Incorporating modern piano music into the core repertoire of undergraduate piano majors: an accessible and manageable syllabus.

Alastair Graham Edmonstone

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Reading Committee:

Robin McCabe, Chair

Ronald Moore

Steven Morrison

Craig Sheppard

Program Authorized to Offer Degree:

School of Music

University of Washington

Abstract

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Alastair Graham Edmonstone

Chair of the Supervisory Committee:

Professor Robin L. McCabe

School of Music

This dissertation will deal with the issue of incorporating modern piano music into the repertoire of piano students at the undergraduate degree level. For the purposes of this paper, it is assumed the students will be pursuing a major in music at a conservatory or university with piano as their instrument. In no way does this paper serve as an extensive guide into all musical styles of the 20th and 21st century. Rather, I have selected a small number of extremely varied compositions which I hope will serve to whet the appetite of the student and encourage further

exploration into the extensive catalog of piano music from this period. As much of this literature is extremely complex, I have specifically chosen works which are manageable yet still present challenges – musically, technically and intellectually. It is no accident that these compositions are somewhat tonal. The aim of this paper is to excite and inspire students without weighing them down in the complexity that is, rightly or wrongly, associated with contemporary music. Perhaps most importantly, each piece or group of pieces exhibits a unique characteristic that will be the focus of study. I am confident the exposure to these exhilarating works will lead to, at the very least, an appreciation and understanding of modern piano music. At best, it is my hope that this syllabus will serve as an inspiration to aid in the discovery of the music of the 20th and 21st centuries, and to further its existence through live performance.

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INTRODUCTION

This dissertation will deal with the issue of incorporating modern piano music into the repertoire of piano students at the undergraduate degree level. For the purposes of this paper, it is assumed the students will be pursuing a major in music at a conservatory or university with piano as their instrument. In no way does this paper serve as an extensive guide into all musical styles of the 20th and 21st century. Rather, I have selected a small number of extremely varied compositions which I hope will serve to whet the appetite of the student and encourage further exploration into the extensive catalog of piano music from this period. As much of this literature is extremely complex, I have specifically chosen works which are manageable yet still present challenges – musically, technically and intellectually. It is no accident that these compositions are somewhat tonal. The aim of this paper is to excite and inspire students without weighing them down in the complexity that is, rightly or wrongly, associated with contemporary music. Perhaps most importantly, each piece or group of pieces exhibits a unique characteristic that will be the focus of study. I am confident the exposure to these exhilarating works will lead to, at the very least, an appreciation and understanding of modern piano music. At best, it is my hope that this syllabus will serve as an inspiration to aid in the discovery of the music of the 20th and 21st centuries, and to further its existence through live performance.

Why is there a need for such a syllabus?

As musicians, we have a responsibility, not just an obligation, to promote and play the music of our time. In the grand scheme of musical preservation, if we are to be more than merely musical museum 'curators' we must embrace the music that is being composed around us in an effort to ensure that it is available for future generations. On a more practical note, piano students should know how to deal with modern piano music not only because it is good for them intellectually, but also because it improves their employability prospects following graduation. Without turning this into a paper discussing the relative merits of being a professional musician, I will assume the opinion that it cannot possibly hurt a student to be as familiar with as many musical styles as possible, and that includes contemporary music. It is all too easy to forget about survival and the art of making a living as a musician while one is in the cozy bubble of a university or conservatory setting. The reality is that it is extremely difficult, in good or bad economic times, to make a satisfying living as a musician. The more specialisms a student can acquire, the greater are his or her chance of gainful employment. There are thousands of pianists who can successfully play standard repertoire to an extremely high level. But how many pianists are there who can play the complete works of Iannis Xenakis or of Luciano Berio? In no way will this paper try to claim that contemporary music is more worthy than romantic, classical or baroque. The goal is simply to provide the student with the tools necessary to expand his or her knowledge of the subject.

Choosing Repertoire

The music of the 20th and the 21st centuries can, however, be a difficult area for students in which to venture. Young pianists are, generally speaking, not exposed to contemporary classical music. Therefore it is rare to find an understanding or appreciation, let alone a passion or enthusiasm towards this music. This is partly due to the fact that within the universities and conservatories of the United States there is a shortage of college courses that specifically address the issues we will deal with in this syllabus.

Traditionally, the student's repertoire selection will ultimately be decided between student and teacher, and the teacher's preferences will be reflected in this selection. Some piano instructors have limited familiarity with contemporary music and might feel their expertise is suited to teaching only repertoire that they have mastered themselves. In defense of their position, it is easy to justify omitting contemporary music in the belief that time will be better spent exposing the student to piano music that they have satisfactory expertise in.

Additionally, degree requirements and the individual needs of each student undoubtedly play a role in what repertoire is assigned. Unless the student (or teacher for that matter) is well informed about modern music, it is entirely possible that there will be no exposure to such works. As I have previously attested to, in no way is it the intention of this syllabus to detract from traditional works in the piano

canon. Furthermore, the choice of repertoire assigned by the students' studio teacher should always be respected. The works set out in this syllabus simply serve as an entry point into modern music, and do so in the same way as a theory class would introduce students to Schenkerian analysis, or as a history class might deal with a subject such as Music in the French Revolution. Neither are replacing the student's core education. Rather, they are providing an extra element to the student's scholastic experience.

There is a need for a syllabus such as this in order to open the doors to modern music and to prove that it can be accessible, rewarding and most importantly, enjoyable. This course will essentially isolate manageable yet significant compositions and provide ideas and suggestions on how to maximize the musical and intellectual benefits that each piece presents. This also ensures that students are gain in exposure to this musical style early on in their undergraduate studies without having to rely on covering these works during their studio lessons.

The problem with Modern Music for the audience

It has to be admitted that modern music has a mixed reputation. It is a very tough commodity to sell. Unhelpfully, at times contemporary music concerts are produced by their very practitioners as though they were some kind of elitist art form. Consequently, the general public can feel isolated. More often than not, the

programming is poorly conceived, resulting in sheer boredom and frustration for the audience. Too frequently, the performing level is not as high as it should be, and this does nothing to convince a potentially skeptical audience about the merits of the avant-garde. Moreover, much of the music from this period is terrifyingly complex. While there will always be people who, when presented with this music for the first time, will be excited and enthused, it is lamentably more likely that the vast majority will be confused and dissatisfied.

The problem with Modern Music for the Pianist

Perhaps one of the reasons pianists play less modern music than they should is due to the sheer, incomprehensible size of the piano repertoire. We simply have too much music. Percussionists are famous for the amount of new music they play (even works by composers such as Morton Feldman are considered standard repertoire.) This is largely because historically, there is limited music written for their instruments. The same goes for a woodwind instrument such as the clarinet. It is perfectly conceivable that a clarinetist could master the entire output for the instrument by the time he or she has left graduate school. In effect, their exposure to new music is born out of necessity. They simply have nothing else to play. Even the violin repertoire, which is large, is nothing in comparison to the size of the piano repertoire. Adding to the problem is the actual quality of the piano repertoire. We are inundated with masterpieces, many of which require stupendous technical and musical skills that can take a lifetime to acquire. Instead of seeing this as a

hindrance, we must see this as a distinct advantage. Just as we can pick and choose which Beethoven or Mozart Sonata, or which Chopin Ballade, Prelude or Scherzo to work on, we can cherry-pick from any number of fascinating compositions from the 20th and 21st century. The beauty of the piano repertoire is that there is so much choice that virtually any interest can be accommodated. If one doesn't appreciate a certain composer or style, there is always something else waiting to be discovered.

In addition, the possibilities with regard to programming are endless. This is surely one of the most effective ways to bring the musical public's attention to modern piano music. For instance, the juxtaposition of two works, one old and one new, can be extremely effective.

The question of complexity

It is my belief that it is unrealistic to dive straight into potentially complicated compositions without the proper background and preparation which can only come from studying music within a historical context. For instance, only the uninformed would choose to begin their foray into the world of Beethoven with the *Hammerklavier* Sonata or begin Bach's *Goldberg Variations* without having mastered any number of his earlier works. The same principle applies for contemporary music. It would be ill advised for a student with no experience in this genre to start with a piece such as Elliot Carter's *Night Fantasies* (1980) or John Cage's *Etudes Australes* (1974-5). The pattern this syllabus will follow will be to

start with a more traditional work, and gradually add layers of complexity or innovation as we progress through the ten-week-period on which the syllabus is based.

It is at this point that I hope to find a satisfactory middle ground with students (and their teachers) who are less than thrilled at the idea of playing (and teaching, for that matter) music that they are unfamiliar or even uncomfortable with. Because there is such an enormous volume of piano music written in the 20th century, and being written in the 21st century, there is no reason to settle for a piece or style that provides no pleasure. In addition, it can be very difficult to find the right difficulty level for a student – technically, musically and intellectually. The compositions represented in this syllabus are directed at students with no experience in studying modern piano music. None of the pieces require any more technical facility than is required by a Debussy Prelude. Most of the works require little-to-moderate note reading preparation. All skills can be mastered within the 10-week duration of the syllabus.

About the format:

This paper will be constructed in the form of a class syllabus based upon the quarter system, presently used by many universities. For the purposes of this paper, each weekly lecture will be 'transcribed' as a chapter, for instance the 'Week 1 lecture', entitled "*Approaching Modern Piano Music*" will form the Basis of Chapter One. Each corresponding week's lecture will then form the core of the subsequent chapters.

This guide will assume a time schedule as used by the University of Washington in Seattle: 10 weeks of teaching plus a final exam in the 11th week (Finals week) of the quarter. Each lesson will last in the region of 2 hours. I have accounted for a class size of approximately twenty students.

There are certain challenges in constructing a syllabus based upon incorporating modern piano music into the education of undergraduate piano majors. The first problem presents itself in defining exactly what type of class this is. Is it a performance or master class where students play music to the teacher in a concert style setting and receive feedback from their peers? Or is it a history class which will explore the set works in detail? Of course, it could be argued that this syllabus represnts a music appreciation class centered upon exposing the students to certain works resulting in group discussion. This class will be a combination of all these elements in miniature. We will cover performance, practical, historical and

musical issues with the aim of providing the students an enlightening and informative course that will not infringe overwhelmingly on his or her existing academic and musical commitments.

The other major problem is time. It is impossible to provide a thorough survey of the piano music of the 20th and 21st century in 10 weeks. However, with careful selection of repertoire, as well as time-efficient reading, listening and writing assignments, I am confident that students will find this a valuable, invigorating and worthwhile addition to their undergraduate curriculum.

Composers to be studied

There is a need to explain the admittedly curious musical selection. There is an absence of composers from the 'Second Viennese School'. Most of the pieces in this guide are in a sense, fairly tonal. This is deliberate as while there is no denying the greatness and importance of composers such as Schoenberg, Berg and Webern, I do not think the place to introduce them to students is in what is essentially a beginners guide to a potentially unpalatable musical landscape. Instead, I will encourage those who are interested to put them aside for 10 weeks and then joyfully work on them in the future!

It is not that these works are exceptionally difficult. They certainly don't compare in complexity to something like, say, Boulez's 2nd Sonata. But I don't think

works such as the latter are optimal in their ability to capture the imagination of a potentially timid student. Instead, I have chosen pieces that are unashamedly pleasing to play.

This syllabus will explore selected works by Olivier Messiaen (1908-1992), John Cage (1912-1992), György Ligeti (1923-2006), Steve Reich (born 1936) and John Adams (born 1947).

Repertoire to be studied and performed by the students

Olivier Messiaen (1908-1992)

Excepts from:

Vingt regards sur l'enfant-Jésus (1944) (Twenty gazes on the Infant Jesus)

I *Regard du Père* (Gaze of the Father)

II *Regard de l'étoile* (Gaze of the star)

III *L'échange* (The exchange)

IV *Regard de la Vierge* (Gaze of the Virgin)

V *Regard du Fils sur le Fils* (Gaze of the Son upon the Son)

VIII *Regard des hauteurs* (Gaze of the heights)

IX *Regard du temps* (Gaze of time)

John Cage (1912-1992)

Bacchanale (1940) (for prepared piano)

György Ligeti (1923-2006)

Musica ricercata (1951-53) (all movements)

Steve Reich (born 1936)

Piano Phase (1967) (for two pianos)

John Adams (born 1947)

China Gates (1977)

Course requirements:

Performance

Students will be assigned a piece of music in the first week and will be required to prepare and perform this piece at a high level. This will consist of one performance in a workshop setting during class time. All set works have been organized by difficulty. Students will have the option of choosing a level 1, 2, or 3 piece. The length of each work (in minutes) has also been supplied. Students should choose each composition carefully, making sure they take their additional practice and musical commitments into account. No extra credit will be given for choosing a more difficult piece. My hope is that students will choose a work which is manageable and that they can perform to the best of their abilities given the relatively short time period in which they have to complete the assignment. All of

the pieces chosen are achievable within the time period. None of the works exhibit extreme technical challenges that would require extremely long periods of practice. In addition, all of the selections are relatively easy to learn, freeing up more time for each student to develop their reading, listening and writing skills in addition to performance. In the finals week, students will be required to participate in a class recital which will showcase every student in a concert setting. It is impossible to define exactly what these three difficulty levels signify, as every student works differently and has unique ability. However, I have chosen to include these difficulty levels in order to provide at least minimal guidance to the student. Level 1 = moderately difficult, level 2 = difficult, and level 3 = very difficult.

Reading

Each week there will be a reading assignment. This will always directly relate to the subject matter to be discussed in the forthcoming class. The readings will be concise and thought provoking in the hope of stimulating the students' interest and encouraging further self-initiated study. The texts will be discussed in class.

Listening

Along with the reading materials, there will be assigned listening lists. As with the texts, these musical examples will be targeted to provide maximum impact to the student within a small amount of time. The importance of listening cannot be

overlooked. It is assumed that many students will be encountering certain composers and pieces for the first time. A familiarity with the given styles is therefore essential in order to promote an adequate understanding of the subject matter. Scores will be available for each of the musical examples and students will be expected to refer to these at the time of listening.

Writing

One of the difficulties in performing modern music is the issue of how to communicate with the audience. Program notes, while useful, are sometimes not enough. Increasingly, performers are required to talk about the music they are to perform in order to promote understanding, enjoyment and personal connection with the audience. The writing component of this course will be in the form of a 5-10 minute presentation specific to the assigned musical work. This will be due about halfway through the quarter and students will be expected to deliver a coherent, well written dialogue from memory, prior to their musical performance. In the case where students have been assigned different sections of a multi-movement work, each will prepare their dialogue regarding the appropriate individual movement, rather than the work as a whole. Students will also be expected to perform this dialogue at the same time as they play their assigned piece in the workshop session. Not only is this particular skill extremely valuable, it is also very good preparation should the student decide to prepare a lecture-recital at a later date.

Learning Outcomes

As well as gaining an introduction and understanding of modern piano music it is envisaged that this syllabus will provide students with the following skills: listening, reading, discussing, writing, public speaking, public performance, class performance in front of peers, and evaluating peers.

WEEK BY WEEK SYLLABUS SUMMARY

Table 1: Week by Week Syllabus Summary

WEEK ONE: LECTURE COMPONENT (transcribed in chapter one)
- Approaching Modern Piano Music **-** Explanation of Syllabus - Distribution of assigned piano pieces/movements

LISTENING ASSIGNMENT (TO BE COMPLETED BY WEEK 2) **Music of Olivier Messiaen (1908-1922)**		
Turangalîla-Symphonie (1946-48)		
I	*Introduction. Modéré, un peu vif*	(7 mins)
Vingt regards sur l'enfant-Jésus (1944)		
X	*Regard de L'Esprit de Joie*	(9 mins)
Catalogue d'oiseaux, Premier Livre (1956-58)		
ii	*Le Loriot*	(9 mins)
Quatour pour la Fin Du Temps (1940-41)		
I	*Liturgie De Cristal*	(3 mins)

READING ASSIGNMENT (TO BE COMPLETED BY WEEK 2)
Harmony in the Solo Piano Works of Olivier Messiaen: The First Twenty Years By John M. Lee *College Music Symposium*, Vol. 23, No. 1 (Spring, 1983), pp. 65-80 http://www.jstor.org/stable/40374163

Table 1 continued

WEEK 2: LECTURE COMPONENT (transcribed in chapter two)
- Messiaen's *Vingt regards sur l'enfant-Jésus* - Messian's 'Toolbox' and compositional process - Introduction and description of 7 movements from the *Vingt Regards*

LISTENING ASSIGNMENT (TO BE COMPLETE BY WEEK THREE) **Music of György Ligeti (1923-2006)**	
Atmosphères (1961)	(9 mins)
Études, Book 1 (1985)	
1 *Désordre*	(3 mins)
5 Arc-en-ciel	(4 mins)
Études, Book 2 (1988-1994)	
13 *L'escalier du diable*	(5 mins)
Continuum, for harpsichord (1968)	(6 mins)

READING ASSIGNMENT (TO BE COMPLETED BY WEEK 3)
Ligeti's early years in the West By Sean Bourke *The Musical Times*, Vol. 130, No. 1759 (Sept. 1989): pp. 532-535. http://www.jstor.org/stable/1193518

Table 1 continued

WEEK 3: LECTURE COMPONENT (transcribed in chapter three)
- Ligeti and the *Musica ricercata* - Exploring the *Musica ricercata* – movement by movement

LISTENING ASSIGNMENT (TO BE COMPLETED BY WEEK 4) **Music of Henry Cowell (1897-1965)**	
The Banshee (1925)	(4 mins)
Music of John Cage (1912 – 1992)	
Bacchanale, for prepared piano (1940)	(7 mins)
Sonatas and Interludes, for prepared piano (1946-1948)	
I through V (at least)	(16 mins)
Music of Changes (1951)	
Book 1 (at least)	(4 mins)

READING ASSIGNMENT (TO BE COMPLETED BY WEEK 4)
Cage's Sonatas and Interludes for Prepared Piano: Performance, Hearing and Analysis By Jeffrey Perry *Music Theory Spectrum*, Vol. 27, No. 1 (Spring 2005): pp. 35-66. http://www.jstor.org/stable/10.1525/mts.2005.27.1.35

Table 1 continued

WEEK FOUR: LECTURE COMPONENT (transcribed in chapter four)
-John Cage and the Prepared Piano - The Birth of the Prepared Piano - Preparing the piano safely and successfully

LISTENING ASSIGNMENT (TO BE COMPLETED BY WEEK 5)	
Music of Terry Riley (b. 1935)	
In C (1968)	(at least first 5 minutes, ideally all)
Music of Steve Reich (b. 1936)	
It's Gonna Rain (1965)	(at least first 5 minutes. Ideally all (17 mins)
Music for 18 Musicians (1974-6)	(at least through Section 3, 14 mins)
Music of John Adams (b. 1947)	
Nixon in China (1985-87)	
Act 1, Scene 1: The People are the Heroes Now	(3 mins)
Act 1, Scene 1: Landing of the Spirit of '76	(2 mins)
Music of Philip Glass (b. 1937)	
Einstein on the Beach (1975)	
Knee Play 1	(4 mins)

Table 1 continued

READING ASSIGNMENT (TO BE COMPLETED BY WEEK 5)
Theory Analysis and the 'Problem' of Minimal Music." In *Concert Music, Rock and Jazz since 1945: Essays and Analytical Studies,* By Jonathan W. Bernard, edited by Elizabeth West Marvin and Richard Hermann Rochester: University of Rochester Press, 1995.

WEEK FIVE: LECTURE COMPONENT (transcribed in chapter five)
What is minimalism? Steve Reich's *Piano Phase* Modes and Gating in *China Gates* by John Adams

WRITING ASSIGNMENT (TO BE COMPLETED BY WEEK 6)
Please prepare a coherent, well written dialogue about your assigned piece/movement that will be between five and ten minutes in length when read aloud. Each student will be expected to perform this dialogue from memory, at the instrument prior to his/her performance in the final concert. You will also be expected to practice this during the musical coaching sessions that will follow from week 6 onwards.

Table 1 continued

WEEK SIX: WORKSHOP SESSIONS BEGIN
- Demonstration on how to safely prepare a piano - Workshop on Cage's preparations
WEEK SEVEN: WORKSHOP SESSION
- Workshop and informal performances by students assigned works by Messiaen - Review of written presentations

WEEK EIGHT: WORKSHOP SESSION
- Workshop and informal performances by students assigned works by Messiaen, as well as Adams and Reich - Review of written presentations

WEEK NINE: WORKSHOP SESSION
- Workshop and informal performances by students assigned works by Ligeti - Review of written presentations

WEEK TEN: WORKSHOP SESSION
- Workshop and informal performances by students assigned works by Cage - Review of written presentations

Table 1 continued

FINAL (EXAM) WEEK
Group concert: Each student to perform their assigned piece in a public concert including a pre-performance spoken presentation.

CHAPTER I

Approaching Modern Piano Music

What exactly is modern piano music? As we are now in the second decade of the 21th century, it is a valid point to question the need to travel all the way back to 1940 to begin our journey exploring 'modern' piano music. In the 21st century alone, we probably have enough material to base a ten-week course. Iconic works such as Berio's *Sonata for Piano* (2001) or Michael Finnissys's *The History of Photography in Sound* (1995–2001), the latter being one of the longest piano pieces ever written come to mind as being particularly fruitful. However, to embark upon an extensive survey of all the piano music written since 1900 would be extremely cumbersome. As pianists, we are in the enviable position of having the largest canon of works of any instrument to choose from, an idyll of which a bassoon player or trumpet player could only dream. This luxury comes with its own set of problems. Where do we begin? If we consider 20th century music one genre, we run into very difficult choices in categorizing within this classification. A minimalist piece is very different from a spectralist piece which is contrasting to a serialist piece and so on. Instead of providing a smattering of musical styles - and leaving the student somewhat confused, not to mentioned disoriented - I have chosen to pick very specific compositions. I will admit that these pieces in no way represent the entire catalog of 'modern' piano music. For instance, the 21st century is not represented at all. The furthest we will go is the 1970s – and there is a lot that has happened since then! However, the assigned pieces either deal with specific issues and problems or they

provide a certain sound world that is easily identifiable. The understanding of these compositions is not limited to music majors in a university environment – they are approachable and can be appreciated by any listener – even one with no prior background in so called 'classical' music.

Music is always evolving, but at what point does it cease to become 'modern' and begin life as a historical artifact? Ultimately, we must try to forget about when music was written. Instead, we must focus on how the music sounds. Is there a specific difference in how music sounds that was written in the 21st century compared to music written in the 20th century? Of course, the actual point at which one century finishes and another begins does not necessarily signal a complete change in musical style. For instance, if we look at the time period between 1750 and 1850 we hear a huge overlap of musical styles, just as we would if we are to take a period of 100 years between just about any two points in musical history. Arguably, so far, the music of the 21st century is an extension of the ideas and style that have permeated the 20th century. Therefore, a familiarization, albeit brief, of the musical styles of the last century is necessary.

Piano Music in the 20th Century

How do we define the term '20th century piano music?' The obvious and literal answer is, of course, any composition that has been written for piano in the 20th century. However, it cannot possibly be that simple. Very quickly, the problems begin. Before we go any further, we need to look at how music of the 20th century is broken up, and this comes down to genre.

Genre

All music is classified. One way or another, whatever music we commercially obtain has been subject to some kind of procedural labeling. As a business, the music industry must find a way to market specific musical styles to specific people, and this ultimately determines who will listen to what. Of course, it shouldn't be a simple task. How can we put Beethoven and Stockhausen in the same category? Or how about Miles Davis and Kenny G? We encounter even more problems when we experience 'crossover' music such as when pop and rock artists borrow techniques from 'minimalist' procedures (of which we will discuss in length later on). Consequently, the idea of categorizing music by genre is an impossibly arduous task, and the complexities and unlimited variations that encompass the complete history of recorded sound will of course, lay colossal challenges on the categorical process. However, we still have a very elementary system of labeling music, as we can observe any time we come across the sale of recorded music.

We are all familiar with the various sub-categories that we associate with genre in musical terms. These are a tremendous source of ambiguity. For instance, let us briefly examine the term 'classical'. If we consider 'classical' music to be only music composed within the constraints of the 'Viennese Classical Idiom', then we confine ourselves to a very narrow group of composers. Consequently, this will result in having to find another 'label' for all the music we now consider as 'classical' but written outside the confines of the Viennese idiom. Clearly, this would be complex. The number of potential sub-categories needed would be commercially unviable, and would be horribly complicated for the uninitiated to deal with. As music evolves, boundaries are pushed and new frontiers are constructed. The impact this has on 'labeling' is significant for if the way in which a recording is marketed excludes a potential audience, then the future of music, both recorded and live is in jeopardy. One could argue that our perception of music is a direct reflection of how it is presented to us, and subsequently, how it will affect us.

But what if, for our purpose, which is to better understand and appreciate 'modern' piano music, we were to attempt to categorize what is commonly known as the 'classical' music of the 20th century? This would surely help us understand the plethora of music from this period in time. As this syllabus will deal with very specific, targeted musical examples, it is necessary to provide a comprehensive but concise survey of the music of the 20th century. The following table shows a list of musical 'categories'. It should be noted that this is in no way an exhaustive list. It is used here as an introductory description to music of the 20th (and 21st centuries).

Additionally, it is not to be assumed that the composer given as an example for a category wrote music *exclusively* in that category. For instance, Copland's composition *Lincoln Portrait* is used as an example for the category 'Nationalism.' However, Copland wrote in many other styles common to this period. His *Piano Variations* (1930) for instance, could be considered a serialist composition.

Table 2: Categories in 20th and 21st Century Music

CATEGORY	**SUGGESTED COMPOSER**	**SUGGESTED LISTENING**
Chance Music (also known as 'Aleatoric Music')	John Cage (1912-1992)	Music of Changes (1951)
Computer Music	Iannis Zenakis (1922-2001)	GENDY3 (1991)
Electronic Music	Mario Davidovsky (b. 1934)	Synchronisms No. 6 (1970)
Exoticism	Olivier Messiaen (1908-1992)	Sept haïkaï (1962)
Expressionism	Anton Webern (1883-1945)	Five Pieces for Orchestra Opus 10 (1911-13)
Indeterminacy	Morton Feldman (1926-1987)	Intersection No. 2 (1951)
Maximalism	Edward Varèse (1883-1965)	Arcana (1925-27)
Microtonalism	Gérard Grisey (1946-1998)	Modulations (1976-77)
Minimalism	Terry Riley (b. 1935)	In C (1964)
Musique concrete	Karlheinz Stockhausen (1928-2007)	Gesang der Jünglinge (1955-56)
Nationalism	Aaron Copland (1900-1990)	Lincoln Portrait (1942)
Neo-Classicism	Igor Stravinsky (1882-1971)	The Rake's Progress (1951)

Table 2 continued

Neo-Romanticism	Samuel Barber (1910-1981)	Adagio for Strings (1936)
Noise Music	John Cage (1912-92)	4'33" (1952)
Polytonalism	György Ligeti (1923-2006)	Galamb Borong (Etudes, Book 2) (1988-94)
Postminimalism	John Adams (b. 1947)	Shaker Loops (1978)
Primitivism	Béla Bartók (1881-1945)	Allegro barbaro, BB 63 (Sz. 49) (1911)
Serialism	Arnold Schoenberg (1874-1951)	Suite for Piano, op. 25 (1921-23)

As we can see, the variety of musical style represented in this table alone is evidence of just how exciting and important modern music is. What is so striking is the crossover in time periods between categories. There is so much going on, and all of it sounds so completely different – from John Cage's ubiquitous *4' 33"* to Stravinsky's operatic masterpiece *The Rake's Progress* to Terry Riley's definitive *In C.*

The developments in the music of the 20th century are immense. Because this syllabus is so short (ten weeks), it is impossible to cover a detailed history of this period. However, it is essential that the student possess a basic understanding of 20th century music, and the developments and events that shaped its music. Although not exhaustive by any means, the following tables describe some of the

major events in composition, listed in chronological order, decade by decade. Events specifically related to the composers we will study in this syllabus (Messiaen, Ligeti, John Cage, Steve Reich and John Adams) are written in bold type in order to make clear the context of their respective musical compositions. It is hoped that this information will be useful in a number of ways:

1) as an aid in searching out composers to play, as well as to listen,

2) as a resource to assist in understanding the scope of different compositional practices of the 20th and 21st century, *and*

3) as a general foundation to emphasize the importance of music history, with the hope of further exploration by the student.

Table 3: Developments in 20th Century Music, 1900-09

1900	Premiere of *Tosca* by Giacomo Puccini (1858-1924).
1901	Premiere of *Symphony No. 4* by Gustav Mahler (1860-1911).
1902	Premiere of *Pelléas et Mélisande* by Claude Debussy (1862-1918).
1903	Anton Berg (1885-1935) begins studies with Arnold Schoenberg (1874-1951). Premiere of Mahler's *Symphony No. 5.*
1905	Birth of Expressionism in Dresden with "Die Bruecke" (The Bridge).
1906	Premiere of Mahler's Symphony No. 6. Advent of *Cubism.*
1907	Ferruccio Busoni (1866-1924) publishes *Sketch of a New Aesthetic of Music* in which he predicts the future use of electronics and dissonance in music. Expressionism born in Vienna with the group "Fledermaus".
1908	Premiere of Mahler's Symphony No. 7. **Olivier Messiaen born in Avignon, France.**
1909	Premiere of *Piano Concerto No. 3* by Sergei Rachmaninoff (1873-1943). Ballet in Paris is revitalized with the founding of the "Ballet russes".

Table 4: Developments in 20th Century Music, 1910-19

1910	Premiere of *The Firebird Suite* by Igor Stravinsky (1882-1971). Premiere of Mahler's *Symphony No. 8 (Symphony of a Thousand).*
1911	Stravinsky's *Petrushka* receives its first performance. Expressionism born in Munich with the group "Der Blaue Reiter".
1912	Premiere of Mahler's *Symphony Number 9.* Premiere of *Pierre Lunaire* by Arnold Schoenberg. **John Cage born in Los Angeles, California.**
1913	First and highly controversial performance of *Le sacre du printemps (The Rite of Spring)* by Igor Stravinsky at the Théâtre des Champs-Élysées, Paris. Riots follow the performance.
1914	World War I begins. Maurice Ravel (1875-1937) composes the *Piano trio in a minor.*
1915	Dadaism is founded in Zurich, Switzerland. Debussy completes the *Études* for piano.
1917	Charles Ives (1874-1954) finishes work on his *Fourth Symphony.* Scott Joplin dies. Sergei Prokofiev (1891-1953) composes his *Classical Symphony*, one of the first neo-classical works of the century.
1918	World War I ends. Death of Claude Debussy. Premiere of the opera *Duke Bluebeard's Castle* by Béla Bartók (1861-1945).
1919	*Cello Concerto* by Edward Elgar (1857-1934) receives its first performance.

Table 5: Developments in 20th Century Music, 1920-29

1920	Léon Theremin invents the 'Theremin', one of the first electronic instruments
1921	Arnold Schoenberg devises "Twelve-tone Technique". The composer later describes the system as a "Method of composing with twelve tones which are related only with one another"[1] Nadia Boulanger is invited to join the faculty of *the Conservatoire Américain at Fontainebleau*. Her students will include Aaron Copland (1900-90)
1922	Ravel's now legendary orchestration of Mussorgsky's *Pictures at an Exhibition* receives its premiere
1923	**Birth of György Ligeti in Transylvania, Romania** Henry Cowell (1897-1965) composes *Aeolian Harp,* his first composition written entirely for 'String Piano' (a technique in which the sounds are produced by direct manipulation of the piano strings, rather than by striking the piano keys)
1924	George Gershwin (1898-1937) composes *Rhapsody in Blue*
1925	Premiere of *Integrales* by Edward Varèse (1883-1965) Pierrre Boulez born, in Montbrison, France Death of Erik Satie
1928	Premiere of Schoenberg's *Variations for Orchestra* Ravel meets George Gershwin (1898-1937) on a concert tour of the USA. Birth of Karlheinz Stockhausen, near Kerpen, Germany Maurice Martenot invents a new electronic musical instrument, the *Ondes-Martenot.*

[1] Schoenberg, *Style and Idea,* 218.

Table 6: Developments in 20th Century Music, 1930-39

1930	Premiere of *Three Places in New England* by Charles Ives (1874-1954).
1931	Prokofiev completes work on *Piano Concerto No. 4*, for the left hand, commissioned by Paul Wittgenstein. It will not receive its premiere until after the death of the composer.
1932	Ravel's *Piano Concerto in G* receives its premiere. Ravel's *Piano Concerto for the Left Hand* is given its first performance by Paul Wittgenstein, a pianist who lost his right arm during World War I
1933	Bartok's *Second Piano Concerto* is premiered in Frankfurt, Germany.
1934	First performance of Paul Hindemith's (1895-1963) symphony *Mathis der Maler.*
1935	Death of Anton Berg.
1936	Premiere of Berg's *Violin concerto.* **Steve Reich born, in New York City.**
1937	First performance of Berg's opera *Lulu.* First performance of *Symphony No. 5* by Dmitri Shostakovich (1906-1975). Premiere of *Music for Strings, Percussion and Celeste* by Bartok. Death of Ravel. Philip Glass born, in Baltimore, Maryland.
1938	Premiere of Berg's *String Quartet.*
1939	World War II begins.

Table 7: Developments in 20th Century Music, 1940-49

1940	Premiere of Schoenberg's *Piano Concerto* **John Cage arrives at the concept of the 'prepared piano' by writing *Bacchanale* at the Cornish School in Seattle, Washington.**
1941	Premiere of *Quatuor pour la fin du temps (Quartet for the End of Time)* by Messiaen in the Stalag VIII-8 prisoner of war camp
1942	Aaron Copland composes *Fanfare for the Common Man*
1943	Bartok composes *Concerto for Orchestra.*
1944	Messiaen publishes *Technique de mon language musical* (Technique of my musical language) **Messiaen composes *Vingt regards sur l'enfant-Jésus***
1945	End of World War II. Death of Webern. Death of Bartok.
1946	Premiere of Bartok's *Third Piano Concerto* A school is established in Darmstadt, Germany for avant-garde composers. Two of its most celebrated students will include Karlheinz Stockhausen and Pierre Boulez (b. 1925)
1947	**John Adams born in Worcester, Massachusetts** The second, revised edition of Ives's *Piano Sonata No. 2, Concord, Mass., 1840-60* is published.
1948	Pierre Schaeffer (1910-1995) creates a laboratory in Paris in which to develop "musique concrete" **John Cage composes *Sonatas and Interludes* for prepared piano** Conlon Nancarrow (1912-1997) begins composing *Studies* for player piano
1949	Leonard Bernstein (1918-1990) conducts the premiere of the *Turangalîla-Symphonie* by Messiaen with the Boston Symphony Orchestra.

Table 8: Developments in 20th Century Music, 1950-59

1951	First complete performance of *Symphony No. 2* by Ives. Death of Schoenberg. Karlheinz Stockhausen joins the school of music at Darmstadt and begins composing "elektronische music." Cage composes *Music of Changes*, a piano piece in which the content is determined by chance procedures applied to the charts and hexagrams of the *I Ching* (the Chinese Book of Oracles).
1952	David Tudor gives the premiere of *4"33'* by John Cage in Woodstock, NY. Pierre Boulez attacks Schoenberg's use of the twelve-tone system in his book *Stocktakings from an Apprenticeship*. Boulez completes *Structures* for two pianos. Stockhausen begins what will become the decades-long process of composing *Klavierstücke.*
1953	**Ligeti completes *Musica ricercata.***
1954	Premiere of *Moses and Aaron* by Schoenberg. Death of Ives.
1956	Messiaen begins work on the *Catalogue d'oiseaux* (bird catalog) for solo piano.
1957	Stockhausen completes work on his landmark composition for three orchestras entitled *Gruppen.*
1958	Edgard Varese (1883-1965) composes *Poeme Electronique* (widely considered the first multimedia piece*)* for the 1958 World Fair in Brussels.
1959	Giacinto Scelsi (1905-1988) composes the highly influential *Quattro Pezzi su una nota sola* [Four Pieces on a single note].

Table 9: Developments in 20th Century Music, 1960-69

1960	Stockhausen's electronic masterpiece *Kontakte* receives its premiere at the ISCM Festival in Cologne, Germany.
1961	Ligeti composes *Atmosphères.* It will later gain notoriety for being featured in Stanley Kubrick's 1968 film *2001: A Space Odyssey.*
1963	Cornelius Cardew (1936-1981) begins composing *Treatise*, a 167 page graphic score piece that will not be completed until 1967.
1964	Terry Riley composes *In C.* It becomes one of the most influential pieces of the 'minimalist' movement. George Rochberg (1918-2005) abandons the use of serialism in his compositions.
1965	Steve Reich arrives at the idea of 'phasing' with the composition of *It's Gonna Rain.*
1966	Reich composes the tape piece *Come Out*, an early example of 'process' music.
1967	**Reich composes *Piano Phase*, a piece which expands the earlier use of 'phasing' to live instruments.**
1969	Berio completes what is perhaps his most celebrated work, the *Sinfonia*, for orchestra and eight amplified voices.

Table 10: Developments in 20th Century Music, 1970-79

1971	Death of Stravinsky. Morton Feldman writes *Rothko Chapel* for the meditation room of the Menil foundation in Houston, Texas. Mario Davidovsky (b. 1934) wins a Pulitzer prize for his composition *Synchronisms No. 6.*
1972	George Crumb (b. 1929) composes the first of four volumes of *Makrokosmos,* for amplified piano.
1973	Leonard Bernstein delivers the first of six public 'Norton' Lectures at Harvard University. The first lecture focuses on Copland's *Piano Variations.*
1975	Death of Dmitri Shostakovich.
1976	*Einstein on the Beach* by Phillip Glass receives its premiere in Avignon, France. Widely considered the composer's masterpiece, Steve Reich's *Music for 18 Musicians* receives it premiere in New York City. Ursula Oppens premieres *The People United Will Never Be Defeated!* (1975) by Frederic Rzewski (b. 1938) in Washington D.C.
1977	**John Adams composes *Phrygian Gates* and *China Gates.*** IRCAM (Institut de Recherche et Coordination Acoustique/Musique) opens in Paris). Iannis Xenakis (1922-2001) develops "UPIC", a computerized composition system that converts data from graphs into musical language. Toru Takemitsu (1930-1996) meets Messiaen for the first time in New York City.
1978	Ligeti's sole opera *Le Grand Macabre* receives its premiere in Stockholm, Sweden.

Table 11: Developments in 20th Century Music, 1980-89

1980	Premiere of *Satyagraha*, the second opera in Phillip Glass's "Portrait Trilogy".
1981	First performance of *Triadic Memories,* for piano, by Morton Feldman.
1982	Toru Takemitsu (1930-1996) composes *Rain Tree Sketch.*
1983	World premiere of *Saint François d'Assise*, an opera by Messiaen.
1985	Ligeti begins work on the first of three books of Piano Études. They will not be complete until 2001.
1986	Morton Feldman composes *Palais de Mari* - a succinct representation of his late style.
1987	John Adams composes *Nixon in China*. The work receives its world premieres in Houston, Texas to mixed reviews.
1988	Death of Italian composer Giacinto Scelsi.
1989	Elliott Carter composes his *Violin Concerto.*

Table 12: Developments in 20th Century Music, 1990-99

1990	Leonard Bernstein dies in his apartment on the upper West side of Manhattan.
1991	*The Death of Klinghoffer*, an opera by John Adams, is premiered in Brussels.
1992	**Death of Messiaen.** **Death of Cage.**
1993	Death of Frank Zappa.
1994	William J. Clinton, 42nd president of the United States of America, proclaims September 1994 as 'Classical Music Month.'
1995	First performance of Stockhausen's *Helikopter-Streichquartett* (Helicopter string quartet).
1996	Mstislav Rostropovich gives the first performance of James MacMillan's (b. 1959) *Cello Concerto* with the London Symphony Orchestra under Sir Colin Davis. Takemitsu compses *Rain Tree Sketch Number 2* and dedicates it to his mentor, Olivier Messiaen. It will be Takemitsu's final piano piece.
1999	Elliott Carter's only opera to date *What Next?* receives its premiere in Berlin conducted by Daniel Barenboim.

Table 13: Developments in 21st Century Music, 2000-2012

2001	Michael Finnissey (b. 1946) completes *The History of Photography in Sound,* one of the longest non-repetitive piano pieces ever written (approx. 5 hours, 30 minutes) Premiere of Elliot Carter's *Cello Concerto*
2002	First performance of *On The Transmigration of Souls* by John Adams, commissioned by the New York Philharmonic and Lincoln Center to commemorate those who lost their lives on September 11, 2001
2003	Death of Berio Premiere of Elliot Carter's *Boston Concerto*
2006	**Death of Ligeti**
2008	Elliott Carter (born 1908) celebrates his 100th birthday and vows to continue composing. His *Flute Concerto* receives its first performance. The New York Philharmonic play a concert in Pyongyang, North Korea
2010	Premiere of *Émilie*, an opera by Kaija Saariaho (b. 1952)
2011	First performance of *Weltethos* for speaker, choir, children's chorus and orchestra, by Jonathan Harvey (b. 1939) An agreement made on April 8 officially ends the 26 week strike by the musicians of the Detroit Symphony Orchestra. *Albumblatt* by Johannes Brahms (1833-1897) is premiered by Craig Sheppard at the University of Washington, Seattle.
2012	*Einstein on the Beach*, by Phillip Glass is to receive its first performance in over 20 years in London. Stockhausen's opera *Mittwoch aus Licht* is to be staged for the first time, helicopters and all, by Birmingham Opera Company in Birmingham, England as part of the London 2012 festival.

The First Approach

Perhaps the hardest element of playing modern music is getting started, taking the first plunge, so to speak. In a great deal of the piano music written before 1900 there are several distinct advantages that aid the student. They may have a familiarity with the piece, or a knowledge of the composer. At the very least, they will have a basic understanding of the general musical style that is associated with that composer. For instance, it is likely that at the undergraduate level a piano major would have at least played a composition by Chopin, however small. At the minimum, the student would have at least *heard* a composition by Chopin. In addition, 18th and 19th century piano music was largely written to fit the hand. This is not the case with much of the music from the 20th and 21st century. It is entirely conceivable that the average student will never have come into conscious contact with modern music. As a result, it is very easy to be put off this style very quickly. Often, the very first experience a student will have with contemporary music is during an initial 'read-through' at the piano. This is a situation which is plagued with disadvantages. First, there is the obvious problem with the difficulty of the score. Unless the students' sight reading skills are of a disproportionately high level, they will not be able to make an informed decision as to whether or not to explore the piece further. Often the student will be presented with bewildering rhythms and a black wall of seemingly unconnected notes. It becomes very easy to dismiss a piece there and then. Another problem is that a work may start simply but then become infinitely more complicated as it progresses.

The most convincing way to attract students to modern music is very basic – through sound. The sound of a piece, or more specifically, the sound world in which it transports us to, should be unique and wonderful. Of the composers we will study each one is incomparable. John Cage wrote *Bacchanale* four years before Messiaen wrote his *Vingt regards sur l'enfant-Jésus*, yet these two respective pieces are a universe apart. Take John Adams, widely thought to belong to the school of minimalism. If we listen to his music alongside that of Steve Reich, their similarities become very small. Musical language is unique and should be something we expose in order to communicate with the student. If the student becomes excited about a particular sound world, it will be much easier to compel his or her interest. Consequently, the easiest and most rewarding route into modern music is by listening in advance of sitting down at the piano to play it for the first time. One could argue that this alters our experience of performing. By listening to a piece of music in advance we do gain a pre-conceived idea of how the music will sound – and the way in which we personally interpret the music is altered. However, this is not necessarily a bad thing. Any steps we can take to aid in our understanding of this music should be explored to the fullest extent. It will be the aim of this syllabus to expose the sound world of each composer, and use that as an entry point into modern music.

Accuracy

As a rule, the accuracy level we should strive to obtain when playing modern music is exactly the same as if we were playing Mozart or Brahms. Too often, performers justify wrong notes and wrong rhythms by telling themselves that the audience won't know the difference, as all the notes sound 'wrong' anyway. This cliché is the epitome of what is wrong with the public's conception of modern music. Imagine a performance of a well-known work, such as a Chopin *Ballade*. If the performer is not technically and musically solid the performance will be shaky at best. Now consider that this is the first time you are hearing Chopin. How likely are you to seek out more material by the same composer, or even in the same style? Different styles of music represent different levels of complexity. In Chopin and Liszt for instance, the challenge is arguably one of technical refinement. In more contemporary works, be it the music of Elliott Carter or Berio, the challenges are different. This is not to say that they do not present *technical* challenges (they most certainly do), but pianists will be faced with rhythmic challenges that they may never have encountered before. All this means is that a different approach is needed. For each new piece, the most difficult criteria should always be spelled out first – and tackled in the same tradition as an etude from the traditional canon. Even more essential, however, is that students have a sound knowledge of what the composer is actually doing in the compositional process.

Ultimately, when it comes to the performance, mistakes can happen, as they can in the performance of music from any time period. Part of the art of being a musician is learning how (and when) you can forgive yourself of these errors. If you have done everything in your power to stay faithful to the wishes of the composer and can honestly claim that you learned (and performed) the piece to the very best of your ability, then you may excuse yourself of any oversights.

Memorization

The issue of memorizing piano music is peculiar. No other musicians fall under the same scrutiny as the pianist. Traditionally, pianists are expected to play from memory, unless they are playing a piece of music by a contemporary composer that is considered complex enough to warrant the use of the score. This raises the obvious question of where to draw the line on this issue. We have discussed just how varied music of the 20th century is and we clearly can't apply the same rules to Samuel Barber as we can to Iannis Xenakis. Students sometimes have the misguided opinion that playing a piece of music by a contemporary composer saves them from having to memorize a piece for a recital. Consequently, this often means that less work is put into the preparation of such a piece, as obviously, it takes less time to play a composition with the music than it does from memory. As a result, one ends up with a low quality performance. This has consequences for the performer and audience. The audience is left confused and possibly irritated while the performer is left with feelings of guilt and non-accomplishment (hopefully!) While memorizing

music requires enormous preparation (as well as nerves of steel), it undoubtedly frees the performer and makes it easier to communicate the meaning of the piece to the audience. It also ensures the pianist has a thorough knowledge of the structure and harmonic language of the piece. At best, memorization ensures a high level of understanding.

The question of whether to memorize a piece or not must be a personal decision. Playing with the score is not necessarily easier. It requires a completely different technique than playing from memory. In reality, it is extremely difficult to perform a piece of complex modern piano literature with the music and not have most of it committed to memory. In effect the music on the piano desk is only there as a back up. We must ask ourselves if we really need to use the score. The answer to that question will very often be yes. For instance, if we look at large scale pieces such as *Phrygian Gates (1977-78)* by John Adams, they exhibit qualities that are almost impossible to memorize, notably the labyrinth of repeated note patterns that fill its 28-minute duration. But, if we look at something that has a far clearer structure, such as Alban Berg's *Klaviersonate* (Opus 1) (1920), we can see that memorizing is definitely possible.

Essentially, the pianist must consider whether the benefits of memorizing outweigh the risks. It must always be remembered that the key to a good performance is a complete commitment to the wishes of the composer, whether the music is used during the performance or not.

CHAPTER II

Messiaen's *Vingt regards sur l'enfant-Jésus*

The music of Olivier Messiaen will serve as our introduction to the world of the modern piano. One could be skeptical about the merits of beginning a syllabus that is supposed to deal with 'modern' piano music with a composer who is already dead. Not only that, but the work that will be studied, the *Vingt regards sur l'enfant-Jésus,* was composed in 1944, over 60 years ago. What it is about Messiaen that is so spectacular, and so timeless that warrants our attention in the 21st century?

Quite simply, the *Vingt Regards* is utterly magical. It is beautiful and beguiling but it can also be terrifying and brutal. In a piece that exhibits the complete spectrum of human and spiritual emotion, Messiaen composed an epic work of unfathomable proportion. Indeed, parts of the *Vingt Regards* are ferociously difficult. However, many movements are perfectly accessible to undergraduate pianists who have had no prior knowledge of 'modern' music. What sets Messiaen apart from his contemporaries is that where other composers bury their intentions under a sea of notes and rhythm, Messiaen literally explains to us *how* he has composed the music, right until the close of the final, 20th movement. This is not to say our work is done for us. There still remains an enormous challenge, not least in processing Messiaen's instructions from compositional treatise to music. But the fact that we are essentially guided through the structural facets of the piece by the composer is quite remarkable.

Throughout this chapter, students will learn the basics of seven of Messiaen's most interesting compositional techniques. Each technique is not exclusive to its corresponding movement. Students will be expected to recognize *all* these techniques whenever they occur, and will be encouraged to base their short written assignment on this subject.

Messiaen's Compositional Toolbox

We will study seven movements from the *Vingt Regards* over the course of this syllabus. In each movement, we will look at a compositional technique that is featured. This is not meant to infer that this is the *only* technique Messiaen is using in the movement. In fact, it is probably possible to find examples of every technique in every movement; the analytical potential of the *Vingt Regards* is nearly infinite. By showing a *simple* example of each technique, it is my hope students will then be able to easily locate these remarkable devices in whatever movement they decide to study. I feel it is also important not to flood students with intricate detail concerning each technique. As a result, what follows is merely a snapshot.

In the following table, I have also included a definition for each technique.

Table 14: Compositional Devices specific to each movement in the *Vingt Regards*

MOVEMENT	**COMPOSITIONAL TECHNIQUE**	**DEFINITION**
Regard du Père	Added Notes	Foreign notes which add color and depth to a given chord.
Regard de l'étoile	Added Values	When an addition to a rhythm makes it ametrical.
L'échange	Agrandissesment Asymetrique (Asymmetric Growth)	A technique where Messiaen develops a small cell by altering the pitches - pitches can rise, fall or stay the same.
Regard de la Vierge	Augmentation and Diminution of rhythm	A technique in which rhythmic values are either increased or decreased.
Regard du Fils sur le Fils	Modes of Limited Transposition	A mode that can be transposed only a limited number of times before it duplicates itself.
Regard des hauteurs	Birdsong	The musical transcription of the vocalizations of birds.
Regard du temps	Non-retrogradable rhythms	Palindromic (symmetrical) rhythms

Messiaen's Compositional Process

The inspiration to describe the mechanics of Messiaen's compositional process stem from my own experiences of playing his piano music. As an undergraduate pianist, I had almost no interest in music theory and held the naive point of view that performers didn't need to know *how* the music was constructed, they just had to be able to *play* it. After all, the musicologists had to have something with which to occupy their time. How wrong I was! I have a feeling that I was not, and will not be, the only young pianist to share this sentiment, especially those who are enrolled in conservatories. As pianists, we spend hours in the practice room. The notes on the page become our focus, and we obsess about technique, memorization, performance nerves, and about recreating that perfect commercial recording that we have listened to a thousand times in the hope of magically speeding up the learning process. In this very learning process, which can take several months at least, and usually up to a year, (although some pieces demand a lifetime's dedication) we lose sight of what the piece of music is actually about. It becomes more about the performer, and less about the composer, and ultimately, the music suffers. Passages that have been practiced again and again begin to sound tired, and serve only as a justification of the pianist's existence rather than as part of a musical experience.

But what if everything we needed was clearly spelled out for us on the score? Not only the notes and rhythm, but also clear directions on what is actually

happening in the score. This requires a rededication to the process we should follow when we learn the music. The score itself should be treated as a complete entity where notes, text, and tempo markings are all of equal importance.

If we have specific knowledge about what is happening musically *before* we begin to learn the music, the results will be superior. This is only part of the process – we also need to know *why* something is happening. Not only will this speed up the learning process significantly but this knowledge will empower the performer and will directly translate to the listener, who, lest us forget, is the reason we play the piano in the first place.

I have performed the complete *Vingt Regards* numerous times. Upon learning the cycle for the first time, I was working against a tight timeline. The sheer scale of the work – 177 pages of music that last almost 2.5 hours, is terrifying. More daunting still are the three huge, pivotal movements of the work – the 6th, 10th and 20th movements, all of which place unprecedented demands on the pianist (and are excluded from the list of assigned works in this syllabus for that very reason). The 6th movement, *Par Lui tout a été fait* (*By Him was Everything Made*) is perhaps the most challenging in the set, perfectly depicting Messian's vision of the birth of the universe. The movement begins as a fugue, and the technical demands quickly grow. How Messiaen constructs this movement is truly remarkable. To summarize, the pianist plays the first five pages and then plays the same five pages again, but this time backwards!

Because the music is so complex, it *is* in fact possible not to notice this mirror image. After all, we are not expecting it, and isn't the work from 1944? Instinct tells us that it is merely another section of the music, and therefore, a new set of notes in which to learn, practice and obsess. When the technical demands of a piece present themselves with such force they become the priority, as we assume that once we can physically 'play' a piece of music then most of the hard work has been done. We must rethink the process of how we learn difficult music and assimilate everything that the composer has directed us to do. We then must make sure we understand it, whether it is translating simple French or Italian musical terms or understanding the formal aspects. After all, it is inconceivable that we would attempt to learn a Beethoven or Mozart sonata without any knowledge of sonata form. If we are armed with the appropriate knowledge, learning 'modern' piano music is no different from learning anything else.

Messiaen was extremely generous in describing exactly what he was doing. To the pianist, this should be considered an incredible gift and one that should be exploited to the fullest extent possible. His directions and remarks should be considered as important as the music itself, and it is essential that young pianists begin to incorporate these into the practice process. While other composers stop at supplying tempo directions, expressive marks and dynamic markings, Messiaen goes much, much further. For instance, in the fugal section of the sixth movement, *Par Lui tout a été fait,* he labels every subject, counter subject, inverted answer, and inverted counter subject! Such attention to detail is representative of Messiaen's

desire to employ a system of total organization to his music and to make his intentions as clear and specific as is possible.

The aim of this chapter will be to provide concise descriptions of the compositional devices that make up Messiaen's 'toolbox.' Of the twenty movements in the *Vingt regards*, seven have been selected for inclusion in the list of assigned works for students to perform. It would be wonderful, and certainly beneficial, to provide a detailed theoretical analysis of each of these 7 movements. However, this is a task of immense proportions, and is not suited to our purpose. Rather, it is my belief that the best way to digest complex information such as this is in manageable segments. Therefore, each movement will be discussed, and any interesting compositional features will be identified but will always be presented in the context of a pianist *playing* the music, rather than a musicologist who is studying the music. By gaining an understanding of Messiaen's compositional intentions, even to a limited extent, the students will experience a far superior and enjoyable learning process.

For further reading, interested students are strongly advised to investigate the composer's treatise, *Technique de mon language musical (Technique of My Musical Language)* which Messiaen wrote in 1944.

Movements from the *Vingt Regards sur l'Enfant-Jésus* that will be available for students to prepare are listed below. To aid in the selection choice, the length is listed, as is the difficulty level.

Table 15: Movements from the *Vingt Regards* to be assigned and studied

Movement	**Length**	**Difficulty**
I. Regard du Père (Gaze of the Father)	8 minutes	Level 1
II. Regard de l'étoile (Gaze of the star)	4 minutes	Level 1
III. L'échange (The exchange)	4 minutes	Level 1
IV. Regard de la Vierge (Gaze of the Virgin)	6 minutes	Level 2
V. Regard du Fils sur le Fils (Gaze of the Son upon the Son)	7 minutes	Level 3
VIII. Regard des hauteurs (Gaze of the heights)	3 minutes	Level 2
IX. Regard du temps (Gaze of time)	4 minutes	Level 1

An Introduction to the *Vingt Regards sur l'Enfant- Jésus*

*Vingt Regards sur l'Enfant- Jésus c*an be roughly translated as 'Twenty Gazes upon the Infant Jesus'. Messiaen's utter devotion to the Catholic Church and its ideals is exemplified throughout the twenty highly expressive and descriptive movements that encompass this cycle. It is an epic composition for sure, but within the cycle lie many manageable movements which can stand by themselves as individual piano pieces.

The learning process for the *Vingt Regards* begins not with attempting to sight-read through the first movement, *Regard du Père,* but in translating the author's note which Messiaen has printed on the first page of the score.

Translation of Author's note:

"Contemplation of the Infant-God of the manger and Gazes that fall on him: from the inexpressible Gaze of God the Father to the multiple Gaze of the Church of Love, passing through the extraordinary Gaze of the Spirit of Joy, through the very tender Gaze of the Virgin, then the Angels, the Wise Men, and the incorporeal or symbolic creatures (Time, the Heights, Silence, the Star, and the Cross).

The Star and the Cross have the same theme because one opens and the other closes the earthly existence of Jesus. The Theme of God is found, of course, in the Gazes

of the Father, of the Son, and of the Spirit of Joy, in By Him All Has Been Made, in The Kiss of the Infant-Jesus; it is present in The First Communion of the Virgin (she carried Jesus within her); it is expanded in the Church of Love, which is the body of Christ. Not to mention the songs of the birds, bells, spirals, stalactites, galaxies, photons, and the texts of Dom Columba Marmion, St. Thomas, St. Jean of the Cross, St. Theresa of Lisieux, the Gospels, and the Missal that influenced me. A Theme of Chords circulates from one piece to another, split up or concentrated into a rainbow; also rhythmic canons, polymodalities, nonreversible rhythms amplified in both directions, note values progressively accelerated or slowed, asymmetric enlargements, changes of register, etc. The writing for piano is very mannered: inverted arpeggios, resonances, diverse strokes. - Dom Columba Marmion (Le Christ dans ses mystères [Christ in His mysteries]) and after him Maurice Toesca (Les douze regards [The twelve gazes]) spoke of the gazes of the shepherds, the angels, the Virgin, the heavenly Father; I have taken up the same idea, treating it a bit differently and adding sixteen new gazes. More than in all my preceding works I have sought here a language of mystical love, at once varied, powerful, and tender, sometimes brutal, in multicolored arrangements."[2]

The incredible detail in the author's note gives us a marvelous insight to the *Regards,* and prepares us for the momentous work we are about to encounter.

[2] Messiaen, *Vingt Regards*, i.

Main Thematic Material

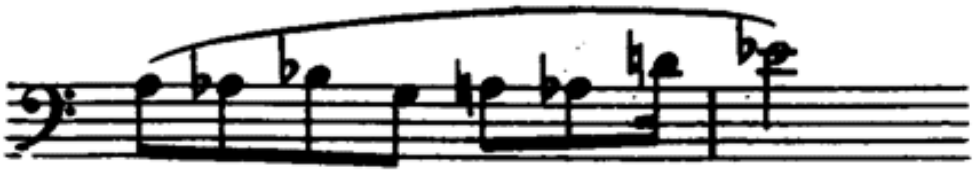
Immediately following the descriptive author's note, Messiaen lists the main thematic material that we will encounter; the *Thème de Dieu* (Theme of God), the *Thème de l'Etoile et de la Croix* (Theme of the Star and the Cross) and the *Thème d'accords* (Theme of Chords).

The thematic material has been reproduced from the piano score.[3]

Musical Example 1: *Thème de Dieu* (Theme of God) (© Durand and Cie., 1947)

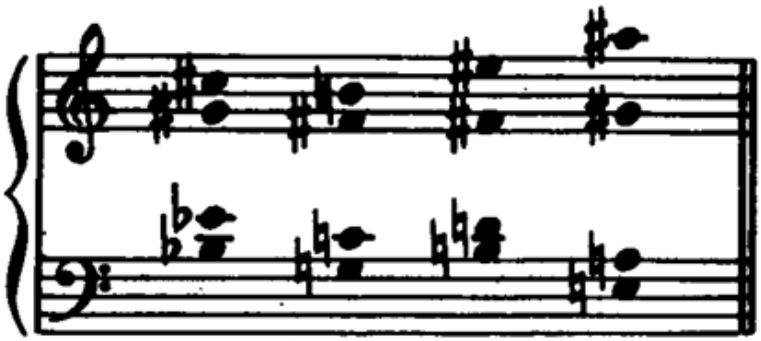
The Theme of God makes multiple appearances throughout the entire set as a symbol of God's supreme love.

[3] Messiaen, *Vingt Regards,* i.



Musical Example 2: *Thème de l'Etoile et de la Croix* (Theme of the Star and the Cross) (© Durand and Cie., 1947)

The Theme of the Star and the Cross also has an explicit meaning: the 'star' serves as an example of the beginning of Christ's life while the 'cross' symbolizes the end.



Musical Example Number 3: *Thème d'accords* (Theme of Chords) (© Durand and Cie., 1947)

The third theme, the 'Theme of Chords' has no specific association but appears throughout the cycle in either its original, fragmented or concentrated form.

Now that we have understood the author's note and have familiarized ourselves with the three main themes, we can now have a closer look at each of the eleven movements that have been selected for inclusion in this syllabus.

Movement I: *Regard du Père* (Gaze of the Father)

> *Et Dieu dit: "Celui-ci est mon Fils bien-aimé en qui j'ai pris toutes mes complaisances")*
>
> 'And God said: 'This is my beloved Son in Whom I am well pleased ...'

[Length: 8 minutes, Difficulty: Level 1]

Messiaen is not content with merely spelling out the hypothesis of the *Vingt Regards* and transcribing the main thematic material. He goes further by prefacing every movement with a visionary statement relating to the forthcoming music, as is shown above. This can only be helpful to the student, especially if he or she is hesitant about trying to make sense of Messiaen's music. The information Messiaen gives us is inspiring and profound. And what better way to enable the connection between performer and composer. Of course, the text must not take the place of

imagination. Rather, it should be thought of as a stepping-stone towards the ultimate goal of an independent interpretive thought process.

Initial Observations

It may seem obvious to point out that before we even begin playing the piece we must investigate all the directions we have been given. This begins with tempo. The composer has given us very specific clues as to how the movement should sound:

Extrêmement lent. Mystérieux, avec amour (Extremely slow. Mysteriously, with love)

Messiaen has also stated a very specific metronome marking: 16^{th} note triplet = 60. The idea of 60 beats per minute as a plausible heart rate could be significant. Messiaen does not allude to this in the score but at the very least it adds to the intrigue and mystery of the movement.

Having studied the tempo markings, we can now turn our attention to the key signature. At first glance, everything looks fairly normal. The movement is in F sharp major. But this carries significance as F sharp symmetrically divides the octave, and therefore gives Messiaen the ideal key in which to represent the idea of God's perfection. Furthermore, a quick glance at the corresponding movements

confirms that Messiaen only uses a key signature in places of extreme importance such as Movements 6, 10, 15, 19 and 20, these being the movements that depict the power of God and his perfection.

In *Regard du Père* we encounter the use of **added notes.** To quote Messiaen, in the *Technique de mon language musical* he describes added notes as being,

….foreign notes, with neither preparation nor resolution, without particular expressive accent, which tranquilly make part of the chord, changing its color, giving it a spice, a new perfume…they are added notes' [4]

A perfect example of added notes can be found in the very opening measure of this movement. We need look no further than the second chord of the *Theme de Dieu* to encounter this technique.

Movement II: *Regard de l'étoile* (Gaze of the star)

[Difficulty: Level 1, Length: 4 minutes]

(Choc de la grâce…l'étoile luit naïvement, surmontée d'une croix…)

The fall of Grace: the Star shines innocently, surmounted by a Cross

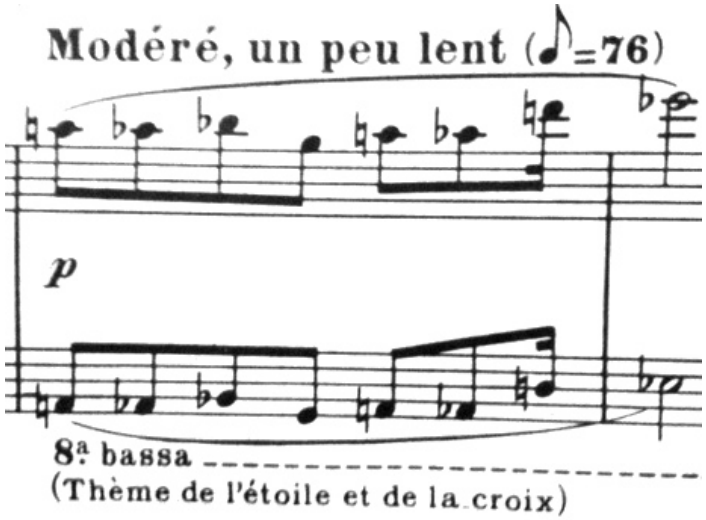
[4]Messiaen, *Technique,* 63.

The first thing we notice about the 2nd Regard is that it has a completely different texture from that of the 1st regard. While *Regard du Père* challenges the pianist's ability to sustain and maintain a dark, brooding piano sound coupled with executing gradual crescendos, the 2nd regard daunts the pianist in a different way: to jump in and out of different textures, and subsequently, to transform the instrument from grand piano to bells, chant and percussion.

Just as the first regard is built upon the *Theme de Dieu*, the second Regard is constructed upon the Theme of the Star and the Cross. This immediately makes the movement infinitely more interesting to the performer and listener alike as we are dealing with two ideas, that of the star which begins life and that of the cross that ends it.

The difficulties in this movement are not merely technical - they are conceptual. For the performer, it really is a case of trial and error. Should the fragmented ideas be connected or should they remain completely isolated? There may be no right answer, which is why this movement is perfect for our purposes. It forces the student to think independently, while following very specific instructions. And specific Messiaen is. By the 3rd bar, where the left hand chord tones follow one another, Messiaen has stipulated the difference between the tones; one is labeled *comme des cloches*, while the other *accords de carillon*. This attention to detail is fanatic, and it only serves to reinforce the importance of experimenting at the piano, and the benefits of using our ears to find the right sound.

The use of **added values** is an important technique that is evident in this movement. Messiaen was heavily inspired by non-western rhythmic systems, in particular by Indian and Greek rhythms. It is noticeable that Messiaen never uses a time signature. This enables the easy structure of ametrical rhythmic patterns. In *Regard de l'étoile* we can clearly see where he has added to a pattern in order to make its value irregular. See Musical Example 4,



Musical Example 4: Added values in *Regard de l'étoile*, measure 6 (© Durand and Cie., 1947)

Movement III: *L'échange* (The exchange)

Descente en grebe, montée en spirale; terrible commerce humano-divin. Dieu se fait home pour nous render dieux…)

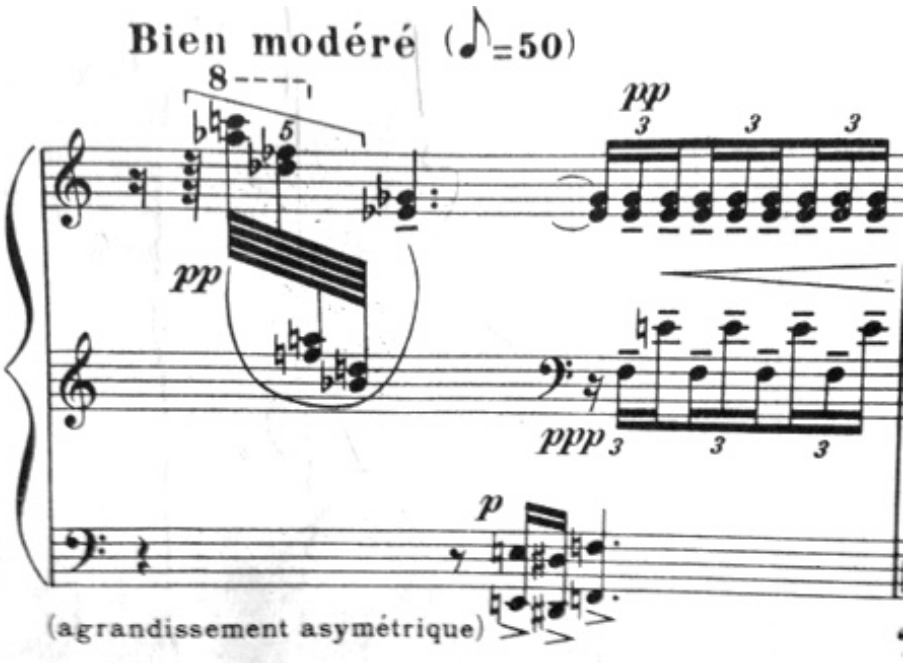
Descending in a spray, rising in a spiral; the terrible trade between humans and God. God made man to make us gods …

[Difficulty: Level 1, Length: 4 minutes)

In *L'échange* we see Messiaen use one of the most interesting compositional techniques he has in his arsenal**: agrandissiment assmetrique** or asymmetric growth. Predictably, he informs us of this effect in the first bar. The composer uses this technique to develop a small cell through the alteration of pitches by various means. Because the use of asymmetric growth is completely fundamental to the structure of the movement, it is essential that the student have at least an awareness of what is going on. The technique may be simple, but the effects are truly amazing. In order to memorize such a movement, it is essential to master the patterns. Indeed, trying to commit such a piece to memory without knowledge of asymmetric growth would be unthinkable, not to mention extraordinarily difficult.

The cascading chordal motif that begins the movement remains constant almost throughout. After the first 5 pitches, the left hand answers with a 3-note

pattern, which will be the start of our investigation of asymmetric growth. Immediately afterwards the hands play a rhythmically unison 8 note pattern that remains the same each time it appears.



Musical Example 5: L'échange, Measure 1 (© Durand and Cie., 1947)

We will begin by looking at the most simple instance of asymmetric growth in the movement.

Table 16: L'échange: 1st instance of Asymmetric growth

Pattern No. 1	E	-	D#	-	F	Left Hand, Bar 1
Pattern No. 2	F	-	D	-	F#	Left Hand, Bar 3
Pattern No. 3	F#	-	C#	-	G	Left Hand, Bar 5
Pattern No. 4	G	-	C	-	A♭	Left Hand, Bar 7
Pattern No. 5	A♭	-	B	-	A	Left Hand, Bar 9
Pattern No. 6	A	-	B♭	-	B♭	Left Hand, Bar 11
Pattern No. 7	B♭	-	A	-	B	Left Hand, Bar 13
Pattern No. 8	B	-	A♭	-	C	Left Hand, Bar 15
Pattern No. 9	C	-	G	-	C#	Left Hand, Bar 17
Pattern No. 10	C#	-	F#	-	D	Left Hand, Bar 19
Pattern No. 11	D	-	F	-	E♭	Left Hand, Bar 21
Pattern No. 12	E♭	-	E	-	E	Left Hand, Bar 23

As we can clearly see each time the sequence repeats:

The 1st pitch is **raised** a semitone

The 2nd pitch is **lowered** a semitone

The 3rd pitch is **raised** a semitone

The second instance of asymmetric growth is more complicated: instead of a 3 note pattern, this consists of a 9 note pattern, or question, in the lower register of the piano, followed by a 5 note pattern, or answer, in the upper register of the instrument.

Table 17: L'échange: 2nd instance of Asymmetric growth

Pattern No. 1	B♭ - C – D - F# - B - C# - A♭ - A - G	Lower 2 staves, Bar 2
Pattern No. 2	B - C# - D# - G – C – D – G - B♭ - F#	Lower 2 staves, Bar 4
Pattern No. 3	C – D – E - G# - C# - D# - F# - B - F	Lower 2 staves, Bar 6
Pattern No. 4	D♭ - E♭ - F – A – D – E – F – C - E	Lower 2 staves, Bar 8
Pattern No. 5	D – E - F# - B♭ - E♭ - F – E - C# - D#	Lower 2 staves, Bar 10
Pattern No. 6	E♭ - F – G – B – E - F# - E♭ - D - D	Lower 2 staves, Bar 12
Pattern No. 7	E - F# - G# - C – F – G – D - E♭ - C#	Lower 2 staves, Bar 14
Pattern No. 8	F – G – A - C# - F# - G# - C# - E - C	Lower 2 staves, Bar 16
Pattern No. 9	F# - G# - A# - D – G – A – C – F - B	Lower 2 staves, Bar 18
Pattern No. 10	G – A – B - D# - F# - G# - B - F# - A#	Lower 2 staves, Bar 20
Pattern No. 11	A♭ - B♭ - C – E – A – B - B♭ - G - A	Lower 2 staves, Bar 22
Pattern No. 12	A – B - C# - F - B♭ - C – A - G# - G#	Lower 2 staves, Bar 24

In this instance, each time the sequence repeats:

Pitches 1 through 6 are **raised** a semitone

The 7th pitch is **lowered** a semitone

The 8th pitch is **raised** a semitone

The 9th pitch is **lowered** a semitone

The 3rd instance of asymmetric growth is the most complicated yet. It is a 5-note pattern in the top two registers of the piano which begins in the second half of Bar 2. Both hands play patterns in rhythmic unison.

Table 18: L'échange: 3rd instance of Asymmetric growth

Pattern No. 1	RH	F# - E - D# - D - B	LH	B♭ - C – D - D# - G#
Pattern No. 2	RH	F – E – D - E♭ - C	LH	B - C# - E♭ - E - A
Pattern No. 3	RH	E – E - C# - E - C#	LH	C – D – E – F - B♭
Pattern No. 4	RH	E♭ - E – C – F – D	LH	D♭ - E♭ - F - F# - B
Pattern No. 5	RH	D – E – B - F# - D#	LH	D – E - F# - G – C
Pattern No. 6	RH	C# - E - A# - G - E	LH	E♭ - F – G - G# - C#
Pattern No. 7	RH	C – E – A - A♭ - F	LH	E - F# - G# - A – D
Pattern No. 8	RH	B – E - G# - A - F#	LH	F – G – A - B♭ - E♭
Pattern No. 9	RH	B♭ - E – G - B♭ - G	LH	F# - G# - A# - B – E
Pattern No. 10	RH	A – E - F# - B - G#	LH	G – A – B – C – F
Pattern No. 11	RH	G# - E – F – C – A	LH	A♭ - B♭ - C - C# - F#
Pattern No. 12	RH	G – E – E - D♭ - B♭	LH	A – B - C# - D - G

In the right hand (RH), each time the sequence repeats:

The 1st pitch is **lowered** a semitone

The 2nd pitch **remains** the same

The 3rd pitch is **lowered** a semitone

The 4th pitch is **raised** a semitone

The 5th pitch is **raised** a semitone

In the Left Hand, each time the sequence repeats:

All pitches are **raised** by a semitone.

Now that we can identify the instances of Asymmetric growth, we must consider how the performer might communicate this compositional device. We need only refer back to Messiaen's note for this movement to gain insight. The 'spray descending' and the 'rising spiral' are clearly represented by the rising and falling pitch patterns we have just examined in the instances of asymmetric growth. Dynamics parallel these patterns. We start at *pp* and by the time we reach the end of the movement we arrive at an enormous *ffff.* Again, all the performer has to do is follow Messiaen's instructions very carefully. He has literally transcribed the musical shape and color of the movement. This does not mean there is nothing left for the performer to contribute. Rather, it serves as an albeit strict guideline on how to conceptualize and execute a stunningly original piece of music.

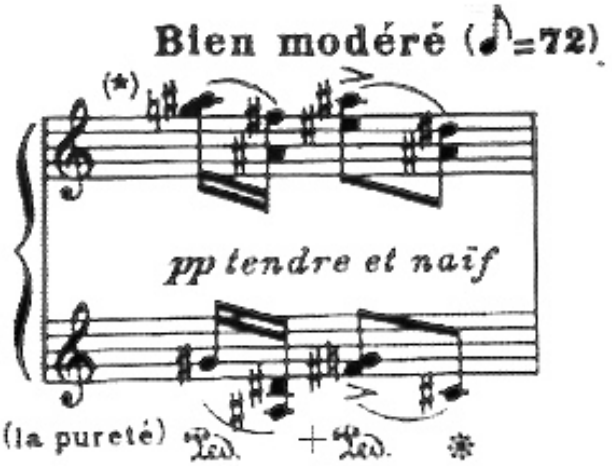
Movement IV: *Regard de la Vierge* (Gaze of the Virgin)

[Difficulty: Level 2, Length: 6 minutes]

Innocence et tenresse…la femme de la Pureté, la femme du Magnificat, la Vierge regarde son Enfant…)

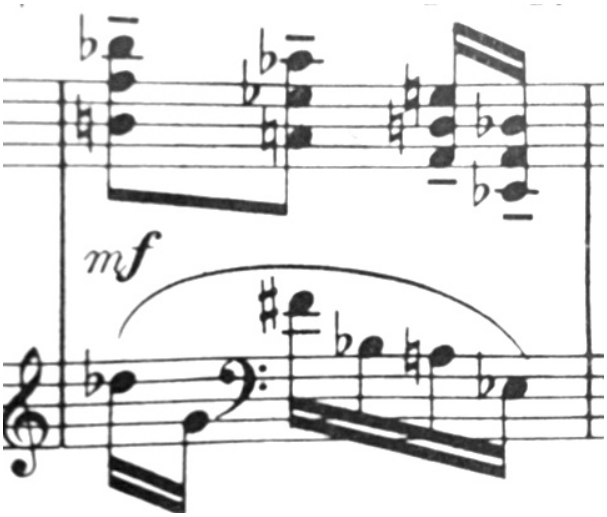
Innocence and tenderness ... The woman of purity, the woman of the Magnificat, the Virgin gazes upon her child.

In *Regard de la Vierge,* the specific compositional technique we will look at is **Augmentation and Diminution of rhythm**. This is a relatively straightforward technique, but one that is used to huge effect throughout the *Vingt Regards.* Messiaen uses this technique in order to vary and expand rhythm within small cells. We can find a simple, but useful example in the first bar of *Regard de la Vierge;*



Musical Example 6: Example of Rhythmic Augmentation: *Regard de la Vierge* (© Durand and Cie., 1947)

Messiaen has simply doubled the lengths of the first two 16th notes. What follows are the results – two eighth notes. Below is a very simple example of rhythmic diminution in the right hand, taken from bar 23. Here, Messian halves the length of the first two 8th notes; two 16th notes follow.



Musical Example 7: Example of Rhythmic Diminution: *Regard de la Vierge* (© Durand and Cie., 1947)

Students who have further interest in Augmentation and Diminution of rhythm are advise to familiarize themselves with page 3 of *The Technique of My Musical Language* where a very useful table listing all possible rhythmic augmentations and diminutions exists.

At the very least, students should easily be able to recognize basic examples of this technique, whichever movement of the *Vingt Regards* they study.

Movement V: *Regard du Fils sur le Fils* (Gaze of the Son upon the Son)

[Difficulty: Level 3, Length: 7 minutes]

(Mystère, rais de lumière dans la nuit – refraction de la joie, les oiseaux du silence – la personne du Verbe dans une nature humaine – marriage des natures humaine et divine en Jésus-Christ…)

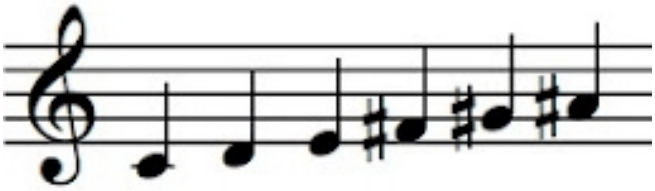
Mystery, rays of light in the night – refraction of joy, the birds of silence – the person of the Word made flesh – union of the human and divine natures in Jesus Christ.

In this *Regard*, we will examine one of the most exceptional compositional techniques to be used by Messiaen, the **Modes of Limited Transposition.** These are modes that can be transposed only a limited number of times before they duplicate themselves. Messiaen developed these Modes as a means of furthering his language. In the *Technique*, Messiaen speaks of his thought process.

The charm (of possibilities), at once voluptuous and contemplative, resides particularly in certain mathematical impossibilities of the modal and rhythmic domains. Modes which cannot be transposed beyond a certain number of transpositions, because one always falls again into the same notes….[5]

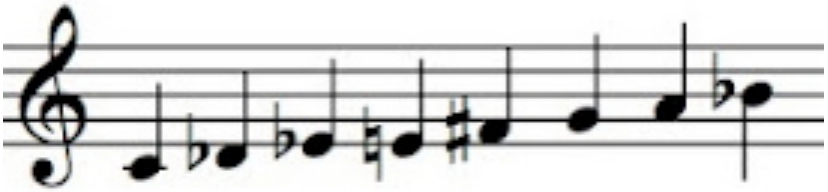
[5] Messian, *Technique*, 8.

The first mode of limited transposition is used extensively by Claude Debussy and should be very familiar to students. It is, of course, the whole tone scale.



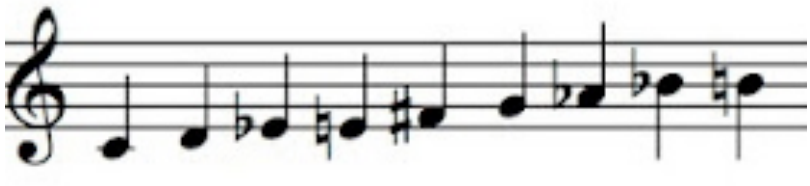
Musical Example 8: Mode 1: the whole tone scale

This mode has only 2 transpositions; the first, as seen in Figure X, and the second on the pitches: C#, D#, F, G, A, B. If we were to attempt to transpose this mode further, we would start repeating pitches and this is precisely why it is a mode of 'limited transposition'.



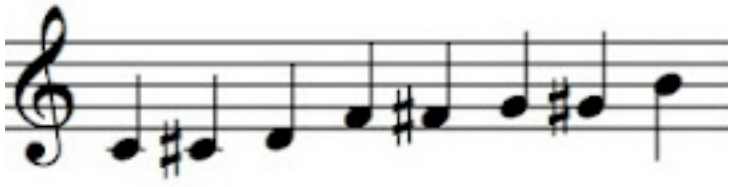
Musical Example 9: Mode 2: the Octatonic Scale

Mode 2 has 3 transpositions. Although this mode is used significantly in the *Vingt Regards*, Messiaen did not invent it - Stravinsky, Ravel and Rimsky-Korsakov had used it previously.



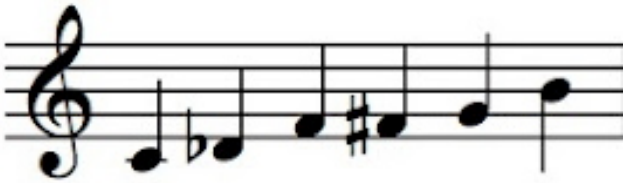
Musical Example 10: Mode 3

Mode 3 has 4 transpositions.



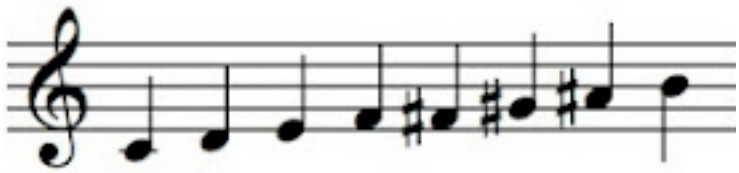
Musical Example 11: Mode 4

Mode 4 has 6 transpositions.



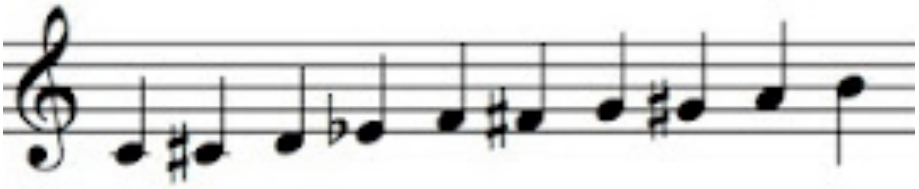
Musical Example 12: Mode 5

Mode 5 has 6 transpositions.



Musical Example 13: Mode 6

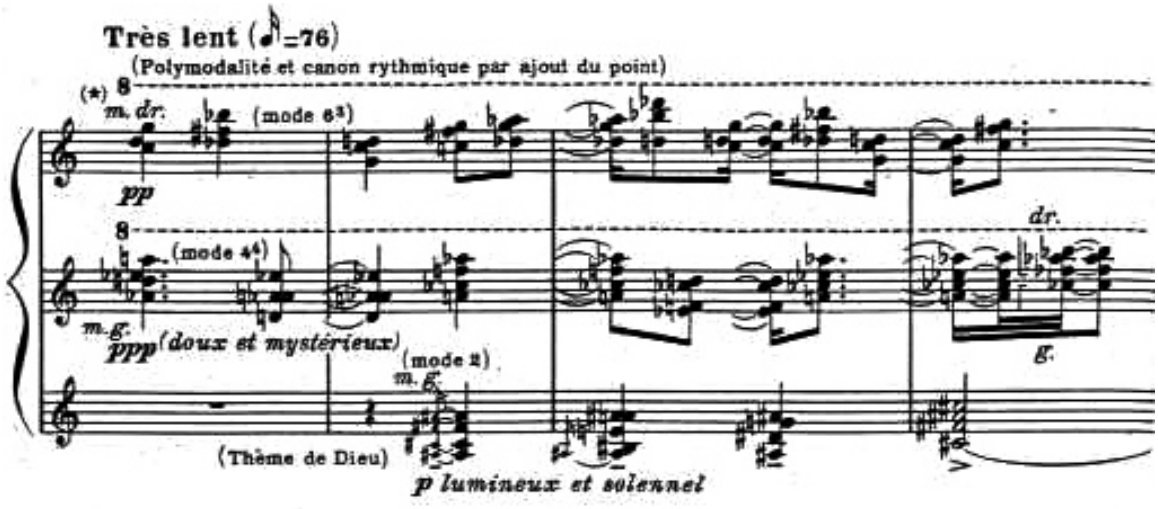
Mode 6 has 6 transpositions.



Musical Example 14: Mode 7

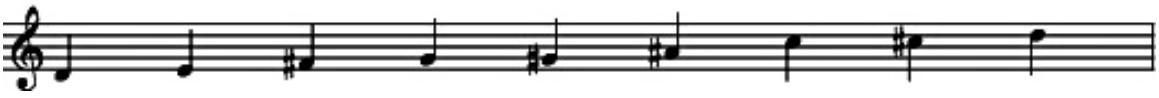
Mode 7 has 6 transpositions.

Considering these modes, we will now examine how Messiaen uses them in the 5th Regard. We must always remember that the modes of limited transposition do not have to be confined to a scale. Messiaen very frequently utilizes them in chords. The allure of these modes is that they provide a perfect symmetry, which results in far greater compositional possibility. In fact, he extends these already wide boundaries even further by layering modes on top of each other, creating polymodality. See Musical Example 15,



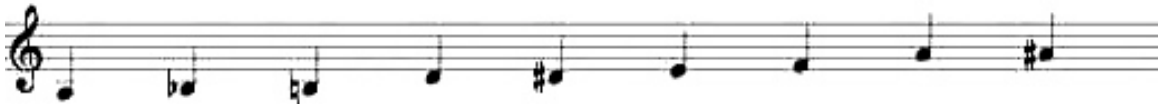
Musical Example 15: Use of Multiple Modes of Limited Transposition in *Regard du Fils sur le Fils* (© Durand and Cie., 1947)

In the above example, we can clearly see how Messiaen superimposes three different modes on top of each other. Additionally, he has employed the use of a rhythmic canon (note values in the middle stave are one and a half times greater than those in the top stave). In the top strand, we hear the 6th mode in its 3rd transposition, which is built on the following notes;



Musical Example 16: 6th Mode of Limited Transposition, 3rd transposition

In the middle stave, we hear the 4th mode in its fourth transposition;



Musical Example 17: 4th Mode of Limited Transposition, 4th transposition

And finally, in the bottom stave, we hear the *Thème de Dieu*, which stays in its original modality: it is built of one of the most commonly used by Messiaen, Mode 2, in the 1st inversion as we have detailed earlier.

The performer will notice that Messiaen often labels when and where a mode is present. Consequently, the performer has no choice but to assimilate this information. This very personal harmonic style demands at the very least a basic understanding by the performer – and students should practice identifying the *modes* at the many places where the composer does not allude to their presence. This exercise is particularly beneficial to performers as it can be done at the piano, and in conjunction with their regular practice. A sound knowledge of these theoretical concepts can only inform the performer, and will lead to a heightened, more gratifying learning experience for the performer.

Movement VIII *Regard des hauteurs* (Gaze of the heights)

[Difficulty: Level 2, Length: 3 minutes]

(Gloire dans les hauteurs…les hauteurs descendent sur la crèche comme un chant d'alouette…)

Glory in the Heights ... the Heights descend to the manger like the song of a lark.

Messiaen was a passionate and lifelong ornithologist, travelling as far as Japan to transcribe birdsong. Although his interest in birdsong reached a pinnacle in 1958 with the composition of the seven books of the *Catalogue d'oiseaux* (Bird Catalog), we can still hear significant examples of this technique in the *Vingt Regards.* **Birdsong** is simply the transcription of the vocalizations of birds.

However, certain problems lie in transcribing birdsong, particularly with regard to tempo and register. It is important that the pianist is aware of these issues. In Claude Samuel's *Conversations with Messiaen*, the composer discusses these difficulties.

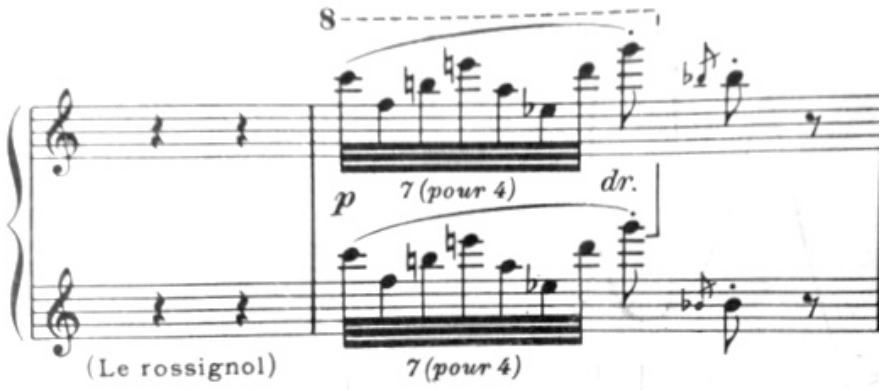
Birds sing in exceedingly fast tempos, which are absolutely impossible for our instruments, and so I have to transcribe the song in a slower tempo. Moreover, this speed is bound up with an extreme sharpness, birds being able to sing in exceedingly high registers that are inaccessible to our instruments, and so I notate them one, two,

three or four octaves lower. And that is not all: for the same reason I have to suppress very small intervals that our instruments cannot execute. I replace these intervals of the order of a comma or two by semitones, but I keep the same scale of values between different intervals, which is to say that if a few commas correspond to a semitone, a true semitone will correspond to a whole tone or a third. Everything is enlarged, but the relationships stay the same, so that my version is still exact. It is the transposition if what I have heard on to a more human scale.[6]

Although the instances of birdsong we find in his earlier works such as the *Vingt Regards* cannot compare in scope (and detail) to the *Catalog,* they still provide a fascinating introduction to this most magically eccentric notion, and provide students with challenges they will find manageable.

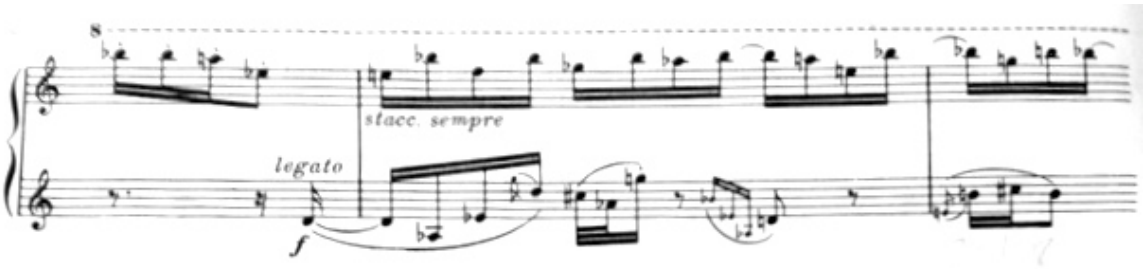
In the *Regard des hauteurs,* a short introduction leads us to the voice of a nightingale (*Le rossignnol)*, in the 5th bar. Messiaen has specifically placed the text *Le rossigol* in the lower stave to indicate that the *left hand* represents the nightingale.

[6] Samuel, *Conversations with Olivier Messiaen,* 113.



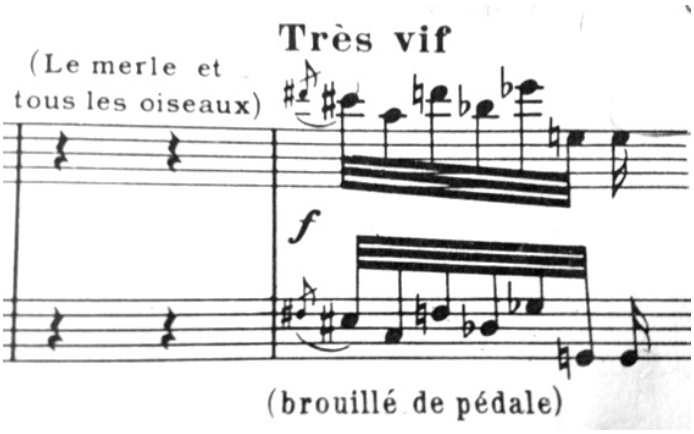
Musical Example 18: Entrance of the nightingale in *Regard des hauteurs* (© Durand and Cie., 1947)

Soon we are introduced to the *L'alouette* (skylark) where a duet begins with the nightingale. This two-part invention is notable for its contrast between the parts. The staccato articulations in the right hand combine with the legato left hand to form a wonderful dialogue between the birds.



Musical Example 19: Bird Dialogue between the Nightingale and Skylark in *Regard des hauteurs* (© Durand and Cie., 1947)

The birdsong returns to unison by the coda: '*Le merle et tout les oiseaux*' (the blackbird and all the birds).



Musical Example 20: Excerpt of Coda from *Regard des hauteurs* (© Durand and Cie., 1947)

Movement IX: Regard du temps (Gaze of time)

[Difficulty: Level 1, Length: 4 minutes]

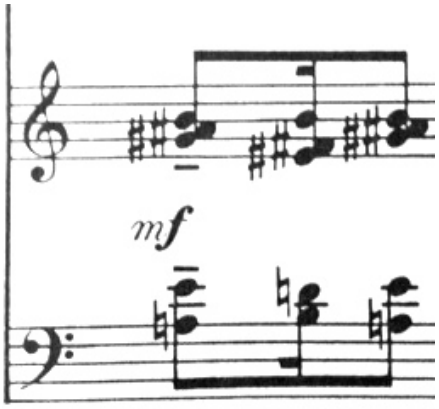
> *(Mystère de la plenitude des temps; le temps voit naître en lui Celui qui est éternel…)*
>
> The mystery of the infinity of Time; Time sees born in itself the One who is Eternal.

The last of Messiaen's compositional techniques we will consider are **non-retrogradable rhythms.** An important technique, Messiaen uses these to an enormous extent in his music, especially in the *Vingt Regards. Regard du temps* serves as the perfect example to illustrate this technique due to its relatively simple content and lack of technical difficulty. In common with the 6th *Regard, Regard du Fils sur le Fils*, Messiaen also employs the use of a rhythmic canon.

> In the *Technique,* we are provided with a succinct definition of non-retrogradable rhythms:
>
> '*whether one reads them from right to left or from left to right, the order of their values remains the same.'*[7]

[7] Messiaen, *Technique*, 17.

The opening measure of the 9th *Regard* employs the most popular of all the non–retrogradable rhythms (see below). The outer notes of this three-note group are identical, whereas the middle has a different value. Students should practice identifying non-retrogradable rhythms according to Messiaen's definition: by reading (or playing) rhythms forwards and backwards in order to determine if the rhythm is palindromic.



Musical Example 21: Example of a non-retrogradable rhythm in *Regard du temps*

(© Durand and Cie., 1947)

CHAPTER III

Ligeti and the *Musica ricercata*

György Ligeti's *Musica Ricercata* is a tantalizing collection of piano pieces written between 1951 and 1953 that serve as wonderful examples of the composer's early musical style. Perhaps what is most appealing about this set is its accessibility, much in part to the widespread use of Ligeti's music by the eminent filmmaker Stanley Kubrick. Anyone who has seen the 1999 film *Eyes Wide* Shut will most likely never be able to listen to the 2nd movement of the *Ricercara* in the same way ever again! This however simply reflects the immense power of Ligeti's music. I would challenge anybody to find an equally terrifying piece of music that is, in the case of the 2nd movement, built only on three pitches.

But even setting the role of popular culture aside, the music is very accessible in its own right. To me, it is also intriguing, beautiful and strikingly original. Yet it is not rhythmically intimidating nor harmonically overbearing. It has elements of tonality, but never encroaches upon neo-romanticism. Clearly Ligeti is economical when it comes to the use of harmony and nothing is wasted in the *ricercata* - the piece has been stripped down to raw, primal ingredients. Its organic progression - adding a pitch each movement until the arrival of all 12 pitches on the final movement, is compelling evidence that suggests a composer on the brink of a stylistic revelation.

This unique pitch structure is undoubtedly its greatest, and strangest attribute. To reiterate, the first movement begins with two pitches and each movement adds a pitch until we arrive at all 12 pitches in the last movement.

Table 19: Musica ricercata – Pitch Set

MOVEMENT	**PITCHES USED**
I Sostenuto – Misurato - Prestissimo	A, D
II Mesto, rigido e cerimoniale	E#, F#, G
III Allegro con spirit	C, E, E♭, G
IV Tempo di valse (poco vivace – "à l'orgue de Barbarie")	A, B♭, F#, G, G#
V Rubato. Lamentoso	A, B, C#, D, F, G
VI Allegro molto capriccioso	A, B, C#, D, E, F#, G
VII Cantabile, molto legato	A♭, A, B♭, C, D, E♭, F, G
VIII Vicace. Energico	A, B, C, C#, D, E, F#, G, G#
IX (Béla Bartók in Memoriam) Adagio. Mesto -- Allegro maestoso	A, A#, B, C, C#, D, D#, F, F#, G
X Vivace. Capriccioso	A, A#, B, C#, D, D#, E, F, G♭, G, G#
XI (Omaggio a Girolamo Frescobaldi) Andante misurato e tranquill	A, A#, B, C, C#, D, D#, E, F, F#, G, G#

Consequently, it is clear that melody and harmony are merely just supporting elements of the work's architecture, rather than the foundation of its structure.

Fascinatingly, by the last movement - the austere *Omaggio a Girolamo Frescobaldi,* Ligeti seems to have arrived at the concept of a 12-tone system even with very limited exposure to the work of Schoenberg some three decades earlier. In addition to the pitch system, the rhythmic energy and textural contrast are always present, and these provide the performer with a vibrant musical landscape to exploit.

Although the *Music ricercata* can seem highly original at first listen, this does not suggest a completely new aesthetic. The presence of Bartok is never far away, and undergraduate pianists will surely recognize the indisputable influences of the *Mikrokosmos*. Of course, the title of the work, *Musica Ricercata*, gives something else away. We can interpret the word 'ricercar' to imply some kind of a technical exploration, common in the 16th and 17th centuries. The title of the ultimate movement, *Homage to Frescobaldi*, further cements the influence of this musical form. All this aside, it is most crucial to our understanding of the work to appreciate that its composition signaled the beginning of a completely new musical style. As Ligeti writes.

"I started to experiment with simple structures of rhythms and sounds, in order to evolve a new music from nothing, so to speak. I regarded all the music I had known and loved up to then as something I couldn't use. I asked myself: what can I do with a single note, what can I do with the octave, or with an interval, or two intervals, or specific rhythmic situations."[8]

[8] Toop, *György Ligeti,* 38.

It is my suggestion that the *Musica ricercata* be considered as a set of 'etudes.' Indeed, the set makes some interesting demands on the pianist, as will be discussed in detail later on – but none so demanding as are seen in Ligeti's three books of *actual* piano etudes, composed between 1984 and 2001. These later works place absolutely enormous demands on the pianist, and aside from a couple of shorter and slower studies (*Arc-en-ciel*, the 5th etude from Book 1, comes to mind), most are completely unmanageable in the context of a ten week class that culminates in a public performance. The beauty of the *Musica ricercata* is that they contain the same magical writing and irresistible sense of non-conformity offered in the etudes, yet they are far simpler to master. Perhaps their most impactful trait is that they are absorbing and diverting to play, without sacrificing musical, technical and intellectual content.

György Ligeti (1923-2006): Background

In order to gain an appreciation and understanding of Ligeti's musical style, it is indispensable to make sense of the events that were happening during his life, as these played a large part in defining the composer. Born in 1923 in Dicsőszentmárton (now known as Tîrnăveni, in Transylvania/Rumania) to Hungarian Jewish parents, Ligeti was educated at the Franz Liszt Academy in Budapest, Hungary, graduating in 1949. Ligeti's compositional output at this time was vast – between 1938 and 1956 he completed over 100 works. However, most of these were rudimentary pieces written in 'folk' style, and many were choral works.

These were most likely a direct result of the restrictions imposed by the socio-political system prevalent in Hungary at this time. The period of despotism that Hungary endured between 1949 and 1953 limited the music that Ligeti could write, but it also gave him ample opportunity to perfect his compositional technique. While most of these works are forgotten, the *Musica Ricercata* (1951) stands out as a remarkable opus. Moreover, at this time, Ligeti was trying to move away from the influence of Bartok, and had become increasingly eager to define his own style. As Ligeti writes,

"At this time. I hadn't the faintest idea of the developments which led up to serial music and which were then evolving in Western Europe. I was even totally oblivious of Schoenberg's method of composition with twelve notes, not to mention Webern's procedures. My supposed self liberation was, of course, doomed to partial frustration by the isolation in which I was working, for the worthy Bartokian idiom still came through, even though it was less marked than in my earlier music. So my works of that period strike me as being thoroughly heterogeneous in style, naïve in their absence of orientation, inadequate and half-baked as solutions."[9]

Due to the restrictions imposed by the Communist government at the time, Ligeti was completely unaware of what was going on, musically, in the West. For instance, Boulez and Stockhausen were at the height of their serialist-defined creativity, significantly extending the boundaries of musical composition. Even more

[9]Steinitz, *Music of the Imagination,* 54.

astonishing is the fact that Ligeti wrote the *Music Ricercata* with little knowledge of the musical developments of the Second Viennese School some decades earlier. In a 1991 interview with Toru Takemitsu, we learn of Ligeti's motivation to compose the *ricercata,*

"In communist Hungary, dissonances were forbidden and minor seconds were not allowed because they were anti-socialist. I knew very little Schoenberg, Berg or Webern and practically nothing of Cowell or Ives, but I had heard about clusters. They were forbidden, of course, as was 12-tone music. As a reaction to this I very naively decided to write music which was built on the forbidden minor seconds. I was so anti-harmonist because harmony, tonal harmony was permitted in communist Hungary and chose dissonances and clusters because these were forbidden."[10]

The Hungarian revolution of 1956 marked another turning point in Ligeti's career. Fleeing Hungary for political and artistic reasons, he found himself in Cologne, Germany. Between 1957 and 1958 he studied the works of Pierre Boulez, Mauricio Kagel and Karlheinz Stockhausen at the West German Radio studio for electronic music. This new exposure enabled him to elaborate and redefine his musical style, free from the tyranny he had been subjected to in Hungary. However, contrary to the aesthetics of his fellow composers of the Cologne Avant-garde, Ligeti rejected the principles of serialism and set about defining a style that would prove to be completely personal, perfectly exemplified by his legendary works of the late

[10] Ligeti, *Gyorgy Ligeti in conversation with Toru Takemitsu*, 8.

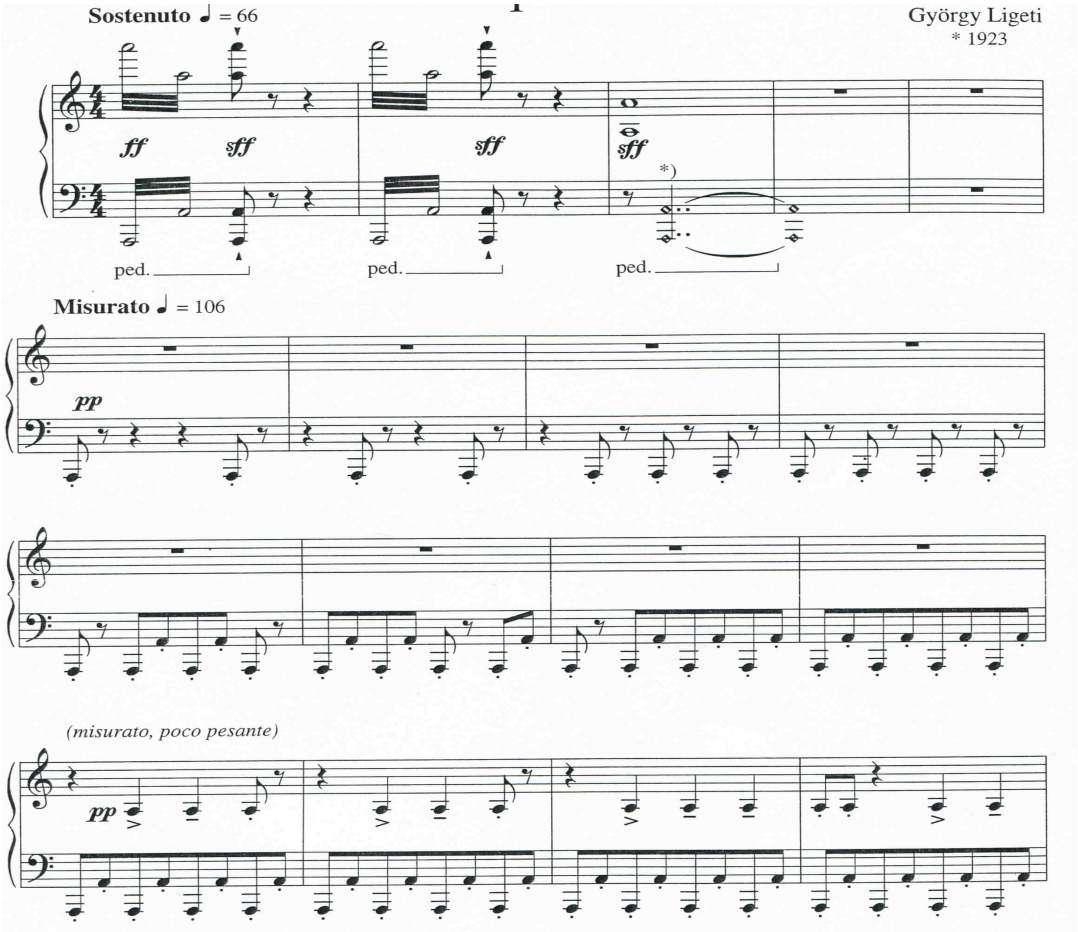
1950s and early 1960s such as *Apparitions* (1958-9) and *Atmospheres* (1961). Throughout the rest of his life, Ligeti remained a resolute original, refusing to join the postmodernists of the 1980s. Rather he sought inspiration from non-Western cultures, sustaining the philosophy of Cartesian doubt that had been an integral part of his compositional ethos. György Ligeti died in Vienna on June 12th, 2006.

Exploring the *Musica ricercata* – movement by movement

The following information is intended as a resource for students who are embarking upon learning one or more movements from the *Musica Ricercata.* The length and difficulty level of each movement have been listed, as well as some general thoughts and suggestions related to each movement. The aim of these remarks is not to impose my suggestions or sensibilities on the students. Rather it is preferred that the student will find the remarks helpful and useful in the process of of arriving at an independent interpretative conclusion. Furthermore, to maximize the usefulness of this syllabus, and to aid students in their repertoire choice, I have listed learning outcomes specific to each movement.

I have also chosen to include a brief printed excerpt from each movement. Due to the unique pitch structure of the piece, I thought it essential to demonstrate the eccentricities of the set visually. Additionally, as the examples show that the technical demands are indeed manageable, it is hoped this will encourage participation among all abilities.

Movement 1: Sostenuto –Misurato – Prestissimo



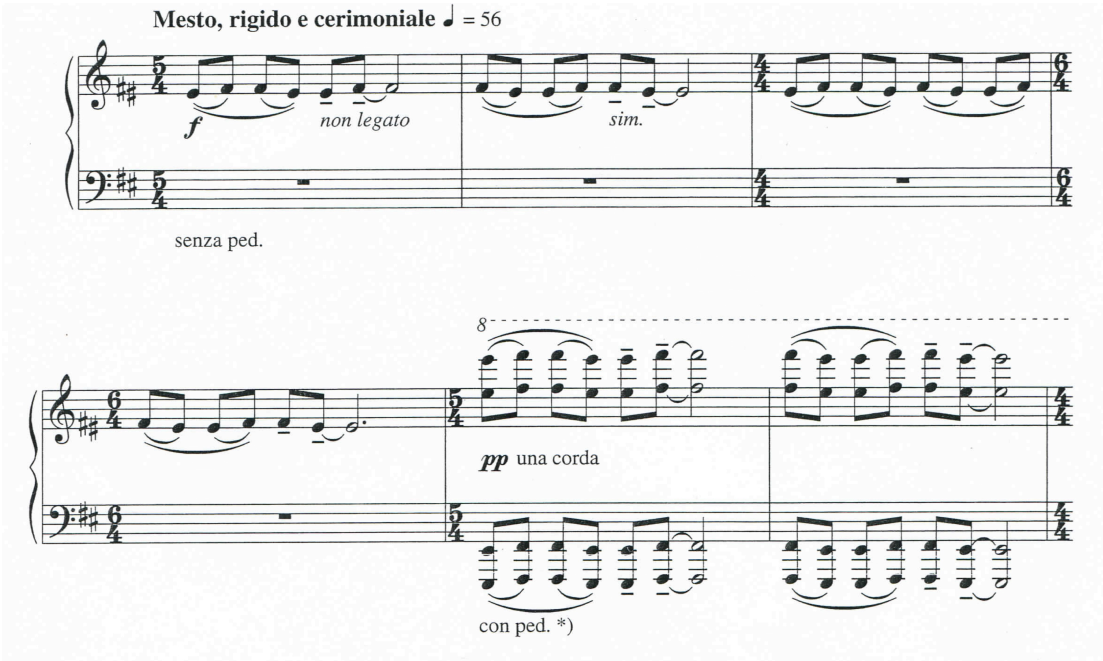
Musical Example 22: Musica Ricercata, Movement 1(© Schott Musik International, 1995)

[Difficulty Level: Moderate. Length: approx. 3 minutes]

Learning objective: Executing a measured rhythmic accelerando and crescendo

Musica ricercata opens with a thunderous tremelo in the piano. Immediately, we can hear that the sound world is completely new, and one can easily identify Ligeti's plan to begin the compositional process with minimal material. His audacity in using only one pitch until the end of the movement results in an amazing restless energy. This apparent simplicity does not make life easier for the pianist. Rather, the difficulties lie in maintaining the rhythmic energy, and in carefully executing the measured rhythmic accelerando and crescendo that drives the movement. Careful attention should be paid to Ligeti's accents, tenuto marks and staccato indications, as these make up a significant part of the piece's make up, and help provide contour and clarity to the rhythmic groove. In addition, the pianist might consider how the piece might sound in a large, reverberant space. This may impact the directness and cleanliness of the tone quality.

Movement 2: Mesto, rigido e cerimoniale



Musical Example 23: Musica Ricercata, Movement 2 (© Schott Musik International, 1995)

[Difficulty Level: Moderato. Length: approx. 4 minutes]

Learning Objective: Mastering fast repeated notes

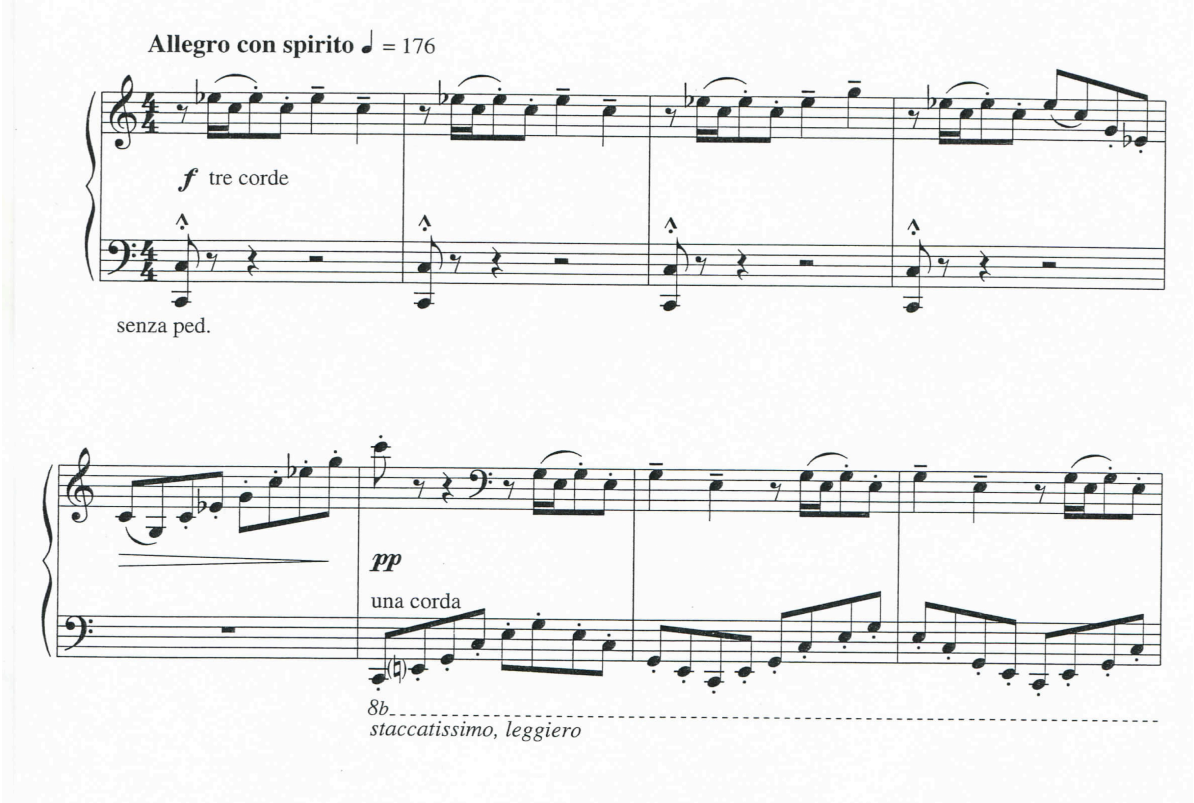
The main technical challenge in this movement is developing the ability to play fast repeated notes, in this case on the pitch of G. Even more difficult is maintaining the tremolo when the main theme (a striking alternation between E#

and F#) returns. Of particular interest is the symbolic nature of these repeated notes. Ligeti has revealed the relentless repeated G notes to symbolize a "knife through Stalin's heart."[11] Students should experiment in developing short exercises to aid in practicing the repeated notes. Rhythmic values should be manipulated so that longer note values fall on different fingers each time a new set of repetitions occur.

As in the first movement, the pianist must be extremely conscientious in capturing the detail in Ligeti's precisely annotated phrasing. There must be a clear distinction between notes with slurs, and notes with tenuto marks.
Additionally, Ligeti scores the main theme (E#-F#) to exploit the extremities of the piano. At times, the bottom two octaves of the piano are used in unison with the top two octaves requiring significant experimentation with voicing in order to create a satisfactory balance of sound between the hands.

[11]Steinitz, *Music of the Imagination,* 57.

Movement 3: Tempo Allegro con spirito



Musical Example 24: Musica Ricercata, Movement 3(© Schott Musik International, 1995)

[Difficulty Level: Moderate. Length: approx. 1.5 minutes]

Learning Objective: Refining independence of the hands

The third movement seems to capture the spirit of the first movement, and is a world away from the bleakness of the second movement. This movement could be

very satisfactorily used as an exercise in refining independence of the hands. At first glance, the movement looks straight forward, but there are several factors which contradict this;

1) the positioning of the hands,

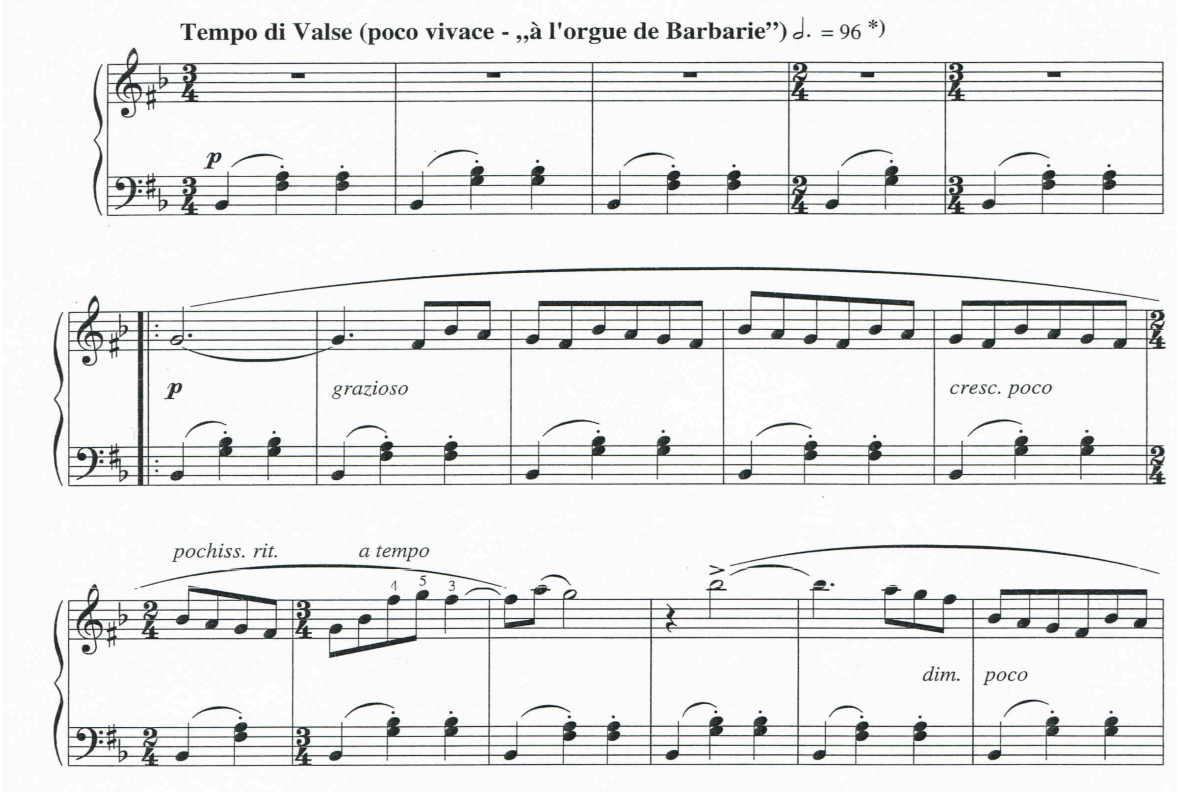
2) the fact that Ligeti requests the sostenuto pedal not be used,

3) the detailed phrasing and staccato marks which are completely different between the hands *and*

4) the very fast tempo of a ¼ note = 176.

When we combine all these factors, the movement suddenly becomes a lot more complex. One should also note the playful juxtaposition between C major and C minor.

Movement 4: Temp di Valse (poco vivace – 'a l'orgue de Barbarie')



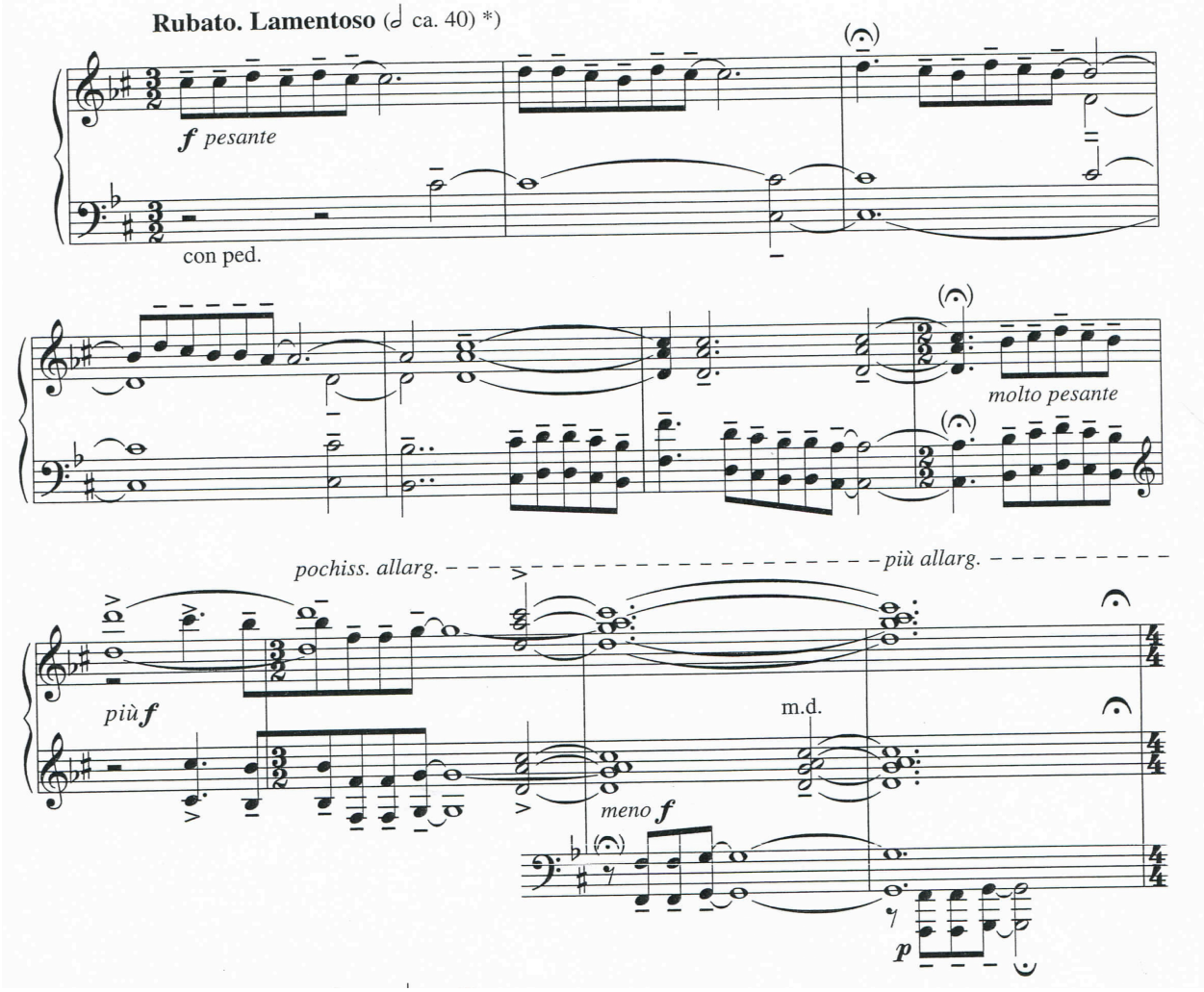
Musical Example 25: Musica Ricercata, Movement 4 (© Schott Musik International, 1995)

[Difficulty Level: Moderate. Length: approx. 3 minutes]

Learning Objective: Improving control of *rubati, ritenuto,* and *accelerandi*

Ligeti's delightful musical picture of the barrel organ player makes for a wonderfully contrasting movement. Particular attention should be paid to the tempo direction. Although Ligeti marks it as a dotted half note = 96, this refers to a maximum tempo. As a result the performer is free to let his or her inner barrel organ player run wild, and is advised to make the most of *rubati, ritenuto* and *accelerando* in order to create the desired effect. The interpretive possibilities of this movement are endless and one would be advised to familiarize one's self with the actual workings of a barrel organ in order to create a truly vivid picture. Contrary to the gradual rhythmic accelerando that the first movement requires, the fourth movement requires no such approach. Instead the imagination of the performer is the key that unlocks the door to musical possibility.

Movement 5: Rubato. Lamentoso



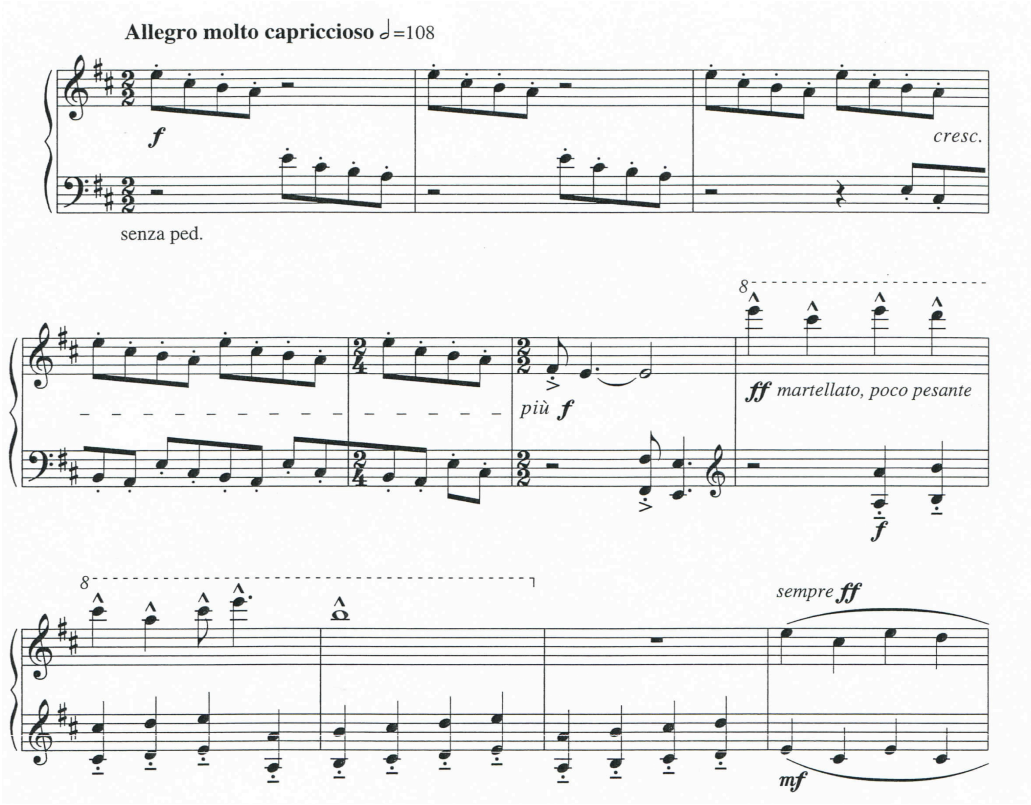
Musical Example 26: Musica Ricercata, Movement 5(© Schott Musik International, 1995)

[Difficulty Level: Moderate. Length: approx. 4 minutes]

Learning Objective: Voicing

After the relative brightness of the organ grinder, we return to the solemnity of the second movement. At this point in the *Musica ricercata* Ligeti uses 6 pitches: A, B, C#, D, F, G. The increase in the number of pitches signals an increase in intensity, amplified by the prodigious use of that most jarring of intervals – the tritone. In the first page, we cannot help but think of plainchant, and the influence of Messiaen is never far away. This movement presents a challenge to the pianist regarding voicing. The piece is derived from a dialogue that moves between the two hands requiring a unified approach by left and right hand alike. Pedaling should be approached with caution, and used in accordance with Ligeti's articulation markings.

Movement 6: Allegro molto capriccioso



Musical Example 27: Musica Ricercata, Movement 6 (© Schott Musik International, 1995)

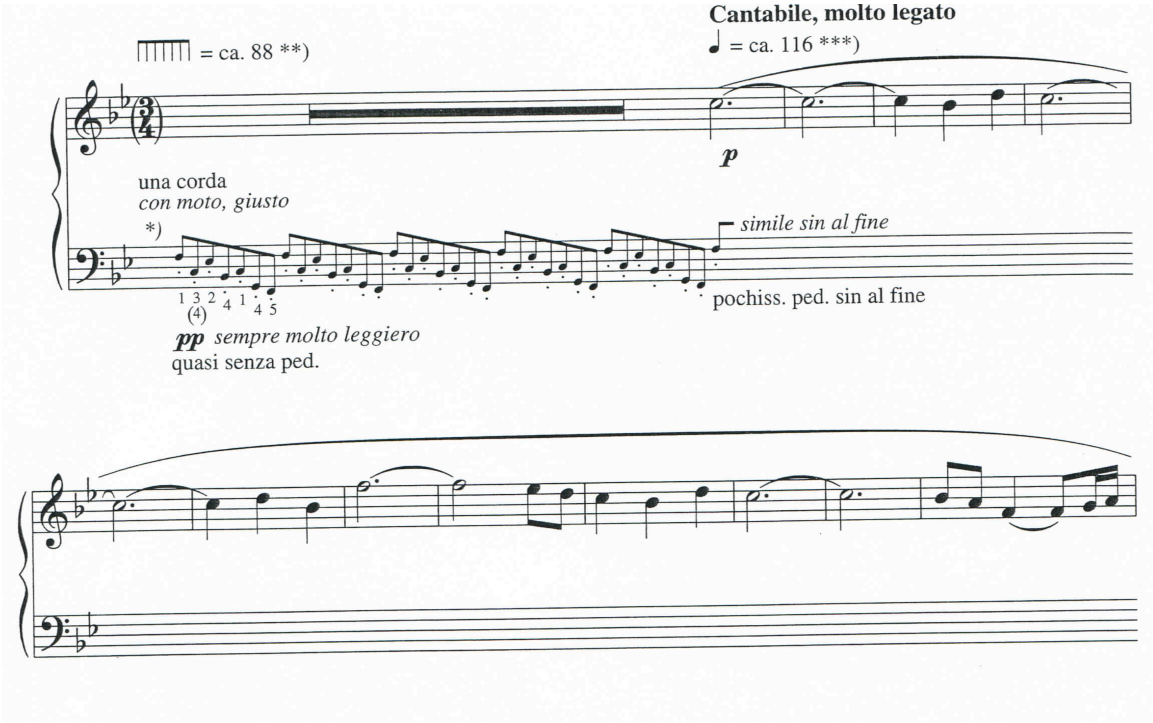
[Difficulty Level: Moderate. Length: approx. 1 minute]

Learning Objective: Seamlessly integrating changes of articulation, dynamics and register.

The influence of Bartok is highly obvious and this fast dance-like movement rapidly changes the mood of the set once again. Amazingly, the miniature lasts only

a minute. The challenge for the pianist is negotiating the changes of articulation, dynamics and register. In many ways, this movement is a study in finesse, quickness and agility of touch. It is recommended that the movement be practiced at a very slow tempo, (such as quarter note =96), making sure that every facet of the miniature is given equal consideration.

Movement 7: Cantabile, molto legato



Musical Example 28: Musica Ricercata, Movement 7(© Schott Musik International, 1995)

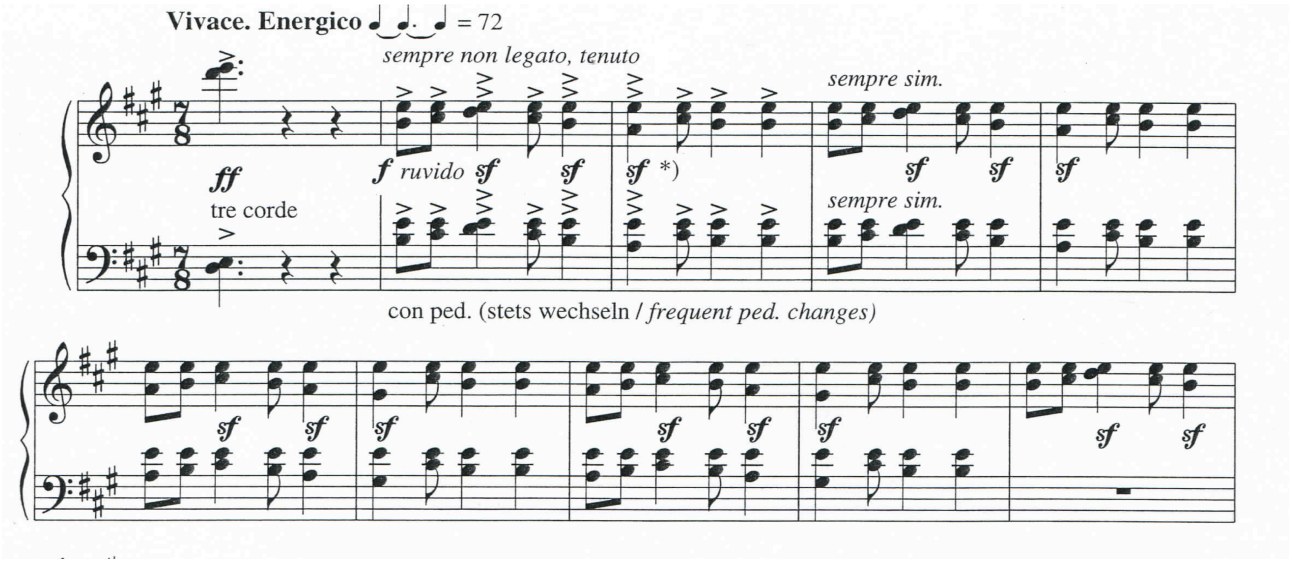
[Difficulty Level: Advanced. Length: approx. 4.5 minutes]

Learning Objectives: Independence of hands, evenness of articulation, lyricism

The seventh movement of the *Ricercata* is in many ways the most engaging of the set. The 7-note left hand ostinato that begins and ends the movement serves as the soundtrack to a highly lyrical folk melody in the right hand, which is delivered at a completely independent tempo from that of the left hand. Essentially the two parts of the movement – ostinato and melody, should sound as if they are being played in complete insolation from each other. Of course, this is where the difficulty lies!
It may seem obvious to suggest significant 'hands separate 'practice, but until each hand is completely comfortable with its respective part, the piece should not be attempted 'hands together.' Extra care should be given to the left hand ostinato when it jumps registers – it should sound as smooth as possible. The right hand melody, which starts off as a simple melody, is developed into a canon and requires an enormous amount of control to ensure complete isolation from the tempo, articulation and general character of the left hand ostinato.

The left hand ostinato could easily be developed into an etude. However, it should be noted that the sheer repetitiveness, and resulting potential physical dangers of the left hand part should be respected, and a safe practice regime arranged accordingly.

Movement 8: Vivace. Energico



Musical Example 29: Musica Ricercata, Movement 8 (© Schott Musik International, 1995)

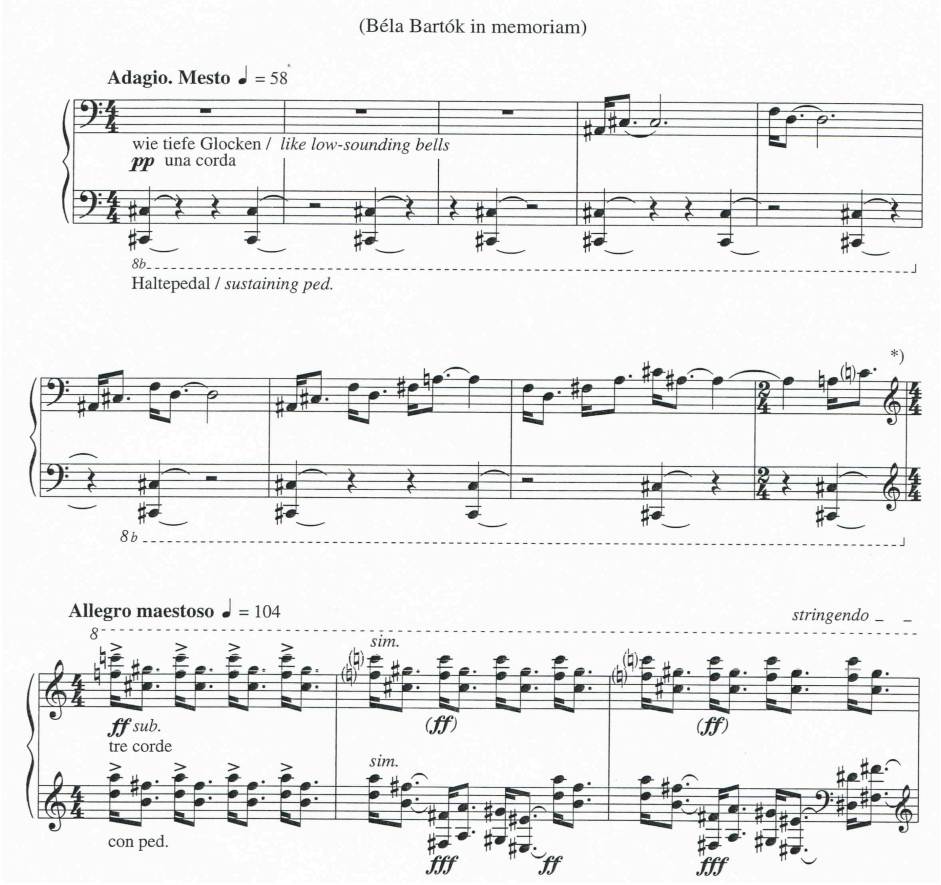
[Difficulty Level: Moderate. Length: approx. 1.5 minutes]

Learning Objective: Improving Rhythmic dexterity

The Bartokian sound has returned and the influence of folk music is apparent from the very beginning. One should note that the voice leading has clearly evolved from that of string instruments – this is pure string quartet writing after all. The open fifths provide a wonderful resonance and the movement between the parts is compressed and agile. The main difficulty in this movement is maintaining the highly charged, rhythmic energy that the fast tempo (essentially, each bar or 7

eighth notes = 72 beats per minute) demands. Pianists should ensure that they have a very specific sound and length in mind for notes without accents, notes with accents, and notes with sforzando markings to ensure the rhythmic energy does not ebb.

Movement 9: (Béla Bartók in Memoriam) Adagio. Mesto - Allegro maestoso



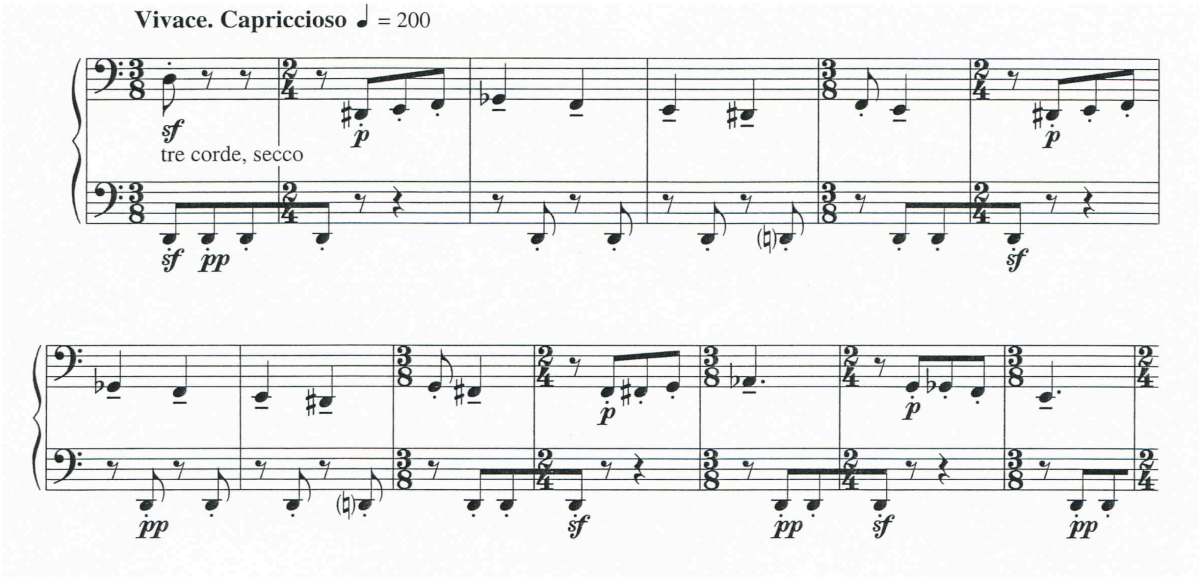
Musical Example 30: Musica Ricercata, Movement 9 (© Schott Musik International, 1995)

[Difficulty Level: Moderate. Length: approx. 3 minutes]

Learning Objective: Strengthening the finger through the use of perfect 5ths

Béla Bartók in Memoriam begins with the toll of the bells, which by the fourth bar accompany a very Bartokian rhythmic motif – a sixteenth note followed by a dotted eighth note. By the *Allegro maestoso* at the 10th measure, the bells have been inverted. Again, Ligeti utilizes open 5ths to a great degree, an idea that he will develop and expand in the eighth piano etude *Fém* (Book 2). The learning objective in this movement is to strengthen the fingers through the playing of these fifth note motifs. Ligeti marks the dynamic level as fortissimo, but it is recommended that during practice sessions the dynamic level is reduced somewhat in order to minimize any wrist tension that may occur. The rhythmic motif of a sixteenth note followed by a dotted eighth note should be inverted during practice sessions to ensure consistent strength in all fingers.

Movement 10: Vivace. Capriccioso



Musical Example 31: Musica Ricercata, Movement 10

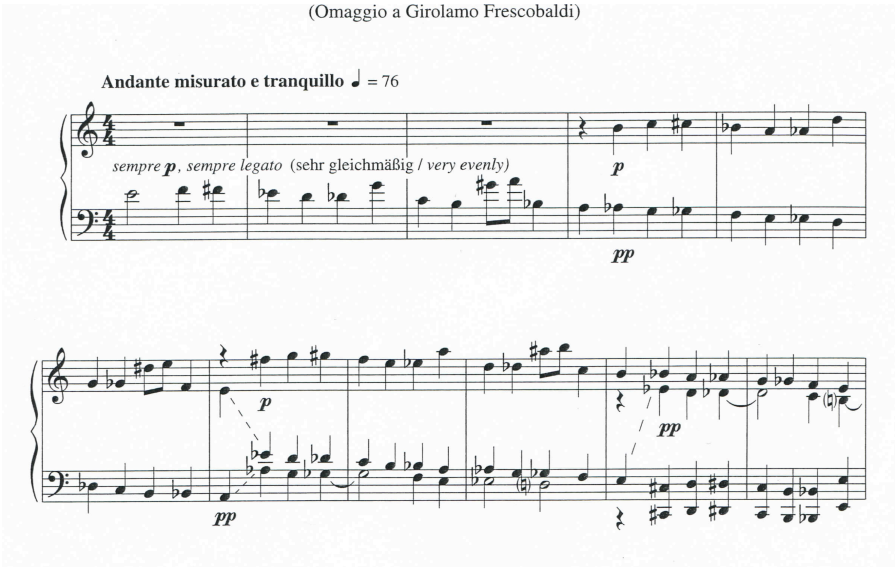
[Difficulty Level: Advanced. Length: approx. 1.5 minutes]

Learning Objectives: Navigating changing meter, minor thirds and tone clusters

The penultimate movement presents the pianist with an array of musical demands. Aside from the technical velocity needed to drive the movement, there lies a great challenge in navigating the changing meter. As in the 8th movement, a great rhythmic fluency is required. Essentially, as a listener, we do not want to be conscious of a change in meter – arguably the meter is there as a guide for the performer only. Importantly, this movement marks the point in the set where Ligeti introduces the tone cluster. He even goes so far as to annotate them on the score as "insistent and spiteful". The abrasive, repeated tone cluster which serves as the climatic point of the movement is to be played "as if mad".

The tone clusters themselves do not pose a significant difficulty for the pianist. However, the passages of ascending minor thirds that occur 30 seconds in to the movement will require significant practice. As always in a case such as this, proper experimentation and application of good fingering is the key to success here. The pianist should also be especially aware of the circumstances surrounding Ligeti at the time of this composition, as has been discussed earlier. Decisions on how to interpret the tone clusters should be informed by the historical context.

Movement 11 (Omaggio a Girolamo Frescobaldi) Andante misurato e tranquillo



Musical Example 32: Musica Ricercata, Movement 11 (© Schott Musik International, 1995)

[Difficulty Level: Advanced. Length: approx. 5 minutes]

Learning Outcome: Mastering the contrapuntal style

The last movement serves as a dedication to Girolamo Frescobaldi (1583-1643), who was regarded as an important figure in the innovation of the *ricercare.* The sense of resolution that we experience by the last movement is immediate and formidable. In hearing the subject of this *ricercare*, built on all 12 pitches, we know we have reached the end of the cycle. The mood is austere, and even dire. As we have discussed, Ligeti arrived at the concept of this 12-tone piece without exposure

to the work of Schoenberg, which is a truly remarkable fact. The complete dearth of rhythmic activity is noticeable. To what extent this can be interpreted as a reflection of life under Stalinist rule is difficult to ascertain, although one is never far away from the trauma. Tellingly, this last movement was considered to be too dissonant for public consumption, even following the relatively relaxed political condition that existed in Hungary after the uprising of 1956.

The same care should be exercised as when learning a fugue by Bach or Messiaen. Learning contrapuntal music is never simple and committing it to memory can be terrifying. The pianist should ensure he or she has an absolutely solid knowledge of each and every entry in the *ricercar*, and should be able to play each hand from memory with ease.

ADDITIONAL RESOURCES

This list is not comprehensive as Ligeti wrote a good deal of keyboard music prior to 1942. However, the pieces listed below serve as an example of the more significant works surviving from Ligeti's early period. Works are for solo piano unless indicated.

Table 20: Ligeti: Selected keyboard works

TITLE	**YEAR COMPOSED**
March, for piano duet	1942
Allegro	1943
Polyphonic Etude, for piano duet	1943
I*nvention*	1948
Ha'rom lakodalmas ta'nc, for piano duet	1950
Sonatina	1950
Ricercare, for organ	1951
Musica ricercata	1951-3
Chromatische Phantasie	1956
Volumina, for organ	1961-2 (revised 1966)
Trois Bagatelles	1961
Etude No. 1: Harmonies, for organ	1967
Continuum, for harpsichord	1968

Table 20 continued

Three Pieces for 2 Pianos No. 1: *Monument* No. 2: *Self Portrait with Reich and Riley (and Chopin in the background)* No. 3: *Bewegung*	1976
Hungarian Rock, for harpsichord	1978
Passacaglia ungherese, for harpsichord	1978
Études Book 1 No. 1: *Désordre* No. 2: *Cordes à vide* No. 3: *Touches bloquées* No. 4: *Fanfares* No. 5: *Arc-en-ciel* No. 6: *Automne à Varsovie*	1984-5
Études: Book 2 No. 7: *Galamb Borong* No. 8: *Fém* No. 9: *Vertige* No. 10: *Der Zauberlehrling* (*The Sorcerer's Apprentice*) No. 11: *En Suspens* No. 12: *Entrelacs* No. 13: *L'escalier du diable* No. 14: *Columna infinită* No. 14A: *Coloana fără sfârşit*	1988-93
Etudes: Book 3 No. 15: *White on White* No. 16: *Pour Irina* No. 17: *À bout de souffle* No. 18: *Canon*	1995-2001

CHAPTER IV

John Cage and the Prepared Piano

Of all the piano music written in the 20th century, and even considering the piano music that has been written in the short period of the 21st century that we have known, it is difficult to find anything that provides the sonic intensity and sense of sheer originality as that of John Cage's prepared piano. When Cage literally transformed the piano into a percussion orchestra, a totally new aesthetic was born, one which has to be considered among the most significant developments in 20th century piano music. No longer were harmony and rhythm the building blocks of musical composition. Instead, raw materials such as bolts, screws, nuts and weather stripping became absolutely integral to the architecture of Cage's music. *Bacchanale* (1940) is Cage's first composition for prepared piano, and his most simple. Between 1946 and 1948, Cage composed the *Sonatas and Interludes*, widely considered to be the ultimate masterpiece for prepared piano. Lasting in excess of one hour, it requires the pianist to prepare over half the pitches encountered, a process which can take about 3 hours. The complexities of the *Sonatas and Interludes*, not only technically, musically and intellectually but also in regard to the extensive preparations required, make it unsuitable for an undergraduate student encountering the prepared piano for the first time. As the art of physically preparing a piano is complicated and fraught with difficulties as well as potential hazards, it is necessary to find a piece that is simpler. *Bacchanale* serves as the perfect example. It is technically not very difficult, it has very few preparations, but it sounds amazing. I

would propose that no pianist could be left unaffected by playing Cage's music for the first time on the prepared piano. *Bacchanale* is the perfect introduction, and will hopefully serve as a springboard for further exploration into everything the prepared piano has to offer.

The Birth of the Prepared Piano

To really understand how the prepared piano was born, we must look not to Cage, but to Cage's teacher, Henry Cowell. Henry Cowell (1897-1965) was an experimental composer from California whose compositional aesthetic must surely be considered the precursor to Cage's prepared piano. One of his most notable works, *Aeolian Harp* (1923) broke precedent by requiring the pianist to reach inside the piano and manipulate the strings by plucking and sweeping while holding the sostenuto pedal down. *The Banshee* (1925) expands upon Cowell's aesthetic by requiring two performers; one player standing in the crook of the piano, and another sitting at the piano who holds the damper pedal down for the duration of the composition. There is no doubt Cage was inspired by Cowell. An early attempt to develop his sound world resulted in Cage placing a metal pie plate directly on the strings of the piano. While this made the desired sound, the pie plate moved around a lot due to the vibrations of the strings, thus requiring Cage to find a way to secure the 'preparations.' Arriving at the combination of bolts, weather stripping and nuts, the foundations for *Bacchanale* were laid. However, there is more to *this composition* than the raw material that make up the preparations to be inserted

between the piano strings. What is so significant about the prepared piano is how its invention essentially shifted the very boundaries of composition. The traditional use of harmony and melody were pushed aside in favor of the preparations. They became the essence of the piece – how they were inserted, how heavy they were, and what they were constructed from became integral to the sound of the piece. As a result, the interpretive potential suddenly increased astronomically. No two performances could ever sound the same.

Bacchanale (1940)

The story of how *Bacchanale* came to be composed is highly interesting. Around 1940, Cage was working as an accompanist for dance classes at the Cornish School in Seattle, Washington. At about this time he was invited by the dancer Sylvia Fort to compose a piece of music for her new dance, entitled *Bacchanale*. Cage's compositional aesthetic had been centered upon writing for percussion instruments, specifically percussion music that evoked the aura of the 'exotic'. Initially, Cage's desire was to create *Bacchanale* from an 'African twelve-tone row' and was to be scored for percussion ensemble. However, upon seeing the location at the Cornish School that was to be the venue for the performance of Sylvia Fort's new dance work, the composer quickly learned that space limitations would eliminate the possibility of using a percussion ensemble. In what can only be described as one of the most brilliant decisions ever to be made by a composer, Cage abandoned the idea of using percusiion and charged himself with transforming the modern grand

piano into a completely new instrument by wedging bolts, nuts and weather stripping in between the strings. The results clearly excited Cage. *Bacchanale* was finished in three to four days and was premiered on April 28, 1940 at the Cornish School in Seattle, Washington. A brilliant example of necessity enkindling invention.

Preparing the piano safely and successfully

Successfully navigating the prepared piano presents an enormous set of challenges for the student pianist. Practice techniques need to be altered and significant time needs to be built in for shopping for preparations, not to mention the actual time needed for installing the preparations. However, the most difficult, and least intuitive task, is learning how to safely prepare the instrument without causing harm to the piano or one's person. In the table of preparations that proceed works such as *Bacchanale* and the *Sonatas and Interludes*, Cage is very detailed in telling the composer exactly what kind of preparation should be installed. But what he does not allude to are specific instructions on *how* to prepare the instrument. It is therefore essential that students have at least an elementary knowledge of how to manage the prepared piano, and are clear of the steps that need to be taken in order to ensure the safety of the pianist and the piano. It is worth mentioning that much has to be done to repair the image of the irresponsible pianist who rushes into preparing the piano without the necessary knowledge. Horror stories abound of pianists who have caused significant damage to instruments and as a result it is

imperative that we are well prepared and aware of our exact intentions when it comes to preparing the piano.

Step 1: Choosing appropriate music

Without specific guidance to repertoire choice, pianists can soon find they are out of their depth. There is a huge difference between a work such as *Bacchanale*, which has only 3 preparations and a larger work such as the *Sonatas and Interludes* which takes over three hours to prepare. However, if we break down larger works such as this into specific movements, they become quite manageable. While it great to perform a work in its entirety, there is surely nothing wrong with extracting excerpts. After all, how often do students perform all 24 of Chopin's *Preludes* in one sitting?

The following table makes several suggestions for the student who is encountering the prepared piano for the first time. Pieces are listed with specific reference to the number of preparations, and the overall difficulty of the piece, taking into account the technical demands, as well as how the intricacy of the preparations.

Table 21: List of Selected works for prepared Piano

COMPOSER	TITLE	NUMBER OF PREPARATIONS	OVERALL DIFFICULTY
John Cage	Bacchanale (1940)	13	Moderate
John Cage	And the Earth Shall Bear Again (1942)	15	Moderate
John Cage	In the Name of the Holocaust (1942)	11	Difficult
John Cage	Primitive (1942)	11	Moderate
John Cage	Tossed as it is Untroubled (1943)	10	Moderate
John Cage	Our Spring Will Come (1943)	25	Very Difficult

Step 2: Informing your Piano Technician

Having chosen suitable repertoire in consultation with the studio teacher, the next step is to inform the piano technician of one's intentions. This should be done, with no exceptions, before any attempt to prepare the piano. Piano technicians may be highly supportive or highly against preparing the piano. Either way, the best way to ensure a successful outcome for everybody is to equip one's self with as much knowledge as possible at the time of the initial consultation with the technician.

The pianist should:

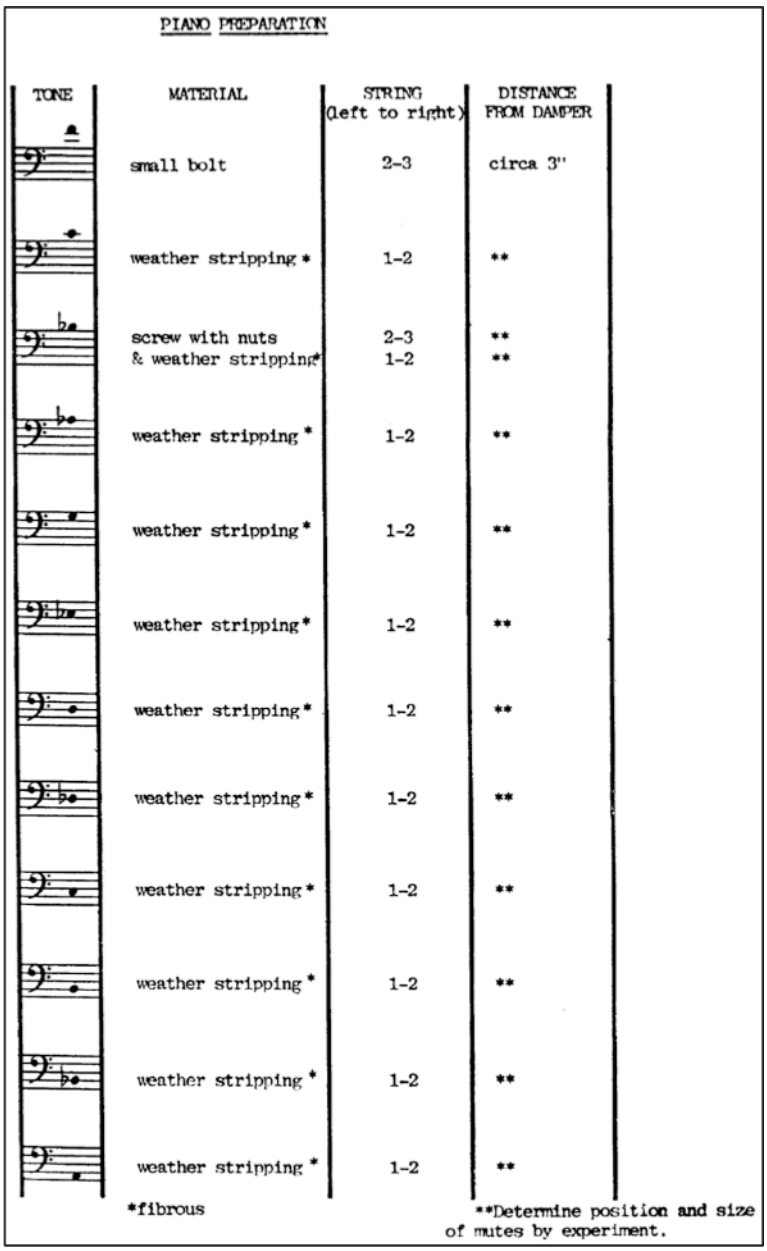
1) Know exactly what repertoire is to be performed and be consistent in this choice.
2) Ask the piano technician if there is a specific piano he or she would like the pianist to prepare.
3) Have a checklist ready listing all preparations, including what they are made from, where they are to be inserted and how they will be removed.
4) Assure the piano technician that the piano will be left in exactly the same condition as it was found.
5) Ask the piano technician if he would like to supervise the initial preparation session.

6) Always be respectful of the technician's decision. If there is still large doubt about the suitability of preparing the piano try to compromise and come up with an appropriate solution.

Step 3: Beginning preparations

In this syllabus, John Cage's *Bacchanale* has been chosen as the set work for the section on the prepared piano. As a result, the following directions on how to prepare the piano will relate specifically to this piece. *Bacchanale* is an early work for prepared piano and consequently, this syllabus will not cover the advanced preparation techniques necessary to embark upon Cage's later works. However, the basic safety tips and techniques will be covered and this will give students an excellent introduction in preparing the piano. *Bacchanale* serves as the perfect debut as there are very few preparations, of which only two are metal. Therefore, it is minimally invasive to the instrument.

The first part in this process must be to examine the 'Table of Preparations' that Cage supplies us with in the score:



PIANO PREPARATION

TONE	MATERIAL	STRING (left to right)	DISTANCE FROM DAMPER
	small bolt	2-3	circa 3"
	weather stripping *	1-2	**
	screw with nuts	2-3	**
	& weather stripping*	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**
	weather stripping *	1-2	**

*fibrous

**Determine position and size of mutes by experiment.

Figure 1: *Bacchanale* by John Cage: Table of Preparations (© Edition Peters, 2000)

We must now determine exactly what we need to acquire in order to successfully and safely prepare the piano. As we can see from the table above, we need a small bolt, a screw with nuts and 11 pieces of 'weather stripping.' It should

be noted that Cage has not supplied any specific information about the materials so it is essential to carefully consider each preparation.

Small Bolt

Unfortunately, Cage does not supply any information regarding the size, or length of the bolt. Obviously, the weight of the bolt will have a significant impact on the sound of the preparation. Essentially, it is up to the performer to experiment with bolts of different weights and determine which one sounds the most appropriate. Two bolts of different lengths will also create vastly different sounds. This is where the magic of the prepared piano really starts to become apparent. So much is left to be decided by the 'ear' of the performer, ensuring every preparation is completely unique and personal. Regardless of the length or weight of the bolt, there is one aspect that is extremely important: the material the bolt is made from. As a general rule, preparations should be used that are made from a material that is **softer** than that of the piano strings. For instance, as piano strings are made from steel, preparations should be made from brass due to the fact that brass is softer than steel. This way there will be minimal damage to the strings themselves. As a general aid for students, below is a photograph of potentially sized small, medium and large bolts. It should always be remembered that the ultimate decision regarding size, weight and experimentation must by determined by extensive experimentation.

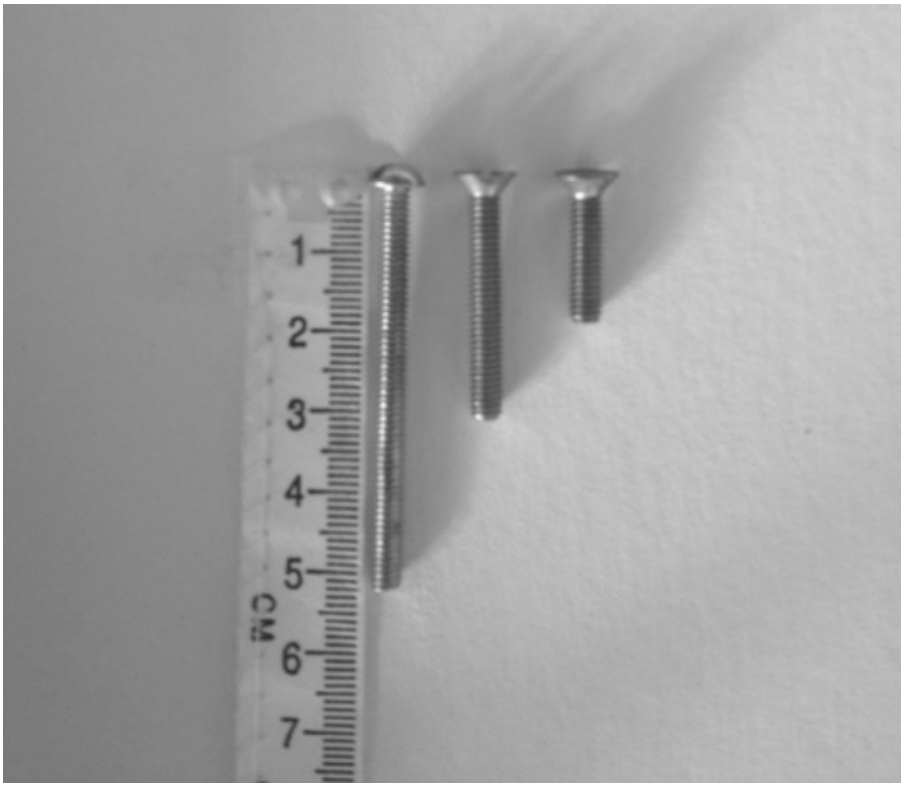


Figure 2: Photo of sample Large, Medium and Small Bolts (measurements in cm)

Screw with Nuts

As is the case with the small bolt, we must ensure that the screw with nuts is made from brass. The screw must be large enough to fit securely between the strings. The pianist must use his or her ear in order to truly decide what the most appropriate material is. Essentially one should be listening for the preparation to produce a resonant, harmonically rich tone. If the screw is too small, not only will it not fit comfortably, but it will most likely produce a metallic tone with buzz. The best advice is given to us by Cage himself. In the 'Table of Preparations' we are advised to determine the position and the size of the mutes by experiment

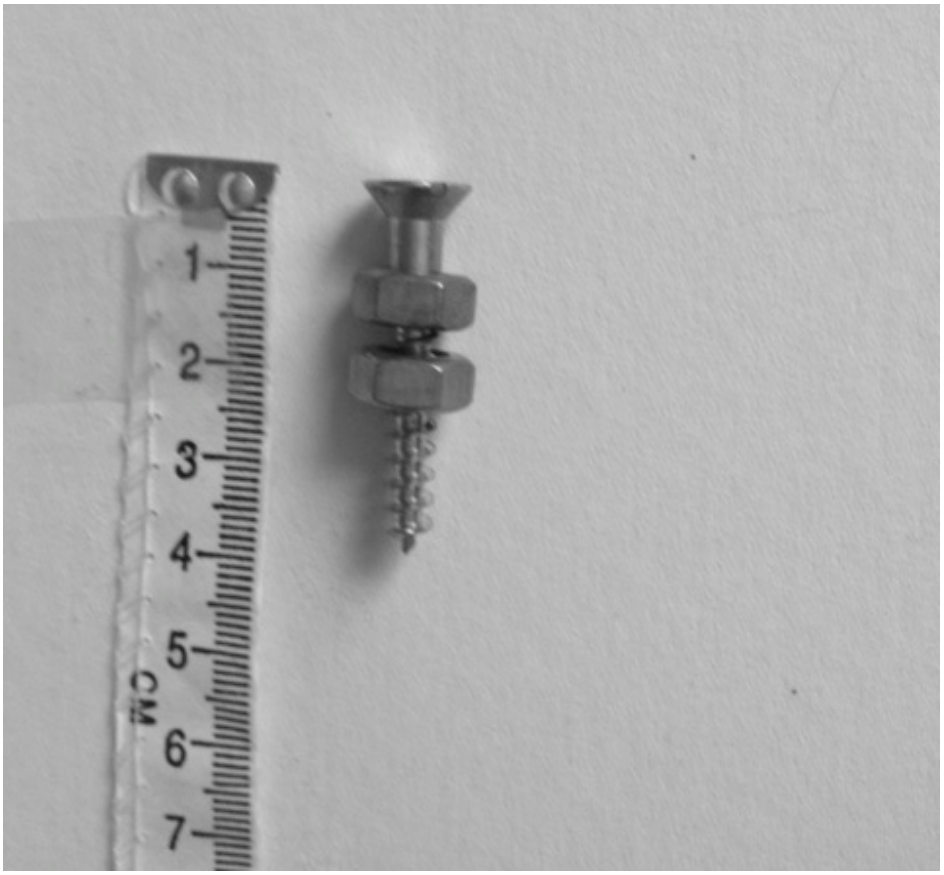


Figure 3: Sample of Screw with Nuts

Weather Stripping

Weather stripping is a material that was used extensively at the time of the composition of *Bacchanale.* Today, it is almost impossible to find and should not be considered a viable material. The most satisfactory substitute is widely considered to be piano tuner's felt. As the aim of weather stripping was to create a 'muted' sound, felt is a highly suitable substitute.

Dampers

As the most fragile part of the piano, extra care must be given when working with the dampers. In order to avoid damage to the dampers, one must always ensure they are lifted when inserting preparations, by wedging the sostenuto pedal so it is down, ensuring the dampers are raised. The dampers themselves should never be lifted by hand. Many pieces require the dampers to be identified to ease in performance, although this is not necessary in *Bacchanale.* There are many different schools of thought on what the safest and least invasive ways to accomplish this are. Some pianists like to lightly affix tape to the dampers, while others like to mark them lightly with chalk. Ultimately, if the student arrives at a piece that requires them to come into direct contact with the dampers, he or she should always seek the advice of the piano technician before work begins.

Getting Started

Before embarking on any piece of music involving the prepared piano, it is essential to have a checklist. For *Bacchanale* we will need:

1) a flat head screwdriver (that is thoroughly clean)

2) a soft tape measure, showing inches

3) a large quantity of tuner's felt – enough for 11 preparations. The felt should be cut to size, as needed.

4) 1 pair of scissors

5) 1 pair of tweezers in order to remove felt, should it slip onto the soundboard.

6) one small brass bolt (as in Figure 3)

7) one brass screw, about 4cm long (as in Figure 4) and several brass nuts that will fit the corresponding screw tightly.

8) a suitable container in which to store preparations and associated materials.

It is strongly advised that students have several different sizes and weights of bolts and screws to experiment with. As has been previously discussed, the possibilities are endless and should be explored to the fullest extent.

Step-by-Step Instructions

What follows are step by step instructions on how to prepare the piano, specifically relating to John Cage's *Bacchanale.*

Step 1: Ensure hands are extremely clean, and free from any grease or grime that could transfer to the piano.

Step 2: Always remember that the sostenuto pedal should be **fully depressed** whenever preparations are being installed.

Step 3: The first preparation is the **small bolt.** First, using the cloth tape measure, measure 3 inches from the damper. Locate the small bolt.

Step 4: To insert a bolt or screw the best method is to gently spread the relevant string of the trichord using a flat top screwdriver while always ensuring the sostenuto pedal is down. This enables the easy insertion of the preparation. The pianist must exercise extreme care to ensure that the screwdriver does not slip and damage the soundboard. See Figure 4.

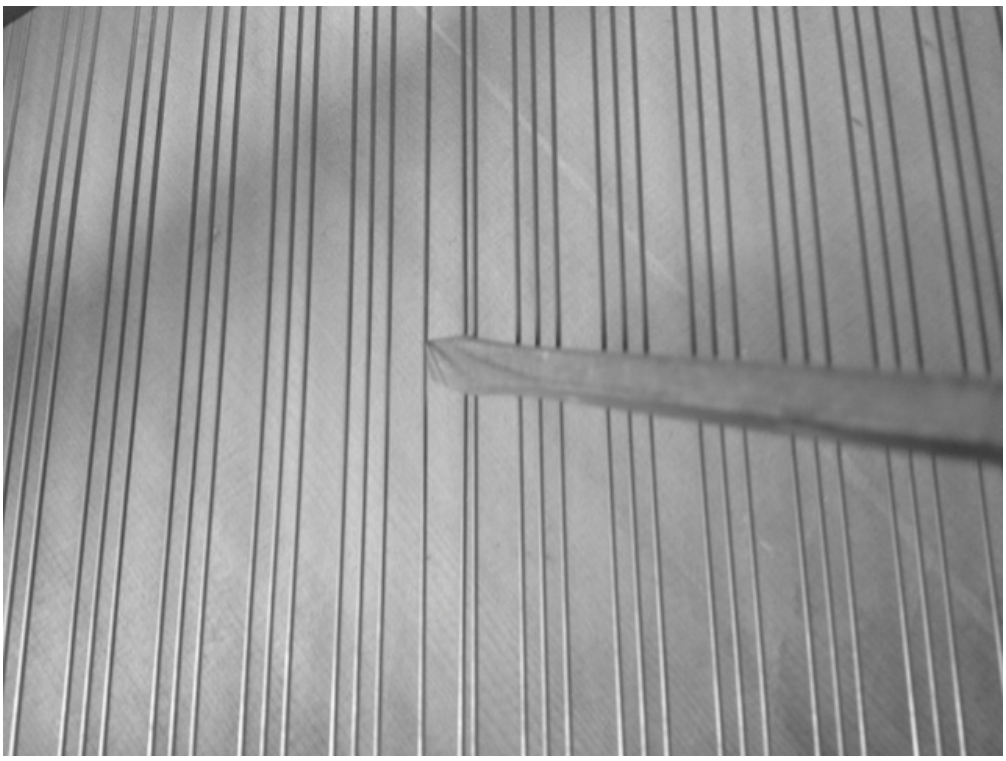


Figure 4: Spreading the Trichord

Step 5: To insert the first preparation in *Bacchanale,* carefully spread the 2nd and 3rd strings of F4 with a flat-top screwdriver, and in the other hand gently place the small bolt between the strings, ensuring that it fits well. See Figure 5.

Figure 5: Inserting the small bolt

Play the F and listen carefully to it. How does it sound? Is the sound resonant and are the overtones distinguishable? If you have other similar size and weight of bolts, now is the time to experiment with these. Always be sure to play the note at full force in order to ensure the stability of the preparation.

Step 6: If a preparation has to be moved or removed it should be done in the same way as it was installed, that is by spreading the strings with a screwdriver and carefully removing the object. The preparations should **never** be pulled straight out from the strings. As always, remember to have the sostenuto pedal depressed in order to avoid damage to the dampers.

Step 7: The next preparation to install is the tuner's felt (our substitute for the fibrous weather stripping which is no longer available). As this and all remaining preparations that utilize weather stripping have no precise information regarding their distance from the damper, the human ear is the only resource in determining where the felt should sit.

This first piece of felt is to go between the 1st and 2nd strings of middle C. It should be cut to size, depending on the thickness of the felt. Sometimes it may be necessary to use a double thickness of felt as I have done, if it is especially thin. While spreading the strings, carefully insert the felt in the space between the 1st and 2nd string. After inserting, play around with the location of the felt. I have chosen to place it close to the damper, but it depends on many factors, not least the size of the piano. See Figure 6.

Figure 6: Inserting felt

Step 8: The next preparation is the screw with nuts between the 2nd and 3rd strings of middle B flat, with felt between the 1st and 2nd strings of this same pitch. These should be inserted in exactly the same way as has been shown, but paying special attention to the nuts on the bolt. It is essential that they are tight, and have no potential to slip off the screw. Cage does not specify exactly how many bolts to use. Rather, it is up to the performer to experiment and decide what will work best. It

should also be noted that in instances where one trichord calls for 2 different preparations, such as felt and a screw, the felt should always be inserted first as a safety precaution. It is much more preferable to have a stray piece of felt left in the piano than a stray screw!

Step 9: The remaining nine preparations are all felt, and should be inserted in the same way as has been described previously, paying special attention to the location of each preparation on the strings and experimenting to find the ultimate positioning. After having carefully inserted all the preparations, the piano should look (and sound) like a completely different instrument! See Figure 7.

It is extremely important to safely remove all preparations in the ways that have been described and to ensure the piano is in the same condition as it was before the preparations were inserted. Materials should always be cleanly stored and labeled in a suitable container to enable ease of use in the future.

Figure 7: The Piano, prepared for John Cage's *Bacchanale*

As we can clearly see from this photo, the majority of the preparations in *Bacchanale* involve felt, making it an excellent choice for the student who is new to the prepared piano. The two non–felt preparations, the screw with nuts and the small bolt, are relatively simple to insert. Providing the student follows the instructions given, there should be no cause for concern regarding the safety of the instrument, or for that matter, the student.

Suggestions for practicing Prepared Piano Music

One of the difficulties young pianists face when embarking on music written for prepared piano is mastering the art of successful practicing. Instinct tells us that because the 'Table of Preparations' is located before the music begins, then it must be what we begin with each time we practice. The absolute worst thing a student can do is to prepare the piano before each and every practice session. Not only is this incredibly time consuming – even preparing the piano for a relatively simple piece such as *Bacchanale* takes about an hour from start to finish, but it is physically exhausting. Spending an hour hunched over the piano, with one foot constantly depressing the sostenuto pedal, places excessive strain on the body. Additionally, there is really no need to prepare the piano before each session, especially in a piece such as *Bacchanale* which, even without the preparations would still read as a very playable piano piece in its own right. Of course, it is essential to prepare the piano at some point, not only to familiarize one's self with the completely new sound world that the preparations open up, but also to get comfortable with the touch of the keyboard which will have changed significantly following the insertion of hardware into the strings.

However, it is perfectly plausible to learn all the notes of a piece before preparations are even contemplated. This is the procedure that will be most beneficial to students following this syllabus, as the demonstration on how to

prepare the piano will take place several weeks after the pieces are given to students to learn.

Suggestions for Performance

Logistics

The first performance on a prepared piano can be nerve-wracking. It may seem like common sense but unless the student is performing an exclusively prepared piano recital, they must ensure that, logistically, the performance venue can handle works for prepared piano and conventional piano. It is essential to have two pianos at one's disposal – one for the preparations, and one for conventional use. The key to a successful performance is, among other things, good planning. The pianist should allow for a lot of time to prepare the concert piano and should build in extra time in case things go wrong. For instance, preparations that work on a small grand piano in a practice room will sound completely different when transferred to a large piano in a concert hall. Ensure that if the piano has to be moved it will not interfere with the very delicate hardware that has been inserted. Ideally, the piano should be in its final location before any preparations are begun.

Safety Preparing

'Safety Preparing' is a term that describes fixing 'dummy' preparations, (usually heavy felt or anything with a 'muting' quality) on the notes immediately next to notes with 'real' preparations. The benefit of using a safety preparation is it reduces the impact of a wrong note, which could trigger a loud preparation at the wrong time. The ethical question of whether these preparations should be used or not is one for the student and teacher to answer. Although a nice safety net in which to fall, it seems to go against the spirit of ingenuity and risk that Cage had in mind when he realized the very idea of the prepared piano. In addition, it is another preparation to manage. The time might be better spent making sure one is highly competent with the notes, just as one might if the work was by any composer writing for conventional piano.

Interpretation

"I don't believe in education. I don't believe in things being explained or understood. I believe in things that are inexplicable."[12] (John Cage)

I have purposely steered clear of providing interpretive advice regarding the actual *musical* part of *Bacchanale*. In establishing that the preparations are completely integral to the piece itself, and considering how personal the choice of

[12]Duckworth, *Talking Music,* 21.

preparations and their resulting sounds will be, it is my feeling that the rest of the piece will present itself to the student without obstacle. As we have discussed, melody and harmony have been left behind, and the preparations have taken us to a sound world that is completely divorced from equal temperament. Alan Rich describes the prepared piano as used in *Bacchanale* as "a cross, perhaps, between an out-of-time [*sic]* (tune) harpsichord and an Indonesian Gamelan."[13]

Perhaps the most important advice to offer the pianist who is embarking upon practicing the prepared piano for the first time is to consider that the instrument they are playing has changed. It is a completely different machine, and will continue to reinvent itself as such, each and every time it is prepared.

[13]Rich, *American Pioneers*, 149.

CHAPTER V

Minimalism

Minimalism has an allure that is hard to resist. Born out of reaction and defiance to the complexities of the *Avant-garde,* the works of minimalism, just like those by Ligeti, Messiaen and Cage we have previously studied, display a completely new compositional aesthetic – an aesthetic students should find exciting and daring. In addition, playing minimalist music requires a completely different mindset and skillset. It forces the musician to adopt a new thought process.

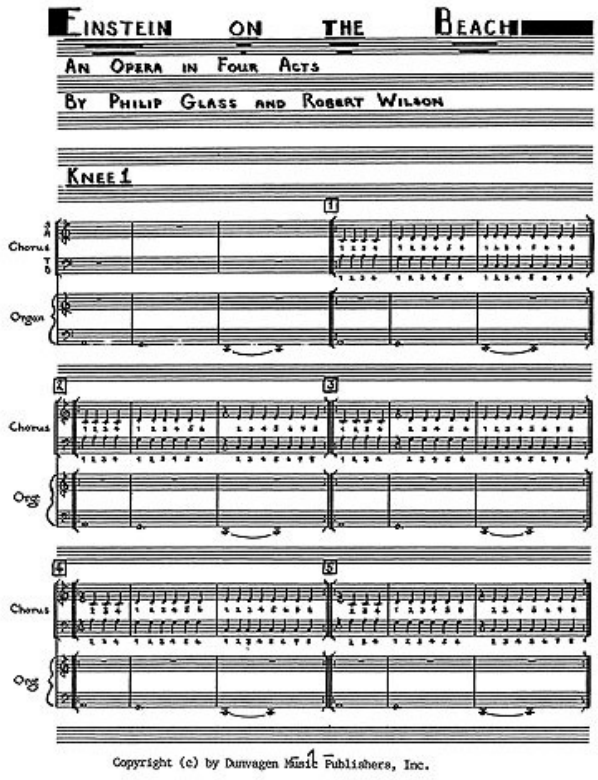
What is Minimalism?

Minimalism is a very awkward genre to define. When most musicians think of the term 'minimalism', there are several household names that come to mind immediately; Steve Reich (b. 1935), Phillip Glass (b. 1937). John Adams (b. 1947) and Terry Riley (b. 1935) are famous examples. However, the variety of musical style between these composers, and even across each composers' own catalog of work is enormous. While it is convenient to fit them all into a tidy category such as 'minimalism' this only serves to confuse and perhaps alienate the prospective listener. For instance, Reich's early works, such as the tape pieces *It's Gonna Rain* (1965) and *Come Out* (1966) are widely different to his recent, large ensemble works like the *Daniel Variations* (2006).

Or let us compare one of John Adam's first works, the simplistic, charming but rather static *China Gates* (1977) with his 2001 oratorio-inspired behemoth - *El Nino.* Both composers have developed their musical style to an extraordinary extent and at the time of this writing, are both still actively composing. So how do we go about defining who is a minimalist composer and who is not? But more importantly, does it really matter?

Phillip Glass stands beside Reich and Adams as one of the most successful and famous 'miniamlist' composers. But what about his music? His 1975 opera in four acts, *Einstein on the Beach,* serves as one of his most celebrated works. To get a basic idea of how unique Glass 's aesthetic is, we shall briefly consider *Knee Play 1* from *Einstein on the Beach.*

As an antidote to 'western art music', Glass attaches the highest compositional priority to rhythm, followed by harmony and finally melody. Indeed, *Knee Play 1* has an extraordinarily simple harmonic language. We hear just 3 chords – A minor, G major and C major, repeated in succession by a choir chanting the numbers "1-2-3-4" ,"1-2-3-4-5-6" and "1-2-3-4-5-6-7-8" accompanied by an electronic organ playing only the root of the chord progression. See Musical Example 33 below,



Musical Example 33: Page One from Glass's *Einstein on the Beach* (© Dunvagen Music Publishers, 1976)

Even more astounding is that this very chanting which opens the opera, was born out of a practice technique used by Glass to teach the singers the music. Although it was never meant to be a part of the performance, Glass decided to leave it in anyway.

It is interesting to note that there is hardly any more harmonic interest in *Knee Play 1* than there is in certain music with massive commercial weight behind it.

For example, the Bruce Springsteen hit song *Born in The USA* (1984) shares a similar harmonic simplicity. Rhythmically however, *Knee Play 1* is complex. The rhythmic interest comes from the juxtaposition of two spoken text parts written by Christopher Knowles, creating a startlingly original musical soundscape. Techniques in the production process, an attribute usually applied to more mainstream recordings, employs the use of a stereo split or 'pan' between the two spoken voices so that the right ear hears a very similar phrase slightly out of sync with a similar phrase in the left hear, a technique which was developed into 'phasing' by composers such as Steve Reich in pieces such as *Piano Phase* and *Music for 18 Musicians.* We will examine *Piano Phase* in some detail later on.

Phillip Glass is an example of a composer who consistently arouses controversy over which genre fits his music. Let us define minimalism, as the Grove dictionary does:

'A term borrowed from the visual arts to describe a style of composition characterized by an intentionally simplified rhythmic, melodic and harmonic vocabulary' [14]

The problem with defining minimalism is quite simple: sometimes the term fits and sometimes it does not. We can see from our very brief look into the rhythmic voice structure of *Knee Play 1* that the rhythmic dialogue evident here is

[14] Keith Potter, "Minimalism." in *Grove Music Online*. *Oxford Music Online*, http://www.oxfordmusiconline.com.offcampus.lib.washington.edu/subscriber/article/grove/music/40603.

anything but simplistic. In fact, if we were to transcribe these rhythmic values, we would undoubtedly be left with something of great complexity.

It is not just Glass and Reich that resist the definition. A brief look at *Phrygian Gates* (1977) by John Adams, confirms that structurally the piece has more in common with a Beethoven Sonata, owing to its clearly designed, implied three-movement form. In addition the advanced harmonic structure, based on a superimposition of Lydian and Phrygian modes further places this piece out of the minimalism box.

Where does this leave us? In a bid to solve this problem, the term *postminimalism* was introduced. Jonathan Bernard advises us that a composer can be referred to as a postminimalist if he or she " 1) began as a minimalist and is now writing music that, however different from those beginnings, can be plausibly traced back to them; or 2) developed after minimalism's most abundant flowering, but principally in response (even if partly in opposition) to it."[15]

Clearly, it is a thorny issue and one that can only be dealt with once a proper knowledge of minimalist and post-minimalist procedures has been obtained. In this chapter of the syllabus, we will look at two important works for piano, Steve Reich's *Piano Phase* (1967) for two pianos and *China Gates* for solo piano by John Adams, written ten years later in 1977. These two pieces will provide students with two

[15] Bernard, *Minimalism, Postminimalism, and the Resurgence of Tonality*, 127.

excellent examples of minimalism and postminimalism. Each work will be discussed and brief advice regarding practice techniques and interpretation given.

Steve Reich - Piano Phase (1967)

[Difficulty: Level 3, Length; anywhere from 22-26 minutes]

Piano Phase (1967) is a revolutionary piece of music for two pianos by Steve Reich. Built upon the idea of 'phasing', it represents the results of Reich's first attempt to transfer the phasing technique he had developed in the early tape pieces of the 1960s from magnetic pre–recorded tape to live, acoustical instruments. Reich would further develop this medium into works such as *Violin Phase* (1967), *Phase Patterns* (1970) and *Drumming (1971).*

In this chapter we will examine *Piano Phase* from the context of the performer and provide insight on how best to tackle this most unusual of piano pieces. I have chosen to include this in the syllabus as there is no other composition like it in the repertoire. It is truly unique and incredibly entertaining, but deceptively challenging. It has been given a difficulty level of '3' due to the amount of practice time that is required to master the 'phasing aspect' (this will be discussed later). Additionally the physical demands that *Piano Phase* calls for must not be overlooked.

The first thing that shocks us is the layout of the score – it completely defies convention! Yes, Reich has provided directions on what to do, but the piece demands at least a basic prior knowledge, (and interest) in the phasing technique that is completely fundamental to the composition.

Phasing

The evolution of phasing as a procedure in minimalist music is typical of the enterprising nature that has dominated the mindset of minimalist composers. Although Reich was born in New York City, and has always been considered part of the 'downtown New York Scene', it must be remembered that he spent a significant amount of time on the West Coast. As a child, he frequently travelled between New York and California by train (this of course providing half the inspiration for his 1988 work for string quartet and tape *Different Trains*).

Reich was living in San Francisco in the mid 1960s, having attended Mills College in Oakland. The sermon of a street preacher named Brother Walter provided the vocalizations Reich recorded and subsequently looped onto two tape recorders that we hear today in *It's Gonna Rain.* Upon attempting to play both tape recorders in unison, Reich discovered that each tape recorder was not running at an identical speed, causing the two initially identical recordings to lose their rhythmic unity. As

Alex Ross so eloquently describes, 'The machines began writing contrapuntal patterns in the air, an electronic canon for two raging voices."[16]

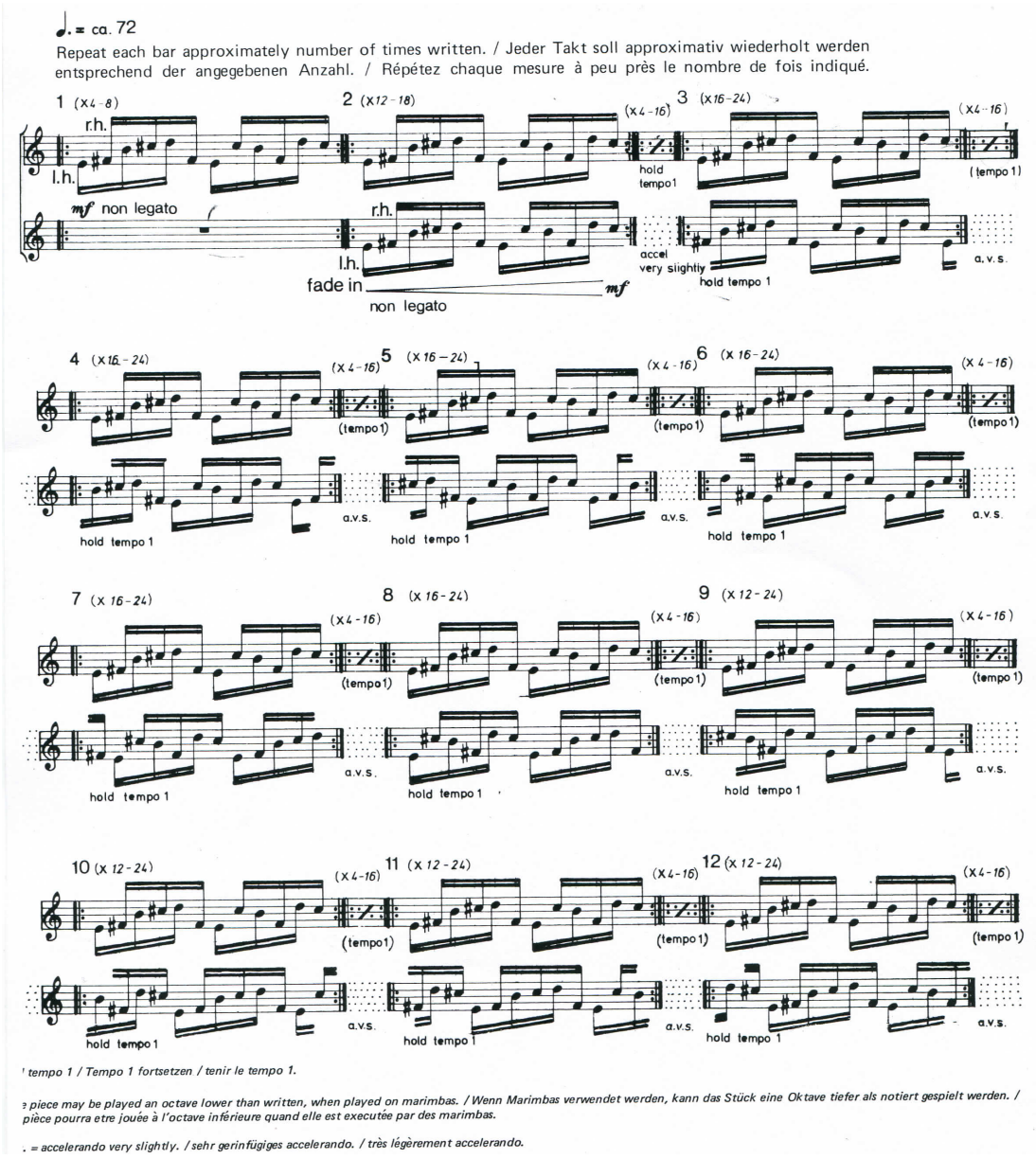
The transfer of this new technique to acoustic instruments was a brilliant move. *Piano Phase* uses exactly the same technique, but instead of tape machines, the pianists are responsible for the phasing aspect of the piece. As we can see in Musical Example 34, each pianist plays the same short 12 note melodic figure – built on the pitches E, F#, B, C#, and D. The first pianist begins and after between six and eight repetitions (the exact number is at the discretion of the performers) the second pianist gradually fades in to arrive at a perfect unison with the first pianist. After between twelve and eighteen repetitions, the first instance of 'phasing' begins. The first pianist remains at precisely the same tempo, while the second pianist accelerates the tempo very gradually over a period of between 4 and 16 repetitions until he or she has moved exactly one 16th note value ahead. The process repeats itself twelve times, with the first pianist consistently moving forward one 16th note until the whole system has come full circle and the pianist are in unison once again. Before the close of the piece, the process repeats itself twice, using similar patterns derived from the initial material.

It is in the actual 'phasing' period where we hear the true magic of the piece, and all its possibility. When the pianists are 'locked' in a phase, the effect is utterly

[16]Ross, "Fascinating Rhythm."

mesmerizing. Our sense of gravity has been altered, the pianos no longer sound like pianos and we are literally transported to a completely new sound world, one that is completely idiosyncratic to Reich.

To aid in the understanding of this complicated process. I have reproduced the first page of *Piano Phase,*



Musical Example 34: Steve Reich – Excerpt from *Piano Phase* (© Universal Edition 1980)

Rehearsing Reich's *Piano Phase*

Piano Phase imposes many challenges upon the pianists. The first is a question of logistics. It is worth pointing out that if pianists are rehearsing the piece in a room with two pianos that are positioned side by side, the musical and visual experience will be unique to that specific location. In a concert setting, Reich recommends the pianos be 'spooned' , ie positioned with the keyboards at opposite ends. Because this piece relies on visual cues between the pianists, it is recommended that the pianos be placed as they would be in a concert setting in order to avoid pianists having to relearn a whole new set of signals. Another logistical problem concerns the size and sound of the pianos. In order for the phase patterns to be convincing, the tone of the pianos must be as similar to one another as possible. If the pianos are of different size, the pianists must experiment with adjusting the piano lids in order to match the sound as closely as possible. However, care must be taken to ensure that there is a clear line of sight between the two pianists at all times. Logistics aside, we can now examine some of the pianistic and musical challenges.

Articulation

The issue of articulation is a constant challenge in *Piano Phase.* In order to carry out the phasing convincingly, every note must share the same quality. Additionally, each pianist must ensure that their sound matches as closely as

possible. When we consider the length of *Piano Phase*, which can last about 25 minutes, we see how technically difficult the movement actually is. There are almost no breaks, and the pianists must maintain a consistent sound quality throughout. Reich has indicated a dynamic of *mezzo-forte*, but realistically, the piece requires a hard-edged sound that is capable of projecting through a concert hall and that can withstand the intricacies of the phasing process. One only need practice the 'phasing' aspect at a very quiet dynamic once to realize how unsuitable this is. The piece demands a strong sound, and consequently a solid piano technique.

Practicing Phasing

Practice sessions of *Piano Phase* need to be regular as the phasing process will be a completely foreign concept to students. It cannot be 'crammed' at the last minute and demands frequent rehearsal time (short daily sessions are ideal). The only real way to practice this technique is by trial and error. This becomes a very useful process as it forces us to use our ears almost exclusively. Of course, some communication between pianists is essential in order to indicate when to move onto the next pattern, but all the work is essentially done by ear. In the very beginning, it may be helpful for the second pianist (who remains at the same tempo) to pull back the tempo ever so slightly in order to facilitate the gradual accelerando of the first pianist. Once both pianists have arrived in the 'phasing' area, (they will know as notes will sound like they are bouncing of the walls) it is recommended that they remain in the 'phase' for as long as possible so that they become accustomed to the

completely unique feel of this phenomenon. Once both pianists are comfortable with the 'phase', they must try to arrive at this point without any pulling back of the tempo from the first pianist. The players must ensure that they switch parts frequently. The only way a thorough understanding of the phasing technique will be realized is if both pianists are completely familiar with both parts.

Concentration

Maintaining concentration is extremely difficult in *Piano Phase* and has to be developed throughout the practice process. The danger of this piece is that one can fall into a daze as the work has an enormously hypnotic quality. The piece demands an extremely heightened sense of concentration in order to balance the technical, physical, and psychological demands that the composer hurls at the pianists. Students should arrive at their own solution in how to enhance their concentration. However, when I have performed *Piano Phase* I have found it helpful to play the patterns with the required articulation at a loud dynamic, while attempting to have a coherent conversation with somebody without missing a beat, (or note). *Piano Phase* demands an unconventional approach. Consequently, the sonic rewards are anything but pedestrian. The sensation that both pianists will experience the first time they arrive at a phase is extremely special as it represents a completely new and intoxicating musical aesthetic.

John Adams – China Gates

John Adams was born in Worcester, Massachusetts in 1947 but moved to San Francisco in 1971. Adams differs to Reich in many ways. He is anchored in the customs of Western classical music, and also draws heavily on the American vernacular musical tradition. While Reich's music is the result of a pure, single system, the music of John Adams appears to be a collage of wide influences. *'What sets me apart from Reich and Glass'* says Adams*, 'is that I am not a modernist. I am not a pure composer; I embrace the whole musical past, and I don't have the kind of refined, systematic language that they have…I rely a lot more on my intuitive sense of balance….I've stopped worrying about whether intuiting a structure is right or not; as far as I can tell, most nineteenth-century composers wrote on intuitive levels."*[17]

In *China Gates* (1977), which along with its big brother, *Phrygian Gates*, comprise Adams' 'opus one', we hear a charming piano piece, perfectly suited to the undergraduate student. The three elements of the piece - the use of modes, symmetry, and the repetition of cells, combine to give the work a defining quality that is strongly evident of the early style of the composer.

[17] Lee, *Masterworks*, 2.

The First Approach

Adams indicates in his program notes that *"The sound throughout should be soft and resonant. Dynamic levels should never exceed mezzo forte. Special attention should be given to equalizing the volume of both hands so that no line is ever louder than another. In this way the intertwining patterns can be most successfully realized. In passages where the proximity of lines is particularly close a quick attack must be used to enable repeated soundings of the notes.*
Pedal should be held throughout each passage until the next gate (change of mode) occurs."[18]

As we can ascertain from this program note, the composer has given us a very detailed account of how the piece should sound. This presents the pianist with a dilemma: should we approach the piece armed only with what we have been provided in the program note? Or should we investigate the use of the modes to a greater extent? The piece has a very pleasant flowing character – and it is easy to recognize when a new gate appears, but there lies a danger. Without knowledge of what is happening in each gate, it becomes difficult to *define* each gate, and this has ramifications for the piece as a whole. Adams has specified very pedestrian performance directions such as soft dynamics and identical voicing between the hands. It is clear that we need to look further into the workings of *China Gates* in order to offer an interesting performance.

[18] Adams, *China Gates,* 1.

The 'Gates'

As we can determine from the program note, the term 'gates' refers to the change of mode - a term Adams has borrowed from electronic music. In the context of a synthesizer, the 'gate' refers to the complete sound – from the first attack to the final decay and this is appropriated in the music by use of the sostenuto pedal. Let us now consider the 'Gating' diagram that is supplied by the composer.[19]

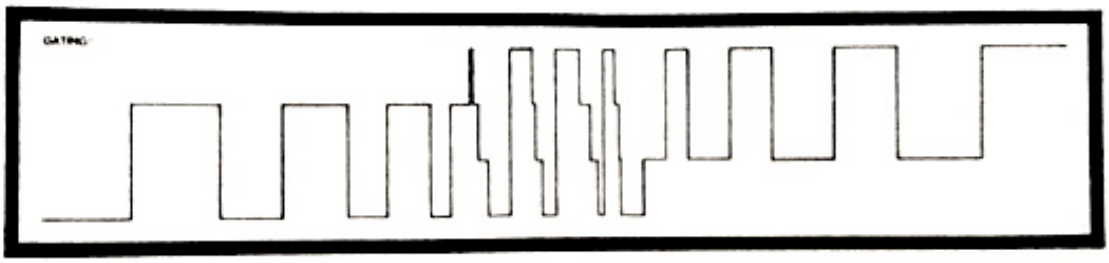


Figure 8: 'Gating' in Phrygian Gates (© Associated Music Publishers, 1983)

The above diagram gives us a clear idea of the structure of the movement, and specifically tells us how the gating (or use of modes) affects the architecture of the movement.

[19] Adams, *China Gates,* 1.

We will now investigate which modes Adams employs in the first section of *China Gates.* See Table 22,

Table 22: Identification of Modes in *China Gates*, measures 1 through 78

GATE NUMBER	**BARS**	**MODE**
1	1 through 15	A flat Mixolydian
2	16 through 30	G sharp Aeolian
3	31 through 42	A flat Mixolydian
4	43 through 54	G sharp Aeolian
5	55 though 62	A flat Mixolydian
6	63 through 70	G sharp Aeolian
7	71 through 74	A flat Mixolydian
8	75 through 78	G sharp Aeolian

The use of modes in the first section of *China Gates* has been provided to demonstrate to the student the importance of recognizing the harmonic structure of what is a delicately complicated piece of music. As an exercise, it is suggested that students locate and identify the modes at each of the remaining gate entries. In addition to expanding one's knowledge of the piece, this helps us in interpreting exactly how we will *play* the mode. As Adams has given us such restrictive performance guidelines, students should investigate the possibilities of applying

different colors to each mode in the hope of creating interest in the piece while still adhering to the wishes of the composer. This attention to micro-detail will help ensure that a rewarding and fulfilling experience is had by performer and listener alike.

Concluding Remarks

Throughout this ten week syllabus it is my hope that students will gain an appreciation and enthusiasm for modern piano music. In the best case scenario it is desired that students will take the initiative to seek out more modern music, having acquired the knowledge to learn and perform it successfully. However, it is probably over-optimistic to assume that each and every student will exit this course with a new-found love for modern music. At the very least, it is my hope that this syllabus will have instilled in students an awareness of 20th century music. Just as we are expected to possess an extensive knowledge of music that predates the 20th and 21st centuries, we must ensure that students who play only compositions written up until 1900 have a knowledge of the music that follows. In addition, most pianists will teach at some point in their careers and is my expectation that this syllabus will equip young pianists with a workable knowledge of modern music, should they encounter a student who is keen on exploring contemporary music themselves.

Furthermore, having completed the course, should the student realize he or she has no interest in performing modern piano music, they will at least have a respectable knowledge of contemporary music which will assist them should their aesthetic change in the future. The aim of this syllabus has not been solely to encourage students to *play* contemporary music. Rather, it is my hope that they will actively listen to and support it by enthusiastically attending live concerts (as well

as buying recordings). Ultimately, this syllabus is about realizing the responsibility we all have as musicians to help in furthering the extension of the music of our time.

With this in mind, I have designed a series of ten 'exit' questions that will be presented to students at the end of the course. These are important as they will afford the instructor an insight into the thoughts and concerns of the students. The responses will be essential in improving and refining the syllabus for future use. As music is always evolving, there remains a wonderful and limitless potential to develop and expand this syllabus at any level.

It is my intention that as this syllabus is taught, it will be tweaked and fine tuned to reflect the interests of the student body, and also of the current musical climate. Of course, I do not expect every student to emerge from this class a modern music aficionado. I fully expect there to a number of students who will still have a limited interest in modern music. However, I believe that at the very least they will have achieved an awareness of the style. This can only benefit the student. After all, what they have learned will only further their musical education. Additionally, it has never been my intention to suggest that music written in one particular period is superior to another. Rather it is my expectation that whether students harbor positive or negative feelings about baroque, classical, romantic or contemporary music, they will adopt a constant spirit of support and enthusiasm for *all* live music.

Exit Questions

Question One

Having completed this course, how would you define the term 'contemporary' or 'modern' music? Does knowing how the music is categorized make a difference in your decision to learn or listen to it?

Question Two

Thinking about the composers and pieces you have studied in this course, do you think learning music from the 20th century is significantly more difficult or easier than learning music that was written before 1900? Please explain your response.

Question Three

Having completed the course, are you likely to:

a) listen to modern music, *and*

b) learn modern music?

If you answered yes to question 'b' please describe what it is that specifically attracts you to contemporary music, ie harmony, rhythm, texture, sound etc. If you have answered 'no' to question 'b' please state what you dislike about contemporary music?

Question Four

If it was mandatory to learn a piece of music written after 1945 for an exam or recital, would you choose:

a) a piece with prepared piano

b) a 'minimalist' or 'postminimalist' work

c) an atonal work

d) a neo-romantic composition, *or*

e) other, not listed above (please specify)

Question Five

Considering John Cage's music for prepared piano, please describe how you felt about the process of learning and preparing the piano. Is it something you will attempt again?

Question Six

If, for an end of year exam or recital, you had the option to play an entire recital of music written in the 20th or 21st century instead of presenting a varied program would you choose to accept this? If you answered yes, please describe the repertoire that you would choose. How would you ensure that the program was varied enough?

Similarly, in the same situation, if you had the option to completely exclude music from the 20th or 21st century from your recital would you? Please explain your decision.

Question Seven

In the setting of university or conservatory exams and recitals, works from the 20th or 21st century (usually those written after 1945) are sometimes exempt from the rule of playing from memory. Does this motivate you to learn contemporary music? Why or why not?

Question Eight

Did you think the music covered in this syllabus was:

a) too tonal

b) too atonal

c) boring

d) too easy

e) too difficult, *or*

f) contained a good range of difficulty and style

Question Nine

Please explain if this course has given you enough knowledge to embark upon learning contemporary music by yourself. If the answer is negative, please describe what you would have liked to have been covered.

Question Ten

In what ways, if any, has completing this syllabus altered the way you think about modern music? Has it changed the way you will practice or perform music?

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VITA

Alastair Graham Edmonstone was born in Perth, Scotland and received his undergraduate degree in music from Birmingham Conservatoire in England. At the New England Conservatory of Music he received the Graduate Diploma and Master of Music degree, which was made possible by a generous award from the Scottish International Education Trust. Additionally, a European Union Erasmus grant enabled him to partake in further study at the Royal Conservatory in Brussels, Belgium. An advocate of modern music, he has worked closely with composers such as Jonathan Harvey, Huck Hodge, Lee Hyla, and Gunther Schuller. Between 2008 and 2009 he gave over a dozen performances of Messiaen's legendary piano cycle *Vingt regards sur l'enfant-Jésus* throughout the United States, the United Kingdom and Canada. In 2010 Dr. Edmonstone gave the Seattle premiere of Luciano Berio's *Sonata per pianoforte solo* (2001). Also active in the world of opera, between 2010 and 2012 he served as a faculty repetiteur and opera coach at Birmingham Conservatoire. In 2012 he earned the degree of Doctor of Musical Arts from the University of Washington in Seattle.