

EXPLORING THE EXTENDED TECHNIQUES OF
PIANO THROUGH SELECTED TWENTIETH
AND TWENTY-FIRST CENTURY
SOLO REPERTOIRE

TAN CAI SIN

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ABSTRACT

In Malaysia, the most common piano examination syllabi used by piano teachers include the Associated Board of the Royal Schools of Music (ABRSM), Trinity College London (TRINITY), and London College of Music Examinations (LCM) (Ang, 2013). A quick search of the syllabi shows that even there contains pieces from the twentieth century, few use extended techniques, or techniques beyond the conventional sense. Repertoire examples from the ABRSM examination syllabus between 2021 and 2022 include *Tsunami* by Stephen Montague (b. 1943) and *Bamboo Dance II* by Chen Yi (b. 1953). Coming from a classical piano background herself, the researcher would like to set an example for the younger generation in Malaysia by including piano works by Henry Cowell, György Kurtág, Ge Gan-ru, Frederic Rzewski, Diana Burrell, George Crumb, and Emma Lou Diemer that use extended techniques in her recital through practice-led research, having the recital itself as part of the research output. This study explores four important classifications (mainly based on Hinkley's categorisation) of extended piano techniques: 1) on the piano, 2) inside the piano, 3) choreography, and 4) inside the piano with one hand and on the keyboard with the other hand. Chapter 1 provide the background and inspiration of the researcher to explore the techniques, and the final classification of the extended piano techniques. Chapter 2 provide general information such as the proper way to play and piano works which include these techniques. Chapter 3 provide methodology and the journey of the exploration. Chapter 4 contains the analysis of each extended techniques from each piano work in the repertoire. At the end of the paper, the researcher hope that this study would encourage classical piano students in Malaysia to learn and explore extended piano techniques, possibly including these piano works in their own recitals.



MENEROKA TEKNIK LANJUTAN PIANO MELALUI REPERTOIR SOLO ABAD KE-20 DAN KE-21 YANG TERPILIH

ABSTRAK

Di Malaysia, syllabi piano yang paling banyak digunakan oleh guru piano ialah Associated Board of the Royal Schools of Music (ABRSM), Trinity College London (TRINITY), dan London College of Music Examination (LCM) (Ang, 2013). Tinjauan ringkas syllabi peperiksaan menunjukkan bahawa walaupun terdapat karya dari abad ke-20, hanya beberapa buah karya yang menggunakan teknik lanjutan, atau teknik yang diperkembangkan daripada teknik konvensional. Antara contoh-contoh karya daripada sukatan pelajaran ABRSM antara tahun 2021 ke 2022 termasuk *Tsunami* dicipta oleh Stephen Montague (b. 1943) dan *Bambu Dance II* dicipta oleh Chen Yi (b. 1953). Sebagai seorang yang mempunyai latar belakang piano klasikal, penyelidik ingin memberikan contoh kepada generasi muda di Malaysia dengan memasukkan karya-karya piano yang dicipta oleh Henry Cowell, György Kurtág, Ge Gan-ru, Frederic Rzewski, Diana Burrell, George Crumb, dan Emma Lou Diemer yang menggunakan teknik lanjutan dalam recital sendiri menerusi penyelidikan practice-led, supaya mejadikan hasil penyelidikan tersebut. Kajian ini meneroka empat klasifikasi (berdasarkan kategori Hinkley) penting daripada teknik lanjutan piano iaitu: 1) atas permukaan piano, 2) dalam permukaan piano, 3) koreografi dan 4) satu tangan bermain atas permukaan piano dan satu tangan bermain dalam permukaan piano. Bab 1 mengandungi latar belakang dan inspirasi penyelidik untuk meneroka teknik dan klasifikasi akhir teknik lanjutan piano. Bab 2 menyediakan maklumat umum seperti cara bermain yang betul dan karya piano yang merangkumi teknik tersebut. Bab 3 pula menyediakan metodologi dan perjalanan penerikanan penyelidik. Bab 4 mengandungi analisis setiap teknik lanjutan daripada setiap karya piano dalam repertoir. Dalam bab terakhir kajian ini, pengkaji berharap kajian ini akan menggalakkan pelajar piano klasikal di Malaysia untuk mempelajari dan meneroka teknik lanjutan piano, dan mungkin dapat memasukkan karya-karya piano yang mempunyai teknik tersebut dalam resital sendiri.

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CHAPTER 1

INTRODUCTION / BACKGROUND



1.1 Motivation / Inspiration

In Malaysia, the most common piano examination syllabi used by piano teachers include the Associated Board of the Royal Schools of Music (ABRSM), Trinity College London (TRINITY), and London College of Music Examinations (LCM) (Ang, 2013). A quick search of the syllabi shows that even there contains pieces from the twentieth century, few use extended techniques, or techniques beyond the conventional sense. Repertoire examples from the ABRSM examination syllabus between 2021 and 2022 which used traditional piano techniques include *Tsunami* by Stephen Montague (b. 1943), *Bamboo Dance II* by Chen Yi (b. 1953) and *Silent Island* by Victoria Borisova-Ollas (b. 1969). “In observing the music syllabus



of the ABRSM, one could easily determine that most of the pieces chosen for the examination are from the Western classical music repertoire” (Tham, 2019). I myself have experienced this, having gone through a similar process of taking ABRSM piano examinations until Grade 8, and TRINITY examinations until the LTCL (Licentiate of Trinity College, London) level. This learning process might lead to limited understanding among piano students or teachers in Malaysia towards performing pieces which include extended piano techniques.

According to Vaes :

“so called ‘extended techniques’ have suffered a consistent lack of understanding from a theoretical, historical and practical point of view. Although most of them – e.g. playing directly on the strings, cluster – and glissando-techniques – exist in a substantial part of the repertoire for the piano and have done so for more than a couple of centuries now, the use of the techniques on stage still sparks off negative reactions by audiences, composers, performers and tuners as well as owners of pianos” (p. i).

Between the eighteenth and nineteenth centuries, the performance of avant-garde works have often been shunned by performers themselves. Charles Rosen (2002) stated that, “if relatively few pianists will attempt the more imposing works of the piano literature composed after 1920, this is not so much because the public does not favour this music, but because so many of today’s professional pianists and certainly the great majority of amateurs are unable to come to terms with it” (p.220). In fact, avant-garde piano works such as *Sonata V* by John Cage (1912-1992), *Salvatore Sciarrino* by Luciano Berio (1925-2003), and *Lemna-*

Icon-Epigram by Brian Ferneyhough (b. 1943) have not often been understood by audiences. This is due to the composers' compositional approaches or musical material presented in their works that require a certain level of understanding musical terms. For performers, the challenges in performing all these works which include notational understanding and extended techniques are completely new elements to adapt to even before performing these complicated works. However, the avant-garde works have now formed the basis of a number of performers' careers including Singaporean pianist Margaret Leng Tan (b. 1945), Steve Beresford (b. 1950) from England, Sylvie Courvoisier (b. 1968) from Switzerland and Satoko Fujii (b. 1958) from Japan. "For a smaller number, the works of the great figures of the twentieth-century avant-garde are equally addictive. As long as this addiction continues to be found among musicians, the music will survive" (Rosen, 2002). Although there was still having issue about the lack of supporter and pioneer, since there are still attract specific audience and there is still have chance to spread these compositions are not designed to confuse listeners but to offer an opportunity for the audience or listeners to open their mind or to think out of the box.

A piano performance given by the lecturer Dr. Yen-Lin Goh (b. at the International Music and Performing Arts Conference (IMPAC) conference in 2016 became a turning point which changed my perspective. She performed her original composition alongside a contemporary piece by Dutch composer Mayke Nas (b. 1972) that not only explored different keyboard techniques but also extended techniques that encompassed the keys, keyboard frame and the strings -the inner mechanisms of the piano. I had not been aware of such approaches in piano music. Here were new works created for the piano, typically considered contemporary

classical music or contemporary art music that explored extended techniques. This was my first exposure to unconventional piano techniques and I was immediately intrigued. It made me realise that there were more than few ways of playing the piano, in addition to the typical techniques.

1.2 Definition of Terms

1.2.1 Traditional Piano Techniques

Some commonly used techniques for classical piano include legato, staccato, chordal work as well as pedalling (C. P. E. Bach, 1770; Hummel, 1828; Czerny, 1806; Liszt, 1827; Schumann, 1878; Walter & Karl, 1972; Alan, 2003; Chang, 2017). Pianist Jean-Francois Proulx (2009) regarded these techniques as “traditional or conventional piano techniques” (p. 14), which “exploit the natural tone of the instrument through the normal action” (p. 14). Hence, the traditional piano techniques consider to a pianist sit on the bench and build the different piano sound through the fingers and pedals. “During the twentieth century a large number of composers employed innovative instrumentation and orchestration to produce new tone colours in their works. They developed new playing techniques on traditional instruments, modified traditional instruments, used non-traditional instruments, or invented new ones” (Ishii, 2005). Regarding from modes of performance, especially composers and performers

always active to extend the technical and expressive qualities of a musical performance (Maria Kallionpaa, 2016).

In line with this, composers have started to search for different tone colours that could possibly be produced by the piano. Rosen (2002) observes that “the new ideas in the use of tone colour on the piano developed by Olivier Messiaen in the 1930s remained hidden from the general public until the early 1950s. By that time, several composers, John Cage in particular, had experimented with prepared pianos, placing different kinds of material on the strings of the piano to make unusual sounds” (p.216). According to Wright (2000), one of the most radical musical thinkers was John Cage (1912-1992). “Cage brought noises from the everyday world into the concert hall and asked why these, too, were not music, thereby questioning our very definition of this art” (p. 355). His music experimented with new sounds and broke traditional rules, such as seen in the “prepared piano.” The idea of the prepared piano was created in 1938. There was a dance performance that was supposed to be accompanied by a percussion ensemble. However, the stage did not have enough space for a percussion ensemble but there was a piano there, which inspired Cage to come out with new percussion sounds by inserting objects between the piano strings (Schwartz, 1993). Since then, the desire for new and different sounds have continuously been discovered and experimented by composers such as George Crumb (b. 1929), an American avant-garde composer. He is known as an explorer of unusual timbres. He became interested in exploring different and unusual ways to play music instruments after being influenced by Anton Webern. George Crumb’s most ambitious work is the 24-piece collection *Makrokosmos*, written as a series of

four volumes. The first two volumes are for solo piano, and they include string piano techniques that require amplification. The third volume, *Music for a Summer Evening*, is written for two pianos and percussion while the fourth, *Celestial Mechanics*, is for piano four-hands (Sachs, 2013). Another figure is György Kurtág (b. 1926), an award-winning Hungarian composer of classical music. His eight volumes of piano pieces called *Jatekok* (also referred to as *Spiele* or *Games*) include pieces for solo piano and four hands (and more). The concept of musical games unfolds in different ways. “They can be analysed as performative games, in which ‘playing’ is interpreted as the more obvious act of performing the pieces, but also related to the idea of ‘playfulness’, therefore treating the piano almost as a toy, exploring all possibilities of movement” (Coelho, 2014).

1.2.2 Extended Piano Techniques

Extended techniques refer to techniques beyond the usual. It can be defined as “an unconventional technique of playing a musical instrument” (Ishii, 2005, p. 1). According to Jean-Francois Proulx (2009), extended piano techniques appeared in the early twentieth century, mostly in the United States.

Extended piano techniques have been classified into several categories by different scholars. Proulx categorised different piano techniques as shown in the table below:

Table 1.1

Classification of different piano techniques by Proulx

Conventional Techniques		Unconventional, Untraditional Techniques			
Keyboard and Pedal Techniques	Special Keyboard Effects	Extended Techniques			
		Active		Passive	
		String Techniques		Percussive and Vocal Techniques	Prepared Piano Techniques
		With hands Natural	With objects Modified		

Reiko Ishi (2005), who conducted research on the development of extended piano techniques, came up with nine categories of the different techniques: “1) special effects produced on the keyboard such as tone clusters and silently depressed notes; 2) performance inside the piano such as plucking, striking, stroking, or rubbing the strings with fingers, fingernails, mallets, or other objects, glissandi on the strings, tremolo on the strings and bowing the strings with bows; 3) performance inside the piano with one hand and on the keyboard with the other such as harmonics and muting or damping the strings; 4) addition of foreign materials such as prepared piano; 5) use of sounds made on the frame/case of the piano; 6) use of microtones; 7) use of sound amplification; 8) use of extramusical devices including addition of human sounds such as singing, speaking, or humming while playing the instrument; and 9) new pedal effects ” (p. 13).

Pianist Hinkley (2017) classified extended piano techniques into five categories: “1) On the Keyboard, 2) Inside the Piano, 3) Foreign Objects, 4) Choreography and 5) Other Instruments, with the supplemental category being Electronics” (p. 2). According to the researcher, extended piano techniques on the keyboard can be defined as non-traditional techniques which played on the keyboard itself such as clusters, playing keys with body parts other than fingers, and silently depressing keys. For extended piano techniques inside the piano features to any technique performed anywhere of the piano but not on the keyboard such as striking strings. According to Hinkley (2017), the category of “foreign objects refer to any non-musical object used on or in the piano” (p.2) such as paper clips and glass tumblers. Moreover, the category of choreography refers to unusual playing positions such as stomping feet or clapping hands while perform. The last category from Hinkley’s concept is other instrument which “requires pianists to be proficient at another instrument, from instruments as similar as the toy piano to entirely different instruments as the harmonica” (p.2). There is a supplemental category which is electronics and it generally divided into three further categories: amplification, tape music, and live electronics.

My conceptualisation of extended techniques is mainly based on Hinkley’s categorisation, as the classification is the most reasonable to reference. His framework clearly divides two main categories - the keyboard, and the inside of the piano. From these two categories, it branches out into more detail about other techniques. I have identified five categories which slightly different with Hinkley’s classification.

There are five categories : 1) extended piano techniques on the keyboard such as tone clusters, 2) extended piano techniques inside the piano such as *glissandi* (sweeping), *pizzicato* techniques, and tapping on the strings, 3) choreography such as percussion techniques and vocal techniques, 4) extended piano techniques inside the piano with one hand and on the keyboard with the other hand such as muting or damping and silently pressing down the key with one hand and strum the strings with the other hand, 5) others such as electronics and foreign objects. Hence, the classifications of this research as shown in Figure 1.1.

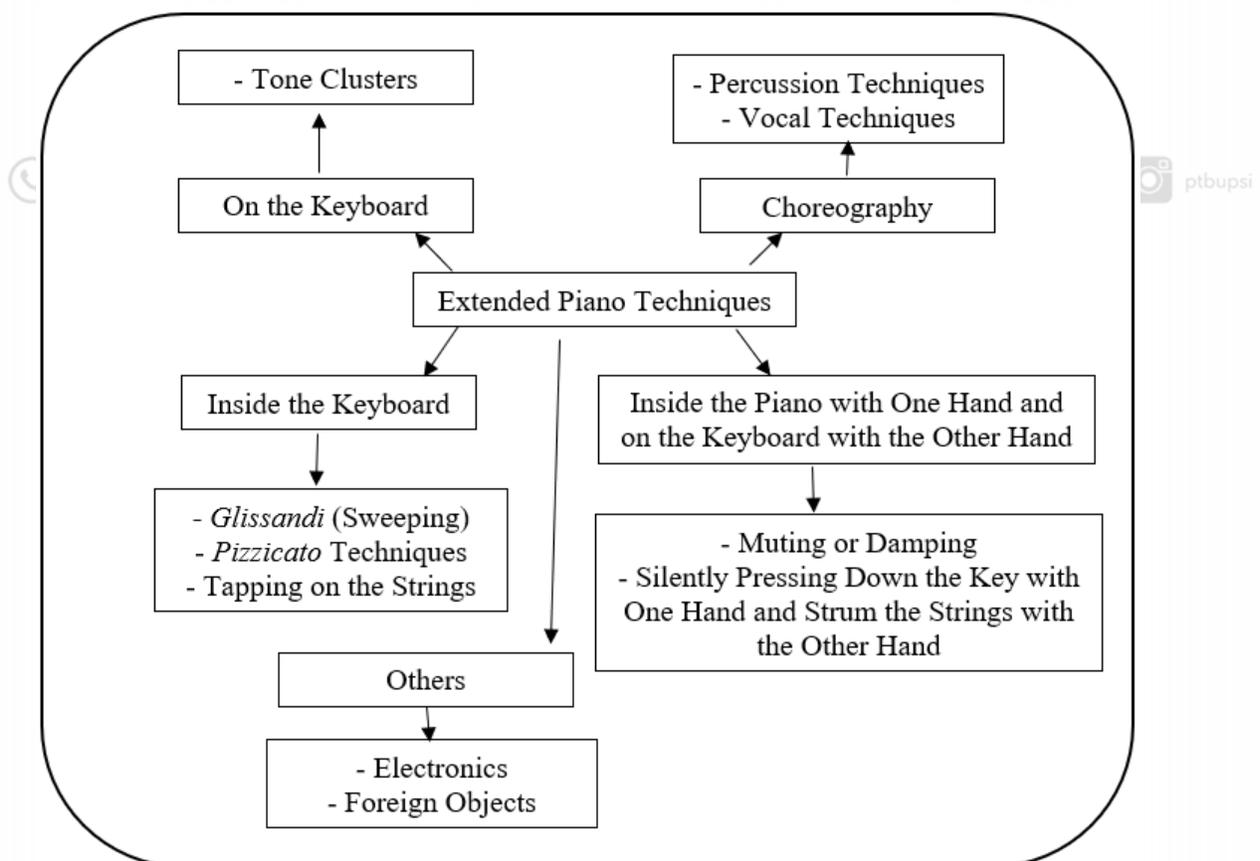


Figure 1.1. The Final Classification of the Study

This study focuses only on the first four categories as the stages of their development can be shown most clearly. Hence, for my two recitals, I focused on extended techniques on the keyboard, inside the piano, choreography, as well as inside the piano with one hand and on the keyboard with the other hand.

1.3 Performance Objectives

The objectives of this performance research are:

1. To perform a selected repertoire of 20th and 21st century pieces featuring extended techniques for the piano.
2. To present different types of extended techniques used in piano works since the early 20th century, based on Hinkley's classification.

1.4 Proposed Programme for Recital 1 and Recital 2

For Recital 1, I performed a selection of 20th century piano repertoire which included the use of extended techniques. The level of difficulty in Recital 1 is as shown in Table 1.2, from beginner to intermediate levels. More advanced pieces from 20th century repertoire were added to the programme for Recital 2.

In tables 1.2 and 1.3, the programmes for Recital 1 and Recital 2 are detailed.

Table 1.2

Programme for Recital 1

Title of works	Duration (minutes)
1. <i>Allegro Barbaro</i> (1911) by Béla Bartók (1881-1945)	3.30
2. <i>Aeolian Harp</i> (1923) by Henry Cowell (1897-1965)	4.00
3. Selections from <i>Játékok</i> by György Kurtág (b.1926) from Volume 1 (1973) - <i>Perpetuum mobile</i> (2.10) - <i>Dot-strumming</i> (0.35) - <i>Walking</i> (0.35) - <i>Scherzando</i> (0.30) - <i>Hommage a Tchaikovsky</i> (1.30) from Volume 3 (1979) - <i>Stop and Go</i> (1.00)	6.20
4. <i>Ancient Music</i> (1986) by Ge Gan-ru (b.1954) - <i>Drum</i>	7.00
5. Selections from <i>The Road</i> (1995-2003) by Frederic Rzewski (b. 1938) - Mile 47 – <i>A Walk In the Woods</i> (8.00) - Mile 49 – <i>The Weak and the Strong</i> (5.30)	14.30
6. <i>Constellations I and II</i> (1996) by Diana Burrell (1948)	3.00
TOTAL DURATION	40.00

Table 1.3

Programme for Recital 2

Title of works	Duration (minutes)
1. <i>Allegro Barbaro</i> (1911) by Béla Bartók (1881-1945)	3.30
2. <i>Aeolian Harp</i> (1923) by Henry Cowell (1897-1965)	4.00
3. Selections from <i>Játékok</i> by György Kurtág (b.1926) from Volume 1 (1973) - <i>Perpetuum mobile</i> (2.10) - <i>Dot-strumming</i> (0.35) - <i>Walking</i> (0.35) - <i>Scherzando</i> (0.30) - <i>Hommage a Tchaikovsky</i> (1.30) from Volume 3 (1979)	6.20
4. <i>Ancient Music</i> (1986) by Ge Gan-ru (b.1954) - <i>Drum</i>	7.00
5. Selections from <i>The Road</i> (1995-2003) by Frederic Rzewski (b. 1938) - Mile 47 – <i>A Walk In the Woods</i> (8.00) - Mile 49 – <i>The Weak and the Strong</i> (5.30)	14.30
6. <i>Constellations I and II</i> (1996) by Diana Burrell (1948)	3.00
7. <i>Makrokosmos</i> (1972-1979) by George Crumb (b. 1929) from Volume 2 (1973) - <i>Tora! Tora! Tora!</i>	4.00
8. <i>Three Irish Legends</i> (1922) by Henry Cowell (1897-1965) - <i>The Voice of Lir</i>	5.00
9. <i>The Banshee</i> (1925) by Henry Cowell (1897-1965)	5.00
10. <i>Three Pieces For Piano</i> (1991) by Emma Lou Diemer (b. 1927) - <i>Fast Dance</i>	6.30
TOTAL DURATION	60.00

1.5 Significance of Performance

Many piano students are not exposed to repertoires that use extended techniques because of their lack of knowledge and experience in playing contemporary repertoire other than those in the European classical tradition (Orduz, 2011). In Malaysia, programs and collectives such as Soundbridges Festival (2015-present), Free Hand Festival 2019, Society of Malaysian Contemporary Composers, and Malaysian Composers Collective are instrumental in promoting contemporary repertoire, especially works by Malaysian composers. However, these festivals and collectives tend to attract professionals rather than member of the public to recognise and understand contemporary art music. This is because the musical expression presented by these festivals and collectives require certain understanding about compositional approaches or musical material. It also requires an open mind. Through my recital performance I hope to inspire and motivate piano students in Malaysia. A study on extended piano techniques carried out at Uludag University in Turkey has shown that the learning of extended techniques have positive effects on pianists (Demirci, Sungurtekin, Yilmaz & Engu, 2015). It is believed that “these students trained with the modern piano techniques at the practicing stage of the project would adapt to these techniques, be able to perform compositions written with these techniques and appropriate for their levels and in this way develop appropriate viewpoints toward different playing techniques of the art of music in following years and these different playing techniques would reinforce students’ sense of self-confidence and increase their learning motivation levels” (Ismail & Sirin, 2013).