>22</sup> John Adams, ‘Road Movies’, <<https://www.boosey.com/cr/music/John-Adams-Road-Movies/6128>> [accessed 4 May 2023].

<sup>23</sup> Ibid.

<sup>24</sup> Olivier Lussac, liner notes to *Philip Glass Piano Music*, Jay Gottlieb, CD, Pianovox PIA 520, 1999.

<sup>25</sup> Tim Page, “‘Einstein on the Beach’– Philip Glass, Robert Wilson (1979)”, <<https://www.loc.gov/static/programs/national-recording-preservation-board/documents/EinsteinOnTheBeach.pdf>> [accessed 8 May 2023].

<sup>26</sup> Similar rhythmic motor-like qualities emerge in some of Glass’s *Twenty Piano Études*, see Chapter IV, 87-129. Another non-Glassian example of musical work inspired by travel includes Steve Reich’s magnum opus, *Different Trains*, written for string quartet and tape in 1988. This piece was inspired by Reich’s multiple train journeys as a child from New York to Los Angeles following his parents’ separation. As a Jew, if Reich had

music's role in multimedia and considers how Glass's score for *Koyaanisqatsi* (1982) perpetuates this idea.<sup>27</sup> Nathan Bernier, a producer of a 2011 public radio series about NASA, interspersed audio clippings from the space shuttle program with Glass's music. Bernier explains that Glass's cues are 'particularly effective for the shuttle because the repetitiveness of Glass's melodies evokes machinery and technology (in my mind). If you've ever seen *Koyaanisqatsi* you'll know exactly what I'm talking about.'<sup>28</sup>

Susan McClary ponders how, through the influence of contemporary minimalism, film-music composers such as Glass reinterpret historical periods.<sup>29</sup> By providing a thorough analysis of the relationship between music and dialogue in one of the scenes from *The Hours*, she effectively demonstrates the power of Glass's music. McClary considers the obsessive nature of minimalist motifs, describing circular patterns in music as sounding 'obsessive and trapped'.<sup>30</sup> Eaton discusses how McClary presents minimalism as a symbol of obsessive desire and suggests this theory is furthered by Robert Fink in his book *Repeating Ourselves*.<sup>31</sup> In McClary's analysis of Glass's music in *The Hours*, she considers the film score to be acting as an operatic recitative. She contemplates Glass's harmonic gestures as symbols of 'Romantic signs of hope and yearning', however, the continuous looping of such gestures denies the listener any meaningful release or resolution.<sup>32</sup> Glass's use of repetitive looping throughout his score never ceases to resolve musically except on one occasion, in which Glass

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been in Europe at this period, he would have had to travel on very different trains. Amy Lynn Wlodarski, 'The Testimonial Aesthetics of Different Trains', *Journal of the American Musicological Society*, 63 (2010), 99.

<sup>27</sup> Rebecca M. Doran Eaton, 'Marking Minimalism: Minimal Music as a Sign of Machines and Mathematics in Multimedia', *Music and the Moving Image*, 7 (2014), 6.

<sup>28</sup> Nathan Bernier, email interview with Rebecca M. Doran Eaton, 25 October 2010; quoted in Eaton, 'Marking Minimalism: Minimal Music as a Sign of Machines and Mathematics in Multimedia', 6. Following Glass's success with *Koyaanisqatsi*, an avant-garde film which reached a mainstream audience, minimalist scores soared in popularity, with Glass and Michael Nyman each writing at least one score almost every year.

<sup>29</sup> Susan McClary, 'Minima Romantica,' in Daniel Goldmark, Lawrence Kramer and Richard Leppert (eds.), *Beyond the Soundtrack: Representing Music in Cinema* (Berkeley: University of California Press, 2007), 51.

<sup>30</sup> *Ibid.*, 56.

<sup>31</sup> Eaton, 'Marking Minimalism: Minimal Music as a Sign of Machines and Mathematics in Multimedia', 4.

<sup>32</sup> McClary, 'Minima Romantica', 57-58.



breaks tradition to showcase ‘the power of domestic love’ in its glory.<sup>33</sup> McClary concludes that Glass has been able to relate the music to the meaning of the film: that one’s life is a succession of unavoidable hours that one must survive and, despite the differing options presented to the characters and the consequences of such actions, the cycle continues and the sustained minor-triad lingers.

McClary references the often-disparaging views of minimalism present in society that existed at the time of her writing:

More than one professional musician has assured me that these composers do so because, as minimalists, they simply do not know any better. I find that explanation difficult to endorse, given the obvious sophistication of all three scores.<sup>34</sup>

It is evident from her writing that McClary believes there is true musical meaning behind minimalism. Its significance lies in understanding the cultural context of the twentieth century from an anthropological perspective. She considers the influence of European composers, at the beginning of the century, shifting their attention to non-Western music and how this marked the beginning of a new era for music.<sup>35</sup> McClary visualises how a traveller from one hundred years ago would view the cyclic repetition littered throughout the music of the late-twentieth century. Glass is mentioned in relation to Ravi Shankar, a virtuoso sitar player who influenced a wide range of musicians across musical styles such as Glass, John Coltrane and the Beatles. Glass’s compositional methods of using additive repetitive structures are carefully considered and are born from his studies in India with Ravi Shankar.<sup>36</sup> Glass follows

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<sup>33</sup> Ibid., 62. Such tactics are considered in relation to Glass’s *Twenty Piano Études* in which Glass explores similar yearnings, see Chapter IV, 85-128.

<sup>34</sup> Ibid., 51.

<sup>35</sup> Susan McClary, ‘Rap, Minimalism and Structure of Time in Late Twentieth-Century Culture’, in Christoph Cox and Daniel Warner (eds.), *Audio Culture: Readings in Modern Music* (New York: Continuum International Publishing Group, 2004), 294.

<sup>36</sup> See Chapter III, 71.

an exhaustive list of numerous other composers including Debussy, Britten and Stravinsky, who sought influence from further afield.<sup>37</sup>

Jonathan Scheffer presents an alternative perspective. He considers baroque music and minimalism as ‘belonging together’. He uses examples of Bach’s cello suites with their arpeggiated sequences, harmonic interludes and contradictions of space and gesture and compares them to Glass’s music, considering the music of Bach and Glass as having the same effect on a listener.<sup>38</sup> There are numerous occasions in which Glass’s music has been paired with Bach. Simone Dinnerstein, the pianist who premiered Glass’s *Piano Concerto No.3*, presented the world-premiere performance of the concerto alongside Bach’s *Keyboard Concerto in G Minor*, BWV 1058 in 2017.<sup>39</sup> Glass’s third concerto was inspired by conversations between Dinnerstein and Glass on Bach and is an example of Glass’s late period. Dinnerstein has discussed the similarities between Bach and Glass’s music:

Bach’s music is really built on patterns; sequences of patterns and layering of different patterns amongst various voices, and all of these different patterns are built up to create a larger structure. That’s really what Glass is doing in his own way. The patterns that he’s using are, of course, different ideas than in Bach, but the basic concept is really very similar.<sup>40</sup>

Among the antecedents of the minimalist movement is Erik Satie’s *Vexations* (1893), a work for piano ‘whose thorny and enharmonic score is meant to be performed for a duration of 840

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<sup>37</sup> McClary, ‘Rap, Minimalism and Structure of Time in Late Twentieth-Century Culture’, 295.

<sup>38</sup> Fink, *Repeating Ourselves*, 170-171.

<sup>39</sup> Simone Dinnerstein and A Far Cry ensemble released *Circles: Piano Concerto’s by Bach + Glass* in 2018. J. S. Bach and Philip Glass, *Circles: Piano Concerto’s by Bach + Glass*, Simone Dinnerstein and A Far Cry, CD, Orange Mountain Music, OMM0127, 2018.

<sup>40</sup> Stephen Raskauskas, ‘What do Philip Glass and J. S. Bach have in common? More than you think, according to pianist Simone Dinnerstein’, <<https://www.wfmt.com/2018/06/04/what-do-philip-glass-and-j-s-bach-have-in-common-more-than-you-might-think-according-to-pianist-simone-dinnerstein/>> [accessed 21 June 2023].

repetitions'.<sup>41</sup> John Cage is credited with giving the first complete execution of this work in 1963 which took over 18 hours from start to finish.<sup>42</sup> Robert Orledge considers *Vexations* as:

the first piece to explore the effects of boredom, even of hallucination, both on the performer and on the audience, as well as being the first piece to incorporate a period of silent meditation in its performance indications.<sup>43</sup>

Cage is often considered as the most influential American composer of post-World War II and the trajectory from Cage to minimalism has long been discussed by academics.<sup>44</sup> Glass has credited Cage's championing of the creative arts as a collective unit as contributing to Glass's involvement in the theatre world.<sup>45</sup> It is hardly surprising that Glass speaks fondly of Cage given the wide-ranging performance elements of Cage's music, his ties to the theatre as well as Cage's music stemming from Far-Eastern inspiration. Claire Polin discusses the immediate difference between Cage's music and the next generation:

A great deal of Cage's music remained improvisatory or capable of being diagrammed or under-notated. The music of minimalists such as Reich or Glass is precisely notated, demanding a high level of control and coordination in its performance.<sup>46</sup>

However, inspiration does not signify extension. If Glass's work is considered as an extension of Cage's, it is worth highlighting the complete difference of soundworlds and techniques employed by both composers, despite Glass being an avid admirer of Cage. When considering Cage's violin études, *Freeman Études*, and Glass's *Twenty Piano Études*, Cage employed complex and ambitious compositional techniques with the view of his studies being as

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<sup>41</sup> Rick Moody, 'John Cage and the Question of Genre', *Salmagundi*, 178/179 (2013), 68.

<sup>42</sup> Robert Orledge, 'Understanding Satie's "Vexations"', *Music & Letters*, 79 (1998), 386. This piece served as inspiration for Cage's silent composition, '4'33" (1952).

<sup>43</sup> *Ibid.*, 386.

<sup>44</sup> Branden W. Joseph, 'Reviewed Work(s): No Such Thing as Silence: John Cage's 4'33" by Kyle Gann', *American Music*, 28 (2010), 506-507. Claire Polin, 'Why minimalism now?', in Christopher Norris (ed.), *Music and the Politics of Culture* (London: Lawrence & Wishart Ltd., 1989), 228.

<sup>45</sup> Allison Welch, 'Meetings along the Edge: Svara and Tāla in American Minimal Music', *American Music*, 17 (1999), 180-181.

<sup>46</sup> Polin, 'Why minimalism now?', 232.

difficult as possible, while Glass's études exist within his already developed musical formula and soundworld.<sup>47</sup>

## **ii. Nadia Boulanger: A merging of cultures in Paris**

In the 1960s, Glass was a part of the exciting, new minimalist movement in New York when Young and Riley's early performances were taking place. Both Glass and Reich recall hearing Young's seminal work *Trio for Strings* at the turn of the 1960s and considering the work disparagingly.<sup>48</sup> While mutual influence between all four vanguard composers (Young, Terry, Reich and Glass) was at play, each composer was developing his own unique musical voice and a multitude of differing paths was being explored.

Glass's early epiphanies occurred during his time in Paris in the mid 1960s studying with Nadia Boulanger and his experience in New York of hearing Steve Reich's *Piano Phase*.<sup>49</sup> His studies and collaboration with sitarist Ravi Shankar have been the topic of many interviews and discussions over the course of Glass's career. Speaking of his two mentors and teachers:

I've always said one taught through fear, one through love. Nadia Boulanger was the great guru in Paris. She was tremendously fierce. She taught me Bach, Beethoven, Mozart – every tool of western art music – with an iron rod. It was, in essence, about understanding technique. Then there was Ravi Shankar, a master of Indian concert music. I met him in 1964. So I had two of the greatest exponents of different traditions at the same time. I was about 25 and Ravi was almost 20 years older. I was like a student. I stayed close to him for a long time. We collaborated. I spoke with him just days before he died.<sup>50</sup>

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<sup>47</sup> See Chapter I, 18-19.

<sup>48</sup> Fink, *Repeating Ourselves*, 69.

<sup>49</sup> Todd L. Burns, 'Philip Glass',

<<https://www.redbullmusicacademy.com/lectures/philip-glass-lecture>> [accessed 6 March 2023].

<sup>50</sup> Fiona Maddocks, 'Philip Glass: 'My problem is people don't believe I write symphonies'', *The Guardian*, 22 January 2017.

These experiences, both uniquely different from one another, propelled Glass on a course towards the repetitive, distinctive and conceptually meticulous soundscape that has ultimately become his unique trademark.

Nadia Boulanger is widely known as one of the greatest music teachers of the twentieth century and her influence as a teacher of piano, organ, harmony, technique and composition has been instrumental in the lives of many.<sup>51</sup> So great was the number of students Boulanger taught that Virgil Thompson once quipped that ‘every town in America has a drugstore and a student of Boulanger’.<sup>52</sup> Her array of American pupils who travelled to Paris to study with her includes Aaron Copland, Roger Sessions, Walter Piston, Virgil Thomson, David Diamond, Elliott Carter and Roy Harris.<sup>53</sup> While celebrating Glass’s sixtieth birthday, Richard Kostelanetz considered how Glass became the most visible avant-garde composer of his generation and ‘the genuine successor to Aaron Copland’.<sup>54</sup> This comparison is a notable link between two students who studied more than forty years apart from one another with Boulanger. Boulanger’s student list included an extensive number of pupils, however, her long lasting gift to American music includes the sizeable list of teachers she trained over the course of her lifetime.<sup>55</sup> Boulanger’s former student, Suzanne Hoover, suggests that ‘perhaps the strongest single influence on the quality of modern American music has been Nadia Boulanger’s supreme sensibility’.<sup>56</sup>

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<sup>51</sup> Although she was deeply rooted in the classical tradition, Boulanger taught and influenced several of the century’s most renowned composers, including Igor Stravinsky and Quincy Jones. Josh Jones, ‘How French Music Teacher Nadia Boulanger Raised a Generation of Composers: Aaron Copland, Leonard Bernstein, Quincy Jones, Philip Glass & More’, <<https://www.openculture.com/2022/01/how-french-music-teacher-nadia-boulanger-raised-a-generation-of-composers.html>> [accessed 6 March 2023].

<sup>52</sup> Glass, *Words Without Music*, 139.

<sup>53</sup> Suzanne R. Hoover, ‘Teaching: Nadia Boulanger’, *The American Scholar*, 46 (1977), 497.

<sup>54</sup> Richard Kostelanetz, ‘Introduction’, in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), xi.

<sup>55</sup> Glass, *Words Without Music*, 139.

<sup>56</sup> Hoover, ‘Teaching: Nadia Boulanger’, 497.

Boulanger's teaching included score reading, counterpoint, harmony, figured bass and analysis.<sup>57</sup> In the classroom she was interested in the harmonic and contrapuntal practice of Bach and Beethoven. However, Boulanger familiarised herself with the early twentieth-century avant-garde music including the expressionistic Germanic twelve-tone music of Arnold Schoenberg and the fashionable neo-classicism of Igor Stravinsky. Her preference for Stravinsky's work led to a life-long friendship with the composer and his family with Boulanger advocating for Stravinsky's music throughout her career.<sup>58</sup> David Ward-Steinman describes Boulanger's approach to pedagogy as 'perhaps more horizontal/linear than vertical/harmonic'.<sup>59</sup> Ward-Steinman considers Boulanger to be more interested in line, rather than harmony, with line being the first to be considered and the harmonic details coming later, all while establishing a harmonic flow in a piece.<sup>60</sup>

Meanwhile Elliot Carter spoke of Boulanger's attention to the intricacies within the music itself and her focus on the available possibilities of sound as a mode of teaching:

Boulanger taught me, maybe more than anything else, about how concern for small details in music can make a great deal of difference in the total effect. It came out, obviously, in the study of counterpoint. We did counterpoint in up to eight parts with her, and she was always pointing out little things about how if you did it in another way, it would sound better ... She made us aware of this extraordinary control of detail, particularly in counterpoint, and as a result, my concern for counterpoint has lasted throughout my work.<sup>61</sup>

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<sup>57</sup> Ev Grimes, 'Interview: Education (1989)', in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 30.

<sup>58</sup> Kimberly Francis, 'A Most Unsuccessful Project: Nadia Boulanger, Igor Stravinsky, and the Symphony in C, 1939-45', *The Musical Quarterly*, 94 (2011), 234.

<sup>59</sup> Ward-Steinman documents his training with Darius Milhaud and Nadia Boulanger in the late 1950s. David Ward-Steinman, 'On Composing: Doing It, Teaching It, Living It', *Philosophy of Music Education Review*, 19 (2011), 8.

<sup>60</sup> *Ibid.*, 8.

<sup>61</sup> Jonathan W. Bernard and Elliot Carter, 'An Interview with Elliott Carter', *Perspectives of New Music*, 28 (1990), 199.

In 1964, Glass left New York to study music technique in Paris with Nadia Boulanger. This marks the first significant step in the development of his soundworld. His reason for studying with Boulanger was simple: ‘In order to be able to produce work of any quality, I needed to improve my ability to handle some basic materials of music— harmony and counterpoint’.<sup>62</sup> It was in Paris that Glass completed his formal training, began his professional career and established relationships with several friends and colleagues who became important to him throughout his life.<sup>63</sup>

The significance of Glass’s period of studying with Boulanger is evident in his memoir, *Words without Music*, and he dedicates a chapter of the memoir to his training with his former teacher. Glass discusses his Parisian experiences and how his studies with Boulanger turned out to be ‘a complete— how can I say— renovation, almost like taking the whole thing apart and putting it back together’.<sup>64</sup> While Glass never studied composition with Boulanger (she informed Glass that she had a high level of respect for composers and did not dare to advise them on their compositions), instead they focused on pure technique in her studio.<sup>65</sup> During two years of rigorous training Glass noticed a shift in his listening abilities and how his attention and focus while listening had been raised. He could hear ‘something’ he had not heard before and most significantly, he could find a way to transcribe it.<sup>66</sup> The period of training in Paris culminated in Glass understanding the true task of the Boulanger studio. The questions Boulanger presented had shifted from being sole technical exercises with the focus now centring on style: ‘An authentic personal style cannot be achieved without a solid

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<sup>62</sup> Despite gaining a Master’s degree at The Juilliard School, New York, Glass did not believe he had fully mastered his compositional technique. He travelled to Paris in search of this. Glass, *Music Without Words*, 111.

<sup>63</sup> *Ibid.*, 113.

<sup>64</sup> Philip Glass; quoted in Todd L. Burns, ‘Philip Glass’.

<sup>65</sup> Glass, *Words Without Music*, 143.

<sup>66</sup> *Ibid.*, 144.

technique at its base'.<sup>67</sup> Ironically, it was at this point, in 1966, that Glass was especially close to generating his uniquely personal style.

Glass explains 'if you had studied with her diligently you would end up with a toolbox of shiny bright tools that you knew how to use. And that was a tremendous thing ... you could do anything that was needed'.<sup>68</sup> Composers including Glass and Carter were inspired to use Boulanger's teaching as the basis of their musical understanding and exploration. The influence of tools and technique such as these is not missed throughout Glass's large-scale works. The impact of Boulanger's teaching on Glass's music is symbolic of the soundworld he crafted. In the midst of the minimalist movement in America, and having refined his listening 'inner ear', Glass produced a series of large-scale works including two lines a fifth apart in *Music in Fifths* (1969), two lines moving in exact mirror images in *Music in Contrary Motion* (1969), to four lines in *Music in Similar Motion* (1969) and a fourth piece which did not survive, *Music in Eight Parts*.<sup>69</sup> Here Glass furthered the basic building blocks of harmonic and contrapuntal practice that Boulanger espoused throughout his studies. In turn, Glass used classical practices to formulate ground-breaking new structures, creating strikingly tonal passages without distinctive melodies. Such practices can also be viewed throughout his piano étude collection.

In one of the most poignant scenes in Glass's memoir, Glass describes receiving letters in the late 1990s, originally written by Nadia Boulanger to the US Embassy during the 1960s, encouraging them to renew Glass's Fulbright Fellowship so he could continue his studies in Paris. The compact letter from Boulanger read: 'I've been working with Mr. Philip Glass on

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<sup>67</sup> Ibid., 145.

<sup>68</sup> Ibid., 139.

<sup>69</sup> Rob Haskins, Philip Glass and Michael Riesman, 'Philip Glass and Michael Riesman: Two Interviews', *The Musical Quarterly*, 86 (2002), 516.



music technique. My impression is that he is a very unusual person, and I believe that someday he will do something very important in the world of music.’<sup>70</sup> Unbeknownst to Glass at the time of writing the letter, Boulanger’s prediction was a nod to the progression of Glass’s style which had developed under her training.

### **iii. Ravi Shankar: A musical awakening**

Individual experimentation and a curiosity to seek out global music was characteristic of an important segment of the American musical avant-garde style throughout the twentieth century. Up until this period, it was considered normal for Western musicians to have little or no knowledge of global or world music. Olivier Messiaen is credited as the first Western composer to investigate Indian rhythmic patterns or tālas, with a number of tālas appearing in his work *Oiseaux Exotiques* (1955).<sup>71</sup> While it was not a taught subject in musical conservatories, it was referred to as ‘ethnomusicology’ by musicologists.<sup>72</sup> Glass has travelled to India repeatedly throughout his lifetime and has spoken of his introduction to the world of global music:

That time in India, which included long stays as well as many shorter ones, visiting frequently from the late 60s until 2001, opened a door to the world of global music. Until then I’d been immersed in European art music. In Kerala I encountered kathakali, the classical Indian dance theatre which had an influence on my own operas, such as *Satyagraha*. Back then, hearing anything beyond western music wasn’t easy. You couldn’t find records, except a few specialist discs of music collected by anthropologists. If you wanted to hear Balinese music you pretty much had to go to Bali. It’s hard to believe that now.<sup>73</sup>

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<sup>70</sup> Nadia Boulanger’s letter; quoted in Glass, *Words Without Music*, 149.

<sup>71</sup> Mirjana Šimundža, ‘Messiaen’s Rhythmical Organisation and Classical Indian Theory of Rhythm (I)’, *International Review of the Aesthetics and Sociology of Music*, 19 (1988), 117.

<sup>72</sup> Glass, *Words Without Music*, 130.

<sup>73</sup> Fiona Maddocks, ‘Philip Glass: ‘My problem is people don’t believe I write symphonies’.

However, it was during Glass's time in Paris before he travelled to India, that he first became influenced by non-Western music. This influence was a result of his collaboration with the great Indian sitar player Ravi Shankar while working as his assistant on the soundtrack for the film *Chappaqua*.<sup>74</sup> Glass's duties included transcribing Shankar's orchestrations into Western notation for an ensemble of French musicians, however, Glass found it difficult to notate the music into Western metrical units, as the bar lines added unwanted accents throughout the score.<sup>75</sup> Glass's revelatory moment emerged when he opted to drop all of the bar lines: 'And there, before my eyes, I could see what Alla Rakha had been trying to tell me. Instead of distinct groupings of eighth notes, a steady stream of rhythmic pulses stood revealed.'<sup>76</sup> Alla Rakha's reiterated message of, 'all the notes are equal', finally rang true for Glass.<sup>77</sup>

Glass's training with Nadia Boulanger, developing a solid technique and understanding the importance of line, was well established by this period. It was at this point, while working and living in Paris, that Glass's work became heavily shaped by Hindustani classical music. Various facets of this style include circular rhythmic procedures (called *tāla*), sustained tones, melodiousness and repeated melodic and harmonic progressions. Showcasing these differences within a context of repetitions is one of the basic principles of Indian music and is also at the core of minimalism.<sup>78</sup> Interwoven, these elements can prolong the sense of arrival in a piece. It is the interaction of melodic improvisation and the *tāla* rhythmic cycle that builds the tension in Indian music.<sup>79</sup>

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<sup>74</sup> Upon meeting Ravi Shankar for the first time, Glass learned that Shankar had met Nadia Boulanger and was delighted to hear that Glass was a student of hers. Glass, *Words Without Music*, 131.

<sup>75</sup> Welch, 'Meetings along the Edge: Svāra and Tāla in American Minimal Music', 191.

<sup>76</sup> *Ibid.*, 191.

<sup>77</sup> Glass, *Words Without Music*, 132.

<sup>78</sup> Lussac, liner notes to *Philip Glass Piano Music*.

, CD, Pianovox PIA 520, 1999, <[https://philipglass.com/recordings/piano\\_music/](https://philipglass.com/recordings/piano_music/)> [accessed 16 February 2023].

<sup>79</sup> Welch, 'Meetings along the Edge: Svāra and Tāla in American Minimal Music', 191.

Glass has communicated his decision to train as a tabla player in several interviews. He explained why he later studied with Alla Rakha in New York, not with the intention of being a skilled tabla player, but to gain a concrete understanding of how the rhythmic structure of the music worked.<sup>80</sup> Glass understood that rhythm in Indian music is of the highest significance, meanwhile in Western music, the primary focus is placed on the importance of the relationship between melody and harmony.<sup>81</sup> The clever use of time in Indian music maximises the element of stasis, ultimately impacting the power of rhythm. When discussing his *Music in Twelve Parts* (1971-1974), Glass explains: ‘The music is placed outside the usual time scale, substituting a non-narrative and extended time sense in its place’.<sup>82</sup> The use of prolonged subtlety and perception of space is littered throughout Glass’s *Twenty Piano Études*.

The impact of Glass working with Shankar led to two significant results. The first was how his notational process changed. Glass was inspired by his notational experience working on *Chappaqua*. Subsequently, when he began writing for his own ensemble in 1968, he decided against completing full scores, instead focusing on individual parts for the performers.<sup>83</sup> Glass credits his approach as being:

more in that tradition of the baroque composers who wrote pieces out and handed them out and people played them. Sometimes I would decide to change a part and I would just write a different part. If the scores were collated later by someone else and they didn’t have all the parts, they didn’t copy them out right. We’re talking much more about a performance practice than a compositional practice. The performance practice sometimes changed what the composition was. With the ensemble, that’s still

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<sup>80</sup> Todd L. Burns, ‘Philip Glass’.

<sup>81</sup> Welch, ‘Meetings along the Edge: Svāra and Tāla in American Minimal Music’, 191.

<sup>82</sup> Brent Heisinger, ‘American Minimalism in the 1980s’, *American Music*, 7 (1989), 434.

<sup>83</sup> Glass began by composing his own part and he could hear a ‘sound picture’ in his head without having to write out a full score. After working on his own part, he composed parts for other players until an amalgamation of parts was made at a later point. Glass, *Words Without Music*, 134.

true. We still change things. There's simply no need to codify it, because there exists no other ensemble but my own that plays a certain repertory of music.<sup>84</sup>

Glass's second influence as a result of his collaboration with Shankar included his newfound consideration for the swarms of rhythmic structures that exist in music. Glass came to understand how even the most highly compound rhythmic patterns can be regarded as groupings or phrases of twos and threes.<sup>85</sup> Glass concentrated on composing reductive works whose structure focused primarily on rhythmic tendencies. Most importantly, he used cyclic rhythmic organisations and what he deemed the 'additive process', in which smaller rhythmic units are joined together to create larger time values.<sup>86</sup> A grouping of five notes might be played several times, followed by a bar containing six notes (similarly repeated), then by seven notes, and so on. An easily identifiable example of such principles coming to fruition as a successful fusion of Indian and Western elements and being exercised in a large-scale work is Glass's opera *Satyagraha*. Glass's 'light bulb' moment occurred when he concluded that 'All music is ethnic music.'<sup>87</sup>

The role of minimalism within the wider context of Glass's works marks the beginning of a soundworld that is shaped by several techniques and processes, as well as musical and cultural influences. It is apparent that Glass deemed his work to be a culmination of both Western and non-Western musical traditions:

I was now working with Ravi Shankar in a tradition of music that was very, very different. But obviously, of a very sophisticated nature, which had a history of its own, and its own kinds of rules. There is no root movement or harmonic movement in the Indian music. There's a lot of ornamentation, and the rhythmic structure becomes the overall structure of the piece. That doesn't happen in our

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<sup>84</sup> Haskins, Glass and Riesman, 'Philip Glass and Michael Riesman: Two interviews', 519.

<sup>85</sup> Glass, *Words Without Music*, 135.

<sup>86</sup> Glass's works, *1+1* and *600 Lines [in Tintāl]*, also use a similar additive/subtractive technique. Welch, 'Meetings along the Edge: Svāra and Tāla in American Minimal Music', 199.

<sup>87</sup> Todd L. Burns, 'Philip Glass'.

Western music. At least it didn't then. Immediately, almost, I began to experiment with the idea of taking the training I had from Boulanger and mixing in with the work I had been doing with Ravi Shankar. Almost immediately I began doing that. And I began writing music for plays at that time.<sup>88</sup>

The question 'if you're not a minimalist, what are you?' is one of the most pressing and controversial topics, particularly regarding Glass's early output, that has been asked of the composer throughout his career.<sup>89</sup> Significantly, Glass's response to this ironically repetitive question has been 'I'm a theatre composer'.<sup>90</sup> Glass deemed his first 'original music' as the combination of theatre work and new music that he created.<sup>91</sup> As the resident composer for a small new theatre company in Paris, Glass was responsible for a number of compositions, composed especially for the work of Samuel Beckett.<sup>92</sup> In 1983, Fred Neumann directed a production of Beckett's *Company* in New York with Glass composing four short pieces for string quartet which fitted into the intervening spaces of Beckett's text.<sup>93</sup>

However, it was Glass's work on Beckett's *Play* during 1965 which ignited his thinking and consideration of the art practices in which composer John Cage and choreographer Merce Cunningham explored throughout their personal and professional relationship.<sup>94</sup> Glass concluded that theatre music existed as a tool in highlighting the epiphany moment of the play and that the nature of the interaction between the narration and the music worked as the primary mode of gaining an audience's full attention.<sup>95</sup> Glass believes his collaboration in the theatre resulted in the composer being put in 'an unexpected relationship to his work'. This

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<sup>88</sup> Ibid.

<sup>89</sup> Glass, *Words Without Music*, 127.

<sup>90</sup> Ibid., 127.

<sup>91</sup> Ibid., 126.

<sup>92</sup> Glass's theatre company was involved in several of Beckett's works over a span of twenty-five years including, *The Lost Ones*, *Mercier and Camier*, *Endgame* and *Play*. Ibid., 125.

<sup>93</sup> Ibid., 125. Glass later published the string quartet with the same name. This piece became a well-known and regularly performed string quartet.

<sup>94</sup> Ibid., 126. The partnership between Cage and Cunningham led to the years-long exploration of the relationship between music and dance. Throughout the 1940s both artists, working within the two art practices, experimented by creating their parts independently from one another, merely clinging to a previously agreed provisional framework. Leta E. Miller, 'Cage, Cunningham, and Collaborators: The Odyssey of "Variations V"', *The Musical Quarterly*, 85 (2001), 546.

<sup>95</sup> Glass, *Words Without Music*, 127.

transcendent collaborative experience in the theatre, and discovering the most successful way to marry his music to the work of Beckett, had a striking effect on Glass's musical direction.

In 1976, Glass's large-scale opera, *Einstein on the Beach* (based on two techniques including additive process and cyclic structures), propelled Glass to the highest levels of international fame.<sup>96</sup> Today, Glass remains one of the most active opera composers in the world. As an opera composer, Glass (as well as John Adams) has been credited with writing music that resonates with today's audiences: 'Both are unapologetic in their desire to take on contemporary stories and to engage with twentieth- or twenty-first-century ideas'.<sup>97</sup> Between 1995 and 2015, Glass had the third highest number of revivals in North America (twenty-five in total), as well as the highest number of works premiered (twelve operas, some of which were first performed in Europe).<sup>98</sup> Finally, having established his reputation with a cluster of operas, including *Einstein on the Beach* and *The Making of the Representative for Planet 8* (1985-1988), Glass began to turn his attention to string quartets, orchestral music and music for piano.

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<sup>96</sup> This marked an important contribution to the musical world, which his teacher Nadia Boulanger had previously predicted in the 1960s. See Chapter III, 72-73.

<sup>97</sup> Thomas May, 'Transforming America's Music: A Milestone Year of Adams, Glass, and Reich', <<https://live.stanford.edu/blog/february-2017/transforming-americas-music-milestone-year-adams-glass-and-reich>> [accessed 4 April 2023]. Both Glass and Adams contribute to contemporary ideas as discussed, however, Glass also looks to historical figures such as Einstein, Gandhi and Akhenaten for compositional inspiration.

<sup>98</sup> An OPERA America study was conducted to measure the number of world premieres of North American works between 1995 to 2015. The author gives recognition to the Brooklyn Academy of Music (BAM) for their role in programming Glass's operas and their influence on Glass's legacy in American opera. BAM has presented *Einstein on the Beach* revivals (in 1992 and 2012) as well as multiple Glass operas, including *Monsters of Grace* (1998), *Galileo Galilei* (2002), and *Kepler* (2009). Sasha Metcalf, 'Funding "Opera for the 80s and Beyond": The Role of Impresarios in Creating a New American Repertoire', *American Music*, 35 (2017), 23.

## Chapter IV: Philip Glass, *Twenty Piano Études*

What I have done in composing for the keyboard is to take advantage of my own idiosyncrasies.<sup>1</sup>

Philip Glass's *Twenty Piano Études* are a thrilling and imaginative twenty-first-century étude offering, embedded within Glass's immediately recognisable soundworld. The études possess an emotional richness, echoing the long tradition of classical piano literature. John Rockwell, a music critic who has closely followed Glass's career since the 1970s, has described the études as:

a genuinely new direction for Glass. They retain most of his signature stylistic elements; and yet they manage, without descending into pastiche, to summon all manner of ghosts of keyboards past.<sup>2</sup>

A complete performance of the études offers an audience an opportunity to experience the breadth of Glass's work and to consider the variety of the étude collection in its entirety. The dedication to Glass's unique soundworld and the significant level of stamina and control required for a performance in its entirety, contributes to the virtuosic nature of these pieces. This is imperative when considering the études in connection to the wider genre and more traditional canons. The developed personality behind Glass's studies represents a composer who at the time of publication of the études presented some of his most compelling work:

Personal style emerges from personality— that's where the word comes from— but it's where personality and technique come together. You have to have them both to have style; you can't have one without the other.<sup>3</sup>

Throughout his career, Glass has remained focused on seeking out worldly influences rather than looking backwards to habitual practices. With the success of his piano études, Glass has

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<sup>1</sup> Philip Glass; quoted in Allan Kozinn, 'The Touring Composer as Keyboardist (1980)', in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 107.

<sup>2</sup> John Rockwell; quoted in William Robin, 'The complete piano etudes by Philip Glass', <<https://carolinaperformingarts.org/wp-content/uploads/2016/05/The-Complete-Piano-Etudes.pdf>> [accessed 29 March 2023].

<sup>3</sup> Ev Grimes, 'Interview: Education (1989)', in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 36.

created a truly unique collection of work born out of a long existing traditional and pedagogical purpose. He is resolute in his disinterest in imitating classical giants:

I like to listen to the same works that everyone likes to listen to—Mozart, Rossini, Verdi, Wagner and the rest. But it never occurred to me to write like any of them, any more than it would to put on the clothes of a nineteenth-century Italian. These works occupy a world of their own, and it is a beautiful world, one that enriches us all. I am a devotee of museums, but I don't want to live in one.<sup>4</sup>

His reluctance to mirror styles of the past is perhaps his greatest asset in progressing an entirely 'Glassian' soundworld throughout his life.<sup>5</sup> His music, particularly of the past few decades, is centred on the extended repetition of brief, elegant melodic sections that weave in and out of an aural tapestry. The pragmatic function of Glass's *étude* collection co-exists alongside his ability to refine his piano studies into independent works of art, creating pieces of beauty, thrill and pure imagination.

### **i. The keyboard**

Glass's *Twenty Piano Études* reveal his deeply personal relationship to the piano. Glass has previously described the piano as 'a personal instrument, which can cross periods easily.'<sup>6</sup> Susan McClary pinpoints Glass's use of the piano in his score *The Hours* as creating a new thread within the film, highlighting the differing characters between a solo instrument and an orchestra. McClary describes Glass as opting for the 'luxuriant orchestra of classic cinema, along with the piano in a concerto texture that pits the heroic, slightly alienated solo instrument against the social group concerto effect.'<sup>7</sup> Glass acknowledges that his use of the piano in *The Hours* served as an aid to the underlying connection between the film's various

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<sup>4</sup> Philip Glass; quoted in Tim Page, 'Philip Glass (1989)', in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 7.

<sup>5</sup> While elements of Glass's *études* often hark back to composers such as Liszt and Schubert, his soundworld remains distinctly his own.

<sup>6</sup> Philip Glass; quoted in Deborah Crisp and Roger Hillman, 'Chiming the Hours: A Philip Glass Soundtrack', *Music and the Moving Image*, 3 (2010), 31.

<sup>7</sup> Susan McClary, 'Minima Romantica,' in Daniel Goldmark, Lawrence Kramer and Richard Leppert (eds.), *Beyond the Soundtrack: Representing Music in Cinema* (Berkeley: University of California Press, 2007), 57.



narratives.<sup>8</sup> Ultimately Glass highlights the significance of the instrument as being the glue of the entire structure.

Upon returning to New York in 1967 at thirty years old, Glass formed the Philip Glass Ensemble (PGE) with the ambition of collaborating with musicians who were ‘willing and able’ to perform his music.<sup>9</sup> Glass formed his ensemble with unconventional instruments including three Farfisa-mini-compact organs.<sup>10</sup> Keyboard instruments were at the forefront of the ensemble and it was at a keyboard that Glass performed and from which he often conducted the ensemble. Glass was keen to develop a penetrating, sharp sound and, despite initial reservations as to why a keyboard instrument such as a Farfisa organ was used in the ensemble, Glass created the sound he was longing for.<sup>11</sup> The Farfisa organ has since become a trademark of the composer’s soundworld.<sup>12</sup>

For sound purposes, Glass used amplification for two reasons: the first was due to the necessity of controlling the Farfisas’ sound levels and the second was due to the intensification of sound as Glass sought to find a way to control the balance of a number of keyboards performing all at once.<sup>13</sup> With the keyboards amplified, there was now a need to amplify the winds and a full-time sound engineer was required for the ensemble.<sup>14</sup> This role was filled by Kurt Munkacsi whom Glass deemed ‘an integral member of the ensemble.’<sup>15</sup>

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<sup>8</sup> Crisp and Hillman, ‘Chiming the Hours: A Philip Glass Soundtrack’, 31.

<sup>9</sup> The only rule of the ensemble included the group performing Glass’s music alone. Philip Glass, *Words Without Music* (London: Faber & Faber, 2015), 237.

<sup>10</sup> Anon, ‘An interview with Michael Reisman’, <<https://www.plogue.com/michael-riesman.html>> [accessed 14 March 2023].

<sup>11</sup> Kozinn, ‘The Touring Composer as Keyboardist (1980)’, 105.

<sup>12</sup> Other keyboards used in the PGE ensemble include a Yamaha double keyboard organ, an EMI electric piano and an ARP Explorer (used as a bass extension). *Ibid.*, 105.

<sup>13</sup> *Ibid.*, 106.

<sup>14</sup> When *Music in 12 Parts* was first being performed, the ensemble consisted of three electronic keyboards, wind instruments and voice, all amplified and fed through a mixer. Tim Page, ‘Music in 12 Parts (1993)’, in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 99.

<sup>15</sup> Kozinn, ‘The Touring Composer as Keyboardist (1980)’, 106.

Glass had created an ensemble which, after considerable rehearsal and experience, could successfully translate Glass's sound from his mind to his audience:

Ultimately, I found that the band, after playing together seven or eight years, and doing concert after concert, had developed a sound and an identity of its own. And that was largely because Kurt had developed a sound system specific to the needs of this band.<sup>16</sup>

The Philip Glass Ensemble's distinguishable soundworld resulted from the ensemble's collectively enhanced sound and, in this instance, was intensified by a nonperforming musician who was considered in every way a full member of the collective.

Aside from Glass's strategic compositional use of the piano and keyboards throughout his film scores and use of keyboards within the Philip Glass Ensemble, Glass's relationship with the piano served another importance. In the 1980s, Glass began performing solo piano recitals on tour and he decided he needed solo piano repertoire for these concerts.<sup>17</sup> He transcribed an array of his own well-known works such as the incidental music composed for a staging of Franz Kafka's *The Metamorphosis*, and the film score from Errol Morris's *The Thin Blue Line* to create a piano suite entitled *Metamorphosis*.<sup>18</sup> Glass released his acclaimed solo piano album entitled *Solo Piano* in 1989 with the composer also acting as pianist. The recording includes *Mad Rush* (for piano and organ) and *Wichita Vortex Sutra* alongside his *Metamorphosis* suite, both works written for significant purposes.<sup>19</sup> Here Glass presents

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<sup>16</sup> Ibid., 106.

<sup>17</sup> His piano suite *Metamorphosis* was included and performed by Glass on his album *Solo Piano* in 1989. Thomas May, 'The Complete Piano Etudes', <<https://www.pomegranatearts.com/project/the-etudes/>> [accessed 16 March 2023].

<sup>18</sup> Franz Kafka's novella, *The Metamorphosis*, was first published in Germany in 1915 and formed the basis of Glass's inspiration for his suite in 1988. Errol Morris's documentary, *The Thin Blue Line*, premiered in 1988, with original music by Glass. Peter Mendelsund, 'Errol Morris The Thin Blue Line', <<https://www.criterion.com/films/28355-the-thin-blue-line>> [accessed 16 March 2023].

<sup>19</sup> *Mad Rush* was originally composed for organ in 1978 for the organ in the cathedral of St John the Divine, New York, on the occasion of the Dalai Lama's first public address in the US in 1979. Mickey Lemle, 'An interview with Philip Glass – Mad Rush and the Dalai Lama', <<https://philipglass.com/glassnotes/93641/>> [accessed 16 March 2023].

*Wichita Vortex Sutra* refers to Allen Ginsberg's anti-war poem by the same name written in 1966. Glass collaborated with Ginsberg after hearing Ginsberg read the poem in New York. Jessie Rothwell, 'Opening/ Wichita Vortex Sutra', <<https://www.hollywoodbowl.com/musicdb/pieces/2536/openingwichita-vortex-sutra>> [accessed 16 March 2023]. Philip Glass, *Solo Piano*, Philip Glass, CD, CBS Inc., FM 45576, 1989.

himself as a solo pianist for the first time with no amplification, no electronic keyboards or synthesisers, merely a lone acoustic piano. His works on the album represent his established sonorities of repeated patterns and melodic motifs and the record hints at Glass's connection to the classical tradition, one with which the composer is not usually associated. The recording offers occasional glimpses of a gracefulness present in works such as J. S. Bach's *Keyboard Suites* and, at several points, Glass explores a stillness similar to the impressionistic piano music of French composer Erik Satie. Yet, throughout the collection of solo piano music, the embodiment of Glass as a twentieth-century composer with a unique voice is evident. The final piece on the album, *Wichita Sutra Vortex*, offers a strikingly American conclusion to the album. Glass creates an ode to gospel music in a similar manner to Aaron Copland's gospel and folk-inspired work including his *Old American Songs*.<sup>20</sup> Throughout Copland's work, he often referenced a specific tune. Meanwhile, in *Wichita Sutra Vortex*, Glass successfully captures a gospel-inspired feel without referring to any specific work.

## ii. Étude beginnings

In 1991, two years after his solo piano album was released, Glass began his étude escapade, bringing his piano music to new heights and widening his reach across the classical music world. In an interview discussing his keyboard technique in the 1980s, Glass described using Dohnányi exercises to nurture his own playing.<sup>21</sup> The *Twenty Piano Études*, considered by Daniel Stephen Johnson as 'some of the most beautiful and inventive music of his late period',<sup>22</sup> were born from Glass's dedication to developing his own pianistic skills. Glass's études were also created for the purposes of his new venture as a travelling solo pianist and

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<sup>20</sup> Copland's collection *Old American Songs* was published between 1950 and 1954, during the Cold War. The premiere of the first set of songs was given by Benjamin Britten and Peter Pears at Aldeburgh Festival in England. Kassandra Hartford, 'A Common Man for the Cold War: Aaron Copland's "Old American Songs"', *The Musical Quarterly*, 98 (2015), 313.

<sup>21</sup> Kozinn, 'The Touring Composer as Keyboardist (1980)', 107.

<sup>22</sup> Daniel Stephen Johnson, 'Philip Glass's Piano Etudes Exemplify a Muscular Late Period', <<https://www.wqxr.org/story/philip-glass-piano-etudes-exemplify-his-late-period/>> [accessed 20 March 2023].

his requirement for having new piano music to perform on tour. This was a new experience for Glass who was accustomed to the vibrancy and camaraderie of his ensemble as he had now delved into a more intimate space with himself at the piano.<sup>23</sup> As a solo pianist, Glass was inspired to improve his technique and he was interested in developing a pedagogical strategy which would help him to become ‘a better player’.<sup>24</sup> Like many other composer-pianists such as Nikolai Kapustin and Marc-André Hamelin, Glass wrote his études for the purposes of being challenged technically and physically. His mission was accomplished and, during the composition of Book I of his études, his playing significantly improved and several deficiencies in his playing had been addressed. Another incentive for the work included a commission for Dennis Russell Davies’s fiftieth birthday in 1994, with Glass presenting the first group of six études as a gift to Davies.<sup>25</sup>

Glass’s original goal was to complete twenty pieces in the étude collection, across two books, and he initially assumed that he would perform the entire set of twenty himself.<sup>26</sup> However, this plan did not materialise.<sup>27</sup> Thomas May describes each of Glass’s études as ‘a miniature’, with the experience of hearing the whole collection as having ‘a characteristically Glassian epic dimension’.<sup>28</sup> However, it is a testament to the strength of the material within each of these ‘miniatures’ that several of the études are regularly performed in isolation from the entire collection. May compares Glass’s étude work to the length and breadth of Glass’s operatic contribution and his ability to complete overarching cyclical operatic projects. Glass has spoken of the result of listening to all twenty études in their entirety as being ‘a self-

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<sup>23</sup> Philip Glass, ‘Philip Glass discusses The Etudes (exclusive)’, <<https://www.youtube.com/watch?v=TjSXbPvmVEM&t=12s>> [accessed 14 March 2023].

<sup>24</sup> Philip Glass, *The Complete Piano Etudes* (London: Chester Music Limited, 2014).

<sup>25</sup> Conductor and pianist, Dennis Russell Davies, is one of Glass’s most significant advocates and collaborators. Christopher Sonnleitner, ‘A Tribute to Philip: Maki Namekawa, Dennis Russell Davies and Cori O’Lan congratulate Philip Glass on his 85th Birthday’, <[https://ars.electronica.art/press/en/2022/01/25/residency\\_austen\\_peluso/](https://ars.electronica.art/press/en/2022/01/25/residency_austen_peluso/)> [accessed 17 March 2023].

<sup>26</sup> Glass, ‘Philip Glass discusses The Etudes (Exclusive)’.

<sup>27</sup> See Chapter IV, 136-137.

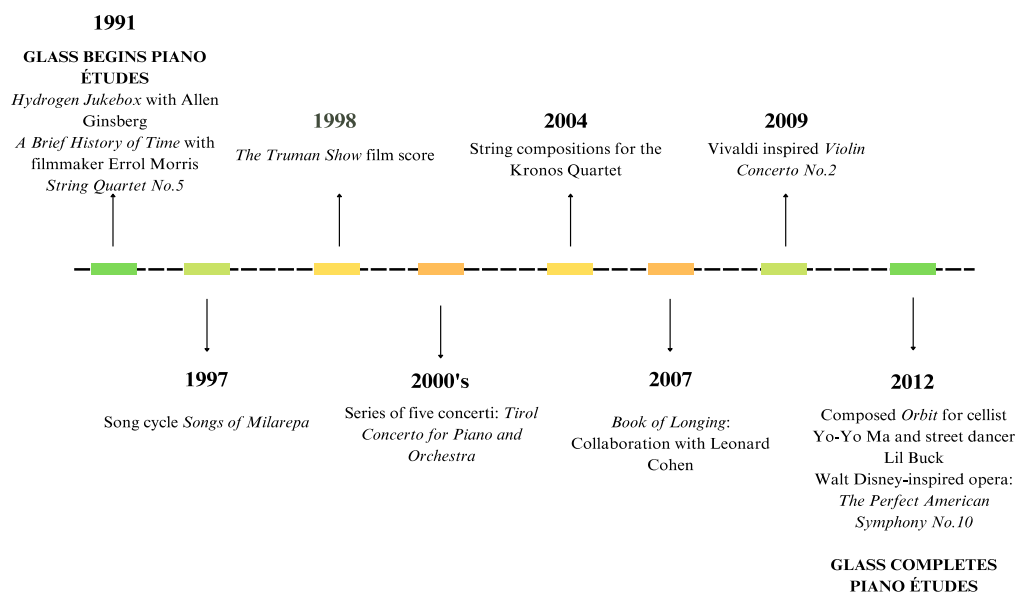
<sup>28</sup> May, ‘The Complete Piano Etudes’.

portrait which wasn't initially intended but unavoidable.<sup>29</sup> Like many étude composers before him, these piano études portray a biographical insight into his work. Composer and performer Timo Andres, who joined Glass on his tour performing the complete *Twenty Piano Études*, spoke of the long-lasting impact of hearing the full collection of études:

Having now listened through the whole set a number of times, there really is that sense of catharsis by the end. Just the fact that they were written over about twenty-five years of the composer's life: you're going to have a built-in progression in that situation. It's very interesting for me from a compositional standpoint and structuring a large-scale piece over that span of time. It articulates time, in compositional development terms.<sup>30</sup>

The *Twenty Piano Études* span a lengthy portion of Glass's career, mirroring his development as an artist over twenty years who was exploring numerous collaborations and inspirations across various mediums and art forms (Image 1).

Illustration 4.1 Philip Glass timeline (1991-2012)



<sup>29</sup> Glass, 'Philip Glass discusses The Etudes (Exclusive)'.  
<sup>30</sup> Timo Andres in conversation with William Robin. Robin, 'The complete piano etudes by Philip Glass'.

As a composer whose life and work are imbedded in collaboration, the medium of *étude* writing is significant within Glass's output. His *études* stand on their own, existing outside of Glass's experienced and applauded contributions to the world of film and stage, all of which often include a splendour of visuals, multiple narratives and dramatically rich characters. By shining a spotlight solely on the piano, Glass's collection of *études* has resulted in twenty unique and intimate works, arriving at the apex of the composer's musical desires.

Simultaneously the *études* offer an introspective insight into the world and mind of Glass.

Glass has a unique and veiled ability to refer to various composers throughout his *études* while retaining his truly original and immediately-recognisable soundworld. On occasion, the listener is offered a glimpse into Glass's other musical influences throughout the studies.

Thomas May considers Schubert as the most prominent presence within Glass's *études*.<sup>31</sup>

Meanwhile Jenny Lin, performer and collaborator of Glass, believes some of Glass's *études* allude to Chopin's and Liszt's studies, while others are reminiscent of Debussy and on occasion even Scarlatti.<sup>32</sup> Lin concludes that the *études* are 'all really different but of course the language is Philip Glass.'<sup>33</sup>

Glass dedicated over twenty years to the completion of his collection of *études*, citing two main objectives for the overall collection. Spanning a lengthy arc of Glass's career, the *étude* collection fits into Glass's late style, introducing Romantic elements into a harmonically-varied language. In Book One, minor keys dominate the collection in numbers 1, 4, 5, 6, 7, 8 and 9, while the home keys of Book Two are split between major and minor. The minor key *études* include numbers 11, 12, 16, 17 and 18. Two *études* are listed as having two key

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<sup>31</sup> May, 'The Complete Piano Etudes'.

<sup>32</sup> Pianist Jenny Lin; quoted in Robert Rowat, 'How Philip Glass's Etudes changed pianist Jenny Lin's life', <<https://www.cbc.ca/music/read/how-philip-glass-s-etudes-changed-pianist-jenny-lin-s-life-1.5082002>> [accessed 20 March 2023].

<sup>33</sup> Ibid.

signatures (Table 4.1). There is also a notable difference in attitude and style between the two halves. Book One includes several expected and straightforward material for the performer, which Glass performed himself, while Book Two explores more harmonically-daring paths as the music takes shape in intriguingly unpredictable forms.

Table 4.1 Key Signatures of Book One and Book Two

<b>Book One</b>	<b>Book Two</b>
No 1 g minor	No 11 c minor
No 2 C major	No 12 d minor
No 3 A major	No 13 A major
No 4 d minor	No 14 A Flat major
No 5 f minor	No 15 D major
No 6 f minor	No 16 g minor
No 7 a minor	No 17 f minor
No 8 a minor	No 18 g minor
No 9 c minor/f minor	No 19 a minor/C major
No 10 E Flat major	No 20 C major

### iii. Book One *Twenty Piano Études: Obsessions*

Nico Muhly, composer, pianist and long-term collaborator of Glass, has performed Glass's *Twenty Piano Études* on tour with Glass and has referenced the obsessive nature of the études:

When I was working for Glass, you could see things from the Etudes form the germ of an idea. The fun of an etude is that it's a study. It's designed for technical or harmonic obsessions. All of them are little diagrams of where Glass's head is at the time.<sup>34</sup>

Rhythmic repetition is an obsessive measure used to great effect by Glass in order to drive the material and to create a specific atmosphere. From a pianist's perspective, the repetition of an arpeggio and ostinato alongside a web of musical patterns allows the performer to focus on

<sup>34</sup> Nico Muhly; quoted in Steven W. Thrasher, 'Philip Glass's Etudes: the sound of a lifetime', *The Guardian*, 8 December 2014.

technical difficulties, including balanced dynamics between each note, hand position and movement, as well as legato playing and specific articulations. Other obsessional features used in the collection to maximum effect include structural layering and motor-rhythmic pulse, creating an original, intricately melodic body of work. These techniques are explored throughout the entire set beginning with Étude No.1 and culminating with Étude No.20.

### Étude No.1

A dramatic chordal five-bar opening in a classical style, with attention on this occasion given to chord-weighting in the upper voice, delves straight into the familiar rhythmic soundworld of Glass (Example 4.1).

Example 4.1 Philip Glass, Étude No.1, bars 1-5

Audio Track 1 Example 1.1 (0:00-0:18)

The musical score for Philip Glass's Étude No. 1, bars 1-5, is presented in two systems. The first system, labeled '1', shows the initial five bars. It begins with a treble clef, a key signature of one sharp (F#), and a 4/4 time signature. The tempo is marked as 144. The music is in a dramatic, chordal style, with a forte (f) dynamic. The right hand plays a series of chords, while the left hand plays a similar chordal pattern. The second system, labeled '2', shows the continuation of the piece. It features a melodic line in the right hand and a rhythmic pattern in the left hand. The right hand plays a series of eighth notes, while the left hand plays a series of triplet eighth notes. The dynamic remains forte (f).

Etudes for Piano by Philip Glass  
1999 © Duvagen Music Publishers. Used by Permission.

The introduction of a long melodic line is presented above alternating left-hand homophonic broken chords. On first appearance, these repeated left-hand chords appear manageable however quick alternating between black keys and white requires careful hand positioning (Example 4.2). This opening étude alternates between rhythmic and melodic dominance.



Example 4.2 Philip Glass, Étude No.1, bars 18-21

Audio Track 1 Example 1.2 (0:39-0:44)

5

Repeated triplets in both hands, with the pattern appearing on five occasions, are tricky for a pianist to control simultaneously (Example 4.3). After the main material has been introduced, Glass begins alternating dynamics, adding a further obstacle. The marked articulation is particularly challenging amidst the necessity of maintaining a steady pulse. Consistency in rhythm, hand shape and control is vital.

Example 4.3 Philip Glass, Étude No.1, bars 74-81

Audio Track 1 Example 1.3 (3:24-3:34)

19

20

## Étude No.2

In this expansive and moving étude, Glass creates a ‘push and pull’ feel throughout the beautiful melodic piece. He achieves this with the clever use of an obsessive alternating 7/8 and 4/4 metric (Example 4.4).

Example 4.4 Philip Glass, Étude No.2, bars 1-5

Audio Track 2 Example 2.1 (0:00-0:14)

1 ♩ = 104

mp

This passage can be viewed as the A section of the study. Despite being carefully phrased and articulated in specific groupings, a pianist needs to delicately craft a long sense of line in order to generate a wash of sound waves. Therefore, the use of the pedal requires much consideration and attention in order to pay homage to the composers specific phrasing.<sup>35</sup> After a lengthy expansion of the motif, the material is interrupted halfway through the piece. A chordal 4/4 pulse creates a change of character, introducing the B section (Example 4.5).

Example 4.5 Philip Glass, Étude No.2, bars 41-45

Audio Track 2 Example 2.2 (3:22-3:35)

5

mf

<sup>35</sup> Phrasing such as this is commonly used in Glass’s orchestral works, particularly for bowed and wind instruments, including *Glassworks* (1981).

The following passage requires thoughtful consideration and meticulous chord management for the ensuing lengthy build-up to the climax. The original A theme re-emerges and for the first time is marked *piano*, with both hands performing the opening material, shortly before the left hand continues in octaves. The legato octaves require isolated practice and is testing for a performer in sustaining the peaceful mood of the étude (Example 4.6).

Example 4.6 Philip Glass, Étude No.2, bars 71-80

Audio Track 2 Example 2.3 (5:47-6:12)

The musical score for Example 4.6 consists of two systems. The first system features a right hand (RH) melodic line and a left hand (LH) octave line. The RH part starts with a *p* dynamic marking. The time signatures for both hands are 7/8, 4/4, 7/8, 4/4, 7/8, and 4/4. The second system shows the RH playing chords in 4/4, 7/8, 4/4, 7/8, and 4/4 time signatures, with the LH continuing the octave pattern. The piece concludes with a final 7/8 measure. The dynamic marking 'p' is present at the beginning of the first system.

It must sound as though both hands are playing the octaves and that there is no difference in sound between the sustained octaves in one hand and the two hands taking over. Glass has specifically marked this (R.H) in the score (Example 4.6, bar 77 and bar 79). The piece continues its final descent to its poignant conclusion.

### Étude No.3

With its pulsating swing feel, this étude creates an unsettled and exciting atmosphere with its clever manipulation of rhythm. Initially beginning with a jubilant syncopation in the opening

four bars, Glass introduces quavers in simple triple time followed shortly by grouped quavers in compound duple time (Example 4.7). He achieves this without changing time signature.<sup>36</sup>

Example 4.7 Philip Glass, *Étude No.3*, bars 5-16

Audio Track 3 Example 3.1 (0:11-0:23)

The musical score for Philip Glass's *Étude No. 3*, bars 5-16, is presented in three systems. The first system (bars 5-8) shows a melody of eighth notes in the right hand and a bass line of eighth notes in the left hand, marked *mf*. The second system (bars 9-12) is marked with a '2' in a box and *f*, indicating a change in the right hand to chords and a rumbling octave bass line in the left hand. The third system (bars 13-16) returns to the eighth-note pattern in both hands, marked *mf*.

The motor rhythm is interrupted every few bars by a rumbling octave bass line. Glass creates a rhythmic progression of 3/4 – 7/8 – 3/4 – 4/4 to off-set the groove using specific articulation markings. This is particularly effective in the 4/4 bars to create a rhythmic illusion with groupings of sixes and twos (Example 4.8).<sup>37</sup>

<sup>36</sup> Similar rhythmic patterns can be found in Leonard Bernstein's 'I want to live in America' from *West Side Story* and George Bizet's 'Habanera' from his opera *Carmen*.

<sup>37</sup> See Chapter IV, 131.

Example 4.8 Philip Glass Étude No.3, bars 33-45

Audio Track 3 Example 3.2 (1:00-1:16)

Glass later swaps this groove to 7/8 – 4/4 – 3/4 – 4/4, once again manipulating the numbers of quavers per bar (Table 4.2 and Example 4.9). The end of this section leads to another set of grouped quavers in compound duple time.

Table 4.2 Number of quaver beats per bar in Philip Glass, Étude No.3

Bar 33-48	6 -7- 6- 8
Bar 89-104	7- 8- 6- 8

Example 4.9 Philip Glass, Étude No.3, bars 89-104

Audio Track 3 Example 3.3 (3:29-3:49)

The musical score for Philip Glass's Étude No. 3, bars 89-104, is presented in four systems. The first system shows the beginning of the piece with a key signature of two flats and a 4/4 time signature. It features a complex rhythmic pattern with frequent meter changes. The first staff is marked with a box containing the number 11. The second staff is marked with a box containing the number 12. A dashed line with the number (8) is located below the first staff. The score includes dynamic markings such as *f* and *mf*. A section labeled "back to Fig. 5 (with repeats)" is indicated above the second system. The piece concludes with a double bar line and repeat signs.

Étude No.4

This piece is centred on ‘rise and fall’ surges in the bass. Unlike the previous three études in Book One, there is no change in meter in the entire study. A consistent 3/4 pulse remains present throughout. However, the two dotted beats per bar is often followed by three straight crotchets creating a familiar two-by-three feeling (Example 4.10).

Example 4.10 Philip Glass, Étude No.4, bars 9-12

Audio Track 4 Example 4.1 (0:15-0:18)

The image shows a musical score for Example 4.10, Philip Glass, Étude No.4, bars 9-12. It is written in bass clef and consists of two staves. The right hand (treble clef) plays chords, with dynamics *p* (piano) and *mf* (mezzo-forte) indicated. The left hand (bass clef) plays a melodic line with slurs, creating a polyrhythmic texture with the right hand.

Polyrhythms between two hands can create issues for a pianist when considering how best to bring out long melodic lines or inner chord notes in one hand (Example 4.10), while simultaneously controlling contrary groupings in the other (Example 4.11).

Example 4.11 Philip Glass, Étude No.4, bars 51-59

Audio Track 4 Example 4.2 (1:12-1:23)

The image shows a musical score for Example 4.11, Philip Glass, Étude No.4, bars 51-59. It is written in treble clef and consists of two staves. Bar 7 is marked "7 a tempo". Bars 8 and 9 are marked with box numbers. The right hand (treble clef) plays a melodic line with slurs, and the left hand (bass clef) plays a rhythmic pattern. The dynamics *mp* (mezzo-piano) are indicated.

This is particularly relevant when highlighting a different line or chordal note on the repeat of sections and/or when Glass makes a specific marking for the second time (Example 4.12).

Example 4.12 Philip Glass, *Étude No.4*, bars 19-24

Audio Track 4 Example 4.3 (0:37-0:42)

The image shows a musical score for Philip Glass's Étude No. 4, bars 19-24. It is a two-staff piece in 4/4 time. The left hand (bass clef) features a rhythmic pattern of tied quaver notes, starting with a dynamic of *mf* and moving to *p*. The right hand (treble clef) consists of chords and trills. A first ending bracket covers the final two bars, with a second ending marked "(2nd time: poco cresc.)".

Glittering trills in the right-hand bring the piece to a close.

### Étude No.5

This meditative étude offers no change within the 4/4 meter and yet it is entirely unique in sound and style. Achieving a sense of simplicity is the most challenging factor of the study. Its beauty is reminiscent of the final sixteen bars of *Étude No.20* as well as the opening of Glass's *String Quartet No.2*.<sup>38</sup>

Glass presents three delicately constructed sections, reflective of the layering of structures in the A section of *Étude No.2*. He gently establishes the opening material entering with a subtle melodic passage in the left hand. He immediately places emphasis on the tied quaver notes which require masterly tapering ensuring that the fourth quaver does not poke through. The bass line must sing with clarity, as if played with another hand, and be placed evenly with the first of the quaver groupings (Example 4.13).

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<sup>38</sup> Glass's *String Quartet No.2* received its premiere in 1983 at the Public Theatre, New York. Anon, 'Philip Glass compositions', <[https://philipglass.com/compositions/string\\_quartet\\_2/](https://philipglass.com/compositions/string_quartet_2/)> [accessed 21 May 2023].



Example 4.13 Philip Glass, Étude No.5, bars 1-5

Audio Track 5 Example 5.1 (0:00-0:17)

Later Glass expands the material placing long octaves in the right hand which require particular care in length and tone. The difference between the dotted crotchet and crotchet becomes a feature of the étude, creating an imbalance in the melodic line. This is especially evident in the third and final section when all four lines merge (Example 4.14).

Example 4.14 Philip Glass, Étude No.5, bars 75-78

Audio Track 5 Example 5.2 (6:49-7:02)

This piece is one of the most dynamically-notated études with an array of markings present (Example 4.15).

Example 4.15 Philip Glass, *Étude No.5*, bars 35-45

Audio Track 5 Example 5.3 (1:58-2:38)

The image shows a musical score for Philip Glass's *Étude No. 5*, bars 9-11. The score is in 6/8 time and features a constant eighth-note pulse in the left hand. The right hand has a melody with dynamic markings *p*, *mf*, and *mp*. Bar numbers 9, 10, and 11 are indicated in boxes above the staff.

If followed accurately, the crescendos and decrescendos create soothing waves of rising and falling melodies. With the use of his layering technique, Glass masterfully creates a sense of stillness within the piece, inspiring a pianist to explore the possibilities of sound within the piano.

### Étude No.6

This *étude* is one of the most exciting of the set to perform and presents a pianist with several rhythmic and technical challenges. Hunter Hoyle credits Glass's *Étude No.6* as existing as a musical response to John Ashbery's poem, 'No Longer Very Clear'.<sup>39</sup> Hoyle considers the *étude* as serving a psychological purpose, connecting the structure of the *étude* to the five stages of the sleep cycle.<sup>40</sup> The pulsating motor quaver pulse in the left hand continues from start to finish. Here Glass returns to his obsessive familiar measures with one repeated F being played thirty-six times (Example 4.16). This right-hand F requires a clear, weighted approach without the note being attacked too lightly. Consideration must be given to fingering of the repeated F notes and whether to play with alternative fingers three and two or to use one

<sup>39</sup> Hunter Hoyle, 'Maximizing Form in Minimalism: Psychological Form as Narrative in Phillip Glass's Etude No. 6', *UNC Journal of Undergraduate Research*, 6 (2022), 64.

<sup>40</sup> *Ibid.*, 66.

finger. I choose to use a repeated third finger in performance for evenness of tone. My experience using alternating fingers resulted in an overall slower tempo.

Example 4.16 Philip Glass, Étude No.6, bars 1-6

Audio Track 6 Example 6.1 (0:00-0:13)

1 ♩ = 132

6

*p*

2

*p*

*mp*

Rising semitones in the bass chord notes between bar 3 and 4 and bar 6 creates immediate melodic tension. Broken arpeggiated chords in the right hand leads to a climactic rising F minor scale passage. The quick change from chord notes to rising octaves and wide jumps at a swift tempo necessitates total control of both hands (Example 4.17).

Example 4.17 Philip Glass, Étude No.6, bars 15-19

Audio Track 6 Example 6.2 (0:52-1:01)

5

*f*

8...]

8...]

8...]

8...]

Glass's short B section explores some of his most evocative piano writing with two four-bar repeated sections creating static and then sweeping wave-like passages. The opposing harmonies of F minor and E major in bar 40, which represent opposite ends of the circle of fifths, are considered by Hoyle as 'invoking the "throbbing" sensation described in Ashbery's text by creating a sort of harmonic and metrical headache for the listener'.<sup>41</sup> This étude can also be considered from Susan McClary's perspective of considering Glass's harmonic gestures as symbols of 'Romantic signs of hope and yearning' with Glass using the contradictory, clashing structure of the middle section to highlight the dramatic tension within the piece.<sup>42</sup> Glass alters the phrasing, distorting the concise groupings of triplets from long phrases into smaller groupings of fives and one group of three. By repeating these cycles, the groupings create natural accents on each of the F notes in the bar (Example 4.18).

Example 4.18 Philip Glass, Étude No.6, bars 37-43

Audio Track 6 Example 6.3 (2:26-2:47)

<sup>41</sup> Ibid., 70.

<sup>42</sup> McClary, 'Minima Romantica', 57-58.

This étude requires miniscule, inaudible breaths throughout the piece to pace the sections and manage the everchanging shifting of sound and material. The final return to the repeated Fs, from broken chord triplets must be controlled delicately so as not to disturb the quavers marked *piano* (Example 4.19). A reversal of the introductory A material (A1-A2-A3-A4) ends with A4-A3-A2-A1.

Example 4.19 Philip Glass, *Étude No.6*, bars 49-50 into bar 51

Audio Track 6 Example 6.4 (4:39-4:45)

bars 49-50

bar 51

### *Étude No.7*

This étude is initially similar to the structural themes of melodic layering present in *Étude No.2* and *Étude No.5*, however, it also contains the rhythmic consistency of *Étude No.12*. The smooth melody line appears for the first time in the left hand, situated on top of the chords (Example 4.20). This requires a careful thumb action in order to draw out the legato melodic line.

Example 4.20 Philip Glass Étude No.7, bars 1-3

Audio Track 7 Example 7.1 (0:00-0:09)

7

The same issue arises when the melody is transferred to the right hand in bar 10 and the line is embedded within the rhythmic motor (Example 4.21). It is necessary to ensure the crotchet melody is as even as possible. Once control has been achieved, it is then possible to create a rubato feel through the rising and falling chordal motif in the left hand. I attempt to offer a variation to this rubato on the repeat. Care must be taken to avoid stopping on barlines and breaking the phrase.

Example 4.21 Philip Glass, Étude No.7, bars 10-12

Audio Track 7 Example 7.2 (0:45-0:52)

2

Glass's rising and falling semitone gestures within the melody as well as his technique of using steady rhythmic values followed by dotted crotchet syncopations allows the music to take on real epic stature. A dazzling passage of one-note trills offers a further challenge when positioned amongst a chord and repeated twice. Strength in hand positioning and dexterity of fingers is needed to ensure the trills shimmer and do not stagger the rhythmic pulse (Example 4.22). Glass's closing material eloquently harks to the opening melody line, initiating a question-and-answer response while dragging towards its eerie conclusion.

Example 4.22 Philip Glass, Étude No.7, bars 43-51

Audio Track 7 Example 7.3 (3:22-3:43)

6

D.C. (with repeats)

### Étude No.8

A thoughtful and subdued étude in A minor presents another moving contribution to the collection. A ‘raindrop’- like four-bar opening is followed by a sustained line in the right hand, accompanied by a sea of gentle quavers in the left (Example 4.23).

Example 4.23 Philip Glass, Étude No.8, bars 1-10

Audio Track 8 Example 8.1 (0:00-0:24)

The B section offers a dramatic contrast to the outer sections with Glass removing a quarter beat from the bar, alternating from the 4/4 time signature to 7/8. Glass's use of diminution produces a build-up of tension as he returns to 4/4 for the climax of the piece, achieving a sense of forward momentum within the rippling triplet passages (Example 4.24).

Example 4.24 Philip Glass, Étude No.8, bars 43-51

Audio Track 8 Example 8.2 (2:18-2:36)

Shortly afterwards, the A theme reappears in the original time signature of 4/4. An unexpected coda returns to 7/8 in the final bars, alluding to the opening of *Étude No.16* (Example 4.25 and Example 4.26).



Example 4.25 Philip Glass, Étude No.8, bars 87-91

Audio Track 8 Example 8.3 (5:17-5:37)

Example 4.26 Philip Glass, Étude No.16, bars 1-8

Audio Track 16 Example 16.1 (0:00-0:10)

### Étude No.9

As the shortest étude in the collection, I consider this ethereal étude to be in two keys: C minor and F minor. Beginning with the gentle rocking of octave quavers, a reoccurring melodic octave leap in the right hand enters in bar 5 (Example 4.27). Glass repeats the leap as if questioning the direction of the melody. The obsessive use of this leap is first heard above a bed of chordal progressions in the left hand beginning with chord I (Example 4.27) and later repeated exploring chords I<sup>7</sup>, VI and IV (Example 4.28).

Example 4.27 Philip Glass, Étude No.9, bars 5-7

Audio Track 9 Example 9.1 (0:06-0:13)

Musical score for Example 4.27, bars 5-7 of Philip Glass's Étude No. 9. The score is in 5/4 time and marked *mp*. It shows a melodic line in the right hand and a rhythmic accompaniment in the left hand.

Example 4.28 Philip Glass, Étude No.9, bar 14

Audio Track 9 Example 9.2 (0:35-0:42)

Musical score for Example 4.28, bar 14 of Philip Glass's Étude No. 9. The score is in 5/4 time and marked *mp*. It shows a melodic line in the right hand and a rhythmic accompaniment in the left hand.

Chord I<sup>7</sup>

Example 4.29 Philip Glass, Étude No.9, bar 23

Audio Track 9 Example 9.3 (1:05-1:11)

Musical score for Example 4.29, bar 23 of Philip Glass's Étude No. 9. The score is in 5/4 time and marked *mp*. It shows a melodic line in the right hand and a rhythmic accompaniment in the left hand.

Chord VI

Example 4.30 Philip Glass, Étude No.9, bar 32

Audio Track 9 Example 9.4 (1:34-1:41)

Musical score for Example 4.30, bar 32 of Philip Glass's Étude No. 9. The score is in 5/4 time and marked *mp*. It shows a melodic line in the right hand and a rhythmic accompaniment in the left hand.

Chord IV

The elongated leaping material is interrupted by a slower stagnant chordal passage in F minor, embedded with counterpoint. The articulation of the two inner lines, while firmly holding the outer notes, requires relaxed thumbs and strong fifth fingers (Example 4.31). As both passages are marked *mezzo forte*, a pianist must consider how best to present the material and provide variety for the listener.

Example 4.31 Philip Glass, Étude No.9, bars 41-56

Audio Track 9 Example 9.5 (2:05-2:53)

The musical score for Philip Glass's Étude No. 9, bars 41-56, is presented in four systems. The first system is marked with a box containing the number 6 and a tempo marking of quarter note = 120. The second system is marked with a box containing the number 7. The third system is marked with a box containing the number 7. The fourth system is marked with a box containing the number 7. The score features a repeating melodic motif in the right hand and a rhythmic accompaniment in the left hand. The key signature is F minor. The piece concludes with a final cadence in 5/4 time.

A return to the leaping material now in F minor, draws the piece to a close. This is a concise example of one of Glass's obsessive melodic ideas explored in less than four minutes.

## Étude No. 10

Glass's *Étude No.10* is a stylistically-typical endurance-testing étude dominated by rhythmic intent. It is a fine example of the mechanical 'space machine' sound of which Glass is particularly fond.<sup>43</sup> The repeated pulsating figure of moving quavers never ceases throughout the seven-minute piece, spotlighting Glass's persistent use of rhythmic and harmonic shifts. The lift of the 3/4 pulse abruptly switches gear to 4/4 only to return to 3/4 a few bars later creating a dramatic effect for the listener (Example 4.32).

Example 4.32 Philip Glass, *Étude No.10*, bars 45-52

Audio Track 10 Example 10.1 (1:13-1:26)

I nickname this the 'rush hour étude', with the piece being evocative of futuristic traffic jams in population exploding cities. Throughout the study, Glass continuously swaps the B Flat dominant seventh chord between the right hand and the left hand adding a further challenge for performance. This is to be done as seamlessly as possible, without the listener being aware of the changing of hands, all while maintaining consistent pulse and manoeuvring through the various time signature changes (Example 4.33).

<sup>43</sup> See Chapter III, 61.

Example 4.33 Philip Glass, Étude No.10, bars 41-44

Audio Track 10 Example 10.2 (1:10-1:13)



Glass has discussed the training required for repetitive practice such as this:

What I've found, though, is that like with any other kind of practicing, if you start off slowly and gradually build up speed, you'll be able to do it. The thing is, the music must be played with a musical feeling, a feeling of naturalness, or else it won't work. Your hand has to be pretty strong, and your fingers have to be independent. You need strength simply because the pieces are so long.<sup>44</sup>

Echoes of Glass's previous work, including the later numbers of *Music in Twelve Parts* are present throughout the étude. The distinctive cells present in *Music in Twelve Parts* are mirrored in *Étude No. 10* with its short and fragmented passages. As an ode to Glass's earlier soundworld, it is a poignant way to finish Book One. When considering the relationship between minimalism and baroque music Robert Fink recalls R. D. Darrell's criteria for Baroque music as 'Music that keeps going; knows exactly where it's going; and when it gets there, promptly stops'.<sup>45</sup> This phrase also rings true in the closing étude of Book One.

<sup>44</sup> Kozinn, 'The Touring Composer as Keyboardist (1980)', 108.

<sup>45</sup> R. D. Darrell was an American music critic and author, primarily focused on recordings. 'R. D. Darrell, notes to Nonesuch H71066'; quoted in Robert Fink, *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley: University of California Press, 2005), 186.

#### iv. Book Two *Twenty Piano Études: Obsessions*

##### Étude No.11

The first étude from Book Two offers fresh sonorities and yet, similar to *Étude No. 1*, embodies Glass's desire to merge new ideas with classical forms, offering the grandeur of Rachmaninoff and drama of Liszt. Rising rhapsodic passages build a swell of sound, creating a dramatic effect for the listener. Glass showcases his mastery of anticipation throughout the study, displacing the right-hand chords by staggering the chordal progression (Example 4.34).

Example 4.34 Philip Glass, *Étude No.11*, bars 141-146

Audio Track 11 Example 11.1 (6:23-6:31)

The musical score shows two staves. The upper staff is the right hand, and the lower staff is the left hand. The right hand plays chords with a staggered progression. The left hand plays a triplet of eighth notes. The dynamics are *p* (2nd time *pp*), *poco cresc.*, and *mp* (*p*). The score is divided into two measures, 33 and 34, with bar numbers 33 and 34 in boxes above the staves.

The triplet material beginning in bar 31 and marked *pianissimo* is one of the most effective passages in the études. An intricate left-hand triplet grouping interrupts the hypnotic landscape Glass has created (Example 4.35).

Example 4.35 Philip Glass, *Étude No.11*, bars 31-38

Audio Track 11 Example 11.2 (1:22-1:35)

### Étude No.12

Highly contrasted from the first *étude* of Book Two, Glass's *Étude No.12* is a masterful example of Glass's use of graded harmonic fluctuation. Alexander Sanchez-Behar described Glass's works as favouring gradual harmonic changes by 'using a contrast of tonally functional chords and embellishing chords that accentuate the dramatic character of his music'.<sup>46</sup> This statement is reflected throughout this *étude* with Glass quickly shifting from harmonic progressions (Example 4.36).

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<sup>46</sup> Alexander Sanchez-Behar, 'Engaging Piano Students With minimalism', *American Music Teacher*, 62 (2012), 24.

Example 4.36 Philip Glass, *Étude No.12*, bars 35-38

Audio Track 12 Example 12.1 (1:43-1:50)



The study shares ties with *Étude No.10* as an example of a motor-generated pulse. However, structurally and melodically, this *étude* stands on its own with Glass constructing his uniquely familiar soundworld with the opening four-bar left-hand ostinato.<sup>47</sup> By placing a slight lean on the first of the groupings of three in the right hand, Glass highlights the counter rhythm between the three-against-two polyrhythms (Example 4.37). Questions of tone arises as the two-quaver slurred pulse in the left hand must remain as clear and rhythmic as possible with no bulging.

Example 4.37 Philip Glass, *Étude No.12*, bars 5-7

Audio Track 12 Example 12.2 (0:09-0:13)



Glass successfully uses the addition and removal of triplets to disturb the steady quaver metric. The middle section of the *étude* requires right-hand precision and focus, with the semiquavers needing to maintain a consistent speed while never surging ahead. This section

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<sup>47</sup> I have performed Glass's *Étude No.12* in insolation from the set on several occasions.



also includes one of the more challenging passages of the études with a swinging hand gesture needed to conserve the undisturbed quality of the rippling semiquavers (Example 4.38).

Example 4.38 Philip Glass, Étude No.12, bars 84-86

Audio Track 12 Example 12.3 (4:10- 4:15)



While the piece includes multiple repeated patterns, the étude never ceases to tire with Glass introducing a final rhythmic idea to the soundscape of the étude in the third and last section. A polyrhythm occurs with three dotted crotchet chords in the right hand against the consistent motor of quavers in the bass (Example 4.39). The piece ends with a final return to the opening material as the motor rhythm begins to chug, eventually disappearing over the horizon.

Example 4.39 Philip Glass, Étude No.12, bars 94-96

Audio Track 12 Example 12.4 (4:32-4:42)



## Étude No.13

This piece in A Major is one of the more focused left-hand études of the set. It is harmonically centred on chromaticism, with the repeated alternation between major and minor chords providing both harmonic and rhythmic structure to the piece (Example 4.40).

Example 4.40 Philip Glass, Étude No.13, bars 4-6

Audio Track 13 Example 13.1 (0:06-0:12)



Excellent coordination throughout the cross-rhythm passages is essential, with long chord phrases in the right hand and quaver groupings in sixths in the left (Example 4.41). As the right hand works in four and the left in six (each bar marked with a *crescendo*), it is helpful to give precedent to one of the hands. Deciding which rhythm to favour throughout the étude and during the repeat sections offers a sense of direction for the performer and variety for the listener.

Example 4.41 Philip Glass, Étude No.13, bars 10-11

Audio Track 13 Example 13.2 (0:23-0:26)



The melodic phrasing is specifically detailed in the piece and if Glass's instructions are adhered to, the étude is hugely contrasting. While care must be given to the pedal in order to avoid dissonances in sound, used effectively, the pedal helps generate musical swells.

An inclusion of a mammoth contrary motion passage (Example 4.42) with both hands mirroring each other in shaping and dynamics creates dramatic musical waves and elevates a typically mundane exercise into a concert piece.

Example 4.42 Philip Glass, Étude No.13, bars 56-63

Audio Track 13 Example 13.3 (2:45-2:58)

#### Étude No.14

Beginning with a soothing broken arpeggiated grouping, Glass uses a semitone ‘falling and rising’ feature on top of the right-hand chords to showcase controlled and sustained chords against a repeated falling bass line. This continuous bass line pattern remains constant throughout the entirety of the piece until the final four bars. Glass sets a challenge for a pianist’s left hand as he gives a clear dynamic instruction from bar 3 onwards which must be executed until a reduction in dynamic in bar 64 (Example 4.43 and Example 4.44).

Example 4.43 Philip Glass, Étude No.14, bar 3

Audio Track 14 Example 14.1 (0:14-0:17)



Example 4.44 Philip Glass, Étude No.14, bar 64

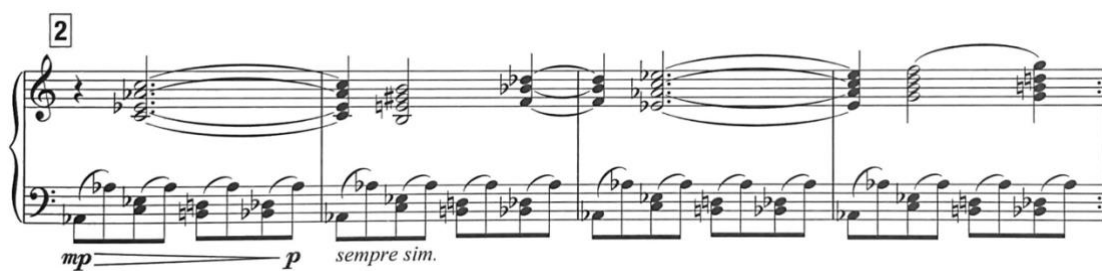
Audio Track 14 Example 14.2 (5:44-5:47)



Near the beginning of the study, Glass introduces a whole-tone scale motif beginning on a B and features throughout (Example 4.45).

Example 4.45 Philip Glass, Étude No.14, bars 7-10

Audio Track 14 Example 14.3 (0:26-0:39)

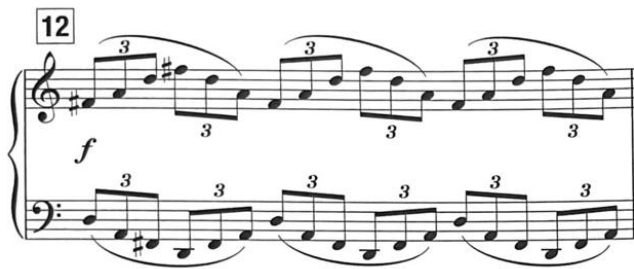


This étude is exemplary in documenting Glass's approach to exploring a multitude of harmonic and thematic ideas on top of a reoccurring pattern. The right-hand material never remains constant. Amongst the descending bass line, Glass presents an array of triplets and



Example 4.48 Philip Glass, Étude No.15, bar 37

Audio Track 15 Example 15.3 (2:31-2:34)



Example 4.49 Philip Glass, Étude No.15, bar 53

Audio Track 15 Example 15.4 (3:49-3:51)



Glass experiments in the first section with occasional rising and falling semitones at the ends of phrases, stabilising the harmonic structure. By the second and third sections, these harmonic risings are augmented with unusual harmonic sequences. A subdued bridge leads into the fourth and final section of the piece where the original material appears once more. However, on this occasion the rhythm is altered and, instead of a minim and crotchet, it consists of bombastic quaver and crotchet syncopated chord clusters in the right hand (Example 4.50). The final passage moves relentlessly through a multitude of keys.

Example 4.50 Philip Glass, *Étude No.15*, bars 87-88

Audio Track 15 Example 15.5 (4:41-4:46)

25 **Tempo primo** (♩ = 120)

*f*

This étude can be considered in relation to *Étude No.10* and *Étude No.12* due to its rhythmically mechanical and minimalist stylistic elements. It was performed at the National Concert Hall in Dublin on 2 November 2023 as the final étude of my programme and was a fitting end to Part I of the complete performance of the études.

#### Étude No.16

Resembling *Étude No.5*, in a similar form of expansion by layering its melodic structure, this poetic étude in 7/8 displays Glass's structural depth as he draws out several layers within the score. Glass's veiled opening is shortly followed by a question-and-answer-like theme. The gestures of rising and falling semitones alongside semiquaver rumblings create a poignant sweeping movement (Example 4.51).

Example 4.51 Philip Glass, Étude No.16, bars 1-7

Audio Track 16 Example 16.2 (0:00-0:17)

These gestures are placed between a gentle bed of rocking quavers grouped in three and two that must be delicately controlled. The left-hand repeated B flat quaver note requires careful hand action consideration as a pianist cannot strike the note from above or the line will be disturbed. Glass’s harmonic phrasings fluctuate between major and minor chords, offering a glimpse of resolution at the end of each eight-bar cycle (Table 4.3 and Example 4.52).

Table 4.3 Harmonic fluctuations in Philip Glass, Étude No.16

Bar 20-21	LH: g minor	E Flat Major	f minor	g minor
Bar 22-23	LH: Eb Major	g minor	a minor	B Flat Major
Bar 24-25	LH: f minor	d minor	E Flat Major	F Major
Bar 26-27	LH: B Major/b minor	B Flat Major	C Major	D Major



Example 4.52 Philip Glass, Étude No.16, bars 20-27

Audio Track 16 Example 16.3 (0:55-1:13)

Étude No.17

Opening with a four-bar chromatic introduction and deviating from E minor to E major, the étude quickly settles in the key of F minor with the main material following a specific harmonic structure of two four-bar passages (first introduced in bar 5). These progressions are present throughout the entirety of the piece with the second of the four bar passages moving to E Flat Major instead of A Flat Major (Table 4.4 and Example 4.53).

Table 4.4 Key progressions in Philip Glass, Étude No.17

Bar 5-8 First four bar passage	Bar 5 f minor	Bar 6 D Flat Major	Bar 7 A Flat Major	Bar 8 C Major
Bar 9-12 Second four bar passage	Bar 9 f minor	Bar 10 D Flat Major	Bar 11 E Flat Major	Bar 12 C Major

Example 4.53 Philip Glass, *Étude No.17*, bars 5-12

Audio Track 17 Example 17.1 (0:06-0:15)

The image shows a musical score for Philip Glass's *Étude No. 17*, bars 5-12. The score is in bass clef with a key signature of one flat (B-flat). It consists of two systems of music. The first system, marked with a '2' in a box, begins with the instruction 'mp sost.' and shows a series of chords in the right hand and a steady eighth-note accompaniment in the left hand. The second system, marked with a '3' in a box, continues the piece and includes the instruction 'poco cresc.'.

This *étude* has similar elements to *Étude No.15* regarding its rhythmic domination throughout the first half of the piece as well as Glass's precise use of augmentation and diminution.

However, the glorious and unpredictable middle section marked 'broader', beginning in G Major, alters the course of the *étude* and is dissimilar in character to Glass's previous material (Example 4.54). It leads to a beautifully-haunting sparse and nostalgic chordal passage which later develops into arpeggiated triplets, sextuplets, sustained minims and crochets before winding down completely.

Example 4.54 Philip Glass, Étude No.17, bars 85-90

Audio Track 17 Example 17.2 (3:42-3:54)

The image shows two systems of musical notation for Philip Glass's Étude No. 17. The first system, labeled '20 Broader (♩ = 96)', is in 4/4 time and marked *mf*. It features a right hand with a sequence of chords and a left hand with a rhythmic pattern of eighth notes. The second system, labeled '21 Faster', is marked *f sost.* and features a right hand with a sequence of chords and a left hand with a rhythmic pattern of eighth notes. The notation includes various musical symbols such as clefs, time signatures, dynamics, and articulation marks.

### Étude No.18

This étude marks a shift in the harmonic language between the final three études (No.18, No.19 and No.20) compared to the rest of the études, with a noticeably more complex and developed harmonic soundworld. The study begins in a 4/4-time signature with twelve triplet quavers in the left hand later joined by six sextuplet crotchets in the right hand. The left hand sways with two groups of triplet quavers in a bar while the right hand splits the bar in three. These polyrhythms must be managed against the contrasting bass articulation and slowly practised in isolation (Example 4.55). Attention to legato playing between the fourth and fifth fingers on top of the chordal clusters is imperative in strengthening the fingers while a loose hand is needed for the bottom chord notes.

Example 4.55 Philip Glass, Étude No.18, bars 3-6

Audio Track 18 Example 18.1 (0:07-0:17)

The musical score for Example 4.55 consists of two systems. The first system shows the beginning of the piece with a treble clef and a bass clef. The treble staff contains sixteenth-note sextuplets (marked with a '6' and a bracket) and the bass staff contains sixteenth-note triplets (marked with a '3' and a bracket). The second system continues this pattern for three more bars, maintaining the same rhythmic and melodic structures.

The second section of the etude is in 3/4 time which explains why Glass uses triplet rhythms in a simple time signature. This results in a built-in change of tempo moving between sections (Example 4.56). The two-bar phrases beginning in bar 19 appear much slower because of Glass's use of quavers instead of triplets.

Example 4.56 Philip Glass, Étude No.18, bars 16-18, bars 19-22

Audio Track 18 Example 18.2 (1:13-1:29)

The musical score for Example 4.56, bars 16-18, is in 3/4 time. It features a treble clef and a bass clef. The treble staff contains sixteenth-note sextuplets (marked with a '6' and a bracket) and the bass staff contains sixteenth-note triplets (marked with a '3' and a bracket). The score is divided into three bars, each with a repeat sign at the end.

bars 16-18

The musical score for Example 4.56, bars 19-22, is in 3/4 time. It features a treble clef and a bass clef. The treble staff contains sixteenth-note sextuplets (marked with a '6' and a bracket) and the bass staff contains sixteenth-note quavers (marked with a '3' and a bracket). The score is divided into four bars, each with a repeat sign at the end. A box containing the number '5' is located above the first bar. The dynamic marking *mp* is present in the first bar.

bars 19-22

## Étude No.19

The penultimate étude is one of the most relentlessly challenging of the collection. Similar, to *Étude No.13*, its melodic interest is primarily in the bass line, however, with a much-thickened texture. Potentially this could be considered a left-hand étude if the right hand was not equally as technically demanding. Glass's obsessive use of triplet patterns reaches new heights with the alternating, mirroring groupings offering a further level of complication for a pianist (Example 4.57 and Example 4.58). A precarious mirroring of semiquaver passages turned upside down follows later in the étude (Example 4.59 and 4.60).

Example 4.57 Philip Glass, *Étude No.19*, bars 1-3

Audio Track 19 Example 19.1 (0:00-0:06)

19

1 ♩ = 96

*mp*

Example 4.58 Philip Glass, *Étude No.19*, bars 10-12

Audio Track 19 Example 19.2 (0:16-0:20)

3

Example 4.59 Philip Glass, Étude No.19, bars 65-66

Audio Track 19 Example 19.3 (2:08-2:11)

14 a tempo

Example 4.60 Philip Glass, Étude No.19, bars 69-70

Audio Track 19 Example 19.4 (2:14-2:17)

15

Pedalling requires significant consideration throughout the piece due to its textural thickness.

One pedal per bass note is essential for clarity for the purpose of bringing out the bass line melody clearly amongst the other two lines. Glass successfully utilises phrasing articulation in preparing for new sections, modifying the left-hand one phrase per bar to one phrase per two bars (Example 4.61 and 4.62).

Example 4.61 Philip Glass, Étude No.19, bars 25-26

Audio Track 19 Example 19.5 (0:38-0:41)

15

Example 4.62 Philip Glass, Étude No.19, bars 53-54

Audio Track 19 Example 19.6 (1:35-1:38)

A most unusual ending in the relative key of C Major, although ending on a G major minor sixth chord with an E Flat in the right hand, creates intrigue and sets up the elegiac closing étude (Example 4.63 and 4.64).<sup>48</sup>

Example 4.63 Philip Glass, Étude No.19, bar 175

Audio Track 19 Example 19.7 (5:15 into Audio Track 20)

Example 4.64 Philip Glass, Étude No.20, bar 1

Audio Track 19 Example 19.7 (5:15 into Audio Track 20)

<sup>48</sup> If choosing not to perform the études in their chronological order, this harmonic connection is not made for the listener.

## Étude No.20

Glass's final étude is perhaps the most otherworldly of the entire set, offering a deeply moving and spacious conclusion to a collection of work spanning two decades. A listener can experience the progression of Glass's style throughout Book Two and this last étude features some of Glass's most imaginative and advanced piano writing. It is modelled on music he composed in 2012 for Godfrey Reggio's film *Visitors*.<sup>49</sup>

*Étude No.20* is considered characteristic of Glass's late period.<sup>50</sup> This study is full of unusual harmonic uncertainties and Glass's obsession with line and space creates a unique heart-breaking tension through the occasional pauses and moments of silence. It is as though the idea of pianistic space explored throughout the collection (such as in *Étude No.2*, *Étude No.5* and *Étude No.16*) has led to the peak expansiveness of this final number. The piece begins with broken arpeggiated gestures in the right hand above a left-handed melody that rises and recedes as it shifts through elongated poetic arpeggiated sequences (Example 4.65).

Example 4.65 Philip Glass, *Étude No.20*, bars 1-4

Audio Track 20 Example 20.1 (0:00-0:17)

The image shows a musical score for the first four bars of Philip Glass's Étude No. 20. The score is written for piano in 3/2 time. It begins with a tempo marking of quarter note = 72. The right hand (treble clef) starts with a piano (pp) dynamic and features broken arpeggiated gestures. The left hand (bass clef) features a rising and receding left-handed melody. The score includes dynamic markings of pp and p, and a first ending bracket over the final two measures.

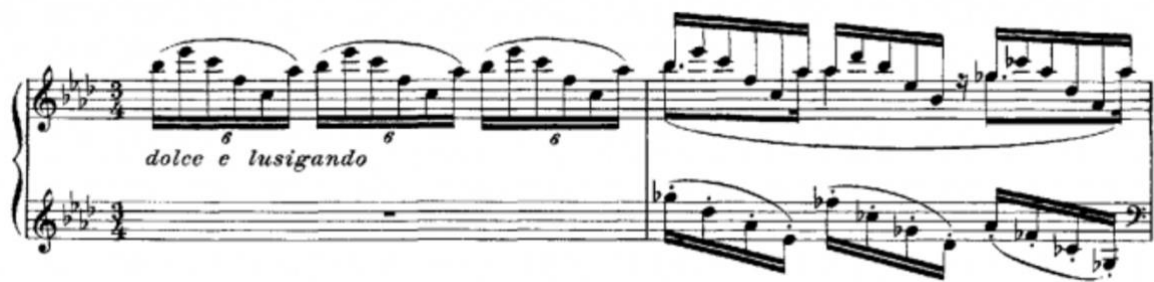
<sup>49</sup> Glass recalls the theme of the *Visitors* film also being shared with the theme from *Étude No.20*. 'Philip Glass in interview'; quoted in Richard Guérin, 'Philip Glass: Discusses his Etudes Part 2', <<http://philipglass.com/glassnotes/philip-glass-discusses-his-etudes-part-2/>> [accessed 17 May 2023].

<sup>50</sup> Other works considered characteristic of this period include the final movement of Glass's *Second Partita for Solo Cello* and the finale of his *Piano Concerto No.3*. Richard Guérin, 'Glass Notes, Brooklyn Rider and the Music of Philip Glass', <<https://philipglass.com/glassnotes/glass-notes-brooklyn-rider-and-the-music-of-philip-glass/>> [accessed 1 May 2023].



Timo Andes has described working on this piece and the challenges presented by the arpeggiated sequences throughout: ‘they’re oddly spaced, odd intervals. I would say it’s probably improved my finger substitution technique.’<sup>51</sup> While the opening is reminiscent of Debussy’s *Douze Étude XI*, ‘Pour les arpèges composés’ (Example 4.66), Glass himself has shown a consideration for a Schubertian-feel.<sup>52</sup>

Example 4.66 Claude Debussy, *Douze Étude XI*, ‘Pour les arpèges composés’, bars 1-2



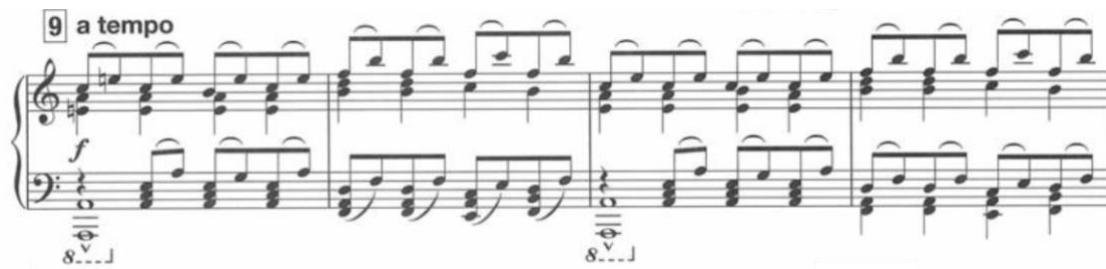
Despite influences and connections to other composers, it is evident that this étude solely belongs to the soundworld of Glass. The étude qualities of the piece feature thirds, chordal passages and wide spaced intervals. A striking chordal and bell-like passage is triumphant in capturing the overall intensity of the études (Example 4.67). Glass communicates his one final grand outpouring of emotion before the material becomes progressively less active and drags to its final epic conclusion, blending space and sound as one.

<sup>51</sup> Timo Andes in conversation with William Robin; quoted in Robin, ‘The complete piano etudes by Philip Glass’.

<sup>52</sup> Ibid. Timo Andes describes Glass asking him to play the final étude more in the style of Schubert.

Example 4.67 Philip Glass, Étude No.20, bars 35-39

Audio Track 20 Example 20.2 (3:16-3:26)



#### v. Performance considerations

My own experience of learning and performing Glass's *Twenty Piano Études* has led me to believe that these obsessions are key to understanding Glass's piano music and the path to unlocking Glass's soundworld. On first appearance, the material can seem deceptively simple. However, there can be an elusive difficulty in Glass's music. Cross-rhythms necessitate discipline and time and are a true test for an étude learner. The studies require a high degree of patience and curiosity to engage with tensional melodies, subtle tempo changes and chordal climaxes. My mission is to remain true to the score and to the sound realm in which I believe these pieces exist. I aim never to interrupt the carefully marked phrasing. Chord-weighting, inner voicing and the decision of which cross-rhythm to highlight on each playing and/or repeat requires deliberation and a trial and error process. My approach with the pedal is to create seamless, uninterrupted transitions, all while enhancing the soundworld.

The variety of the études means there is an abundance of characteristics present within the pieces, dominated by a rhythmic and melodic nature. The motor and mechanical element of Glass's soundworld is evident in several of his études including No.6, No.7, No.12 and No.19. All four of these études have a repeated pulsating rhythm that does not change character throughout the entirety of the pieces with these études serving a multipurpose including melodic and rhythmic intent. With both hands often playing independently from one another, the obsessive and stylistic nature of the repeated quaver rhythm usually

performed in one hand creates atmospheric contrasting gestures. If carefully and properly executed, the repetition of a musical pattern enhances finger coordination (Example 4.68).

Example 4.68 Philip Glass, Étude No.19, bars 61-66

Audio Track 19 Example 19.8 (2:00-2:14)

Glass previously discussed the challenges of repeated and ever-present rhythmic idiosyncrasies throughout his piano music:

The difficulties in my music are in the metrics. You have to be able to play in five in one hand and four in the other. Or, what regularly happens in my music is that I'll set up a recurring meter of three in one hand and a cycle of meters of three in one hand and a cycle of meters in the other, so that against the three you'll have nine, eight, six, five, four, three, four, five, six, eight, nine, and twelve, all worked out so that they fit the basic cycle of three, but nevertheless require a good rhythmic feeling to carry them off.<sup>53</sup>

Glass uses melodic layering to great effect by creating waves of sound, eloquently maximising the spaciousness of the étude. While a sense of space is a pre-requisite for a pianist when performing études such as No.2 and No.5, the pulse should never stall as it always requires a sense of direction. Glass expresses his requirement for playing 'musically'

<sup>53</sup> Kozinn, 'The Touring Composer as Keyboardist (1980)', 107.

above all else. He has stated that if the natural element of the music does not come across to the listener, the music does not work.<sup>54</sup>

One of the challenges in performing Glass's music is the stamina required to play in a continuous relaxed manner while still managing to show the necessary inflections and distinct phrasing as they present themselves throughout the score. Strong hands and independence of fingers is paramount to success. There are constant, minute harmonic changes in Glass's music that must be carefully and delicately integrated into the soundscape. This is another possible reason as to why Glass has expressed his dislike at being labelled a minimalist composer: 'It never repeated all the time,' Glass writes in his memoir, 'for if it had, it would have been unlistenable'.<sup>55</sup> Glass's music is constantly shifting and evolving; that is its purpose. However, these changes are subtle, almost hidden and, in order to be managed correctly, they should never interfere or disturb the continuous rhythmic pattern throughout. Conveying these stylistic obsessions of musical change tastefully throughout Glass's études is a challenge for any pianist and, if done incorrectly, can lead to a one-dimensional style of performance.

Like several of the most celebrated étude collections composed over the past two centuries, Glass's set of études is susceptible to a wide range of possible interpretations, including varying tempo, cross-rhythm voicing and dynamic considerations. Expression and the necessary tone quality for each étude must be considered. Glass credits his meticulous theory training from Boulanger as his source of security in knowing that he does not need to revise his scores and fix any incorrect notes: 'One of the things that's characteristic of my music

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<sup>54</sup> Ibid., 108.

<sup>55</sup> Philip Glass; quoted in Anne Midgette, 'If you think you know who Philip Glass is, you probably don't', *The Washington Post*, 29 November 2018.

today is that every note has a place in the music.’<sup>56</sup> From a performer’s perspective, I approached Glass’s études from this viewpoint. Instead of considering the work as repetitive structures, I regard the musical notes as having specific meanings that must be drawn out, considered and carefully approached in performance.

Joan La Barbara contemplates Glass’s earlier works as melodic units with a strict pulse repeated across a fixed cycle. These allow the listener to feel the strong accents present in the music, and how they are ‘felt in different places according to the point of augmentation or diminution of the melodic unit, while relaxing the mind through pure order’.<sup>57</sup> This consideration for Glass’s earlier work is also reminiscent of sections throughout his études. Passages in *Étude No.3* navigate between differing groupings of units. Glass changes the order of the groups including groups of twos, threes and sixes, which varies the stresses in the bar all the while maintaining the pulse (Example 4.69). It is the responsibility of the pianist to guide the listener through these rhythmic changes, purposefully showing these differences.

Example 4.69 Philip Glass, *Étude No.3*, bars 97-102

Audio Track 3 Example 3.4 (3:40-3:49)

The image shows a musical score for Philip Glass's *Étude No. 3*, bars 97-102. The score is written for piano and consists of two systems. The first system is marked with a box containing the number 12. The music is in 4/4 time and features a steady pulse with varying melodic units and accents. The first system shows a melodic line in the right hand and a bass line in the left hand. The second system continues the same pattern, ending with a double bar line and repeat dots.

<sup>56</sup> Grimes, ‘Interview: Education (1989)’, 36.

<sup>57</sup> Joan La Barbara, ‘Philip Glass and Steve Reich: Two From the Steady State School (1974)’, in Richard Kostelanetz and Robert Flemming (eds.), *Writings on Glass* (Berkeley: University of California Press, 1997), 45.

Alexander Sanchez-Behar explores how minimalist music presents unique challenges for a pianist. He considers ‘thoughtful and reflective repetition’ to be imperative in instilling a positive practice method that can be adapted across all musical styles.<sup>58</sup> He argues that many of the piano pieces belonging to the genre are not immediately technically difficult, however, they do present the performer with numerous synchronisation challenges, ultimately testing a pianist’s aural abilities.<sup>59</sup> Sanchez-Behar considers how, in previous classical repertoire, musical growth stems from melodic development throughout a work, while in minimal music growth is experienced as minute variations of repetitive patterns. He suggests that these patterns can be off-putting for students and that they must endeavour to ‘perform the exact number of repetitions for each musical pattern since playing fewer or more repetitions bear ramifications on the formal structure of the piece’.<sup>60</sup> While I do not consider Glass’s études to be categorised as minimalist pieces, the studies have inherited a familiar repetitive trait representative of Glass’s style. These repetitive patterns require a high level of skill and have been expanded and developed into pieces which work as a cohesive whole.

When dealing with the issue of repeat markings which are included in every piece of the collection, I consider the work through both an objective and subjective lens. My recording pays homage to Glass’s markings and notation and aims to honour his intentions as closely as possible. I have used the repeats as an opportunity to create variety within the music, further exploring the possibilities of the material. My interpretation rarely presents identical repeated passages. There are two occasions on the recording, in *Étude No.7* and *Étude No.10*, where I made the artistic decision not to include the ‘D.C (with repeats)’ and ‘D.S (Fig 23) (with all repeats and instructions)’ markings.<sup>61</sup> On both occasions I was cautious to avoid hand-

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<sup>58</sup> Sanchez-Behar, ‘Engaging Piano Students With minimalism’, 23.

<sup>59</sup> Ibid., 23.

<sup>60</sup> Ibid., 23.

<sup>61</sup> Glass’s D.C and D.S markings are subject to varying interpretations with several recording artists choosing not to do these repeats and others choosing to include them.

cramping as the material here is particularly taxing and I wished to maintain the integrity and standard of the performance.

Pianist Timo Andes offered his opinion on how best to interpret Glass’s markings:

You look at these pieces on the page, and there isn’t a huge amount of information there. There are basic dynamics and phrase markings, but for the amount of notes and the amount of times those notes repeat—modules of music repeat and develop—you really have to add your own thing.<sup>62</sup>

Andes’s assessment of Glass’s score is correct; however, based on the markings that Glass has included, my conclusion is that Glass is particularly specific regarding his dynamic markings and articulation. My experience has been that adhering as closely to these markings as possible results in being able to offer a listener a convincing contrast on the repeats.

Regarding tempo markings on the score, these markings perhaps need to be updated considering that Maki Namakawa, a collaborator and pianist who gave the premiere performance and recording of the full études, has not adhered to some of these tempo markings. My own track recordings do not always correlate with Glass’s tempos and I often perform these études at significantly faster or slower speeds than marked. I have been guided by available recordings (Table 4.5) and the knowledge that Glass is open to multiple interpretations of his work given the range and backgrounds of performers he performs alongside.<sup>63</sup> Given the recent publication of the first edition of the score (2014), a new edition of the études in future years might address these tempo discussions.

Table 4.5<sup>64</sup> Selection of metronome speeds for Philip Glass, Étude No.10

Étude No. 10	Marking in score	Maki Namakawa’s Tempo	Sally Whitwell’s Tempo	Vicky Chow’s Tempo	My tempo
	♩ = 176	♩ = 260	♩ = 174	♩ = 250	♩ = 240

<sup>62</sup> Timo Andes in conversation with William; quoted in Robin, ‘The Complete Piano Etudes by Philip Glass’.

<sup>63</sup> See Chapter IV, 136-137.

<sup>64</sup> *Étude No. 10* tempos taken from Maki Namakawa’s premiere recording of the études, Sally Whitwell’s recording of the complete études and Vicky Chow’s recording of the first ten études. Philip Glass, *The Complete Piano Etudes*, Maki Namakawa, CD, Orange Mountain Music, OMM0098, 2014. Philip Glass, *Philip Glass: Complete Piano Études for Solo Piano*, Sally Whitwell, CD, ABC Classics, 481 6592, 2018. Philip Glass, *Philip Glass: Piano Etudes, Book 1*, Vicky Chow, CD, Cantaloupe Music, CA-21183, 2022.

When performing the études in their entirety, I chose to perform the complete set from memory. As a multitude of repeats is littered throughout the score, these can be confusing and on occasion off-putting during a performance. I quickly discovered that performing from memory was the best way of categorising an étude in my mind and making sense of its existing structures. Clara Yang, who has performed the études alongside Glass in concert, discusses the difficulties of moving from one section to the other:

It's challenging to convincingly form a way to depict the passing of time during these pieces. It repeats a lot, obviously, and sometimes it's static and it moves, and one has to really understand how things move.<sup>65</sup>

I noticed how, once I familiarised a group of études away from the score, I could envisage a roadmap and the inner workings of the pieces more distinctly in my mind. It was now possible to draw out the differing patterns more easily between the hands and I could shape the music phrasing more comfortably than previously. Memorising afforded me the opportunity to immerse myself in Glass's soundworld and gave me the flexibility of spontaneity in performance, all while maintaining a high level of control.

## **vi. Programming the études**

As a soloist embarking on performing Glass's études in their entirety, the performer is faced with an artistic dilemma: whether to perform the work in its published chronological order or to rearrange the études and create a personal performance order. It is worth noting that the order in which the études were published is different from their order of composition. I took this into consideration for my premiere performance of all twenty études at the National Concert Hall, Dublin.<sup>66</sup>

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<sup>65</sup> Clara Yang in conversation with William Robin; quoted in Robin, 'The Complete Piano Etudes by Philip Glass'.

<sup>66</sup> The two concert performances of the full collection of études took place on 2 November 2022 and 9 November 2022 at the National Concert Hall, Dublin.



Table 4.6 demonstrates my programming choices of the études. The first étude I performed on 2 November began in D minor and the final étude ended in D Major. Similarly, the first étude on 9 November 2022 began in C minor and concluded with the breath-taking C Major final étude offering an overarching yet alternative experience for the audience. Despite the harmonic relationships between the opening and closing études in the programme, the other pieces were considered in relation to purposes such as tempo, dynamic and overall character. The ultimate aim of the selected programme was to keep the listener engaged and to maximise the variety of the études across the two books.

Table 4.6 Programming of Philip Glass's *Twenty Piano Études*

	<b>2 November 2022</b>	<b>9 November 2022</b>
1.	No 12 d minor	No 11 c minor
2.	No 1 g minor	No 9 c minor/f minor
3.	No 2 C Major	No 3 A Major
4.	No 10 G Major	No 14 Ab Major
5.	No 5 f minor	No 4 d minor
6.	No 6 f minor	No 16 g minor
7.	No 8 a minor	No 19 a minor/C Major
8.	No 13 A Major	No 7 a minor
9.	No 18 g minor	No 17 f minor
10.	No 15 D Major	No 20 C Major

Prior to the Irish premiere performance of all of Glass's *Twenty Piano Études* in November 2022 given by one pianist, Richard Guérin informed me that this was the first worldwide full performance of the études performed outside of their chronological order.<sup>67</sup>

<sup>67</sup> Email correspondence between myself and Richard Guérin on 20 October 2022. Since 2006, Richard Guérin's principal occupation is running Philip Glass's record label, Orange Mountain Music, and he is a frequent lecturer on the music of Philip Glass including onstage interviews with Glass. Richard Guérin, 'Bio', <<https://www.richardguerin.com/bio>> [accessed 14 April 2023].

However, as concert performance and listening experiences greatly differ, my recording presents the études in their chronologically-published order beginning at number one and culminating at number twenty. This decision emerged from my desire to give a listener the expansive aural experience of hearing the études in their set order, while also reflecting the composer's chosen order. From a practical point of view a listener can form an affection for a particular number in a series, and this can be easily found if the track number corresponds to the number of the étude.

Several festivals, concert halls and individuals have been responsible for the development of this mammoth collection of studies. Glass's first set of six études composed for Dennis Russell Davies were later numbered 2, 3, 4, 5, 9 and 10 with *Étude No.6* appearing in the same year commissioned by WNYC, New York Public Radio.<sup>68</sup> *Étude No.7* was commissioned in 1996 by the Sydney Festival, No.12 and No.13 were commissioned by pianist Bruce Levingston in 2007 and *Étude No.17* was commissioned for the anniversary of the Menil Collection in Houston, Texas.<sup>69</sup> In celebration of Glass's seventy-fifth birthday, the final three études No.18, 19, 20 were commissioned by the Perth International Arts Festival in 2012.

Glass's second set of études, No.11- No.20, offer pianists a higher degree of difficulty, and Glass chose not to perform the entire collection himself.<sup>70</sup> His innovative programming and consideration as how best to perform these twenty pieces, resulted in a ground-breaking display of pianism and show of camaraderie. He conscripted the talents of nine other pianists,

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<sup>68</sup> Philip Glass, *The Complete Piano Études* (London: Chester Music Limited, 2014).

<sup>69</sup> The Menil Collection in Houston is an art museum housing an 18,000-work collection and it is the first museum in the United States designed by the Italian architect Renzo Piano.  
<<https://cdn.filepicker.io/api/file/iIHJ3LpNRJyF0LZEXaHd?&fit=max>> [accessed 14 April 2023].

<sup>70</sup> Glass's album, *Etudes for Piano Vol.1, 1-10*, was released in 2003 and a recording of Glass performing his études 11-20 is not yet in existence. Philip Glass, *Etudes for Piano Vol.1, 1-10*, Philip Glass, CD, Orange Mountain Music, OMM0009, 2003.

across a variety of musical backgrounds to join him for the first performance of all twenty études in 2014 at the Brooklyn Academy of Music, New York. The pianists selected included Jenny Lin, Nico Muhly, Timo Andres, Aaron Diehl, Maki Namakawa and Sally Whitwell.<sup>71</sup> On the same date as the premiere performance in New York the étude sheet music was published and made available to the world.

With the resounding success of the premiere, a core group of travelling pianists emerged, performing the études across the world in a similar manner to the premier performance. Glass's commitment to his études is resolute: he opens the concerts, performing the first and second études, and remains backstage to listen to each of the performers.<sup>72</sup> Having toured alongside Glass on numerous occasions performing these pieces, pianist Jenny Lin describes her experience: 'To see his dedication to this music, after all these concerts and all these years, is amazing to me'.<sup>73</sup> Lin explains how Glass also extended the welcome to one or two local musicians to join the concert performances in various countries across the world:

There is a core group that travels, and then we take on locals. For example, we were in Brazil and we took two local Brazilian pianists to join us. It's been so interesting and exciting, not just meeting the different pianists from each country, but also working with Philip Glass in person.<sup>74</sup>

The Philip Glass Ensemble is the 'exclusive performer of its repertoire'.<sup>75</sup> Perhaps Glass's works for ensemble are more dependent on the collective sound of the group as well as the sound engineer and, for this purpose, Glass restricted the performance rights to all other

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<sup>71</sup> James Manheim, 'Philip Glass Complete Piano Etudes', <<http://jennylin.net/albums/philip-glass-complete-piano-etudes/>> [accessed 4 April 2023].

<sup>72</sup> Rowat, 'How Philip Glass's Études changed pianist Jenny Lin's life'.

<sup>73</sup> Ibid. Jenny Lin released 'Philip Glass: Complete Piano Etudes' on the Steinway & Sons label in 2017, after the New York premiere of the complete set of études.

<sup>74</sup> Ibid.

<sup>75</sup> The majority of Glass's ensemble works were composed specifically for the Philip Glass Ensemble. At present, the PGE remain the only performers of this music. The group is committed to maintaining the tradition of the group and educating the next generations of musicians. The Philip Glass Ensemble, 'Biography', <<https://philipglassensemble.com/>> [accessed 19 May 2023].

groups except his own ensemble. Meanwhile, Glass's string quartets have been written for a number of quartets and have been performed and recorded extensively.<sup>76</sup> Glass is adamant on hearing a multitude of pianists interpret his études. Since the publication of the études in 2014, the number of pianists performing Glass's piano works worldwide has surged.

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<sup>76</sup> Glass has composed nine string quartets thus far with several of the quartets having been recorded by the Kronos Quartet, the Molinari Quartet, the Smith Quartet and the Carducci Quartet. The Tana Quartet gave the world premiere of *String Quartet No.9, 'King Lear'* on 15 January 2022 at Palais des Beaux-Arts in Belgium. Jesús Rodríguez Lenin, "'String Quartet No.8 & 9' by Philip Glass", <<https://minimalismore.es/index.php/en/2022/01/15/philip-glass-16/>> [accessed 17 May 2023].

## Conclusion

Unlike several genres of piano music collections which have declined over the past century, the piano étude is still in existence and thriving.<sup>1</sup> Composers and composer-pianists across the world are continuing to add their individual contributions to the genre. Most importantly, pianists are committed to performing and recording these works, championing the possibilities of an étude. As études place some of the most experimental ideas of a composer at the forefront, in return the performer seeks to respect and celebrate such triumphs. The true success of the étude relies on the pianist endorsing the obsessions and spirit of both the composer and the work.

As investigated in Part I of the thesis, the development of piano technique and the capabilities of the modern pianist during the twentieth century resulted in extraordinary advancements of virtuosic display. In exploring the twentieth- and twenty-first-century additions to the piano étude genre and the inspirations behind composers collections, two possibilities arise. When composers realised the potential of the étude genre, which had been glamorously elevated by Chopin and Liszt, they were initially presented with two options for their études: concert hall performance and extreme technicality or practice room fine tuning and personal development. It appears composers were either focused on purely rudimentary exploration or motivated by artistic expression through virtuosic and physical endurance. Therefore, late twentieth- and twenty-first-century composers were now either writing études with the sole aim of improving technique for pedagogical purposes or they were writing études inspired by the already-developed modern pianist's technique which had reached new levels of remarkable possibilities.

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<sup>1</sup> Piano genre collections which have declined in number over the past century include scherzos, waltzes and polonaises. There are few composers publishing these mediums of composition in the twenty-first century. Meanwhile études, preludes and nocturnes have remained popular.

This possibly explains why Debussy's vision for *Douze Études* is more likely connected to the former concept as Debussy never intended for the works to be performed as a set or in concert.<sup>2</sup> Meanwhile, such progress in a performer's technique has meant that études such as Ligeti's *Étude pour Piano* and Cage's *Freeman Études* were able to be created and performed more ambitiously than other étude collections. As a musician's technique now had the potential to be highly developed by this period, Cage was able to experiment with his études and encourage the performer to perform the impossible.<sup>3</sup> It is evident that even a short period of sixty years between two composers' works, for example Debussy and Cage, has proven significant in the development of the étude genre.

Glass has inadvertently managed to transcend both possibilities with his *Twenty Piano Études*. Glass has expressed that his twenty-piece contribution serves a dual purpose. The first book of études was primarily designed to improve his own piano technique. As his original set of études became increasingly popular and began to garner attention from pianists across America, his mission shifted:

The first ten really have a pedagogical aspect to them for my own development. The second set have nothing or very little to do with that. I began working in the world of ideas.<sup>4</sup>

Glass was no longer writing for himself, but for a contemporary generation of professional pianists who heard his music and aspired to join Glass on his musical voyage, showcasing what a twenty-first-century composer has to offer contemporary piano audiences.

Through my own reflective practice of Glass's études, as well as the array of examples referred to in Part I, I have arrived at a conclusive comprehension of a composer's mission

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<sup>2</sup> Lucas Wong, 'Humour in late Debussy: multiple perspectives on "Douze études"', *The Musical Times*, 157 (2016), 77.

<sup>3</sup> James Pritchett, 'The completion of John Cage's Freeman Etudes', *Perspectives of New Music*, 32 (1994), 264-265.

<sup>4</sup> Alex Burns, 'Philip Glass Étude No.1 Pedagogical Performance', < <https://classicalalexburns.com/2022/02/17/philip-glass-etude-no-1-pedagogical-performance/> > [accessed 22 June 2023].

and the magnitude of dedication and sophistication required when experimenting within the field of piano études over lengthy periods of time. My personal commitment to performing and recording all twenty pieces, as well as the extensive time studying the études, has afforded me the opportunity to explore the inner workings of Glass's musical mind in order to decipher how best to interpret his material.

Unquestioningly, Glass's études refute the cliché of minimalism. While his studies certainly offer glimpses of minimalist practice as explored in Chapter III, the pieces unite admirably as a collection inspired by Glass's decorative and eclectic past, oozing with personality and style. One of the exhilarating factors of performing the full collection is that the pieces do not exist as one entity with a singular purpose. Music critic, Alex Ross considers Glass's talent for rhythmic schemes as being able to successfully sustain 'constant repetition through constant change'.<sup>5</sup> On one hand when obsessive rhythmic forces dominate the études, the listener is often transported to Glass's raga-inspired imaginative world, a long-credited source of Glass's developed soundworld. On the other hand, the studies provide a microscopic lens into the impact of a more seemingly traditional classical practice, including his studies with Nadia Boulanger in Paris. Both divergent musical spectrums are inclusive of a significant depth of character, experience and personality, all detached from the minimalist trope and symbolic of a greater purpose. On all occasions throughout the études, the soundworld belongs distinctly to Glass, and to the spirit, world and mind of the composer.

Perhaps the étude as a genre has always been ahead of its time, born for reinvention throughout history. It has been used as an imaginative exploration tool, an invisible trusted partnership between composer and performer. The composer sets the almost impossible

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<sup>5</sup> Alex Ross, 'Glass at 80: A Celebration Of Philip Glass', <[https://issuu.com/uncperformarts/docs/cpa\\_glass\\_booklet\\_12-22\\_pages\\_togo](https://issuu.com/uncperformarts/docs/cpa_glass_booklet_12-22_pages_togo)> [accessed 26 May 2023].

challenge, with the performer attempting to rise to the occasion moving beyond the virtuosic challenges and entering the sound realm of the composer. At its core, an étude is a dedication from composer to pianist and it appears to have sustained substantial interest and significance in the modern era. With the success of Glass's addition to the twenty-first-century piano études canon, pianists can be assured that the genre will continue to flourish for many decades to come.



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