

Music in The Big Apple

A MUSIC APPRECIATION TEXTBOOK
FOR NEW YORKERS



Professor Emeritus Stephen Jablonsky

The City College of New York

MUSIC IN THE BIG APPLE

A MUSIC APPRECIATION TEXTBOOK FOR NEW YORKERS

July 10, 2019

Stephen Jablonsky, Ph.D.
Professor Emeritus
The City College of New York

Email: jablonsky@optimum.net

Website: www.stephenjablonsky.net

Music: soundcloud.com/stephen-jablonsky

TABLE OF CONTENTS

INTRODUCTION

Dear Reader	4
Using a Textbook	6
Twelve Things to Know About Music	7
How Big is the Problem?	8
Music Is...	9
The Relatedness of Knowledge	10
The CIPA Formula	11
The 5 Ws of Music	12
Some Themes of Life	13
Connecting the Dots	14
Popular and Unpopular Music	16
Inspired Improbabilities	17
Music as Narrative	19

THE ELEMENTS OF MUSIC

The Materials of Music	20
A Music Listener's Checklist	21
Basic Music Theory	22
The World of Pitch	23
The Major Scale	24
Fascinating Rhythms	25
Reading Rhythms	26
Meter	27
Tempo	28
Modern Music Notation	29
The Fundamentals of Music Notation	30
Measuring with Intervals	31
The Overtone Series	32
Various Scales	33
The Choice of Scale	34
The Construction of Triads	35
The Four Types of Triads	36
Musical Combinations	37
Musical Instruments	38
Musical Structure	40
Multi-sectional Instrumental Forms	41

MUSIC HISTORY

The Basics of Music History	44
Western Classical Music History	45
Some Dates to Remember	46
NYC Timeline	47
Music Timeline in the Big Apple	50
A Geocentric View from CCNY	52
Maps of the US and Europe	53
The Voyager Record	55
The Tale of Two Georgs	57
Bach's Goldberg Variations	58
Women in Music	59
Extraordinary Women in Music	60
Lorenzo Da Ponte	62
A Matter of Style	63
From Rags to Rap	63
Listening to Recorded Music	66
The Problem of Modern Music	68
Stockhausen is Dead	70
Your Grandparents' World	71

MUSICAL GENRE

Historical Repertoire	72
Keyboard Sonatas	74
Chamber Music	75
The Symphony	76
The Concerto	79
Art Song	80

Summertime on YouTube	81
The Great American Songbook	82
Songs About NYC	84
The Mass	85
Music for the Stage	88
Music for the Ballet	90
YouTube Adventures	91
Dance Assessment Inventory	92

THE VENUES

Carnegie Hall	93
Lincoln Center	94
Other Concert Venues and Music Schools	95

COMPOSERS (The Immigrants)

A Composer's Complaint	97
Dvorak in New York	99
Mahler Apotheosis	100
Varese in New York	101
Bartok in New York	102
Stravinsky in New York	103
Rachmaninoff in New York	104
Irving Berlin in New York	105

COMPOSERS (The Homies)

Stephen Foster	108
Charles Ives	110
George Gershwin	112
Duke Ellington	114
Aaron Copland	115
Jerome Kern	116
Richard Rodgers	118
Stephen Sondheim	120
Carole King	121
Mohammed Fairouz	122
The Grawemeyer Winners	123
Composers Born in New York	124

THE PERFORMERS

Musical Performers	125
Legendary Stars of Music	126
The Conductor	127
The Orchestra	128
Arturo Toscanini	129
Leontyne Price	130
Leonard Bernstein	131
Yuja Wang	132
Pierre Boulez	133
James Levine	134
John Lennon	136
Tito Puente	137
Bob Dylan	138
John Lewis	139
Buddy Rich	140
Barbra Streisand	141
NYC Ballet	142
Recent NYP Music Directors	143

THE APPENDIX

Steinway & Sons	144
Musicians' Birthdays	145
Grammy Music Genre	147
Necrology	148
Stars of Dance	149
Art Assessment Inventory	150
The Star Spangled Banner	151
Glossary of Terms	152
I Like the Island Manhattan	157

DEAR READER:

Chances are you registered for Music Appreciation because it fit in your schedule and you like music. Maybe you thought this would be an easy class. What you may not have realized is that there are no easy subjects. You obviously wanted to learn more about music but really had no idea what you were getting yourself into.

My job is to introduce you to the principles and concepts of a subject that has its own history and technology going back hundreds of years. Now is a really good time to ask yourself what you wanted to know about music when you signed up for this adventure. I can assure you that every time I prepare for this course, which I first taught in 1964, I ask myself what is it that I really want my students to get from these fifteen weeks together. Each time I ask that question I get a different set of answers, so this semester you will benefit from my most recent introspection.

My intention is to help you become curious critical thinkers. I also hope to excite you about music and its relationship to all the areas of human invention and investigation. It is the interrelatedness of all things and all people that fascinates me. In the brief time we have together I hope we can learn a thing or two about each other, and about the vast universe we inhabit. Your college education may appear to be segmented into separate subject areas taught in separate buildings, but it is the wise student who realizes that this is all one campus and the search for truth and beauty goes on in every classroom, studio, and laboratory.

There are so many ways to talk about music and each of them has value. No matter which path I choose, I know one thing – I cannot really teach you anything. All I can do is invite you to learn. You and I have a good shot at success if the course designed by me has merit and you are willing to do a lot of hard work and investigation on your own. Learning takes place when you integrate what I share with you in class with what you discover for yourself elsewhere.

I am your intellectual caterer. I will prepare a buffet of fascinating materials and challenges for you and invite you to partake in the feast. You need to grab a plate, come up to the buffet, and partake of what I offer. Fill your plate and return to your seat and enjoy the intellectual victuals. Look at what is on your plate, assess it, smell it, taste it, chew on it, and swallow. All this is, hopefully, a pleasurable activity. Of course, you also have the option of fasting. The choice is yours.

I have compiled this textbook for your delight and edification. Read it as if you had paid a king's ransom for it. It is advisable to take notes on items that seem important enough to show up on the next test. In the best of all possible worlds you would be inspired by what you have read to come to class and engage me in conversation about things that intrigued you. Make sure you stay ahead of the reading schedule in your syllabus. There may be items you want to read a second time to solidify your knowledge. You are responsible for the contents of this volume.

You will be tested on your reading comprehension and your ability to properly process subjects covered in class. You are a professional student and will earn the grade that I record for you at the end of the semester. We are partners in this endeavor. The study of music can help us better appreciate what it means to be

human. It can even help us learn more about ourselves, a process of self-discovery that takes a lifetime. Let us fill it with good music and the joy of learning. There are vast numbers of gorgeous soundscapes waiting for you to discover them. This class will, hopefully, point you in the right direction and provide you with a proper foundation for further discovery.

The hardest part of this class is getting your head out of your cell phone, following directions, and meeting deadlines. While you are at it, make a friend.

Dr. Jablonsky

Addendum: As you go through life you are either connecting or disconnecting from people you know. Occasionally a rift develops between us, especially when information needs to be shared. I have had students who were in trouble and, when I wrote to them, they never responded. I had one student who still owed me two papers after the final exam and so I wrote to her asking for her plan. Three days later, at 1:15 in the morning, the papers arrived in my email but the grades had already been posted at 8PM. If she had written to me in a timely fashion, I could have waited, but there was a major disconnect between us. Hopefully, a byproduct of your years at CCNY will be your ability to communicate efficiently and effectively, both verbally and in writing.

Get connected! Stay connected!



The Great Hall at CCNY

HOW TO USE A TEXTBOOK

It is entirely possible that no one ever told you how to use a textbook. A textbook is different from a novel. When you read a novel you start on page one and go to the end. Because you want to enjoy the literary trip you do not peek at the last page.

When you acquire a textbook you do not read it, you study it. You begin by previewing it by checking the table of contents, preface, and introduction. Then you browse through the entire book so you know what lies ahead. It is also a good idea to study the pictures since someone went to the trouble of putting them there and they must have had a good reason for doing so. As you read the textbook you should take notes on things that seem important. When you come across a superlative like "most, best, or greatest" make a note. If you read with comprehension, you should be prepared to come to class to discuss the chapter with your classmates and teacher.

For a class like ours, it is a good idea to read the entire textbook in the first ten weeks of the semester so that you can review it from time to time in the last four weeks. You will be surprised how much you missed the first time around. If there is a glossary at the end, use it as a good review of what you have read.

The accumulation of knowledge is a slow steady process. The things you learn about in chapter 1 will help you better appreciate what you encounter in all the other chapters. That early material is the foundation of your learning program and needs to be reviewed from time to time.

You will very shortly come to realize that this is not a regular textbook. First of all, it is very personal. This is my take on the world of music. Some of the information is designed for you to read at home while other material will be used in the classroom. Some of it will serve you well long after the class is over. Hopefully, the textbook will pique your curiosity and you will be tempted to go to the Internet for further investigation. Remember, that much of what you find there is faulty or fallacious so you need to triangulate the truth by checking multiple sources. YouTube is your primary source for documentary and music videos. Go explore and enjoy!



Charles Ives (1874-1954)

TWELVE THINGS TO KNOW ABOUT MUSIC

Music is organized sound and silence

Music is universal but not identical from culture to culture

Music is a metaphor for life and the human experience

Music is a drug that alters your neurochemical condition

Music serves many purposes in the life of the listener

Music may be any combination of rhythmic, melodic, or harmonic

Music has texture and form but no meaning

The timbre may be vocal or instrumental (acoustic or electronic)

The medium is a message

Musicians create music by composing or improvising

Talent, training, and taste are critical factors for composer, performer, and audience

There is no accounting for taste; and beauty is in the ear of the beholder

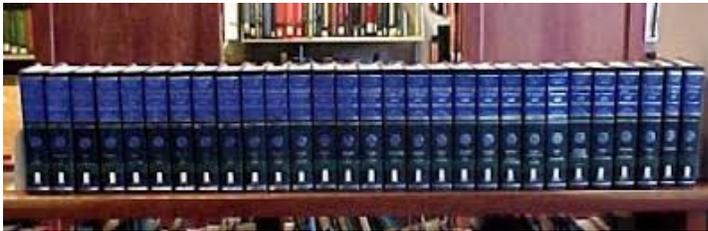
When combined with words, dance, or visuals the synergy can be potent



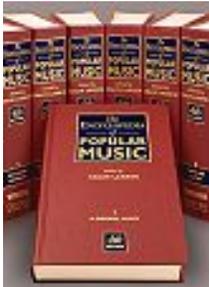
designed by [freepik.com](https://www.freepik.com)

HOW BIG IS THE PROBLEM?

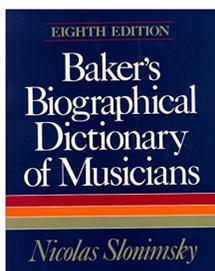
You say you would like to study about music. OK. What music would you like to study? Humans have been making music for a very long time on six continents in myriad styles and genres. To give you an idea of how much there is to learn I direct your attention to Oxford Music Online. This website contains *The New Grove Dictionary of Music and Musicians*, *The New Grove Dictionary of Opera*, and *The New Grove Dictionary of Jazz*. This amazing repository of knowledge consists of more than 51,000 articles and 30,000 biographies contributed by over 6000 scholars from around the world. If that were not enough, the website also provides *The Grove Dictionary of American Music* and *The Grove Dictionary of Musical Instruments*, another 20,000 articles for you to consult. As an added treat when you subscribe to the website you get access to *The Oxford Companion to Music* and *The Oxford Dictionary of Music*.



If that is not enough to sate your curiosity, I highly recommend *The Encyclopedia of Popular Music* that is also available through Oxford Music Online. Those 27,000 articles should answer any questions you may have.



One of my favorite books is Nicolas Slonimsky's *Baker's Biographical Dictionary of Musicians* that is written in his own inimitable style. When you read all 2115 pages call me and we will discuss it.



MUSIC IS...

- A mystery because we do not really understand how it does what it does
- A stimulus because it causes us to feel, to think, to move, or sleep
- An art because it can transcend the mundane and go for the stars
- A craft because it requires training and practice
- A business because it can bring us a lot of money if we know how
- A sport because performers often compete with each other
- A game because the composition of music is a game of notes
- A mood modifier because it can embellish your sadness or happiness
- A sleep aid because the right music can lull you into a dream state
- A science because all of the sciences are related to its production
- A social event because we gather together as audience or performers
- A religious experience because we use it to worship and pray
- A word enhancer because it makes poetry into song
- An escape from reality because it can take you into personal fantasy
- An image enhancer because it makes images and videos come alive
- A form of communication because musicians touch your heart
- A celebration because no birthday is complete without it
- A companion because it will bring you solace in those difficult moments
- A kinesthetic experience because it touches all parts of your body
- A buying aid because you leave the store with too much
- A digestive aid because it is nice to eat while Mozart is playing
- A learning experience because it provides a lifetime of challenges
- A time perception modifier because it causes us to lose track of time
- An adventure because it takes us to places we have never been
- A gateway to memories because it can unlock senses long buried
- An analog of experience because it reminds us of us
- An analog of emotion because it seems to say things we cannot utter
- A series of wave forms because essentially it is just energy

THE RELATEDNESS OF KNOWLEDGE

While music is our main concern in this course, it is best not to take a narrow view of this particular human activity. It might be interesting, as well as profitable, to think about the relationships between music and the other fields of study that are offered at our school. For example, what can music tell us about mathematics and what can mathematics tell us about music? Is medicine related to music? How about economics? It is all connected! How is music related to your major?

- Advertising / Public Relations
- American Studies
- Anthropology
- Architecture
- Art
- Asian Studies
- Biology
- Black Studies
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Creative Writing
- Earth & Atmospheric Science
- Economics
- Education
- Electrical Engineering
- English
- Foreign Languages and Literature
- History
- Jewish Studies
- Journalism
- Latin American Studies
- Mathematics
- Mechanical Engineering
- Media and Communication Arts
- Medicine
- Philosophy
- Physics
- Political Science
- Psychology
- Sociology
- Theater & Speech
- Women's Studies

THE CIPA FORMULA

$$Q = (C: t \times T)^*s + (I: t \times T) + (P: t \times T)^*s + (A: t \times T)^*s$$

$$M \times E$$

- Q = the quality of the musical experience
C = the composer
I = the intended audience
P = the performer
A = the actual audience
M = the medium of performance
E = the concert environment
t = talent
T = training
s = state of being

What you see above is a hypothetical formula invented by me that attempts to explain the complex interaction between the composer (C), intended audience (I), performer (P), and the actual audience (A) that results in the quality (Q) of the musical experience for those listeners. The CIPA formula has not been approved by any reputable mathematician—just by me. It is one way of trying to explain why music sounds the way it does.



STEPHEN FOSTER (1826-1864)

THE WHEN, WHERE, WHY, WHAT AND WHO OF MUSIC

In order to place a piece of music in the proper context you need to answer the following questions:

When?

- Does the music sound like it comes from a particular time?
- Is it your time?

Where?

- Does the music sound like it comes from a particular place?
- Is it your place?

Why?

- Does this music have a purpose?
- Is it for dancing or for listening?
- Is it religious or secular?

What?

- What is the medium?
- Is it being sung and/or played?
- Is it a solo or an ensemble piece?
- Is it excited or calm?
- Is it intimate or monumental?
- Is it expository or developmental?
- Does it have one continuous mood or does it have contrasting sections?
- Is it narrative (it has a program or story) or is it abstract?
- Is it associated with anything extra-musical?

Who?

- What do you know about the composer?
- What do you know about the performer?
- What do you know about the audience?

How?

- How is the music coming to you and under what circumstances?
- How much did you pay to hear this music?
- How are you feeling?

SOME THEMES OF LIFE THAT ARE PORTRAYED IN ART AND MUSIC

Birth

Motherhood

Grandmother

Sisterhood

Friendship

Youth

Courtship

Marriage

The Hunter

Victory

Promotion

Food Gathering and Preparation

Work

Good Weather

History

The Performer / Creator

Good Health

Wealth

Flora

Science

Natural Structures

Sports

The Country

Music

On the land

Hopes

Kindness

Heroism

Death

Fatherhood

Grandfather

Brotherhood

Enmity

Old Age

Rejection

Divorce

The Hunted

Defeat

Demotion

Eating and Drinking

Rest

Stormy Weather

Mythology

The Audience

Sickness

Poverty

Fauna

Technology

Manmade Structures

Diversions

The City

Dancing

On the water

Fears

Cruelty

Cowardice

CONNECTING THE DOTS

On my way home after my first day of teaching in September of 1964 I thought a great deal about what had transpired in my Introduction to Music class earlier that day. What was most apparent was the fact that I did not know as much about music as I had previously thought. There I was, a cocky 22 year-old with a BA degree in music from CCNY, a master's degree from NYU, and a year in between at Harvard. As I lectured to my students that fateful day I was cognizant that, having never taught before, I had no experience explaining anything to anyone with any degree of depth or precision. There were moments in the class where I realized that I was not absolutely sure of what I was talking about. More significantly, I began to see the gaping holes in my knowledge of a subject I had started studying fifteen years earlier.

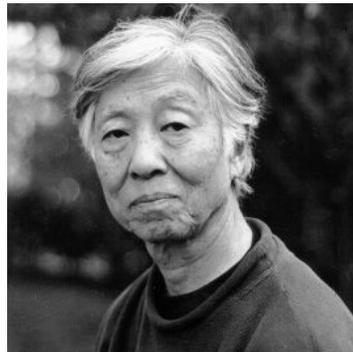
The scene shifts forward 38 years to 2002 when, as chair of the Music Department, I rarely spent a leisurely hour breaking bread with colleagues at the faculty dining room because there always seemed to be too much to do back at my office what with 300 majors and 64 faculty members counting on me for guidance and counsel, and so much bureaucratic minutiae that needed my attention. So, I usually microwaved my lunch from home and spent ten minutes eating while reading *Baker's Biographical Dictionary of Musicians*. What struck me early on in this ritual were the myriad characters described in Slonimsky's tome as "significant," "prominent," "eminent," "outstanding," and the like and I had never heard about these people. How is it possible that musicians this accomplished had flown below my radar? In a moment of clarity it dawned on me that the world of music was so vast that one could easily spend a lifetime believing that you actually knew something about music and all you had done was scratch the surface.

Case in point: I came upon the entry for Leon Dudley, otherwise known as Kaikhosru Sorabji. His entry began with the word "remarkable" so I continued reading with great interest. Upon finishing I got up and went to my computer to YouTube this fellow to see just how remarkable his music might be. Well, the music that I heard was definitely arresting and challenging. I am not sure whether this fellow was a genius or a lunatic, which begs the question, "Is there a difference?" Regardless of the final judgment, it is obvious that this fellow's music is worth a listen. I checked for his name in my sixth edition of the famous Grout/Palisca music history textbook and he is absent. He did not make the cut. Not surprisingly, he is not alone. I have read about, and then researched, dozens of Baker denizens and they have all seem to have disappeared into the fog of history.



Thinking about this situation prompted me to envision my understanding of music as analogous to the Connect the Dots drawings of my youth. If I remember correctly, you open to a particular page and you see nothing but dots and perhaps a few line drawing hints to help you get started. If you stare long enough you realize that if you connect the dots correctly you can create something that looks like a horse or a schoolhouse. Well, that is how I now picture my understanding of music—as a widely spaced collection of intellectual dots that I connect only in my imagination. The intellectual magnetism that connects these dots gives me the appearance of solidity much like the particles in the subatomic world but, like those particles, they are not really solid and seem to jump around a lot when I look at them closely. In attempting to quantify my knowledge I realize that most of my education, both formal and personal, has been devoted to a relatively small number of greatly talented composers and performers, mostly American and European, who are truly only the tip of the iceberg.

Much of what I know of music has been determined by the path I have traveled. After graduating from CCNY I went to Harvard where I met Pierre Boulez and Leon Kirchner and got to know them and their music. One of my classmates went on to study at Princeton where he worked with Earl Kim. I mention Kim in particular because I did not know his music until recently. He was a Korean-American of prodigious abilities and wrote some really lovely music that escaped my purview. My second wife is Korean-born and the son of her best friend is a conductor who performed some of Kim's songs at a concert a few years back and, by doing so, shone a light in that little corner of the musical universe for me. Thank you, Yoon Jae.



One of the saving graces of having lived three quarters of a century is the comforting awareness that I know almost nothing. I seem to know just enough about myself that I am no stranger to my foibles and shortcomings, and I know just enough about people and life to enjoy the daily gifts that fate bestows upon me, and I know just enough about music theory and composition to be able to write some charming pieces that pose no great threat to the masters, but I know almost nothing about the world of music—barely enough to call myself professor. In truth, I continue to be more of student than a teacher, and I am grateful that my career as educator has allowed me to be both to the fullest possible measure. In my youth, my arrogance allowed me to believe that I could know music just as some astronomers believe they can wrap their minds around the universe or some theologians believe than can comprehend God, but I am in a more realistic place now that allows me to enjoy my role as explorer, not conqueror.

POPULAR AND UNPOPULAR MUSIC

A number of years ago I was meeting with a new member of our faculty who was going to teach a piano class and he mentioned that he was preparing for a concert in Poland that included the music of a Jewish composer who had died in a Nazi concentration camp. He did not mention the composer's name because he may have figured that I would not know about him, but, as luck would have it, a previous professor in our department had turned me on to the music of Erwin Schulhoff maybe twenty years earlier when little of his music was available in print or recording. When I got home, because it was a Friday night, and I had finished my *shabbas* meal, I went to YouTube and checked out what was available by Schulhoff and was delighted to see how much of his music was there. I listened to several of his pieces and the last one was his Fifth Symphony which has no title so I am calling it "Man of Steel Symphony" because he was a Communist and Stalin modestly called himself Man of Steel. This is one of the most muscle-bound pieces I have ever heard and if you are a brass lover you will go nuts, especially if you like the trombone.

I share this piece with you because I enjoyed it (I was a trumpet player back in the day) and was the 285th person on the planet to hear this version on YouTube. 285 out of maybe 1 billion people with access to a computer! You see, there is popular music and then there is unpopular music, and 285 hits would put this piece well down on the list of the unpopular. In case you need the contemporary standard, one of Lady Gaga's "Edge of Glory" websites has had 125 million hits so far. Now that's popular! There is a great deal of popular music that never made the charts for any number of reasons. But, fear not, there are dead white guy classical composers from Vienna who did make the charts big time as well. But there are classical pieces like Beethoven's *Fur Elise* by Ivo Pogorelich that has had more than 25 million visits--so there. Take that! I am guessing that, if you put all the *Fur Elise* websites together, Ludwig might even do better than some of Britney's best stuff.

So, in summary, there is popular and unpopular popular music...and popular and unpopular classical music. Most of the popular classical composers are dead, so living composers have something to look forward to when they are gone. In popular/popular music we usually know the performer better than the composer unless the singer is also the composer. *C'est la vie!* Popularity is often a fleeting thing both in classical and popular music. There are many popular artists who only had one or two hit songs and then disappeared from the charts. Classical composer Philip Glass has enjoyed a relatively popular career of late but I predict that he will end up as a footnote to musical history. I could be wrong. Fifty years from now let us see how things turned out.



INSPIRED IMPROBABILITIES

What is the difference between competent music and great music? For me, it is what I call “inspired improbabilities”—those musical events that simultaneously surprise and delight us. They always come at just the right moment when the piece needs that special something to keep the listener fully engaged and continuously amazed. I suspect they come from that inner voice that resides within all creative people that says, “Do this now.” The rational mind responds, “Are you kidding? That’s crazy stuff!” The great artists have always listened to that inner voice because it is processing and juggling data in ways the rational mind cannot begin to fathom. Our inner voice is nurtured by all that it ingests while we listen and practice. It seems to have a genius all its own, and tends to exert discretion and playfulness in equal measure.

I have always enjoyed the interaction between the composer (me), and the composition I am writing at the moment. The farther I get into the compositional process the more the piece seems to take on a life of its own. There are special moments when the piece informs me of what it needs to do next. I always attend to this command even though it seems to go against everything I was taught or thought to be correct practice. I have to respect the needs of the piece when it wants to go in directions I had not originally planned for the musical journey. I trust that the listener will experience heightened neural activity when they hear these special moments because the act of adding them to the creative mix gives me a tingle.

Every composer learns his craft from studying with other composers and by gleaning important lessons from countless hours of listening and study of scores. What he does with that craft will be profoundly affected by his ability to go beyond what he has been given. By thinking outside the box he creates a new box where he may reside for a period of time before moving on. If properly constructed, those boxes will contain the inspired improbabilities that will elevate the piece from safe and comfortable to daring and exhilarating--from craft to art. There is a difference between a piece that travels well along the ground and one that takes off and flies. The magic that creates the fliers cannot be fully comprehended, reduced to formula, or repackaged for future use.

There are no algorithms for taste. Taste is the innate ability to discern the difference between good, adequate, and unacceptable. If properly employed it prompts us to never settle for less than the best. It seems that the impeccable taste of the great masters was always operating at the maximum while many famous composers I can think of had good days and bad. The joy of listening to great music derives from an indefinable awareness that what we hear is the product of a supreme talent creating something new at the highest level of output. The magic of the experience results from the genius of a compositional practice that is exquisite and an editing process to match. There is a truth in the beauty of the thing that cannot be denied nor defined. At the end of a great performance of a great piece there is an intellectual and emotional exhalation that says, “Yes, that is how it must be!”

Whenever I hear a piece of music I always feel like I am being told a story in sound. As a theorist I have never been able to discover why certain pieces seem to be telling an important story while others seem to be nothing more than well-constructed musical palaver. It may have something to do with the power of an idea, but I am never quite certain how to quantify that musical power or express it in words. I think, like most

people, I can sense when I am in the presence of greatness. Hearing the first phrase of a great composition is like the opening scene of a great drama, or the first page of a great book, because it is immediately intriguing and gives the audience a strong sense of the artistic trajectory that will propel the action to the last scene or page. We then follow the travails with rapt attention and seem to disappear into the story along with the characters. When properly done, we should lose all sense of time, and maybe even place. When the curtain finally falls we are aware that we have been on an extraordinary journey. The course of events took us where we needed to go and cadenced successfully at just the right time and place. If the experience was truly great, all we can say is, "Wow!"

Epilogue: Several years ago I went to a concert that was so boring I kept checking my watch during the first half. During the second half I kept checking my calendar.



Belasco, Toscanini, Puccini in NYC 1907

MUSIC AS NARRATIVE

Let us remember that music is both magical and mysterious, and, because of that, untold amounts of energy and intelligence have been spent trying to explain it with varying degrees of success. Sometimes I wonder if musical analysis is a fool's errand best kept to one's self. Music, because it occurs over time, is narrative in the sense that it presents a sequence of musical events that may or may not be related to each other. It is narrative in a language that is perceived and understood in different ways by each listener. Our brain processes the incoming aural data relative to what it already knows about other music. It also operates on various levels of cognition based on prior musical training and experience. It is even possible that we listen to the alternative "realities" of music simultaneously, but focus or blur our attention depending on our purpose of listening.

I have always contended that a musical masterpiece is greater than the sum all the theories that try to explain it. I sometimes find myself reading the most erudite of scholarly reporting only to realize that all those diagrams, charts, and verbal descriptions are like analyzing the muscle and tissue of a cadaver. The magic and mystery of music is analogous to the spark of life that animates the body, and like doctors, music theorists marvel at its indescribable beauty. Great music bristles with the spark of genius and its effect stays with us long after we experience it. Music of lesser quality merely survives during its performances and is soon forgot.

Great films (and great music) are great from the first scene to the last and never flag. We are swept up and carried through time without any awareness of its duration. It holds our attention the way a hypnotist controls our awareness. Good luck to all those who attempt to explain the power of the trance. Each masterpiece is the product of great skill and craft, but at no time are we aware of the technical genius that undergirds the work. What sweeps us away is the emotional ride we are taken on as we explore the heights and depths of the human experience. A great watch keeps perfect time without our understanding how the inner works operate. The genius that went into creating the watch mechanism is best appreciated only by other watchmakers.

I close by sharing with you a visual experience very much like listening to music— watching clouds float by on a warm summer afternoon. The exquisite aesthetic of that experience defies description and has, to my knowledge, not yet prompted the formation of a Society of Cumulus Theorists.



George Gershwin (1898-1937)

THE MATERIALS OF MUSIC

The materials of music are sound and silence. Silence refers to the critical spaces that help to articulate the sounds and make the musical message clearer. The training of a skilled composer must include information on how to use silences as well as pitches, which are tones of specific frequency (vibrations per second), and noises, which are sounds of indeterminate pitch. Music itself is a highly unnatural phenomenon—a man-made artifice. Of its three components, silence and noise are universal natural elements while pitch manipulation may only be encountered in nature's singers such as birds, whales, and wolves. But, what of chords and chord progressions? Never. To harmonize is human.

Young, healthy human beings can hear sounds in a range from 20Hz (20 vibrations, or wave cycles, per second) to 20kHz (twenty thousand vibrations per second). As we get older our range may diminish, especially if we, as adolescents, have abused our aural equipment in pursuit of sensory overload. "Hz" is the abbreviation for the last name of the 19th-century German physicist Heinrich Hertz who is honored by this appellation. Within this range it has been known since the time of Pythagoras that the doubling or halving of a frequency results in two tones, played consecutively, that will sound the same except that one is "higher" than the other. For example, a tone of 100Hz will sound the same as a tone of 200Hz or one of 50Hz. When the two tones are played together they seem to blend perfectly into one combined tone. We call this doubling an octave because, in the scales of the ancient Greeks, the doubled note was eight tones higher than the first. It is for this reason that we give the same letter name to the eighth tone and so use only seven letters of the alphabet in the construction of scales.

- Warning: Professional musicians are very exacting in all their musical activities, especially the handling of pitches. You should join them by remembering that A, A flat, and A sharp are not the same note. They all share the same letter, but two of them are black notes on the keyboard and one is white.

The tonal space between two pitches an octave apart may be filled with any number of intermediary tones. Our musical system is based upon the division of the octave into twelve equally spaced tones we call the chromatic scale. From among these we may construct any number of other scales including the pentatonic (5-note) that has served many cultures very well for millennia. For the past four hundred years, the two diatonic (seven-tone) scales that have served tonal composers are known as major and minor. More about scales a little later.



Heinrich Hertz (1857-1894)

A MUSIC LISTENER'S CHECKLIST

Rate and/or evaluate the following elements of music
These are the factors that affect your reaction to what you are hearing

- VOLUME: Soft 1 2 3 4 5 Loud
- MEDIUM: Acoustic or Electronic
 - Instrumental: Strings Woodwinds
 Brass Percussion
 Keyboard Special effects
 - Vocal: Soprano Alto Tenor Bass
 Ensemble Chorus
- TEMPO: Slow 1 2 3 4 5 Fast
- REGISTER: Low 1 2 3 4 5 High
- DENSITY: Thin 1 2 3 4 5 Thick
- RHYTHM: Regular 1 2 3 4 5 Irregular
- METER: Non-metrical 1 2 3 4 5 Metrical

 Duple Triple Compound Mixed
- DURATION: Short 1 2 3 4 5 Long
- PROPORTION: Small 1 2 3 4 5 Large
- TENSION: Consonant 1 2 3 4 5 Dissonant
- ARTICULATION: Separate (staccato) or Connected (legato)
 Conjunct (steps) or Disjunct (skips)
- FORM: Binary Ternary Rondo Theme & Var. Complex
- TEXTURE: Homophonic Polyphonic Monophonic Heterophonic
- SCALE: Major Minor Pentatonic Other _____

SOME VERY BASIC THINGS TO KNOW ABOUT MUSIC THEORY

1. Music is organized sound and silence. Sound is energy. Sound is vibration. Sounds are pitches or noises. Healthy humans can hear vibrations from 20-20KHz.
2. The doubling of a vibration (frequency) results in "sameness." It is called the octave.
3. Within this doubling we divide the sound space into scales. For example:
 - a. Pentatonic scales contain five notes
 - b. Whole-tone scales contain six notes
 - c. Diatonic scales contain seven notes (common usage)
 - d. Chromatic scales contain twelve notes
4. The two diatonic scales in common usage in Western music since around 1600 are "major" and "minor." Their differences can be demonstrated by calculating the sequence of whole steps (W) and half steps (H) starting from the tonic (note #1):
 - a. Major W W H W W W H
 - b. Minor (natural) W H W W H W W
5. Thus, the intervals (distance) from the tonic to the other tones are:

Major: Maj2 Maj3 P4 P5 Maj6 Maj7

Minor: Maj2 Min3 P4 P5 Min6 Min7
6. The names of the scale steps are:
 - #1 tonic (the tonal center or home pitch)
 - #2 supertonic (above the tonic)
 - #3 mediant (half way between the tonic and the dominant)
 - #4 subdominant (a P5 below the tonic)
 - #5 dominant (vibrates 1.5 times faster than tonic)
 - #6 submediant (half way between the tonic and the subdominant)
 - #7 leading-tone (it pushes up to the tonic by half-step motion)
7. Three tones may be combined simultaneously to form a triad (basic harmonic unit):

Major triad: root Maj3 P5

Minor triad: root Min3 P5

Diminished triad: root Min3 dim5

Augmented triad: root Maj3 aug5

The functional name of a triad is derived from the name of its root. Its number is, likewise, derived from the scale step number of the root and is written in Roman numerals. Triads may be inverted and/or rearranged (that is, the root does not always have to be the bottom note and the third, the middle and the fifth, the top). The most important triads are the tonic (I), the subdominant (IV), and the dominant (V). Chords can be increased in size by the addition of 7ths, 9ths, 11ths, and 13ths. Chromatic harmony uses chords from outside the scale.
8. A melody is a characteristic sequence of pitches (a mix of chord tones and non-harmonic tones) and rhythms. Melodies contain phrases that end with cadences.

THE WORLD OF PITCH

OK. You are finally learning to read music. Why you waited this long nobody knows. Maybe you thought it would be hard to do. Well, you are about to discover that it is not. There are two elemental aspects to music notation--pitch and rhythm. Pitch refers to the tones we make with our voice or an instrument. When the sound vibrates at a steady rate it produces what we call tones. We write these tones on what we call a staff--five lines and the four spaces between them. When sounds seem to go up, they go up the page and vice versa. The music you see below begins with that fancy squiggle we call a treble clef. It is used for all the music on the right side of the keyboard. It is also called a G clef because it tells us where to find the note G--on the second line from the bottom. Lucky for you the musical alphabet only goes from A to G.

For demonstration purposes I have written the names of the notes for you in the first half of this piece. Your job is to write the names in the second half. You will notice that notes can go above or below the staff. If we need to, we can add what are called leger lines for notes like the B in measure 7. Almost all the notes in the example below are white notes on the keyboard. The black notes between them are called flats and sharps. If you go up from F to G (see m.11) the black note between them is called F sharp (#). If you go down from G to F (see m. 15) the black note between them is called G flat (b).

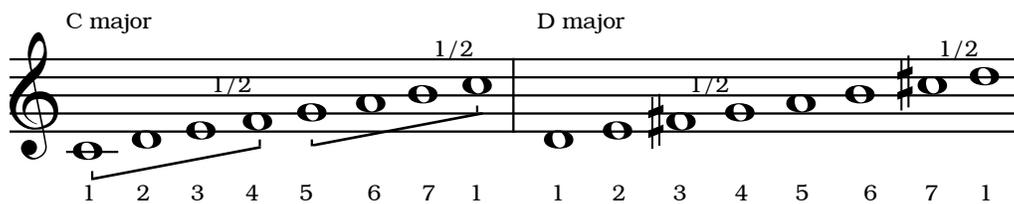
15

6

12

THE MAJOR SCALE

A scale is a series of pitches ordered by stepwise motion that spans an octave. It may go up or down and is the basis for everything we do in tonal music. It is the wise student who practices scales in both directions, slowly at first and then at increasingly faster tempos. Perhaps the most important scale we use in tonal music is known as the major scale. It is derived from the ancient Ionian mode (another name for scale). This series of pitches may be played on the keyboard by ascending or descending from C to C using only the white notes. To understand the construction of this and other scales we measure the distance, or interval, between each of the adjacent tones as well as the distance from the first tone to all of the others. The smallest interval is known as a semitone or half step. The major scale has half steps between steps 3 and 4 and between 7 and 8. All the other steps are whole steps (the distance of two half steps). In fact, the major scale is constructed of two equal tetrachords (a group of four adjacent notes) each of which contains two whole steps followed by a half step. The two tetrachords are separated by a whole step as follows: whole-whole-half / whole / whole-whole-half.



♪ For purposes of abbreviation we use a caret to indicate scale step (e.g., scale step five is abbreviated 5̂).

The intervals from the first step to the other tones of the major scale are:

1̂ to 2̂: **major second**

1̂ to 3̂: **major third**

1̂ to 4̂: **perfect fourth**

1̂ to 5̂: **perfect fifth**

1̂ to 6̂: **major sixth**

1̂ to 7̂: **major seventh**

FASCINATING RHYTHMS

*Fascinating Rhythm,
You've got me on the go!
Fascinating Rhythm,
I'm all a-quiver.*

The lyrics to the George and Ira Gershwin hit song from 1924 say it all. The excitement of studying and performing music begins with rhythm.

Of the four basic parameters of music—rhythm, melody, harmony, and timbre—the first is the most basic and the place where we begin our study of music. Everything we do in music starts with rhythm. Melody and harmony may be added later but are not necessary for a satisfying musical experience. Rhythm refers to the duration of sounds and the duration of the spaces (rests), or lack of spaces, between them. Rhythms are considered regular when they contain recognizable patterns and there seems to be a reasonable system of expectation in the musical narrative. On the other hand, rhythms may be irregular when we cannot anticipate with assurance what might come next because we do not sense an integral logic born of pattern. Rhythms can be very simple, consisting of a small number of durations or it may be highly complex. Volumes could be written about this intriguing subject but the discussion here is kept brief in the interest of practicality and because it is more fun to perform rhythms than to read about them.

It is important to understand that we read rhythms the same way we read language. As you read this introduction your eye is taking in sizable batches of data at one time, perhaps several words at once. You are not reading each letter separately and then forming them into words. So it is with rhythm. Your job is to familiarize yourself with the common patterns employed in various meters in order to be able to recognize them as the musical equivalents of words and phrases. The skilled musician often takes in half measures, whole measures, or even pairs of measures at a glance depending on the complexity of the patterns and the tempo.

Count: 1 2 3 4 1 2 and 3 4 1 and 2 3 4

READING RHYTHMS

It took thousands of years to develop what I am about to share with you. Our system of rhythmic notation uses symbols to represent relative lengths of tones. At the heart of the system is the concept of doubling or halving the values. For example, the first note you see is called a whole note. The two notes that follow it are called half notes because they last half as long as the whole. The next four notes are called quarter notes because they last one quarter the length of the whole note, and half the length of the half note. Following those you see eighth notes, and by now you know why they have that name. Can you spot the 16ths?

The music with which you are most familiar is based on what we call meter. When we listen to music we very often sense an underlying pulse to the rhythmic activity of the piece. These pulses are called beats and when we clap along with the music we usually clap the beats. When beats are grouped in identifiable patterns we call that meter. Traditionally, the first beat of every group gets an accent by being slightly louder than the other beats. This helps us find our place in the rhythmic structure. If the meter has two beats we say it is duple. If it has three beats we call it triple meter. Four beats are also duple because it is divisible by two.

The music below has something we call a time signature--the fraction at the beginning. The numerator tells us how many beats are in every group and the denominator tells us what kind of note will represent the beats. This one tells us there are four beats in each group represented by quarter notes. The groups are separated by a bar line into what we call measures. All the note combinations below add up to four quarters in every measure. See if I am right.

The image shows three staves of musical notation in 4/4 time signature. The first staff starts with a treble clef and a 4/4 time signature. It contains five measures: a whole note, two half notes, four quarter notes, eight eighth notes, and two quarter notes. The second staff starts with a measure number '6' above the first measure. It contains five measures: two quarter notes, two eighth notes, a quarter note, two eighth notes, a quarter note, two eighth notes, a quarter note, and two eighth notes. The third staff starts with a measure number '11' above the first measure. It contains six measures: two eighth notes, a quarter note, and a whole note.

METER

Most music has at the heart of its rhythmic structure an underlying pulse known as the beat—the steady, measured throbbing on which all the rhythmic values are based. Most of the music of the past four hundred years is metrical; that is, the beats are grouped into recognizable repeating patterns the most common of which are two beats per group (duple meter) or three beats per group (triple meter). You understand duple meter by walking: left-right-left-right. You can feel triple meter by waltzing or skipping: one-two-three, one-two-three.

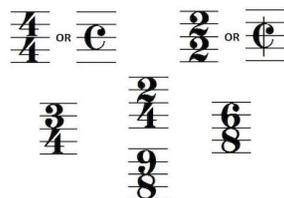
When notated, these groupings are known as measures and are separated by bar lines. The first beat of each group gets an accent and is performed with some increased level of energy. This first beat is known as the downbeat because conductors indicate the beginning of each measure with a downward motion of the hand or baton. The last beat of each measure is known as the upbeat and the conductor's hand or baton should move accordingly. In essence, all beats other than the downbeat are considered upbeats—duple meter is counted “DOWN-up” while triple meter is counted “DOWN-up-up.” When triple meter moves very quickly it is often counted in one.

There are many other meters besides duple and triple. If you put a duple and a triple together you get a measure containing five beats. This meter is somewhat lopsided because it has a grouping of two beats and a grouping of three beats. This is compound duple meter with one leg longer than the other. It can be seen as 2+3 or 3+2: One-two--one-two three or one-two-three--one two.

A compound meter with six beats per measure is symmetrical: 3+3. In this arrangement beat 1 gets the strongest accent and beat 4 gets a weaker one. This is a compound duple meter that is often very pleasing.

In the history of Western classical music there is music in more than six beats per measure. The more common ones are 9 beats per measure (3+3+3) and 12 beats per measure (3+3+3+3). Seven beats per measure is a compound triple meter with one long leg (2+2+3 or 3+2+2 or 2+3+2). Eight beats per measure is a compound triple meter with one long leg (2+3+3 or 3+3+2 or 3+2+3).

For a very long time music that started in one meter stayed in that meter right to the end of the piece. Beethoven was the first composer to notate a change of meter in the middle of a piece and that opened the door to the use of mixed meter later in the 19th century.



TEMPO

Tempo refers to the speed of the beat. At the beginning of each composition there is either a word or metronome marking that indicates how fast the piece should be performed. Your first attempt to perform any piece of music should be done at half speed. If you practice too quickly your performance may be filled with mistakes that are very hard to un-learn later. When you have mastered the material at that speed you may gradually speed up the tempo until it reaches the appropriate speed. Accuracy comes first; speed comes later.

Metronome markings indicate the number of beats per minute. For example, “march-time” (duple meter) is usually performed at “quarter note equals 120” which means that there are 120 beats per minute or two beats per second. Every serious musician has a metronome or an application easily accessible in their cell phone. When you practice with a metronome it keeps you honest and tests your ability to stay in tempo.

You may also find that the tempo is indicated by a word, often in a foreign language such as Italian, French, or German. Here are some of the common Italian terms in order of speed:

Grave—very slow

Largo—slow and broad

Lento—moderately slow

Adagio—slow and easy

Andante—at a comfortable walking pace

Moderato—moderate (not too fast and not too slow)

Allegretto—moderately fast

Allegro—fast

Vivace—fast and lively

Presto—very fast

Prestissimo—as fast as possible

If you wish the performer to slow down gradually use the term *ritardando*. The term *accelerando* is used to indicate a gradual speeding up. Tempo *rubato* (stolen time) allows you some freedom with the speed of the beats.



Prelude

Op. 28, No. 7

Frederic Chopin

The image shows a musical score for Chopin's Prelude Op. 28, No. 7. It is written for piano and consists of two systems of music. The first system begins with a treble clef, a bass clef, and a brace. The tempo is marked 'Andantino' and the dynamics are 'p dolce'. The second system starts at measure 8, with dynamics 'mp', 'mp', and 'rit. e dim. - - - pp'. The piece ends with a double bar line.

Modern music notation employs a system based on five lines and four spaces known as the staff. What you see above is the result of a thousand years of evolution. At the beginning of each staff is a key (clef) to the relationship of the lines and spaces to the pitches contained therein. In this example, the upper staff has treble clef that designates that the note G may be found on the second line. The lower staff employs a bass clef that indicates that F is on the fourth line from the bottom. In this case, because this is music for piano, the two staves are joined together by a brace. The three number signs at the beginning of each staff are, together, known as the key signature. Those number signs are actually known as sharps and the key in this case is A major. The fraction $\frac{3}{4}$ indicates that there are three beats in every measure and the quarter note represents the beat. Because there are three beats per measure the meter is triple. Most of the music we know is either triple or duple meter with two or four beats per measure. The measures are separated by the vertical bar lines running through both staves. The word "andantino" is the designation of tempo, in this case at a moderate walking speed. The letter *p* in the pickup measure indicates that the music should be played quietly (*piano*). Later in the piece the dynamic increases to *mezzo forte* (*mf*) and then decreases to *pianissimo* (*pp*). Opus 28, number 7 is a publisher's catalog indication. Frederic Chopin was a brilliant pianist who wrote some of the greatest piano music in the 19th century. When he died in 1849 ten thousand Parisians went to his funeral even though he was Polish. Go to YouTube and check him out.

THE FUNDAMENTALS OF MUSIC NOTATION

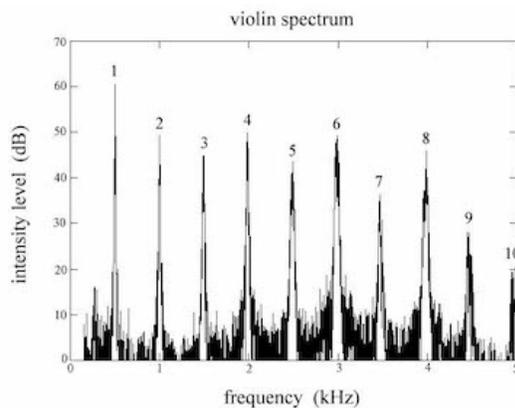
Accidental	A flat (b), sharp (#), or natural (♮) used to alter pitches down or up
Bar line	It separates measures
Bar	The space between bar lines. Same as measure
Bass clef	Used to indicate notes below middle C
Dot	Adds 50% to the value of the note
Double bar	Used to indicate the section or the piece is over
Downbeat	The first beat in every measure
Dynamics	Tells you how loud (forte) or soft (piano) to perform
Flat	Lowers a pitch by half step. Double flats (@@) lower flats
French curve	A brace that joins two staves together
Key signature	The collection of flats or sharps employed by the scale of the piece
Ledger lines	They are used to extend the range of the staff when needed
Metronome #	Number of beats per minute
Note values	May be whole, half, quarter, eighth, or sixteenth
Pickup measure	An incomplete opening measure
Rest	Indicates silence that may be whole, 1/2, 1/4, 1/8, or 1/16
Sharp	Raises a pitch by half step. Double sharps (*) raise sharps
Slur	Indicates notes to be played legato (smoothly)
Staff	The five lines and four spaces on which we place the notes
Tempo	Tells you how fast or slow to perform the music
Tie	Joins notes together to make them longer
Time signature	Numerator = # of beats in a measure, denominator = value of a beat
Treble clef	Used to indicate notes above middle C
Upbeat	The last beat in every measure

THE OVERTONE SERIES

The overtone series above results from the fact that a vibrating body such as an acoustic instrument subdivides itself into an infinite series of integer fractions ($1/2, 1/3, 1/4, 1/5$, etc.). These subdivisions produce frequencies (harmonics) that are integer multiples of the fundamental ($2F, 3F, 4F, 5F$, etc.). The series below is based on the fundamental C and is limited to the first sixteen overtones. A series may be built on any pitch and is infinite. Overtones 7 and 11 are approximately half way between the two pitches indicated. They are naturally occurring "blue notes." Instruments that are rich in overtones produce vibrant, brilliant tones.

You can calculate the frequency ratio of any interval by locating it on the harmonic series. For example, the ratio of an octave is 2:1. The ratio of a perfect 5th is 3:2. A C major triad is 4:5:6. The ratio of 15:8 creates the dissonance of a major 7th.

The image shows two staves of musical notation. The top staff is in 4/4 time and contains notes numbered 1 through 8. The bottom staff is in 4/4 time and contains notes numbered 9 through 16. The notes are arranged in a way that shows their relative positions on a piano keyboard. The notes are: 1 (C), 2 (C), 3 (E), 4 (F), 5 (G), 6 (A), 7 (B), 8 (C), 9 (C), 10 (D), 11 (E), 12 (F), 13 (G), 14 (A), 15 (B), 16 (C).



VARIOUS SCALES

TETRACHORD



PENTATONIC



5

WHOLE TONE 1

WHOLE TONE 2



11

MAJOR



15

NATURAL MINOR

MELODIC MINOR

HARMONIC MINOR



17

OCTATONIC 1

OCTATONIC 2



23

CHROMATIC



27

THE CHOICE OF SCALE AFFECTS THE MESSAGE

This is a tune you like to sing at least once a year. Notice how the emotional message changes when you change the scale. Which one is your favorite?

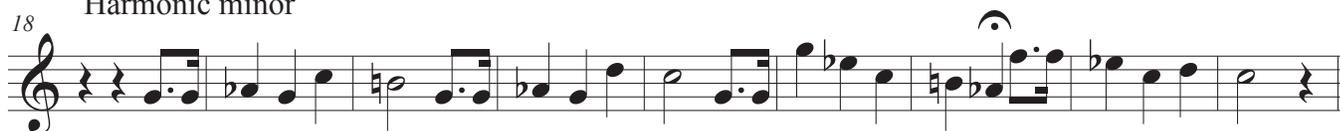
C major



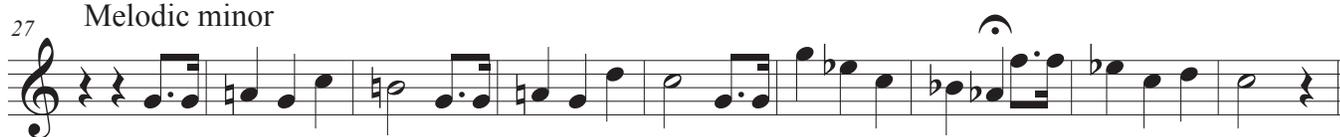
9 Natural minor



18 Harmonic minor



27 Melodic minor



36 Lydian dominant



45 Chromatic



54 Pentatonic



THE CONSTRUCTION OF TRIADS

An interval consists of two notes played simultaneously or consecutively. A chord is a discrete collection of three or more notes that function as a harmonic unit. Its constituents may be played simultaneously or consecutively. Most of the time we see or hear all the notes of a chord in close proximity to each other, but other times we are presented with incomplete harmonic information. In other words, composers do not always use all the notes all the time.

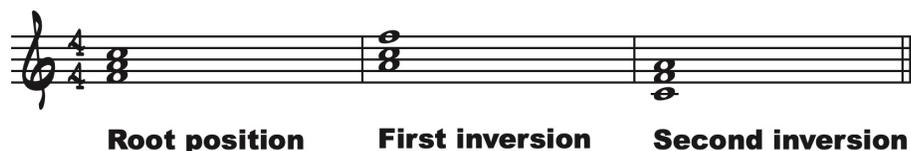
The basic harmonic unit in tonal music is the triad, a three-note chord built of 3rds. Harmony based on 3rds is labeled tertian (i.e., every other note in scalar motion). The note on which the chord is built is called the root; another note is added a 3rd above the root and is called the third; the other member of the chord is a 5th above the root (and a 3rd above the third) and is called the fifth. In every triad there are three intervallic relationships: between the bottom note and the middle note, between the bottom note and the top note, and between the middle note and the top note. Each of these intervals contributes to the way your brain processes the aural data it receives, but the intervals measured from the bottom are the most critical because the lowest sounding note is the harmonic foundation.

A triad may appear with any of its three notes in the lowest position we call “the bass.” We use this appellation even though it may not actually be in the bass voice or bass clef. When the root is lowest, the triad is most stable and is said to be in root position. As such we have 3rds between each of the notes and a 5th between the root and the top note. It is important to remember that the root is not always the same as the bass (the lowest sounding note). The root and bass are the same only in root position.

If we rearrange the triad, making the third the lowest note and the root the top note, the triad is in first inversion. In this position there is a 3rd between the bass and the middle note, a 6th between the bass and the root, and a 4th between the middle note and the root. This is a different collection of intervals than that found in root position. They both have the same root but provide the listener with two different aural experiences. In this inversion the triad is somewhat less stable than it was in root position.

When the fifth is lowest, the triad is in second inversion. The special sound of the second inversion results from the 4th between the bass and the root, the 6th between the bass and the third, and the 3rd between the root and the third. Later, we will see that the fourth between the bass and the root creates a sonority that is quite unstable and must be handled with care.

The Three Positions of a Triad



THE FOUR TYPES OF TRIADS

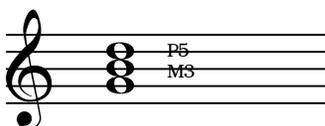
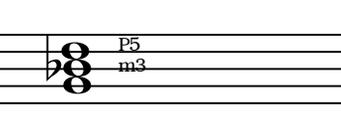
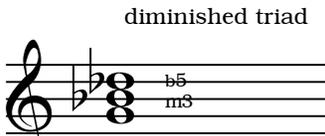
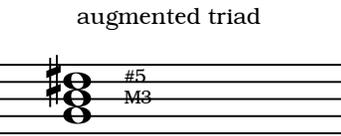
There are four types (qualities) of triads whose names depend on the interval between the root and 3rd and interval between the root and 5th:

How Triads Are Labeled

WHEN THE 3RD IS:	AND THE 5TH IS:	THE QUALITY IS:
minor	diminished	diminished
minor	perfect	minor
major	perfect	major
major	augmented	augmented

Below we see the four types of triads built on the root G. Only major and minor triads may be used as tonics, subdominants, or dominants. The diminished triad appears as the leading tone chord in major and the supertonic in minor. The augmented triad is occasionally used as an altered form of the dominant in a chromatic harmonic setting.

Types of Triads

major triad	minor triad
	
diminished triad	augmented triad
	

The triad is not always presented with all of the notes within an octave, called close position. Sometimes chords appear in open position, with the notes farther apart (more than an octave). Triads must always be made from letter combinations of root, 3rd, and 5th regardless of the accidentals used. For example, a C minor triad is comprised of the notes C, Eb, and G, never C, D#, and G. Only the following combinations are possible:

A-C-E B-D-F C-E-G D-F-A E-G-B F-A-C G-B-D

MUSICAL COMBINATIONS

The number and variety of instruments or voices that are involved in a music performance will greatly affect the quality of the recital.

Solo: One instrument or voice alone is a special and unique circumstance. More than one performer is another matter entirely.

Duo or Duet: two performers

Trio: three performers with resultant triangulation

Quartet: four performers. Vocal quartet. String quartet (2 violins, viola, cello), SATB

Quintet: five performers. Piano quintet (piano and string quartet),

woodwind quintet (flute, oboe, clarinet, bassoon, French horn)

brass quintet (2 trumpets, French horn, trombone, tuba)

Sextet: six performers

Septet: seven performers

Octet: eight performers

Nonet: nine performers

Ensemble: a group of people who perform together

Band: woodwinds, brass, and percussion

Marching Band: plays very loud in association with football games

Rock band: guitars, keyboards, bass guitar, drums

Jazz Big Band: 5 saxophones, 4 trumpets, 4 trombones, piano, guitar, bass, drums

Orchestra: a large ensemble of strings, woodwinds, brass, and percussion

String orchestra: violins, violas, cellos, and basses

Vocal ensemble: small group of singers (2 or 3 on a part)

Chorus: a large group of singers

Choir: a chorus associated with a religious organization

MUSICAL INSTRUMENTS

Woodwinds:

Piccolo (highest), flute, alto flute, recorder

Oboe, English horn (alto oboe)

Piccolo clarinet, B flat clarinet, bass clarinet

Saxophone (soprano, alto, tenor, baritone)

Bassoon, contrabassoon (lowest)

Brass:

Trumpet (highest)

French horn

Trombone, bass trombone

Tuba (lowest)

Strings:

Violin (highest), viola, cello, string bass (lowest)

Guitar, lute, mandolin

Harp

Percussion:

Timpani (comes in four sizes)

Snare drum, tenor drum, bass drum

Gong, triangle, chimes, wind machine

Wood blocks, siren, cymbals, temple blocks, castanets, tambourine

Glockenspiel, xylophone, marimba, vibraphone

Keyboards:

Piano, harpsichord, celesta, organ

Note: These are the instruments in common use in Western music. There are an untold number of other instruments that have existed since the beginning of time.

Early Electronic Instruments

Musical inventors have been toying with sound and electricity since the middle of the 18th century. The first electric synthesizer dates from 1876. Elisha Gray invented a Musical Telegraph and in doing so came up with the first oscillator. In 1897 Thaddeus Hill invented his Telharmonium whose technology later led to the development of the Hammond Organ (1929). The Audion from 1906 employed the first vacuum tube that led to the generation and amplification of electrical signals, radio broadcasting, and electronic computation. An electronic instrument still popular today is the Theremin named after its inventor, Leon Theremin. It was the first instrument you played without touching it. A number of composers wrote for it and it is still being manufactured almost a hundred years after its creation in 1919. In 1928 Maurice Martenot invented a microtonal keyboard that attracted a number of leading composers at the time.

The first commercial synthesizer was the Novachord. This 500-pound monster was produced from 1938 to 1942. It used 163 vacuum tubes and produced 72-note polyphony. Edgar Varese wrote his famous *Poeme Electronique* for the 1958 Brussels Worlds Fair using the Clavivox synthesizer invented by Raymond Scott and Robert Moog. The Mark II Sound Synthesizer, housed at Columbia University in 1957, was a room full of interconnected equipment that was programmable using a paper tape sequencer. Making one minute of music was a slow and laborious task. In the 1960s composers used organ-like keyboards or Fortran 4-B IBM cards to program their human-size Moog Computers. The first digital synthesizers showed up in the 1980s. Since that time synthesizers have gotten smaller and smaller. Today people create music in their laptops and cell phones using amazing amounts of computational power unimaginable a half century ago. Computer software has replaced rooms full of hardware from the previous generation of electronic studios.



The Control Room of the CCNY Sonic Arts Lab

MUSICAL STRUCTURE

Composers throughout the ages have acquired valuable insights into the compositional process by looking at the music of their contemporaries and predecessors. A great deal of their education is spent listening to music and studying scores. Early in their careers, all composers employ a good deal of imitation because, in our business, it traditionally is the greatest form of flattery. The goal of every composer is to move beyond the period of imitation to a discovery of his or her own individual voice. No composer was ever completely original because no one grows up in a musical vacuum. No one ever learned to be a composer from reading a book.

Structural Units

The smallest unit of structure is the **note**. A small number of notes may be grouped together as a **motive** (or motif), a collection of rhythmic, melodic, and/or harmonic materials that serves as the seed that will generate the material of the rest of the piece. A good example is the G-G-G-E^b motive at the beginning of Beethoven's Symphony No. 5. All of the materials of this first movement are derived from these four notes. This is what we call developmental music because, like an acorn, everything grows from this single idea. The motive is the equivalent of a word in written language.

The next largest structural unit is the **phrase**. It is the equivalent of a sentence and concludes with a sense of repose we call a **cadence**. Cadences may be conclusive or inconclusive depending on where they are in the piece. Phrases may be joined in a pairing we call a **period**. Generally, a period consists of an **antecedent phrase** that makes a musical statement and is followed by a **consequent phrase** that responds to it. Two related periods may be joined together to form a **double period**, the equivalent of a four-line stanza in poetry. In fact, there is much about the structure of music that reminds us of poetry and vice versa. A song may have as few as four phrases and larger pieces, such as the movement of a symphony or sonata, may have as many as the composer desires.

In larger structures like these the next structural division is called a **section** that may comprise any number of periods, double periods, or unattached phrases. A piece may have any number of sections. If it comprises two sections it is in **binary form** (A-A'). The most common **ternary form** (three sections) has an A-B-A' structure. There is no limit to the number of sections that a composer may employ. When diagramming structure we use lowercase letters for phrases and uppercase for sections. A section is the equivalent of a paragraph.

Larger pieces, such as sonatas, symphonies, and concertos usually have several **movements** that are equivalent to chapters. A movement is a separate piece of music that may or may not be thematically related to the other movements. In a cyclical piece thematic elements from the first movement reappear in succeeding movements.

MULTI-SECTIONAL INSTRUMENTAL FORMS

The structure of large musical forms is not dissimilar from that of large literary works. A novel comprises chapters, paragraphs, sentences, phrases, words, and letters. In music we have movements, sections, periods, phrases, and notes. The following discussion relates to the most common forms employed by the composers of the common practice period from 1700 to 1825. Many of these forms are still in use today. They may range in size from sixteen measures to six hundred. What is significant about the proportion is the amount of time the composer has allotted for the statement, restatement, and development of ideas. Some works may be considered expository because they present lovely melodies and harmonies but little is done to develop these materials. At the other end of the spectrum are purely developmental works that may begin with seemingly inconsequential ideas but, as time goes by, these ideas grow and develop in extraordinary ways. On larger canvases we get to see these ideas go through a variety of transformations much like what happens to the protagonist in a great drama. At the end of the play that character has been transformed in some significant way that has moved and transformed the audience as well.

Binary Form

Tonal composers have employed a wide variety of musical forms over the past four hundred years. The simplest of these is known as binary form because it contains two sections. There are equal binary forms where both halves are the same length and unequal ones in which the second part is longer than the first. The dance music of the Baroque Period is a rich source of binary forms whose A sections usually ranged from eight to twenty-four measures depending on the tempo of the piece. If the composition is in major the A section may end with a cadence on V or in the key of the dominant. If it is in minor the modulation is to the relative major. Almost without fail, there is a repeat sign and the section is played again. The second part (A1) uses melodic material very similar to the first in a more adventurous harmonic framework and ends with an authentic cadence in the tonic. This section is also repeated. A form known as rounded binary is notable because the second part features a return to the opening material in the original key (||: A :||: A1 A :||).

Ternary Form

Perhaps the most important ternary form of the 18th century was the **minuet & trio** that was essentially an A-B-A1 arrangement. A binary form minuet (A) was paired with a second, simpler minuet (B) that provided just a touch of thematic contrast in a related key. At the end of the second minuet, referred to as the trio because the texture often thinned to three musical lines, there is the indication "da capo" (to the head) that tells the musicians to return to the first minuet that they play without the repeats. In the Romantic period, beginning with Beethoven, this form got continually faster and more complex evolving into what we now think of as a true **schерzo**. In the early 18th century the term was applied to lighter works in 2/4 time. With Haydn it became a tempo

designation and later it became a replacement for the minuet. In the 19th century the same form was often used for its most popular dance, the **waltz**.

Rondo Form

There are a number of different rondo forms. What they all have in common is that they begin and end with an A section. Where they differ is the number and nature of the sections that alternate with restatements or variations of A. The simplest rondo has an ABACA structure and this may be extended to A-B-A¹-C-A²-D-A³. The arch, or bow, rondo form has the symmetrical structure of A-B-A¹-C-A²-B-A³. Occasionally, in more complex rondos where the A section may be rather long, the form was truncated by the removal of the A after the C resulting in an A-B-A¹-C-B-A² structure. In listening to, or analyzing, rondos it is interesting to see in what condition the A section returns and how closely the alternating sections are related to each other, if at all. The alternating sections are very often in related keys and occasionally a restatement of A may be in the opposite mode or it may be modified by change of register, dynamics, or instrumentation. This form was often used for the final movements in sonatas and symphonies.

Sonata Form

Sonata form, or sonata-allegro form, is the most frequently used complex form in the instrumental music of the Classic/Romantic Period. Almost every first movement of untold numbers of sonatas, symphonies, concertos, and string quartets employed this form that has a long history of evolutionary process. Sonata form is more of a design concept than a prescribed structure. Its flexibility has given rise to myriad variants. A huge number of books and articles have been written about this subject. The following discussion will give you a general sense of the problem and your further investigations of particular examples will teach you about the details. Basically, the form is a large rounded binary comprising an **exposition** that may be repeated, a **development section** that is followed by a **recapitulation**.

The exposition contains two contrasting groups of materials. Group I is presented in the tonic and is traditionally more vigorous than Group II. It is followed by a transition that modulates to the key of the second, more lyrical, group, which is either the dominant or the relative major if the piece is in minor. The exposition ends with a closing group that usually reprises motives from Group I and sounds very cadential with an insistence on the establishment of the new key. There is often a repeat sign at the end of the exposition. In the 19th century, as symphonic movements got larger and more complex, the repeat was dropped from common practice and, eventually, from scores. Beethoven's Symphony No. 9 (1824) was his first in which the repeat is absent.

The development section is essentially a fantasia on material from the exposition. There is no way of knowing in advance what material will be developed, and sometimes it is only a minor detail, not the prominent theme. It is the most harmonically unsettled section and features only temporary key references. There are no cadences here because the development is supposed to be a turbulent mix of melodic, rhythmic, and harmonic

excitement and instability, all of which lead to the climax. As the storm subsides the harmony stabilizes on a long dominant pedal that prepares us for the return to the beginning back in the tonic.

The recapitulation is a modified restatement of the exposition. Traditionally, it connects Group I and Group II with a transition that pretends to modulate but returns to the tonic. Thus, all three groups (including the closing group) are in the home key. This section can be the most intriguing for the analyst because the modifications to the exposition may be very subtle. Very often, the listener is not aware that something has been added or deleted, or re-orchestrated, or shifted to another octave, or had its harmony altered. While the development section is just that—the obvious juggling of primary motives—the “recap” is the place of compositional magic where the composer practices a “sleight of ear,” leading us to believe that this is a da capo repeat, which it is not.

Frequently, the momentum at the end of the recapitulation is too great to allow the composer to conclude there so a **coda** is added. This section was originally quite brief and practiced a kind of deception. Its use of primary materials leads us to believe that this will be a second exposition but turns out to be an abbreviated version of Group I and brings the piece to a complete stop. Codas were never the same after Beethoven’s Symphony No. 5 in which the coda of the first movement, which turns out to be another development section, is larger than the exposition and is followed by its own codetta (little coda).

Theme and Variations

The concept behind theme and variations is quite simple although nothing is simple when it comes to the creativity of great composers. The form begins with the theme, often in simple binary form, followed by a series of variations that may, or may not, be the same length as the theme. At the end there may be a reprise of the theme or not. There is no prescribed number of variations that may be employed. There may be as few as three or as many as thirty-two. This form gives the composer the opportunity to apply extreme inventiveness to a single musical idea. The character of the variations may cover a wide spectrum of emotional states from slow and contemplative to ecstatic virtuosity. The basic jazz form of head-solos-head is a descendent of this practice. A composition that employs the theme and variations structure could stand alone or be part of a larger multi-movement work.

In this form, the theme does not have to be original. Countless composers have taken someone else’s theme, or a folk song, and played around with it. The operative concept in the execution of this form and, indeed, all musical activities is the word “play.” We play the piano or we play around with musical ideas. The playfulness that is so much a part of childhood is, thankfully, still alive and well in the spirits of adult composers and performers. The perfect depiction of this playfulness occurs in the film *Amadeus* in the scene where Mozart listens to the uninspired little piece that Salieri wrote for the Emperor to perform and then proceeds to sit at the piano and transform the dull ditty into a delightful bonbon.

THE BASICS OF MUSIC HISTORY

One of the things that makes homo sapiens special is their love of music. It seems that almost all of us like to listen to music and many of us like to perform it. Some performers are extremely talented and pick it up right away, even at a very young age. At the other end of the bell curve are those with no talent at all who should remain comfortably seated in the audience.

Humans have been making music for thousands of years. During that time there have been numerous attempts to write it down. The problem is that with all those impressive systems we have no way to translate them into sound. What we know as modern notation started in the Middle Ages when the Catholic Church wanted uniformity of practice throughout their vast realm. The earliest written examples date from around 850 AD and are called neumes. They are a system designed to assist performers with their musical memory. It only showed the shape of the melody, not the exact notes, so you had to know the piece beforehand.

In the early 11th century a Benedictine monk by the name of Guido d'Arezzo invented the four line staff, the forerunner of the five-liner we use today. He also gave us the solmization of *ut, re, mi, fa, sol, la, si* to help us learn to sing from notation.

To have effective music notation we need a system of pitches and rhythms, and that took a long time to develop into what we use today. The composers of the Parisian Notre Dame School of the late 12th and early 13th centuries had a reasonably effective system in use for their *organum*, or polyphonic masses and motets. By now you will notice that a great deal of musical innovation took place inside church walls. That is because the church employed a large number of talented musicians to serve their religious purposes. The best musicians usually worked for those who could pay them—the nobility and the church. Good music tends to be expensive. You pay for talent, training, and practice.

A great deal of the music that was created over the past thousand years has been lost to mayhem, fire, and flood, but we do have an increasingly impressive body of work that allows us to study the amazing development of music technology in the Western classical experience. From the monophonic chants of the early church and popular minstrels to the complexities of contemporary symphony and opera, the never-ending push forward in music composition gave us much to study in utter delight.

On the following page you will see a summary of those developments as well as a list of a small number of its outstanding proponents from each age. Amazingly, the shifts in style occurred with great regularity. Each period of music lasted about 150 years and began with a half century in which a small number of people experimented with new compositional practices that overthrew their predecessors' styles and genres. It ended with a half century of music so rich and complicated it needed to be replaced. At the same time instrument makers were continually improving the performance capabilities of known winds, strings, and percussion while they invented new ones with even greater possibilities.

Since the first printed music in 1476 we have so much written and recorded music that it would take ten lifetimes to familiarize oneself with its most outstanding examples. The world of music is incredibly complex and involves myriad individuals each of whom contributes something to its life and history. Just consider how many professions relate to music? Maybe everything?

WESTERN CLASSICAL MUSIC HISTORY

(Almost everything you need to know on one page)

Medieval (to 1450)

Perotin	Leonin	Polyphony / Organum, counterpoint
Guillaume de Machaut	John Dunstable	Gregorian Chant, notation, Greek modes
Hildegard von Bingen	Guillaume Dufay	Isorhythm, motet, mass, troubadours

Renaissance (1450-1600)

Josquin des Prez	Orlando di Lasso	Modal, imitative counterpoint, chorale
Johannes Ockeghem	William Byrd	Cantus firmus, printed music,
Jacob Obrecht	Heinrich Isaac	Consort, polychoral, antiphonal
Giovanni da Palestrina	Giovanni Gabrieli	Mass, madrigal, vocal style, lute
John Dowland	Tomas Luis de Victoria	Tone painting, homorhythmic

Baroque (1600-1750)

Claudio Monteverdi	Henry Purcell	Major / minor, homophony, triads, equal tuning
Francois Couperin	Heinrich Schutz	Continuo / Figured bass, fugue, organ, violin
Arcangelo Corelli	Antonio Vivaldi	Opera, oratorio, cantata, aria, harpsichord
Girolamo Frescobaldi	Domenico Scarlatti	Concerto, overture, dance suite, trumpet
Johann Sebastian Bach	George Frederic Handel	Instrumental style, virtuosity, castrati, commerce

Classic / Romantic (1750-1900)

Wolfgang Amadeus Mozart	Franz Joseph Haydn	Symphony, sonata, art song, rondo
Ludwig van Beethoven	Franz Schubert	String quartet, minuet & trio, piano, nature
Franz Liszt	Frederic Chopin	Symphonic poem, etude, prelude, singspiel
Robert Schumann	Johannes Brahms	Fantasia, waltz, cyclical symphony
Hector Berlioz	Gioacchino Rossini	Nationalism, popularism, Boehm system
Peter Ilyich Tchaikovsky	Giacomo Puccini	Chromaticism, NHT dominance, free lancer
Felix Mendelssohn	Gustav Mahler	Sonata-allegro form, clarinet, ballet,
Richard Strauss	Alexander Scriabin	Miniature / monumental, saxophone
Giuseppe Verdi	Richard Wagner	Exoticism, mysticism, verismo, women in music
		Leitmotiv, continuous music

Modern (1900-2050)

Claude Debussy	Maurice Ravel	New and old scales, ametricality
Igor Stravinsky	Arnold Schoenberg	Nonfunctional harmony, polytonality
Alban Berg	Anton von Webern	Atonality, primitivism, mixed meter
Bela Bartok	Gyorgy Ligeti	Electronic instruments, Theremin
Charles Ives	John Cage	Chance theory, Concrete music
Aaron Copland	George Gershwin	Jazz, syncopation, polymeter
Bruno Maderna	Luciano Berio	Pan-nationalism, Experimentalism
Dmitri Shostakovitch	Sergei Prokofiev	Neoclassicism, improvisation
Benjamin Britten	Gustav Holst	Vertical sonorities
Arvo Part	Steve Reich	Minimalism
George Crumb	Elliot Carter	Serialization, 12-tone system
Karlheinz Stockhausen	Pierre Boulez	Multi-media, Computer, Synthesizer
Edgar Varese	Ruth Crawford	Post-romanticism
John Corigliano	David Del Tredici	Fusion
Harry Partch	Olivier Messiaen	
Jean Sibelius	Leonard Bernstein	
Morton Feldman	Earl Kim	
Toru Takemitsu	Witold Lutoslawski	
John Adams	Leon Kirchner	

SOME DATES TO REMEMBER

- 14 Death of Augustus Caesar founder of the Roman Empire.
- 1066 Battle of Hastings and beginning of Norman Conquest of England.
- 1215 King John agrees to Magna Carta. Ghengis Khan captures Beijing. Kublai Khan born.
- 1227 Death of Genghis Khan founder of Mongol Empire.
- 1455 Gutenberg Bible is first book printed using movable type. Wars of the Roses begins.
- 1492 Jews and Arabs expelled from Spain. Columbus uses their money to buy three ships.
- 1601 Possible first performance of "Shakespeare's" Hamlet.
- 1636 Founding of Harvard, America's oldest college. Oxford University Press established.
- 1750 Death of JS Bach and unofficial end of the Baroque Period.
- 1776 Declaration of Independence a year after the battles of Lexington and Concord.
- 1789 French Revolution and fall of the Bastille. Washington becomes president.
- 1791 Death of Mozart. Haydn gets doctoral degree from Oxford.
- 1827 Death of Beethoven. Death of William Blake. Baltimore & Ohio Railroad.
- 1847 The Free Academy established by Townsend Harris. Later becomes CCNY.
- 1849 Death of Chopin. Birth of Crazy Horse and Emma Lazarus.
- 1859 Wagner's Tristan und Isolde signals eventual end of tonality, first zoo in Philadelphia.
- 1861 South Carolina attacks Fort Sumter and American Civil War begins.
- 1883 Death of Wagner. First vaudeville opens in Boston. Brooklyn Bridge opens.
- 1909 Diaghilev brings the Ballets Russes to Paris. Indianapolis Speedway opens.
- 1913 *Le Sacre du printemps* (The Rite of Spring) premieres in Paris with a scandal.
- 1914 Beginning of World War I. ASCAP founded. First Mother's Day.
- 1918 End of World War I. Spanish Influenza infects 500 million people.
- 1929 Stock Market Crash. End of Jazz Age and beginning of the Great Depression.
- 1939 New York World's Fair. Beginning of World War II. Germany invades Poland.
- 1941 December 5. Jablonsky is born and two days later the Japanese attack Pearl Harbor.
- 1945 End of World War II. Red Army liberates Auschwitz. Death of FDR. Atomic bomb.
- 1969 Man lands on the moon. The Beatle's last album *Abbey Road*. First Boeing 747.
- 2001 World Trade Center demolished. W's Iraq invasion destabilizes Middle East in 2003.
- 2016 The Electoral College chooses a Russian agent as president, Brexit, Obama visits Cuba.

NEW YORK CITY TIMELINE

Before white people showed up the area was populated by members of the Lenape Tribe who spoke an Algonquian language.

1524. Explorer Giovanni da Verrazano, sailed a French ship into New York harbor where a bridge with his name on it now stands.

1609. Henry Hudson, an English sea captain working for the Dutch East India Company, sailed the Half Moon on the first day line cruise up the Hudson River. He was looking for a passage to India but found a lot of beavers instead.

1624. The first Dutch settlement, New Amsterdam, was established to handle the fur trade. Using slave labor from Africa they built a wall to protect the city from the natives and the English. Haarlem and Brooklyn were named after towns in Holland.

1639. Jonas Bronck sails to the New World.

1664. The British army conquered the colony of New Netherland, which was then re-named New York, in honor of the Duke of York. As a result, CCNY students must speak, read, and write the impossible English language rather than Dutch.

1754. Kings College is founded (later Columbia University).

1765. New York City hosted the first Colonial Congress, a conference called to discuss and resist the King of England's Stamp Act.

1776. After a century of British colonial rule, New York declared its independence on July 9, becoming one of the original 13 states of the Federal Union. Can you name the other twelve? The Revolutionary War began and the city served as British military headquarters. Countless patriots died in the prison ships moored near Brooklyn.

1783. On November 25 the last British troops evacuated New York City as General George Washington triumphantly entered the city.

1785–1790. New York City became the first capital of the United States. In 1789, George Washington took the oath as the first US President at Federal Hall on Wall Street. It remained the nation's capital until 1790 when it moved to Philadelphia.

1802. Alexander Hamilton builds his Grange in upper Manhattan. Killed in 1804.

1824. Castle Garden (Clinton) opens at the Battery. Lafayette Victory Parade.

1827. New York outlawed slavery. As a terminal of the Underground Railroad, New York had more anti-slavery organizations than any other state. Until the end of the Civil War in 1865, thousands of people passed through New York as they traveled to freedom in Canada.

1846. Edgar Allen Poe and his wife move to Fordham Village.

1847. The Free Academy is founded by Townsend Harris (later CCNY).

1854. Jenny Jerome, Winston Churchill's mother, is born in Cobble Hill, Brooklyn.

1858. Frederick Law Olmstead's Central Park design comes to fruition.

1861-1865. The State of New York supplied almost one-sixth of all Union forces during the Civil War.

1872. The Metropolitan Museum of Art opens at 681 Fifth Avenue.

1880. Coney Island becomes largest amusement area in US. Lillian Russell debut.

1883. The Brooklyn Bridge, an engineering marvel, connected Long Island with Manhattan. Designed by John Augustus Roebling it took 14 years to build.

1886. The Statue of Liberty, a centennial gift from the people of France, was dedicated on October 28 in New York Harbor.

1892. Washington Square Arch commemorates Washington's inauguration.

1892-1954. More than 12 million immigrants are processed at Ellis Island. Their contributions made this country great. We are a nation of immigrants.

1899. The Bronx Zoo opens with 843 animals. Spanish-American War Treaty of Paris ratified.

1902. Our first skyscraper, the 21-story Flatiron building at 23rd Street and Fifth Avenue, was built.

1904. New York City's first subway line, called the IRT, opened. Construction begins on CCNY's new campus in Manhattanville with stone from the subway.

1909. The Grand Concourse opens to traffic. Manhattan Bridge opens.

1913. The Armory Show introduces America to modern art.

1914. The Frick Mansion is constructed on 5th Avenue. ASCAP founded.

1914-1918. World War I. America joins in 1917 bringing jazz to Europe.

1922. WNBC signs on the air as WEAJ Radio.

1923. Yankee Stadium opens in the Bronx. Time magazine first issue.

1927. The Holland Tunnel opens and is named for its chief engineer. Jerome Kern's musical *Show Boat* opens on Broadway.

1929. Abby Aldrich Rockefeller and friends open the Museum of Modern Art nine days after the Stock Market Crash on Wall Street.

1931. The Empire State Building and the Chrysler Building are added to the skyline. The George Washington Bridge connects Manhattan to the mainland.

1933. Rockefeller Center's first Art Deco building opens.

1934. Fiorello LaGuardia becomes mayor for three terms.

1936. Robert Moses builds Tri-borough Bridge. Max Schmeling defeats Joe Louis.

1939. The World's Fair opened in New York City, corresponding to the 150th anniversary of George Washington's inauguration as first President of the US.

1941-1945. The 70,000 workers at the Brooklyn Navy yard make a major contribution to the war effort.

1952. The United Nations headquarters opens. Today Show. Lever House.

1957. *West Side Story* opens on Broadway. Brooklyn Dodgers move to LA.

1958. The New York Giants move to San Francisco. Bobby Fischer grandmaster at 15.

1962. The NY Mets play their first season in the Polo Grounds.

1963. Demolition of Pennsylvania Station begins. JFK assassination.

1964. The World's Fair opened. Its symbol still stands in Flushing Meadows Park next to the BJK Tennis Center.

1969. Stonewall riots begin Gay Liberation movement.

1982. The musical *Cats* opened on Broadway. For reasons no one can explain, it ran for 20 years. Death of Thelonious Monk.

1988. The musical *Phantom of the Opera*, the longest running show on Broadway, opened.

2001. Three World Trade Center buildings are demolished under circumstances that are still open to debate. America prepares for another fool's errand.

2011. On June 24, New York became the sixth state in the nation to legalize same-sex marriage. Love and justice triumph!

2017. New Yorker Donald J. Trump moves to Washington D.C.

MUSIC TIMELINE IN THE BIG APPLE

1728. John Gay's *The Beggar's Opera* debuts in London. It is still popular today.
1833. Lorenzo Da Ponte opens his Italian Opera House.
1842. New York Philharmonic is formed.
1843. Hutchinson Family Singers NYC debut. Virginia Minstrels at Bowery Amphitheatre
1847. The Astor Opera House opens with Verdi's *Ernani*.
1854. The Academy of Music opens on 14th Street.
1881. First vaudeville at 14th Street Theater.
1882. Boris Tomashefsky starts Yiddish Theater.
1883. Metropolitan Opera House opens on 39th Street and Broadway.
1885. Tin Pan Alley opens on 28th Street between Fifth and Sixth Avenues.
1887. Rubin Goldmark attends CCNY.
1888. Edward MacDowell performs his *First Piano Concerto*.
1891. Carnegie Hall opens with concert conducted by Tchaikovsky.
1892. Dvorak becomes director of the National Conservatory of Music on 17th Street.
1893. Henry Thacker Burleigh copies parts for Dvorak's *New World Symphony*.
1905. The Juilliard School becomes the city's leading conservatory.
1907. Giacomo Puccini visits NYC for Met performances of *Manon* and *Butterfly*.
1908. Mahler debut at the Metropolitan Opera. BAM gets new building.
1915. Edgar Varese moves to NYC.
1917. Aaron Copland studies with Rubin Goldmark.
1920. Charles Tomlinson Griffes dies of Spanish Influenza.
1922. Charles Ives publishes his *114 Songs*.
1924. Gershwin's *Rhapsody in Blue* is premiered at Aeolian Hall on 42nd Street.
1926. Composer Marion Bauer begins teaching at NYU.
1930. National Orchestral Association is founded by conductor Leon Barzin.
1932. Radio City Music Hall opens.

1934. Apollo Theater opens to blacks on 125th Street (built 1914).
1935. Village Vanguard opened by Max Gordon in Greenwich Village.
1938. Benny Goodman performs at Carnegie Hall.
1949. Birdland opens on Broadway and 52nd Street.
1951. Christian Wolff gives *I Ching* to John Cage.
1955. Gunther Schuller and John Lewis found Modern Jazz Society.
1957. Leonard Bernstein's *West Side Story* hits Broadway.
1960. Joan Baez has concert debut at 92nd Street Y.
1962. Philharmonic Hall, the first of the Lincoln Center venues, opens.
1964. Simon & Garfunkel, "The Sound of Silence." The Beatles arrive for Ed Sullivan show.
1966. Metropolitan Opera moves from 39th Street to new home in Lincoln Center.
1967. Ravi Shankar is visiting professor at CCNY. Philip Glass returns from Paris.
1968. Luciano Berio's *Sinfonia* premiered by NY Philharmonic.
1969. Igor Stravinsky moves to the Essex House from Los Angeles.
1970. Steve Reich's *Four Organs* introduces phase music.
1971. Igor Stravinsky dies at Essex House.
1958. Bernstein begins Young People's Concerts at NYP.
1973. Boulez begins Rug Concerts at NYP.
1975. James Levine becomes music director of the Met Opera.
1978. Zubin Mehta becomes music director of NYP.
1980. John Lennon assassinated outside The Dakota on 72nd Street.
1981. Laurie Anderson's "O Superman" is surprise hit.
1985. John Zorn's *The Big Gundown*.
1991. John Corigliano's *The Ghosts of Versailles* at the Met.
2004. Jazz at Lincoln Center opens.
2005. Meredith Monk celebrates 45th birthday at Carnegie Hall.
2008. Elliot Carter celebrates 100th birthday at Carnegie Hall.
2009. Alan Gilbert is first New Yorker to be NYP music director. Resigns 2017

A GEOCENTRIC VIEW FROM CCNY

- Our neighborhood: Manhattanville (our first famous resident was Alexander Hamilton). Ha(a)rlem is the flat land to the east of us.
- Our county: New York (Manhattan Island)
- Our City: New York City (includes The Bronx, Queens, Brooklyn [Kings County] and Staten Island [Richmond County])
- Our State: New York State (Albany is the capitol of The Empire State)
- Our nearest neighbors: New Jersey (The Garden State) to the south and Connecticut (The Nutmeg State) to the north (New England)
- New York is one of the original thirteen colonies:
 - New Hampshire
 - Massachusetts
 - Rhode Island
 - Connecticut
 - New York
 - New Jersey
 - Pennsylvania
 - Delaware
 - Maryland
 - Virginia
 - North Carolina
 - South Carolina
 - Georgia
- The mid-west begins with Ohio.
- Eventually you come to the Mississippi River and that's where the west begins.
- When you get to either California, Oregon or Washington stand on the beach and watch the sun set into the Pacific.
- Texas used to be part of Mexico. Then it became the largest state until somebody decided to add Alaska to the famous forty-eight. And since they added such a frigid state they had to counterbalance it with a new warm state, which was Hawaii.
- Oklahoma is a Broadway show by Rodgers and Hammerstein and also a state.
- There are 50 states and most of them seem to either have English, Spanish, or Native American names (what are the others?).
- New York City may be considered the capitol of the world since so many people want to come here and attend CCNY. It was originally a Dutch colony (Amsterdam Avenue), then the English stole it, and now it belongs to the world.
- There was a convent on Convent Avenue. Now it is in Westchester.





Locate these capital cities:

- | | | |
|-----------|------------|--------------|
| London | Dublin | Moscow |
| Vienna | Rome | Vatican City |
| Paris | Bern | Zagreb |
| Bucharest | Amsterdam | Sarajevo |
| Madrid | Helsinki | Vilnius |
| Berlin | Stockholm | Sofia |
| Warsaw | Copenhagen | Riga |
| Budapest | Kiev | Oslo |
| Ankara | Athens | Reykjavik |
| Brussels | Prague | Lisbon |



VOYAGER 1977-2017

September 5, 2017 was the 40th anniversary of the launching of Voyager 1, a spacecraft designed to explore the outer planets of our solar system and then continue its journey to deep space. Voyager 2 was launched a short time later and it too has a similar mission. Amazingly both travelers are still sending data back to Earth. Voyager 1 is currently 13 billion miles from Earth and traveling in interstellar space where no man-made object has ever gone. It is traveling at 38,000 mph and, some day in the distant future, may be intercepted by another life form from another galaxy. With that idea in mind, astronomer Carl Sagan and his compatriots developed a record, printed on gold-plated copper, that includes the sounds of our planet. It includes images, sounds of nature, greetings in many languages, and music. The list of that music may be found on the next page.

What you see above is a lithograph of the iconic record cover. The diagrams you see explain how to play the recording. The upper left is a drawing of the record and instructions written in binary arithmetic around it for the correct time of rotation—3.6 seconds. The four diagrams in the upper-right show how to decode the video portion of the recording; the top drawing is what the waveform of the video signal should look like. The bottom right pictures a hydrogen atom in its two lowest states—the transition time between them functions as a clock reference for the other diagrams. The lower right is a pulsar map showing the location of our solar system.

For more complete information about the mission follow this link to their website:

<https://voyager.jpl.nasa.gov>

VOYAGER RECORD CONTENTS (1977)

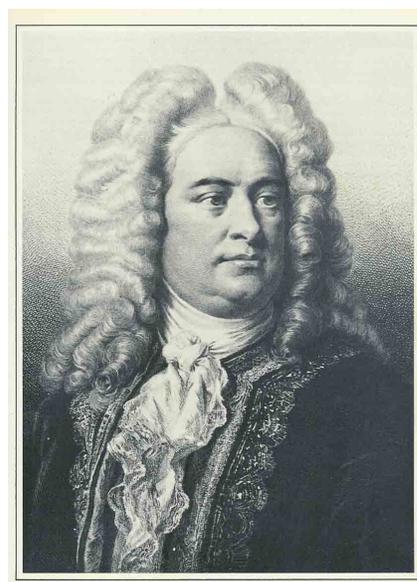
»	Bach , Brandenburg Concerto No. 2 in F. First Movement, Munich Bach Orchestra, Karl Richter, conductor. 4:40
»	Java, court gamelan, "Kinds of Flowers," recorded by Robert Brown. 4:43
»	Senegal, percussion, recorded by Charles Duvelle. 2:08
»	Zaire, Pygmy girls' initiation song, recorded by Colin Turnbull. 0:56
»	Australia, Aborigine songs, "Morning Star" and "Devil Bird," recorded by Sandra LeBrun Holmes. 1:26
»	Mexico, "El Cascabel," performed by Lorenzo Barcelata and the Mariachi México. 3:14
»	" Johnny B. Goode ," written and performed by Chuck Berry . 2:38
»	New Guinea, men's house song, recorded by Robert MacLennan. 1:20
»	Japan, shakuhachi, "Tsuru No Sugomori" ("Crane's Nest,") performed by Goro Yamaguchi. 4:51
»	Bach , "Gavotte en rondeaux" from the Partita No. 3 in E major for Violin, performed by Arthur Grumiaux. 2:55
»	Mozart , The Magic Flute, Queen of the Night aria, no. 14. Edda Moser, soprano. Bavarian State Opera, Munich, Wolfgang Sawallisch, conductor. 2:55
»	Georgian S.S.R., chorus, "Tchakrulo," collected by Radio Moscow. 2:18
»	Peru, panpipes and drum, collected by Casa de la Cultura, Lima. 0:52
»	" Melancholy Blues ," performed by Louis Armstrong and his Hot Seven . 3:05
»	Azerbaijan S.S.R., bagpipes, recorded by Radio Moscow. 2:30
»	Stravinsky , Rite of Spring, Sacrificial Dance, Columbia Symphony Orchestra, Igor Stravinsky, conductor. 4:35
»	Bach , The Well-Tempered Clavier, Book 2, Prelude and Fugue in C, No.1. Glenn Gould, piano. 4:48
»	Beethoven , Fifth Symphony, First Movement, the Philharmonia Orchestra, Otto Klemperer, conductor. 7:20
»	Bulgaria, "Izlel je Delyo Hagdutin," sung by Valya Balkanska. 4:59
»	Navajo Indians, Night Chant , recorded by Willard Rhodes . 0:57
»	Holborne , Paueans, Galliards, Almains and Other Short Aeirs, "The Fairie Round," performed by David Munrow and the Early Music Consort of London. 1:17
»	Solomon Islands, panpipes, collected by the Solomon Islands Broadcasting Service. 1:12
»	Peru, wedding song, recorded by John Cohen. 0:38
»	China, ch'in, "Flowing Streams," performed by Kuan P'ing-hu. 7:37
»	India, raga, "Jaat Kahan Ho," sung by Surshri Kesar Bai Kerkar. 3:30
»	" Dark Was the Night ," written and performed by Blind Willie Johnson . 3:15
»	Beethoven , String Quartet No. 13 in B flat, Opus 130, Cavatina, performed by Budapest String Quartet. 6:37

THE TALE OF TWO GEORGS

How cruel is the history of music? I was driving to school one day, when, on my XM radio, I heard a lovely Baroque suite by one Georg Caspar Schurmann. I was, once again, delightfully surprised at encountering a fine composer about whom I knew absolutely nothing. What I heard was music that certainly rivaled that of Handel in quality and style, so I made sure to look this fellow up when I got home. As soon as dinner was over, I pulled out my *Baker's Biographical Dictionary of Musicians* and found that the editor rates him as "eminent," which puts him one rung below "great." At CCNY that evaluation would give him an A minus, memorable at the very least. So then I checked out iTunes and found one overture by him available for purchase. My next stop was YouTube where only one of his compositions is available. It turned out to be the same piece I had heard earlier in the day on the radio, and it's a damn good piece.

So, what does all this tell me about the ravages of time? Well, there must be scores of fellows out there in the dark recesses of history who were deemed masters in their day and have failed to make the big time centuries later. Hey, this guy lived and worked in one of the best courts in Europe almost his whole life, and he lived to 79, and now he only gets 3 inches in *Baker's*? I must conclude that the music business is, indeed, very cruel to the highly talented because they failed to be supremely talented. Talk about elitism! I have spent my fifty years as a professor of music focused on an infinitesimally small percentage of music history's cast of characters. For every Handel there must be ten Schurmanns who I may never meet in this lifetime, so I must be grateful that I got to spend at least one day with Caspar before I toss him aside and get back that other Georg who is firmly ensconced in the Hall of Fame.

So how do we measure a composer's worth? Handel gets 86 inches in *Baker's* and Schurmann gets 3. Is Handel 28 times more noteworthy than Schurmann? Listen to the music; I will let you be the judge.



BACH'S GOLDBERG VARIATIONS

A number of years ago, when I was chair of the department, there was some extra cash in the departmental till so I asked my faculty if there were some DVDs they would like to order for use the following semester. Among the suggestions was a film by Bruno Monsaingeon entitled *Hereafter*, a biography of Glenn Gould. I ordered the film, and when it arrived I watched it intrigued by the strangeness and brilliance of the Canadian pianist's life. Much of the film was spent on his first recording, the *Goldberg Variations* of Johann Sebastian Bach.

The power of the film stayed with me into the next day, so I decided to put my CD of the *Variations* in the player in my car so I could refresh my memory of this Baroque keyboard monument. I played it as I travelled down the Merritt Parkway and onto the Hutch. All was well and good until Glenn got to the 25th variation. It was then that my life was knocked slightly out of the orbit it had been travelling. My ears were telling me that some heavy harmonic stuff was going down and I struggled to grasp what was unfolding. The dark narrative of this piece takes twists and turns that challenge the attuned listener to stay with the tonality. As the variation neared the end I had the impression that this little piece of magic seemed to be just one step away from Wagner's *Tristan* and two short steps away from early Schoenberg. The problem is that Bach was writing in 1742, *Tristan* was 1859, and *Verklaerte Nacht* was 1899. How could one step be 117 years, and two steps be 157 years? The only explanation I could come up with was that Bach was composing this variation somewhat out of the time/space continuum, in some timeless place where all geniuses occasionally find themselves in pursuit of universal truth and beauty.

I am reporting all this to you so that you will understand how the tranquility of my first week of that summer vacation had been unsettled by the myriad compositional problems that had been thrust upon me as a musician who cannot resist the temptation to analyze a piece that intrigues me. How could any obsessive theorist rest easily when there are questions to be answered, and so many knots to be unraveled? Bach must have known that, from time to time, even 268 years later, a musician coming upon this cultural artifact would be challenged to unlock its mysteries. I spent two hours that morning doing some preliminary analysis and I could see that this piece was like a musical Venus flytrap. Its savory flavors enticed me to enter but I knew there would be no exit. I was sorely tempted to get to the bottom of the matter, but having gone down two layers already I was not sure there was a bottom, or, if there was a bottom I was not worthy of diving that deep.

As lunchtime approached I was forced to leave my study and disconnect from Mr. Gould and his Goldberg madness. The question remained: when would I return to continue this excavation? After lunch I could do any number of fun things in a warm summer afternoon, or I could return to my desk and continue digging with the eventual possibility of writing an article in which I share my amazing discoveries with a few friends and colleagues. There was a remote possibility the article might even be published and be read from start to finish by as many as five theorists spread across the globe. I knew one thing: the more time I spent with this piece the more I would come to realize how wide is the gulf between Johann Sebastian Bach and all the rest of us poor wretches.

WOMEN IN MUSIC

I think we can accept the fact that women are just as talented as men in all human endeavors. So why then are there so few women composers in the European/American canon of classical music? At the heart of the problem is the deep-seated male chauvinism that pervades our culture up to the present. We, the residents of the early 21st century, are finally coming to grips with questions of inequality and injustice that have plagued our society for centuries. Whether we overcome the sexism and racism that stains our communal soul remains to be seen. There was a time when women were expected to be wives and mothers, not doctors and lawyers. Despite the limited expectation system, a few did rise to prominence as performers and composers.

Throughout music history there have been countless very talented lady performers and composers. The performers have had a better time of things. The major impediment to the advancement of the female composers was the fact that major musical organizations such as orchestras and opera companies have, almost without exception, been exclusively male dominated until the second half of the 20th century. Today, when you go to see the New York Philharmonic perform, you will observe a sizable number of women, especially in the string and woodwind sections. Of the 95 members of the orchestra 44 are women (46%), which is almost as close as you can come to 50%. Currently there are a few seats empty so the tide may turn with the next set of auditions. A half century ago this would have not been the case. Great strides have been made in the past forty years both here and abroad.

In the early 20th century and before, with few exceptions, women composers mostly wrote chamber music that would usually be performed by themselves and their friends or family. It made almost no sense to write too many symphonies or operas because the chance of them being played was often slim to none. There were no women music directors of major musical organizations until recent memory and, in most cases, men in positions of power were not sufficiently enlightened to champion women. In America women did not vote until 1920. Really!

Let us pause here to reflect on a few of the outstanding women composers of the past. A good place to start is with the amazing Hildegard von Bingen, the 12th century abbess and mystic. Maddalena Casulana stands out in the Renaissance. In the Baroque Era we can point to Leonora Duarte, Barbara Strozzi, Isabela Leonarda, Elisabeth Jacquet de la Guerre, and Francesca Caccini. They are followed in the Classical Period by the likes of Marianna Martines. The numbers swell in the 19th century with such luminaries beginning with Fanny Mendelssohn and Clara Schumann. Other Romantics worthy of note are Maria Szymanowska, Amy Beach, Ethel Smyth, Louise Farranc, Cecile Chaminade, Teresa Carreño, Augusta Holmes, and Agathe Backer-Grøndahl.

In the early 20th century we start with the prodigious Lili Boulanger who was so very talented and died way too young. Joining her are Florence Price, Germaine Tailleferre, Rebecca Clark, Grazyna Bacewicz, and Ruth Crawford Seeger. Whether any of the women I have listed so far rise to the pantheon occupied by the likes of Bach, Mozart, Wagner, and Stravinsky is not for me to say. I do expect, as time goes along, that from the crop of contemporary talents (too many to list here) a few may reach the level of the sublime, although going up against heavyweights like Chopin or Debussy is a tall order for any composer. Even among male composers the number of true magicians is amazingly small, so, statistically, what can we expect from the women?

EXTRAORDINARY WOMEN IN MUSIC

Henrietta Yurchenco (1916-2007) was a woman I was privileged to know. We were colleagues at The City College of New York. She was one of those short, dynamic women who have helped run the planet. Her energy and enthusiasm was always infectious as she sailed through 91 buoyant years of life. She bristled with new ideas and was either coming or going to some other place on the globe to save their music from extinction. She was an ethnomusicologist who studied the cultures of Mexico, Guatemala, Morocco, and the United States. Tales of her leading mules laden with recording equipment through hazardous mountains in search of indigenous people abound. She was funny, musical, and loyal. Starting in the 1930s she had a folk music show on WNYC radio and helped introduce the likes of Pete Seeger, Woody Guthrie, Oscar Brand, and Bob Dylan to an American audience that knew almost nothing about its musical roots. She was a staunch supporter of peace, justice, and equality. She was one of a kind.

Lorraine Gordon (1922-2018) died just a few days ago. She was 95 and was married for forty years to the founder and owner of the Village Vanguard. When he died in 1989 she took over the management one of the premier jazz clubs in the city and ran it until her passing. She fell in love with jazz by listening to it on WNYC back in the 1930s when everyone was glued to the radio because there was no TV. Her first husband was the founder of Blue Note Records that specialized in jazz. She worked for his company during and after World War II. After she and Alfred Lion divorced she met Max Gordon trying to sell him on an unknown pianist, Thelonious Monk. They married and worked together promoting the likes of John Coltrane, Bill Evans, Sonny Rollins, and Wynton Marsalis in a club that counted 123 seats. The club celebrated its 80th anniversary in 2015. More than 100 jazz albums were recorded there during that time. In 2012 Lorraine was given the Jazz Masters Award from the National Endowment for the Arts.

Deborah Borda is in her second year as the president and CEO of the New York Philharmonic. She was hired to guide the orchestra through what promises to be several turbulent years in which Geffen Hall will be totally renovated and the orchestra will be forced to play elsewhere. Unlike the two previous women she is very much alive and kicking. Back in the 20th century she spent eight seasons as executive director of the orchestra so she is no stranger in these parts. Prior to her present gig she was, for seventeen years, president and CEO of the Los Angeles Philharmonic and oversaw their installation in their new home, Walt Disney Concert Hall, and the addition of a new shell for the Hollywood Bowl. She has been a music administrator her entire career including stints with the Detroit Symphony Orchestra, San Francisco Symphony, and the Saint Paul Chamber Orchestra. She is a graduate of Bennington College and the Royal College of Music. The NYP is in good hands.



Henrietta Yurchenko



Lorraine Gordon



Deborah Borda

LORENZO DA PONTE

In the annals of music history few characters are as fantastical as Lorenzo Da Ponte. His story would seem like fiction if it were not entirely true. His adventure began in the Republic of Venice in 1749 and ended right here in the Big Apple in 1838. He began life as Emanuele Conegliano, the eldest son of a Jewish father who, as a widower, converted the family to Catholicism so he could marry a woman of that faith. As was the custom at the time, he changed the family name to that of the bishop who baptized him.

With help from the bishop, the three sons were able to study at the local seminary. In 1770 Lorenzo took minor orders and became a professor of literature. Three years later he was ordained as a priest., a career for which he was not well suited. He moved to Venice where he served the church but took a mistress and had two children with her. When he was finally charged and brought to trial the salacious details of his debauchery caused him to be banished from Venice for 15 years.

With help from a friend he got a letter of introduction to Antonio Salieri who was court composer to the Emperor of the Austro-Hungarian Empire. Salieri got him a job as court poet and librettist that gave him the opportunity to work with Salieri and Mozart on Italian operas in Vienna. His most famous contributions were to *The Marriage of Figaro* (1786), *Don Giovanni* (1787), and *Così fan tutte* (1790).

When the emperor died in 1790 Da Ponte lost his job. His intention was to travel to Paris but news of the arrest of the king and queen forced him and his mistress to change course to London. He stayed in the English capital doing a variety of unsuccessful jobs and was forced to flee bankruptcy in 1805.

He arrived in New York City with his companion and their four children whom he supported by running a grocery store and giving Italian lessons. Another friend job him the unpaid job as the first professor of Italian literature at Columbia College. His interest in music never abated and he produced the first performance of *Don Giovanni* in America in 1825. Three years later he became a naturalized citizen.

In 1833 he founded an opera house and company but his lack of business acumen caused it to fail in only two seasons. He died in 1838. Despite the large funeral that was held in his honor, no one knows where he is buried. One of history's greatest librettists lies buried somewhere not far from here.



A MATTER OF STYLE

In the annals of music history some pieces are popular for a brief period of time and then fade into obscurity, never to be heard again. At the other end of the spectrum there are pieces of such high quality that they stay on playlists for centuries. That may well be the definition of a classic. **Johann Sebastian Bach** was a composer and performer whose music was so exquisite that musicians today still enjoy playing the notes he penned back in the early 18th century, or delight in arranging his music in their own style and manner. Here is a short list of YouTube videos of Bach's "Air on a G String" from his *Orchestral Suite No. 3* that gives you an idea of the breadth of musical expression. Making music is a joyful experience. Listening to great music can often be palliative or transformational.

Original Instruments (nonet)

The Classical Jazz Quartet Plays Bach Air

A. Siloti (piano)

Anne Akiko Meyers (violin and piano)

BBC Proms 2010 (string orchestra)

Per-Olov Kindgren (guitar)

David Garrett (violin and ensemble)

Two Cellos

Electric Guitar <https://youtu.be/uMaSpnUGqu0>

Bobby McFerrin (vocal)

Pipe Organ <https://youtu.be/uFwZeEF5uog>

Andrew Huang G-strings <https://youtu.be/4CyLWOWz5uc>

Philip Achille Harmonica

Sergei Nakariakov (Fluegelhorn and strings)

Libera (vocal)

Maurice Andre (trumpet and organ)

Stijepo Gled Markos (voice and strings)

Metal version <https://youtu.be/o-Mul81PPGs>

Classics Meet Cuba <https://youtu.be/k0CKSZnpxDs>

Salsa/ Sverre Indris Joner <https://youtu.be/ihf2Wp4aCck>

FROM RAGS TO RAP

During the 20th century America was a major influence culturally, economically, and politically around the globe. This was especially true in the world of music. From jazz to rock, America was the birthplace of some of the most influential music the world had yet experienced, aided by the popularity of new technologies such as the phonograph, radio, and cinema. There was one other very successful distributor of American tunes to the rest of the world: the American GI, who brought his music with him wherever he went from the Europe of World War I to the Middle East today.

What were the most important influences on 20th century popular music? One possible answer is African-Americans and the musical culture they brought to this country as slaves. Their music and dance highly influenced the European-based culture that was already here. Later it blended with the contributions of immigrant populations that followed.

Even before the 20th century began, blues music was evolving, north and south, out of the traditional African slave spirituals, work calls, and chants. Of all the developing genres, the blues would be the most far-reaching, with its influence felt in everything from jazz to rock, country music to rhythm and blues, and even some classical music in the 20th century. Classical composers from Brooklyn to Berlin caught the fever of jazz.

Jazz's influence on the world music scene would be nothing short of transformational. Jazz saw much of its early development in the African-American communities all throughout the South, most notably in New Orleans – with rhythms reflecting the diversity of cultural influences from West Africa to the West Indies, from ragtime to the blues. It spread from there up the Mississippi River to Saint Louis, then to Chicago, and eventually New York. The raspy trumpet and vocals of Louis “Satchmo” Armstrong, a Queens resident, and the doleful voice of Bessie Smith were as infectious in their day as the Spanish Influenza that swept the world in 1918.

With similar roots to blues (and blues as one of its roots), jazz also took from another American art form – Ragtime – to create its unique syncopated sound. Its early white detractors were many, from prejudiced Henry Ford to Thomas Edison. Racism was often the reason for cries of “it's immoral.” Yet the insistent, danceable, heartfelt sounds quickly spread American culture to the far corners of the globe. There is no denying the toe-tapping popularity and genius of Scott Joplin’s 44 ragtime compositions beginning in the 1890s. Joplin spent the last 10 years of his life in NYC eluded by success.

Its ever-mutating style turned itself into the swing music of the late 1920s (The Jazz Age of The Great Gatsby) and 1930s with its Great Depression. Everyone was dancing to American big bands lead by the likes of Duke Ellington, Count Basie, and Benny Goodman right through the years of World War II. They often featured the likes of the legendary singers Ella Fitzgerald from Yonkers, Harlem’s Billie Holiday, and Frank Sinatra from Jersey City. Harlem was the place to go if you were in New York and wanted a good time uptown.

In the 1940s and 1950s the emphasis slowly shifted from dancing to listening when the Bebop Era began featuring faster tempos, more complex chord changes, and complicated melodic improvisation. The virtuosity of Charlie Parker and Dizzy

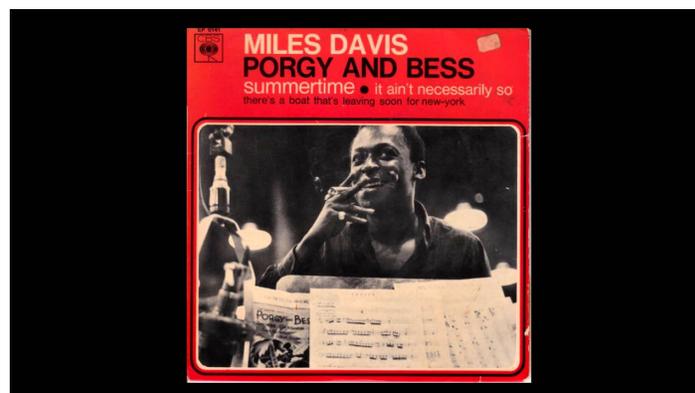
Gillespie showed us just how far from the melody they could go and still provide compositional integrity. The music of Thelonious Monk, Charlie Mingus, and John Coltrane challenged your intellect much like the classical music of the time. You could hear them play most nights of the week down in Greenwich Village. Performers like Miles Davis, who studied at Juilliard, helped to blur the lines between genres in the late 1950s and 1960s. The Cool Jazz of that period was focused in mid-town Manhattan with 52nd Street as its focus. Interestingly, Third Stream, a term coined by Gunther Schuller in 1957, developed to bridge the gap between classical and jazz. For many years Gunther was my next-door neighbor on West End Avenue.

Jazz's knock-on effect was further seen in rock 'n roll's development in the United States in the 1950s. Artists from Elvis Presley to Chuck Berry created their infectious music using the influences of boogie-woogie and blues, along with jazz. They, like many contemporaries, visited New York in order to appear on the Ed Sullivan Show. Beginning in 1955 with Bill Haley and the Comets, rock's popularity quickly spread around the world, with English groups of the 1960s such as The Beatles and The Rolling Stones often crediting American musicians and styles for their inspiration.

Soul music, which dominated the charts in the 1960s, grew up alongside rock 'n roll, and also developed out of African American gospel, and rhythm and blues traditions. Leading the way were the high-energy performances of Little Richard and James Brown followed by the profound sweetness of Aretha Franklin and Stevie Wonder. As the decade progressed soul music became regionalized and morphed into the funk of the 1970s and other genres such as jack swing in 1980s New York, it helped lay the groundwork for the next two decades of popular music.

The end of the century saw the birth of hip-hop music and culture. As early as the mid-1970s in the Bronx, DJs began isolating percussion rhythms from songs and talking over and between the songs, continuing a poetry recitation tradition that reaches back to ancient Greece. Rap music, with its semi-autobiographical lyrics and driving rhythms were just one more evolution in the blues tradition that had started at the beginning of the century, and one further, enormous transformation in the world of music created and nurtured in the African-American community. Now people are rapping around the globe, including places like South Korea with its highly successful K-Pop industry.

Where we go next is anybody's guess, but the threads that trace back to Africa will always be there. Acculturation in America began in the holds of slave ships and has no end.



LISTENING TO RECORDED MUSIC

Before the late 19th century, if you wanted to hear music, you had to play it yourself or get someone to play it for you. That was the case until 1877 when Thomas Edison invented the phonograph cylinder. It was the in vogue technology until around 1910 when the shellac disk, introduced by Emile Berliner in 1889, took over. The machine that played these disks was known as the gramophone. It changed the world of music. On it, the disks spun at 78 revolutions per minute (rpm) and contained only about three to four minutes of music. Recordings were strictly acoustic, made through megaphones, and did not include very high or low frequencies. The disks were brittle and broke if not properly handled. It put music into the hands of millions.



Anatomie d'un phonographe à disques

In 1948 Columbia Records introduced microgroove recordings on vinyl disks that were flexible and did not shatter if dropped. They spun at $33 \frac{1}{3}$ rpm so they contained a lot more music, almost 26 minutes on a side. A year later RCA introduced 7-inch, 45 rpm disks that were designed for single song popular albums. By the 1960s the 78s were gone. This new technology was labeled LP for long playing. Many strides were made in electrical recording techniques in the 1920s and 1930s so that by the time LPs came along audiences could hear the full spectrum of recorded sound, from 20Hz to 20KHz. It was in the 1950s that stereophonic recordings were finally mass-produced.



Although the first motion picture with sound, *The Jazz Singer* of 1927, used a recorded disk, movies since that time have used an optical recording track on all 35mm film.

Other technologies, such as magnetic tape and magnetic wire, were also developed mid-century to record sound. The wire recorders were usually used for office dictation. Magnetic tape had the capability of two-channel recording so it was used for music and produced a stereo effect by the early 1940s. By the 1950s most vinyl recordings were mastered on tape. By the 1960s multi-track recordings were common practice.



The introduction of the compact cassette in 1964 put tape recordings in the hands of listeners worldwide. A similar technology, the higher quality 8-track tape player was mainly used in automobiles. Mechanical miniaturization led to the universally popular Sony Walkman in 1979, the first personal cassette player. Recordings were vastly improved by the contributions of Ray Dolby in the area of background noise suppression in 1966. Home sound systems ran on vacuum tubes until the introduction of the transistor in the 1960s. That is when fidelity got even higher in the hands of inventors like Avery Fisher who helped fund Philharmonic Hall in Lincoln Center.



The technology changed again in 1982 with the introduction of the digitally recorded compact disk (CD). Suddenly LPs were history and relegated to boxes in the basement. CDs were small, held a lot of music and you could record them yourself. Of course, that was a long time ago and now our CDs are in boxes in the basement next to the LPs. Since the 1990s we listen to and record music using the software in our computers and hand held devices. Our hard drives and flash drives hold more music than a room full of 78s. In your lifetime there will probably be at least one major shift in sound technology, so stay tuned for further developments. It only gets better.

THE PROBLEM OF MODERN MUSIC

Many years ago I went to a modern music festival that Pierre Boulez conducted with the London Philharmonic at Carnegie Hall. Over the course of three evenings he played many of the orchestral masterpieces of the first half of the 20th century. Each piece was beautifully performed and intriguing to hear, but something amazing happened when he played the final piece—Stravinsky's *Petrushka*. During the performance I realized how dark and angry all the other pieces were in comparison to the brightness and glitter of *Petrushka's* bristling sonorities. A great deal of the neurosis and madness of the 20th century found its way into its music, and the expressionists were, probably, the worst of the bunch. If you look at Schoenberg's paintings you will have a better idea why much of his music sounds the way it does. He obviously needed more time on Freud's couch.

I love Debussy's music because his structures are as exquisitely complicated as the other moderns but his stuff is beautiful from beginning to end. Ravel deliberately put a modicum of dissonance into his music but even that spice is sweet. Some modern music, especially pieces written in the second half of the 20th century, went off track when it got so obtuse that the audience could not remember three notes when they left the theater. Many of the moderns forgot that music is about emotional drama, not serial calculations and note sequencing. To be modern is not, in and of itself, a virtue. Modern does not always have to be difficult, or even offensive. Melody is not a bad thing every once and a while. There is something very pleasurable about singing along with every note in Prokofiev's music. People do like to sing along whether at camp or at Carnegie. OK, maybe they do not have to sing the whole thing, but they have to hum something on the way home from the concert.

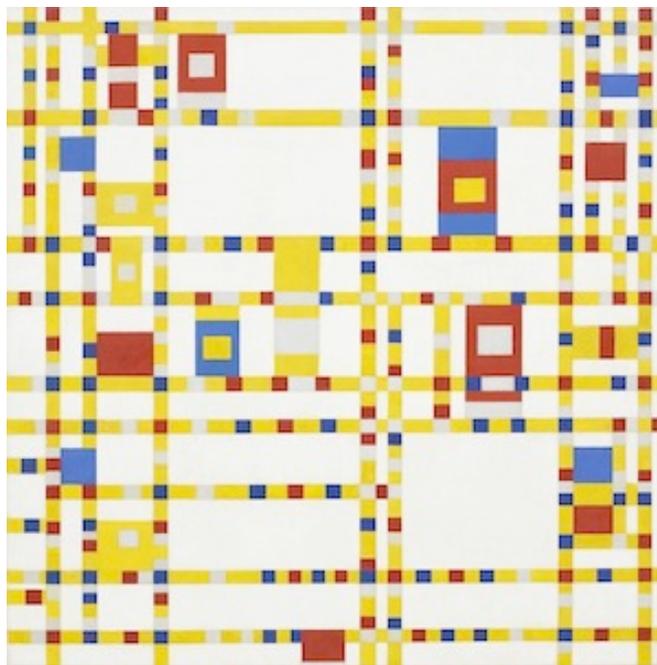
Modern jazz has suffered the same fate as classical music. When it abandoned the idea of being danceable or tuneful it lost its audience and its revenue. Picture a ballroom filled with hundreds of people jiving to the Count Basie band. Then, picture a small jazz club on 52nd Street or in the Village where a handful of avid listener's are wondering when, and if, the tune they love dearly will ever come back. The musicians are digging the improvisations but the audience has been disconnected from the primal essence of music. They are dazzled by the intellect and the technique but are befuddled and lost much of the time. Some music provides intellectual joy while other music attends to more important emotional needs. Great music does both.

Sometimes the theory of modern compositional practice got in the way of the music. Think for a moment about the intriguing, influential philosophies of John Cage in comparison to the quality of his music. In much of his output he gave up control of the compositional process, and this is problematic because it is the sonic evidence of a brilliant mind at work that delights and fascinates us. Webern's late stuff is as seemingly devoid of emotion as the late experiments of Mondrian—fascinating but cold, made for the head, not the heart. The application of abstraction in art and music is a process where the details are distilled away and only the essence is left. In Webern what you are left with is a few well-chosen tones in a relatively thin texture. The audience is expected to savor each pitch but may arrive at the end of the experience still

feeling hungry. Anton's later music often reminds me of a meal of hors d'oeuvres. On the way home I feel like stopping for a Whopper and fries.

So, what is at the heart of the problem? If the audience cannot follow the musical narrative that is being told then it is all just a lot of smoke and mirrors, or worse-- musical palaver. Music must first be engaging and entertaining, and then it can be art. It needs to be magical and emotional. It is already mysterious. Most of all, there must be a significant and palpable connection between the humanity of the composer and the hearts and minds of the audience. Mozart thought of himself, first and foremost, as a songwriter and it is that lyricism that pervades his symphonies and sonatas and still makes them immediately attractive and memorable. Much of the music in the mid-20th century feasted on brutal dissonance and rhythmic instability causing the generation of composers that followed them to investigate minimalism and post-romanticism as an antidote.

After every musical performance one must consider how much of the piece stayed with you the following day. Was the aftertaste bitter or sweet? Will it be a cherished memory in years to come? Would you like to hear this music again any time soon?



Piet Mondrian "Broadway Boogie-Woogie" (1942-43)

STOCKHAUSEN IS DEAD

In the late years of the past century I made a visit to the opening of a new Tower Records store at Lincoln Center and was delightfully surprised at how large the classical music CD section was. I figured this was the place to add special recordings of contemporary works to my already sizable collection. I walked around to the places devoted to some of my favorites. Much to my dismay I discovered that the space devoted to Stockhausen had only three CDs in it and it caused me to think that over time things had certainly changed. As I write this I am reminded that Tower Records went out of business in 2006 and all their stores are gone. And, yes, I still have 1200 CDs in my house that I do not know what to do with because that technology has come and gone. Last year I threw my small collection of VHS tapes in the dumpster because I have no player. In case you are wondering, my LP record collection resides in the basement of Shepard Hall gathering dust and getting moldy.

Back in the fifties and sixties Karlheinz was one of the giants of the *avant-garde*. Every time he gave a concert in NYC it was a major event attended by all 200 lovers of contemporary music, mostly university types like myself (200 out of a total population of 7 million!). Well, here it was twenty years later and this giant had been relegated to a footnote of history by the paucity of commercial square footage. I was always in awe of his prodigious output and the fertility of his unique mind. How could it be possible that there were only 3 CDs representing his total output? It caused me to think about what success in the classical composition field really means.

If you are a mediocre talent with a great sense of self-promotion like Philip Glass you make a name and a career for yourself. If you are a genius like Stockhausen, Berio, Carter, or Crumb you live, and eventually die, in almost total obscurity. Somehow that seems unfair, but, then, life is not necessarily fair. Which reminds me of *Briggs Fair* and how little the music of Delius is played. I will stop here because the list could get very long of composers far more talented than I who got little or no recognition during or after their lifetimes. It has been a fact of nature for a very long time and will, undoubtedly, continue until the *End of Time*...oh, yes, and Messiaen...



YOUR GRANDPARENTS' WORLD

Life in the 20th century took an interesting roller coaster ride. The first decade was like a volcano that eventually erupted into World War I in the second decade. The 1920s were known as the Jazz Age of the Great Gatsby. The Great Depression occupied the 1930s and World War II was the focus of the 1940s. Life struggled to return to normal in the 1950s and the Flower Power Hippies came to the fore in the 1960s along with LSD and The Beatles.

New York City has always been a hotbed of creativity and invention, never more so than in the 1950s. Exciting new directions were been explored in art, poetry, dance, and music. Politically the conflict between the Soviet Union and the West lead to what is known as the Cold War the highlight of which was the space race. Notable military conflicts during the 1950s were the Korean War, the Vietnam War, the Arab-Israeli Conflict, and the Algerian War. This was also the era of early rock 'n roll, Doo Wop, and Elvis. Jazz in the 1950s went underground to the clubs in Greenwich Village and 52nd Street where bebop reigned supreme. It was also a time when folk music became commercialized. Television was coming into its own as the prime source of news and entertainment.

The 1960s saw the rise of Youth Power, the prevalence of drugs, the civil rights movement, a landing on the Moon, and three regicides that rocked the nation. During this turbulent decade Mao Zedong led his ill-fated Cultural Revolution in China, The Troubles began in Ireland, and The Stonewall Riots woke up New York to a new reality. No one from that period can forget when the world was on the brink of nuclear annihilation due to the Cuban Missile Crisis. Then America attacks Vietnam. The popular music at the time featured girl groups like the Supremes. The Beach Boys with their exciting new harmonies were at the top of the charts until the Fab Four invaded from Britain in 1964. The music business was changing from 45rpm singles to whole albums. Motown Records got into the business and became a force to be reckoned with. Country and Western music filled the airwaves. Bob Dylan sang "Like a Rolling Stone."

In New York there were a number of little known classical composers who later proved to be significant contributors to the history of music. Chief among them was John Cage (1912-1992). His theoretical forays into the world of chance were matched by his experiments with prepared piano and exotic instrumentation. His most famous piece, *4'33"*, written in 1952, has no sound. He wrote a great deal of music that requires an open mind to be fully appreciated. He created dance music for his partner and influential choreographer, Merce Cunningham.

Other members of the so-called New York School include Morton Feldman, Earle Brown, and Christian Wolff. They were closely associated with each other but do not represent the totality of classical music in town at that time. Feldman liked to create slow moving, hypnotic scores that last forever. Brown experimented with new forms of music notation and open forms inspired by Jackson Pollack. Christian Wolff studied with Cage but was essentially a self-taught. He lectured on Greek and Roman classics at Harvard and Dartmouth and wrote his strangely innovative music in his spare time. He was fond of silence and timbre, but not melody or harmony. His music is an acquired taste.

HISTORICAL REPERTOIRE

Here is a sample of great music by New Yorkers that culturally aware individuals should know. If you listen to one piece a day you can get through this list in about 2 months. When you finish, experience them again. Listen with an open mind and this assignment will broaden your musical horizon.

Many of these we will listen to in class and the rest are your responsibility. Enjoy!

Solo performance:

Bugle call	<i>Taps</i>
Gershwin	<i>Three Preludes for piano</i>
Gideon	<i>Of Shadows Numberless</i>
Kay	<i>Prelude for flute</i>
Varese	<i>Density 21. 5 for flute</i>
Corigliano	<i>Red Violin Caprices</i>
Druckman	<i>Valentine for double bass</i>
Lewis	<i>For Ellington</i>
Del Tredici	<i>Ballad in Yellow</i>

Chamber Music:

Varese	<i>Ionisation</i>
Barber	<i>Adagio for Strings</i>
Tchaikovsky	<i>Serenade for Strings</i>
Reich	<i>Octet</i>
Lewis	<i>Django (Modern Jazz Quartet)</i>
Ellington	<i>Satin Doll</i>
Gershwin	<i>Lullaby for String Quartet</i>
Copland	<i>Fanfare for the Common Man</i>
Tower	<i>Fanfare for the Uncommon Woman No. 3</i>

Symphonic Music:

Stravinsky	<i>Symphony in C</i>
Ives	<i>Three Places in New England</i>
Dvorak	<i>Symphony From the New World</i>
Tchaikovsky	<i>Symphony 6</i>
Mahler	<i>Symphony 9</i>
Berio	<i>Sinfonia</i>
Gould	<i>Symphony 2, Pavanne</i>

The Concerto:

Rachmaninoff	<i>Piano Concerto 2</i>
Barber	<i>Violin Concerto</i>
Gershwin	<i>Rhapsody in Blue</i>
Gershwin	<i>Piano Concerto</i>
Bartok	<i>Piano Concerto 3</i>

Dvorak	<i>Cello Concerto</i>
Copland	<i>Piano Concerto</i>
Bartok	<i>Concerto for Orchestra</i>

Song:

Foster	<i>Jeanie with the Light Brown Hair</i>
Weill	<i>September Song</i>
Moross	<i>Lazy Afternoon</i>
Ives	<i>The Cage</i>
Copland	<i>12 Emily Dickinson Songs: 4. The World Feels Dusty</i>
Barber	<i>Hermit Songs: 8. The Monk and His Cat</i>
Boulez	<i>Le Marteau sans maître: L' Artisanat furieux</i>
Kern	<i>All the Things You Are</i>
Anderson	<i>O Superman</i>

Choral Music:

Traditional	<i>Shenandoah (Chanticleer)</i>
Traditional	<i>Lowlands (Robert Shaw Chorale)</i>
Feldman	<i>For Stefan Wolpe</i>
Hohvaness	<i>Triptych</i>
Barber	<i>Agnus Dei</i>
Ives	<i>I Come to Thee</i>
Stravinsky	<i>Pater Noster</i>

Stage:

Corigliano	<i>The Ghosts of Versailles, "Samira the Turkish Entertainer"</i>
Weill	<i>Three Penny Opera, "Mack the Knife"</i>
Puccini	<i>Madama Butterfly: Love Duet, Un bel di vedremo, Finale</i>
Gershwin	<i>Porgy & Bess: Summertime, Bess, You Is My Woman Now</i>
Bernstein	<i>West Side Story</i>
Bernstein	<i>On the Town: "New York, New York"</i>

Ballet Music:

Tchaikovsky	<i>The Nutcracker Ballet</i>
Hindemith	<i>The Four Temperments</i>
Stravinsky	<i>Orpheus, Agon</i>
Copland	<i>Billy the Kid</i>
Copland	<i>Appalachian Spring</i>
Prince	<i>N.Y. Export: Opus Jazz</i>

KEYBOARD SONATAS THROUGH HISTORY

The piano was invented around 1700 by Bartolomeo Cristofori, an employee of the Medici family of Florence. Before that, the harpsichord was the most popular keyboard instrument. Today we have pianos that play themselves as well as electronic synthesizers that outdo the great old church organs. Today's standard piano has 88 keys of black and white. Our local piano factory is Steinway in Astoria.

Scarlatti	Over 500 sonatas in one movement
Mozart	Sonata in C major, Sonata in A minor
Haydn	Sonata Nos. 61 and 62
Beethoven	Sonata No. 8 "Pathetique," Sonata No. 14 "Moonlight"
Schubert	Sonata No. 18 in G major "Fantasie"
Chopin	Sonata No. 2 in B flat minor "Funeral March"
Liszt	Sonata in B minor
Brahms	Sonata No. 3 in F minor
Grieg	Sonata in E minor
Scriabin	Sonata No. 2, No. 9 "Black Mass"
Tchaikovsky	Grand Sonata in G
Rachmaninov	Sonata No. 1 and No. 2
Stravinsky	Sonata (1924)
Prokofiev	Sonata No. 3 in A minor, No. 7
Berg	Sonata No. 1
Boulez	Sonata No. 1



CHAMBER MUSIC THROUGH HISTORY

Chamber music is usually performed by a small number (2-9) of musicians; one on a part; in a small to moderate size room. This genre includes everything from a rock band practicing in the drummer's garage to a string quartet serenading an archduke's dinner party. It may be vocal or instrumental. In any case, the desired effect is intimacy and the joy of concerted effort.

Gabrieli	Motet, "O magnum mysterium"
Bach	"Jesu, Joy of Man's Desiring"
Handel	Water Music
Mozart	Clarinet Quintet
Mozart	Eine kleine nachtmusik
Beethoven	String Quartets
Schubert	"Erlkonig"
Tchaikovsky	Serenade for Strings
Grieg	Holberg Suite
Dvorak	Serenade for Strings
Ives	The Unanswered Question
Ravel	String Quartet
Debussy	String Quartet
Boulangier	Nocturne for Violin and Piano
Schoenberg	Pierrot lunaire
Bartok	Music for Strings, Percussion, and Celesta
Varese	Ionisation and Octandre
Copland	Twelve Songs on Poems by Emily Dickinson
Boulez	Le marteau sans maître
Stockhausen	Gesang der junglinge
Crumb	Vox balanae
Joel	Lullaby (Kings Singers)

THE SYMPHONY THROUGH HISTORY

The symphony started out as part of the vibrant orchestral life of 18th century Vienna, the capitol of the Austro-Hungarian Empire. Originally it was structured in the three-movement Italian style of fast/slow/fast. Eventually a fourth movement was added that was usually a minuet, the most popular dance of that time. The earliest examples were mostly written for small string orchestras, but, as time went along, a small number of wind instruments were added in various combinations. These early symphonies were, in effect, larger string quartets. Haydn, Mozart and their contemporaries were the ones who expanded the reach and scope of the symphony. Haydn wrote at least 107 and Mozart wrote at least 47.

In the hands of Beethoven, who was their junior, the symphony changed from commonplace and frequent to more rare and substantial. He wrote nine symphonies and it is interesting to see how far afield he traveled in just those few works. His first two symphonies are modeled after his predecessors but his third, *The Eroica*, presents a major leap forward. It is 50% longer and features a funeral march as the second movement. The third movement is a scherzo, a faster minuet, at breakneck speed. This movement employs three French horns in the trio section. His Fifth Symphony is, perhaps, the most famous symphony ever written. Its opening four-note motive is universal. In the fourth movement finale Beethoven surprises us by using trombones for the first time in a symphony. His next symphony is programmatic, meaning it has an extra-musical story associated with it and is known as *The Pastoral Symphony*. Never one to rest on his laurels, his Ninth Symphony does the unthinkable and features four vocal soloists and a chorus in the last movement.

Beethoven was such a revolutionary and creative dynamo that he set the standard in compositional practice for a hundred years to come. There were other symphonists such as Franz Schubert who made significant contributions to the genre, but nothing compared to Beethoven. Schubert's Eighth Symphony, *The Unfinished*, is a masterpiece but only has two movements. His Fifth and Ninth Symphonies are considered classics and are worth checking out.

The next generation of composers also wrote wonderful symphonies in the shadow of Beethoven. Felix Mendelssohn wrote five symphonies worth hearing and Robert Schumann wrote four. The most innovative genius of this next generation was Hector Berlioz. His *Symphonie fantastique* of 1830 heralds a new age of instrumentation and drama. This is a five-movement work with a complex story inspiring each movement: Reveries and Passion, A Ball (waltz), Scene in the Fields, March to the Gallows, Dream of a Witches' Sabbath. Throughout, the orchestral effects constantly amaze and delight the audience.

As the 19th century went along, many composers felt that they had little to add to the symphonic contributions of Beethoven and looked for other means to fruitfully engage an orchestra. The invention of the symphonic poem fit the bill. This form is a complex one-movement structure that is based on something extra-music like a novel, a poem, a painting, or a natural wonder. Franz Liszt was the one who seized upon this new opportunity for dramatic expression and wrote thirteen examples, *Les Preludes* being one of the best known.

In the 1870s and 1880s there was a resurgence of symphonic composition. Johannes Brahms, the master of the conservative, wrote four that picked up the mantle from

Beethoven while his contemporaries sought new means of expressions. Bruckner wrote nine symphonies that are all flawed masterpieces but set the stage for Gustav Mahler in the next generation. Tchaikovsky, Dvorak, Borodin, Saint-Saens, and Franck have provided works that are still frequently played in concert venues from Carnegie Hall to Singapore. Throughout this period orchestras continued to grow in size and pieces tended to get longer. Mahler's Third Symphony (1896) lasts 100 minutes and is monumental in scope and power. The last movement alone lasts longer than many early Haydn symphonies.

The tone poem made a major comeback in the hands of Richard Strauss. Between 1886 and 1898 he wrote eight examples that are brilliantly orchestrated and take the genre to new heights. The most well known are *Don Juan*, *Death and Transfiguration*, *Till Eulenspiegel's Merry Pranks*, *Also sprach Zarathustra*, *Don Quixote*, and *Ein Heldenleben*. Claude Debussy's famous paean to the sea, *La Mer*, is a kind of three-movement symphony / tone poem blend. Composed in 1905 it was not well received but has proven to be a modern masterpiece beloved by all. Two tone poems by Alexander Scriabin, *The Poem of Ecstasy* (1908) and *Prometheus*, are extraordinary blends of mysticism and magic.

You would have thought that by the beginning of the 20th century the symphony would have run out of steam, but that is not the case. A whole flock of composers including Sergei Rachmaninov, Dmitri Shostakovich, Sergei Prokofiev, Jean Sibelius, Charles Ives, Erwin Schulhoff, and Carl Nielsen have added major works to the genre. Other modernists have tinkered with the toy and produced new interpretations of the original model. Stravinsky's *Symphony in Three Movements*, *Symphony in C*, and *Symphony of Psalms* are among some of the best examples of "new wine in old bottles." His *Symphonies of Wind Instruments* from 1920 employs no strings and the usual sonata form is nowhere to be found.

Late into the 20th century the symphony was still a very usable format for creative exploration. Ralph Vaughan Williams, Henri Dutilleux, Krzysztof Penderecki, Arthur Honegger, Henryk Gorecki, Carlos Chavez, Aaron Copland, Leonard Bernstein, and Witold Lutoslawski all wrote symphonies that are important contributions to the concert repertoire. Luciano Berio's *Sinfonia* (1968) is one of the most important orchestral works of the century. The genre shows no signs of subsiding in the first years of the 21st century.

Mozart	Symphony 39, 40, 41
Haydn	Symphony 94 "The Surprise", 104 "The London"
Beethoven	Symphony 3, 5, 9 "The Choral"
Schubert	Symphony 8 "The Unfinished"
Berlioz	Symphonie fantastique
Mendelssohn	Symphony 4 "The Italian"
Schumann	Symphony 3 "The Rhenish"
Dvorak	Symphony 9 "From the New World"

Franck	Symphony in D minor
Tchaikovsky	Symphony 4, 5, 6 "The Pathetique"
Mahler	Symphony 1 "The Titan"
Sibelius	Symphony 5
Stravinsky	Symphony in Three Movements
Shostakovitch	Symphony 5
Prokofiev	Symphony 5
Berio	Sinfonia
Rouse	Symphony 2

Other Orchestral Music:

Liszt	Les Preludes
Brahms	Haydn Variations
Grieg	Peer Gynt
Wagner	Siegfried Idyll
Bizet	L'Arlesienne Suite
Scriabin	Poem of Ecstasy
Strauss	Don Juan
Mussorgsky	Night on Bald Mountain
Ravel	Mother Goose Suite
Webern	Six Pieces for Orchestra
Schoenberg	Five Pieces for Orchestra
Ives	Orchestral Set 2
Reich	Music for Large Ensemble
Adams	Short Ride in a Fast Machine
Luther Adams	Becoming Ocean

THE CONCERTO THROUGH HISTORY

A solo concerto is essentially a symphony for soloist and orchestra. The largest number of concertos feature virtuoso pianists or violinists. It is usually a three-movement form. Towards the end of the first movement the orchestra stops and the soloist shows off by performing the cadenza which may or may not feature improvisation on earlier themes. A double concerto has two soloists. The *concerto grosso*, popular in the Baroque Era, featured a small group of soloists. A good example is the collection of six *Brandenburg Concertos* by Bach.

Vivaldi	The Four Seasons, Mandolin Concerto, Concerto for 2 Trumpets
Bach	Piano Concerto in D minor, Concerto for 2 Violins
Mozart	Piano Concerto 23, Clarinet Concerto, Sinfonia Concertante
Haydn	Trumpet Concerto
Beethoven	Piano Concertos 1-5, Violin Concerto
Chopin	Piano Concerto 1 and 2
Mendelssohn	Violin Concerto
Schumann	Piano Concerto, Cello Concerto
Grieg	Piano Concerto
Scriabin	Piano Concerto
Tchaikovsky	Violin Concerto, Piano Concerto 1
Brahms	Double Concerto, Violin Concerto, Piano Concerto 2
Dvorak	Cello Concerto
Bruch	Violin Concerto
Rachmaninov	Piano Concerto 2
Shostakovitch	Piano Concerto 1
Sibelius	Violin Concerto
Berg	Violin Concerto
Bartok	Piano Concertos 2 and 3, Concerto for Orchestra
Gershwin	Piano Concerto in F, Rhapsody in Blue
Prokofiev	Piano Concerto 3
Barber	Violin Concerto

ART SONG

Nothing is more fundamental to the world of music than song. We all like to sing our favorite tunes, or at least sing along with our favorite performers. Sometimes we find ourselves just humming a few bars of a long forgotten melody and it brings back fond memories. Melody is constructed of phrases that are the equivalent of lines from a poem. Put two of them together in poetry and you have a couplet; in music you have a period. Put four lines together in poetry and you have a quatrain; in music you have a double period. Four lines are all we need for a song. Putting poetry to music is the very essence of song. If the music conveys the character and mood of the lyrics there is synergy. When it is great poetry set by a classical composer it is an art song. The setting may be syllabic, melismatic, or psalmodic.

Throughout recorded history there have been an untold number of melodies composed, some of which come down to us through the centuries. Others were written recently and are today's temporary hits. The nature of song ranges from the simplest folk tune that only spans an octave and can be sung by all to the virtuosic aria from a famous opera that can only be properly performed after 10 years of voice lessons.

A really good song can be successfully performed without accompaniment if the singer is musical and sensitive to nuance. A great number of times the vocal part is accompanied. This accompaniment can just be a guitar or a piano, or it can be an entire orchestra. In the classical realm there have been collections of songs we call song cycles that are all based on the same collection of poems. Here are a few examples from the classical repertoire for your delight and edification.

Beethoven	An die ferne Geliebte
Schubert	Die Winterreise, Die Schone Mullerin
Schumann	Dichterliebe, Frauenliebe und leben
Berlioz	Les nuits d'ete
Mahler	Kindertotenlieder, Das Lied von der Erde
Faure	La bonne chanson
Grieg	Haugtussa
Mussorgsky	Songs and Dances of Death
Messaien	Poemes pour Mi
Dutilleux	Correspondances
Barber	Hermit Songs
Granados	Tonadillas al estilo antiguo
Britten	The Holy Sonnets of John Donne
Copland	Twelve Poems by Emily Dickinson

SUMMERTIME ON YOUTUBE

Every once in a while a composer writes a song that every musician wants to perform no matter what their stylistic proclivities. "Summertime" from the opera *Porgy & Bess* is such a tune. Thank you George Gershwin. Here are some of the videos available on YouTube that should intrigue you. These are the ones I most enjoyed after a one-hour search on the first three pages. It was quite a trip! Imagine what 2 hours might reveal. Research reveals that there are currently over 25,000 versions of this gorgeous lullaby.

Louis Armstrong & Ella Fitzgerald

Janis Joplin

Billy Stewart

Nora Jones

Miles Davis

Billie Holiday

Willie Nelson

Fantasia Sings for Stevie Wonder

Sam Cooke

Annie Lennox

The Zombies

Angelina Jordan

Nina Simone

Scarlett Johansson

Stephanie McCourt

Joss Stone & LeAnn Rimes

John Coltrane

Lillie McCloud

The Wailin' Jennys

Studio Jams #67

Kathleen Battle

The Doors



THE GREAT AMERICAN SONGBOOK

In the half-century between the end of World War I (1918) and man landing on the moon (1969) American composers, many of them New York residents, produced a body of vocal music that will undoubtedly stand the test of time. The Great American Songbook, a combination of great lyrics with great melodies and harmonies, has given the world a library of song standards. The list below is a sampling of these masterpieces I know you will enjoy.

YEAR	COMPOSER	SONG
1919	Berlin, Irving	A Pretty Girl is Like a Melody
1924	Gershwin, George	The Man I Love
1925	Berlin, Irving	Always
1925	Youmans, Vincent	Tea for Two
1926	Berlin, Irving	Blue Skies
1926	Gershwin, George	Someone to Watch Over Me
1926	Henderson, Ray	Bye Bye Blackbird
1927	Carmichael, Hoagy	Stardust
1927	Kern, Jerome	Old Man River
1928	Gershwin, George	Embraceable You
1929	Kern, Jerome	Can't Help Lovin' Dat Man
1929	Yellin, Jack	Happy Days Are Here Again
1929	Youmans, Vincent	Without a Song
1930	Gershwin, George	I Got Rhythm
1931	Brown, Nacio Herb	Singin' in the Rain
1931	Hupfeld, Herman	As Time Goes By
1931	Schwartz, Arthur	Dancing in the Dark
1932	Berlin, Irving	How Deep is the Ocean?
1932	Duke, Vernon	April in Paris
1932	Porter, Cole	Night and Day
1933	Arlen, Harold	Stormy Weather
1933	Berlin, Irving	Easter Parade
1933	Kern, Jerome	Smoke Gets in Your Eyes
1933	Kern, Jerome	Yesterdays
1934	Duke, Vernon	Autumn in New York
1934	Noble, Ray	The Very Thought of You
1934	Rodgers, Richard	Blue Moon
1934	Warren, Harry	I Only Have Eyes for You
1935	Ellington, Duke	In a Sentimental Mood
1935	Gershwin, George	My Man's Gone Now
1935	Gershwin, George	Summertime

1935	Gershwin, George	Bess, You Is My Woman
1935	Porter, Cole	Begin the Beguine
1935	Warren, Harry	Lullaby of Broadway
1936	Kern, Jerome	The Way You Look Tonight
1936	Porter, Cole	I've Got You Under My Skin
1936	Strachey, Jack	These Foolish Things
1937	Berlin, Irving	God Bless America
1937	Gershwin, George	They Can't Take that Away from Me
1937	Rodgers, Richard	My Funny Valentine
1938	Carmichael, Hoagy	The Nearness of You
1938	Coots, J. Fred	You Go to My Head
1938	Fain, Sammy	I'll Be Seeing You
1938	Weill, Kurt	September Song
1939	Arlen, Harold	Over the Rainbow
1939	Kern, Jerome	All the Things You Are
1940	Duke, Vernon	Taking a Chance on Love
1940	Rodgers, Richard	Bewitched
1942	Arlen, Harold	That Old Black Magic
1942	Berlin, Irving	White Christmas
1942	Warren, Harry	There Will Never Be Another You
1943	Rodgers, Richard	Oh, What a Beautiful Mornin'
1944	Raksin, David	Laura
1945	Kosman, Joseph	Autumn Leaves
1945	Rodgers, Richard	You'll Never Walk Alone
1945	Styne, Jule	Let it Snow
1947	Loewe, Frederick	Almost Like Being in Love
1949	Rodgers, Richard	Some Enchanted Evening
1952	Young, Victor	When I Fall in Love
1954	Howard, Bart	Fly Me to the Moon
1955	Fain, Sammy	Love is a Many Splendored Thing
1956	Loewe, Frederick	On the Street Where You Live
1957	Coleman, Cy	Witchcraft
1957	Van Heusen, Jimmy	Come Fly With Me
1959	Rodgers, Richard	The Sound of Music
1961	Mancini, Henry	Moon River
1962	Mancini, Henry	Days of Wine and Roses
1963	Dylan, Bob	Blowin' in the Wind
1964	Simon, Paul	The Sound of Silence
1965	Dylan, Bob	Mr. Tambourine Man
1968	Simon, Paul	Mrs. Robinson

SONGS ABOUT NEW YORK

Here is a very small sample of songs written about The Big Apple. I dare say no other city in this great nation has inspired quite so much creativity. Yes, there are some songs about Chicago and San Francisco but the list below is only the tip of the iceberg. In Wikipedia there is a "List of Songs about New York City" that will knock your socks off.

When the massive waves of poor immigrants came to these shores in the late 19th and early 20th centuries they went immediately to the Lower East Side and lived in overcrowded tenement buildings. When they had saved a few dollars they moved to either Brooklyn or the Bronx. It is those two locations along with Manhattan that have inspired the most songwriting. Staten Island and Queens not so much.

Jay-Z & Alicia Keys	Empire State of Mind
Alicia Keys	New York
Frank Sinatra	New York, New York
Odyssey	Native New Yorker
Taylor Swift	Welcome to New York
Frank Sinatra	How About You
Billie Holiday	Autumn in New York
Gold Diggers of 1935	Lullaby of Broadway
On the Town	New York, New York
Owl City	New York City
Leon Russell	Manhattan Island Serenade
Jo Stafford	Manhattan Serenade
Duke Ellington	Take the A Train
Clinton Cerejo	Manhattan
Shinehead	Jamaican in New York
Ace Frehley	New York Groove
Kermit the Frog	New York, I Love You But You're Bringing Me Down
The Pogues	Fairytale of New York
Billy Joel	New York State of Mind
The Strokes	New York City Cops
Paul Simon	The Only Living Boy in New York
AC/DC	Safe in New York City
The Eagles	New York Minute
Manhattan Transfer	The Boy from New York City
Paloma Faith	New York
The Yardbirds	New York City Blues
Cool Change	The Streets of the Bronx
Neil Diamond	Brooklyn Roads
Lou Reed	Walk on the Wild Side
Steely Dan	Brooklyn Owes the Charmer Under Me
Bruno Mars	Somewhere in Brooklyn
Barry Manilow	Brooklyn Blues
Beastie Boys	Hello Brooklyn
Village People	Manhattan Woman
Tito Puente	110th Street & 5th Avenue
Tony Bennett	Manhattan

THE MASS THROUGH HISTORY

For a very long time talented composers have been writing music for the Catholic service. It all started with monophonic settings we now call Gregorian chant in honor of Pope Gregory who took the office in 590. These single line prayers served well until the invention of *organum* in the Middle Ages, the first experiments in polyphonic textures. Around 1200, two Parisians, Leonin and Perotin, were responsible for major contrapuntal breakthroughs that affected all religious music from then on. Before you know it, worshipers were being treated to four-, five-, and six-part settings of the mass with Palestrina at the 16th century pinnacle. Masses were usually sung *a capella*, meaning without instrumental accompaniment until the Protestants showed up in the 16th century and allowed instruments into the mix. The Requiem mass is a service for the dearly departed. Mozart was finishing his Requiem when he died in December 1791. That is quite a coincidence!

Machaut	Messe de Notre Dame
Dufay	“L’homme armé” Mass
Josquin	Missa Pange Lingua
Palestrina	Pope Marcellus Mass
Monteverdi	Mass for Four Voices
Vivaldi	Gloria
Bach	Mass in B minor
Mozart	Requiem
Beethoven	Missa Solemnis
Verdi	Requiem
Puccini	Messe
Faure	Requiem
Durufle	Requiem
Stravinsky	Mass
Britten	War Requiem
Penderecki	Polish Requiem
Ligeti	Requiem
Part	Berliner Messe

THE ORDINARY OF THE MASS

The mass is the central religious service of the Catholic Church. It is essentially a Eucharistic liturgical service that re-enacts the Last Supper of Jesus Christ where, according to the New Testament, while celebrating Passover he offered wine and *matzoh* to his followers so that they would remember him and his teachings. The etymology of the word "mass" is open to much debate.

Kyrie eleison.
Christe eleison.
Kyrie eleison.

Lord, have mercy.
Christ, have mercy.
Lord, have mercy.

Gloria in excelsis Deo.
Et in terra pax
hominibus bonæ voluntatis.
Laudamus te; benedicimus te;
adoramus te; glorificamus te.
Gratias agimus tibi
propter magnam gloriam tuam.
Domine Deus, Rex coelestis,
Deus Pater omnipotens.
Domine Fili unigenite Jesu Christe.
Domine Deus, Agnus Dei,
Filius Patris.
Qui tollis peccata mundi,
miserere nobis.
Qui tollis peccata mundi,
suscipe deprecationem nostram.
Qui sedes ad dextram Patris,
O miserere nobis.
Quoniam tu solus Sanctus,
tu solus Dominus,
tu solus Altissimus, Jesu Christe.
Cum Sancto Spiritu
in gloria Dei Patris.
Amen.

Glory be to God in the highest.
And in earth peace
to men of good will.
We praise Thee; we bless Thee;
we worship Thee; we glorify Thee.
We give thanks to Thee
for Thy great glory.
O Lord God, Heavenly King,
God the Father Almighty.
O Lord Jesus Christ, the only begotten Son.
Lord God, Lamb of God,
Son of the Father.
Thou that takest away the sins of the world, have mercy upon us.
Thou that takest away the sins of the world, receive our prayer.
Thou that sittest at the right hand of the Father,
have mercy upon us.
For thou only art holy,
thou only art the Lord,
thou only art the most high, Jesus Christ.
Together with the Holy Ghost
in the glory of God the Father.
Amen.

Credo in unum Deum;
Patrem omnipotentem,
factorem coeli et terrae,
visibilem omnium et invisibilem.
Credo in unum Dominum Jesum Christum,
Filius Dei unigenitum,
Et ex Patre natum ante omnia secula.
Deum de Deo, lumen de lumine,
Deum verum de Deo vero,
Genitum non factum,
consubstantialem Patri:
per quem omnia facta sunt.
Qui propter nos homines,
et propter nostram salutem
descendit de coelis.
Et incarnatus est de Spiritu Sancto
ex Maria Virgine: et homo factus est.
Crucifixus etiam pro nobis
sub Pontio Pilato,
passus et sepultus est.
Et resurrexit tertia die
secundum Scripturas.

*Et ascendit in coelum:
sedet ad dexteram Patris.
Et iterum venturus est cum gloria,
judicare vivos et mortuos:
cujus regni non erit finis.
Credo in Spiritum Sanctum,
Dominum, et vivificantem:
qui ex Patre Filioque procedit.
Qui cum Patre et Filio simul
adoratur et conglorificatur:
qui locutus est per Prophetas.
Credo in unam sanctam
catholicam et apostolicam Ecclesiam.
Confiteor unum baptisma,
in remissionem peccatorum.
Et expecto resurrectionem mortuorum
et vitam venturi sæculi.
Amen.*

*I believe in one God;
the Father almighty,
maker of heaven and earth,
and of all things visible and invisible.
And in one Lord Jesus Christ,
the only begotten Son of God,
begotten of the Father before all worlds;
God of God, light of light,
true God of true God,
begotten not made;
being of one substance with the Father,
by Whom all things were made.
Who for us men
and for our salvation
descended from heaven;
and was incarnate by the Holy Ghost,
of the Virgin Mary, and was made man.
He was crucified also for us,
suffered under Pontius Pilate,
and was buried.
And on the third day He rose again
according to the Scriptures:
and ascended into heaven.
He sitteth at the right hand of the Father;
and He shall come again with glory
to judge the living and the dead;
and His kingdom shall have no end.
I believe in the Holy Ghost,*

*the Lord and giver of life,
Who proceedeth from the Father and the Son,
Who with the Father and the Son together
is worshipped and glorified;
as it was told by the Prophets.
And I believe in one holy
catholic and apostolic Church.
I acknowledge one baptism
for the remission of sins.
And I await the resurrection of the dead
and the life of the world to come.
Amen.*

Sanctus, Sanctus, Sanctus, Dominus Deus
Sabaoth.
*Pleni sunt coeli et terra gloria tua.
Osanna in excelsis.*

*Holy, Holy, Holy, Lord God of Hosts.
Heaven and earth are full of Thy glory.
Hosanna in the highest.*

Agnus Dei,
*qui tollis peccata mundi,
miserere nobis.
Agnus Dei.
Dona nobis pacem.*

*Lamb of God,
Who takest away the sins of the world,
have mercy upon us.
Lamb of God.
Grant us peace.*

Benedictus qui venit
in nomine Domini.
Osanna in excelsis.

*Blessed is He that cometh
in the name of the Lord.
Hosanna in the highest.*

MUSIC FOR THE STAGE THROUGH HISTORY

Opera was a form of entertainment that got its start in the courts of Europe around the beginning of the 17th century. The early dramas were taken from Greek and Roman mythology and were sung throughout. Because they involve soloists, a chorus, dancers, an orchestra, scenery, props and costumes they are expensive and designed to entertain the aristocracy. In the 19th century many opera houses were built so that the growing middle class could enjoy the show as well. In the theatre world, incidental music is composed to support a play and is usually inserted between acts.

Monteverdi	The Coronation of Poppea, Act I, scene 3
Purcell	Dido & Aeneas, "Dido's Lament"
Handel	Rinaldo, "Lascia ch'io pianga"
Handel	The Messiah, "Hallelujah" (oratorio)
Mozart	Don Giovanni, Act I, scene 3
Mozart	The Magic Flute, "Queen of the Night Aria"
Mendelssohn	Midsummer Night's Dream (incidental music)
Verdi	Rigoletto, "La donna e mobile"
Wagner	Tristan und Isolde, "Liebestod"
Wagner	The Ride of the Valkyries
Wagner	Siegfried Idyll
Leoncavallo	Pagliacci, "Vesti la giubba"
Grieg	Peer Gynt (incidental music)
Bizet	Carmen
Bizet	L'Arlesienne (incidental music)
Puccini	Madama Butterfly "Humming Chorus"
Puccini	La Boheme, Act I
Puccini	Turandot, "Nessun dorma"
Berg	Wozzeck, Act 3
Prokofiev	Alexander Nevsky (Cinema)
Gershwin	Porgy & Bess
Bernstein	West Side Story (Broadway)
Ligeti	Lux Aeterna (as used in 2001: A Space Odyssey)

Overtures and Preludes

It is often the case that operas begin with an instrumental piece of music that usually features the significant motives and melodies in the drama that follows. This music is known as an overture, or opening piece and is played before the curtain rises. Sometimes it gets to be so famous that it ends up being performed in strictly orchestral settings, divorced from the opera. On occasion the term prelude is used instead of overture and is also applied to the music that is heard before particular acts of the opera. Sometimes the term overture is used for a relatively short piece that is not connected to an opera or stage performance.

Mozart	Don Giovanni, overture
Mozart	Magic Flute, overture
Beethoven	Fidelio and Leonora overtures
Beethoven	Egmont, overture
Berlioz	Roman Carnival Overture
Rossini	William Tell, overture
Weber	Der Freischutz, overture
Glinka	Russlan and Ludmilla, overture
Reznicek	Donna Diana, overture
Smetana	The Bartered Bride, overture
Verdi	La Forza del destino, overture
Wagner	Lohengrin, Prelude to Act III
Wagner	Tristan und Isolde, prelude
Wagner	Die Meistersinger, prelude
Tchaikovsky	Romeo & Juliet, fantasy overture
Tchaikovsky	1812 Overture
Brahms	Academic Festival Overture
Brahms	Tragic Overture
Delius	Irmelin Prelude
Barber	School for Scandal, overture
Bernstein	Candide, overture

MUSIC FOR THE BALLET

Ballet began in the Italian Renaissance courts of the 15th century. Thanks to Catherine de Medici (1519-1589) it spread to France where it later flourished under Louis XIV (1638-1715) and his court composer, Jean-Baptiste Lully. The ballet music of Tchaikovsky helped to elevate the status of the compositional art in the last quarter of the 19th century. It got its biggest boost from Serge Diaghilev's *Ballets Russes* from 1909 to 1929 in Paris. Diaghilev's last choreographer, George Balanchine, founded the New York City Ballet in 1948.

Delibes	Coppelia
Tchaikovsky	The Nutcracker
Tchaikovsky	Swan Lake
Tchaikovsky	Sleeping Beauty
Rimsky-Korsakov	Scheherazade
Stravinsky	The Firebird
Stravinsky	Petrushka
Stravinsky	The Rite of Spring
Stravinsky	Orpheus
Stravinsky	Apollo
Debussy	Afternoon of a Faun
Ravel	Daphnis & Chloe
Prokofiev	The Prodigal Son
Prokofiev	Cinderella
Copland	Billy the Kid
Copland	Appalachian Spring
Copland	Rodeo



YOUTUBE ADVENTURES IN SIGHT AND SOUND

Here are some free videos that will greatly enhance your appreciation of music and dance. These are all performances that were created for the *Ballets Russes* between 1909 and 1929. These videos should only be watched by people like yourself who enjoy the synergy of great music and exquisite body movement.

Stravinsky: The Firebird

<https://youtu.be/q0MpwTEkzqQ>

Stravinsky: The Nightingale

<https://youtu.be/DIOYX7Y27qM>

Rimsky-Korsakov: Scheherazade

https://youtu.be/CpE_pCHVBR4

Stravinsky: Petrushka

<https://youtu.be/XvXIFKvpoOg>

Debussy: Afternoon of a Faun

<https://youtu.be/2GqGVkfUip8>

Stravinsky: Le Sacre du printemps

https://youtu.be/_QZXrPJGLJ0

Ravel: Daphnis & Chloe

<https://youtu.be/1s9vEQsTGyg>

Borodin: Polovtsian Dances from Prince Igor

<https://youtu.be/WgCfRH1VloQ>



DANCE ASSESSMENT INVENTORY

- Purpose
 - Ceremonial Popular/folk Art
 - Professional Amateur
- Location
 - Indoors Outdoors
 - Formal Informal
- Artistic Elements
 - Scenery: see Art Assessment
 - Properties
 - Costumes
 - Lighting
- Music
 - See Music Assessment
 - Live or Recorded?
 - Synchronized with dance?
- Number of Dancers
 - Solo Duet Trio Quartet Quintet Sextet 7 to 12 More Than 12
- Ensemble Gestures
 - Same Similar Different
 - Simultaneous Consecutive
- Movement
 - Are the dancers silent, rhythmic or melodic?
 - Which body parts are in motion?
 - Head Arms Torso Hips Legs Feet Hands
 - How often are the feet on the ground?
 - Are there acrobatic elements?
 - Is pantomime involved?
 - Are special feats of strength in evidence?
 - Is the movement smooth or jerky?
 - How high is the energy level?
 - Is there body contact? Lifting?
 - Types of motion: parallel, similar, contrary, oblique
- Structure
 - How long is the dance?
 - Is it sectional?
 - Is it narrative or abstract?
 - Is it tragic or comic?

CARNEGIE HALL

57th Street and 7th Avenue is, without question, the center of the musical universe. This is the place where performers go to make their careers. If you can say you played Carnegie Hall it puts you on a higher level than any other theater in the country.

Built in 1891, it was funded by Andrew Carnegie who made his fortune as the owner of the Carnegie Steel Corporation back in the days when America made steel. He was wealthy and wise enough to become one of the great philanthropists in American history. Tchaikovsky performed at the opening night concert conducting his *Marche Solennelle*. The program also included Beethoven's *Leonora Overture III* and the Berlioz *Te Deum*.

The Carnegie family owned the hall until 1925 when it was sold to a real estate developer who, in the 1950s, wanted to sell it to the New York Philharmonic, the primary tenant. However, the orchestra was planning to move to the new Lincoln Center complex and declined. In 1960 the hall was destined for demolition but was saved at the last minute by violinist Isaac Stern and a cohort of interested backers. Eventually the hall was bought by the City of New York and is now run by the nonprofit Carnegie Hall Corporation.

The main theater, Stern Auditorium, is complemented by the smaller Weill Recital Hall used for chamber music, and Zankel Hall in the basement. The three venues are noted for their excellent acoustics and warm ambiance.

One of the oldest jokes in the music business goes like this:

Question. "How do you get to Carnegie Hall?"
Answer. "Practice!"



LINCOLN CENTER

Urban renewal! To those who want to add to the glory of their metropolis these are magical words. That was in the mind of David Rockefeller III when he became Lincoln Center's first president in 1956. He schemed with urban planner Robert Moses to turn a working class residential neighborhood into the largest cultural center in America. His job was to raise private capital to assist with the massive project. That was more than half a century ago. The end result is the magnificent collection of edifices that populate the entire neighborhood. One does wonder, however, what all the tenants and business owners who were displaced thought of the original plan. Are they happy with it now?

Ground was broken in 1959 for first of many buildings. Philharmonic Hall, later Avery Fisher Hall, now David Geffen Hall opened in 1962 and was designed by famed architect Max Abramowitz. He did a wonderful job of creating a new home for the resident orchestra. The only problem was that the site plan for the building was too long and too narrow and the resulting acoustics in the hall were no match for the beautiful décor. The place was renovated twice but the results were still not satisfactory, so a major overhaul is planned for a time when the funds are once again available.

The second building to open was The New York State Theater, now the David H. Koch Theater. In 1964 it became the new home of the New York City Ballet and the New York State Opera. It was designed by Philip Johnson and was also eventually renovated, this time with greater success. It is located across the plaza from Geffen Hall. The following year saw the addition of Eero Saarinen's Vivian Beaumont Theater that occupies the northwest corner of the site. It abuts the Lincoln Center Library for the Performing Arts on Amsterdam Avenue, a branch of the NY Public Library system.

The plaza with its famous fountain was completed when Wallace Harrison's Metropolitan Opera House opened in 1966. With its massive murals by Marc Chagall it is the center of attention when viewed from across the street.

Many other structures were added to the original trio. 1969 saw the completion of Damrosch Park and the Guggenheim Band Shell in the southwestern corner of the sixteen-acre site. It was for many years the home of the Big Apple Circus that performed there every winter for 35 years until it folded. 1969 was also the year the Juilliard School and Alice Tully Hall were added across 65th Street.

After a building hiatus of twenty-one years the Rose Building opened in 1990. It houses the Walter Reade Theater, The Stanley Kaplan Penthouse, the School of American Ballet, a residence hall for Juilliard students, and much needed office space for many of the resident organizations. With contiguous space all used up, new extensions were housed off-campus but nearby. In 2004 Jazz at Lincoln Center opened a few blocks south on Broadway with three performing venues. In 2012 The Clare Tow Theater was added on top of the Vivian Beaumont Theater that also houses the Mitzi Newhouse Theater. Over the past decade much renovation and embellishment has taken place as the Center continued to grow and improve with new plazas and atria.

It is worth mentioning that in 2016 Debora Spar became the first woman president of Lincoln Center after the sudden departure of Jed Bernstein.

OTHER CONCERT VENUES

New York City is a place with almost ubiquitous music. You find it in the usual places but also in churches, schools, libraries, museums, parks, subways, and on street corners. The following is a list of some of the more usual places you can attend concerts. They are listed in alphabetical order.

Aaron Davis Hall at CCNY

Apollo Theater

Beacon Theater

Bowery Ballroom

Barclays Center

Brooklyn Academy of Music

Kaufmann Concert Hall at 92 Street Y

Kaye Playhouse at Hunter College

Lefrak Concert Hall at Queens College

Lehman Center for the Performing Arts

Madison Square Garden

Queens Library at Main Street

Radio City Music Hall

Roseland Ballroom

Springer Concert Hall at College of Staten Island

The Clare Tow Theater at Brooklyn College

The Cutting Room

The Grace Rainey Rogers Auditorium at the Metropolitan Museum of Art

The Town Hall

From 1915 to 1973 the summer home of the NY Philharmonic was **Lewisohn Stadium** on the City College campus. Now they deliver to a park near you: Central Park, Van Cortlandt Park, Cunningham Park, Prospect Park, and the Music Hall at Snug Harbor Cultural Center. The last person to conduct at Lewisohn Stadium was the author of this book. He conducted the CCNY Concert Band at the 1973 commencement ceremony and two weeks later the place was demolished.



MUSIC EDUCATION

While there are many fine conservatories and universities all over America that do a great job teaching music, there is nothing like studying in the cultural capital of the world. The following is a list of institutions around town that offer music instruction besides neighborhood public and private schools. They are listed in alphabetical order. Juilliard is world-famous, the others less so. Studying music is very hard because we are always striving for perfection. It helps if you are musical and have rich parents. Many successful musicians were self-taught while others learned from local musicians, friends, or relatives. Learning to read music only takes five minutes, followed by a lifetime of practice. No matter how good you are you can always get better.

Barnard College

Baruch College

Brooklyn College

College of Staten Island

Columbia University

CUNY Community Colleges

Fordham University

Hebrew Union College

Hunter College

Jewish Theological Seminary

Lehman College

Long Island University

Manhattan College

Manhattan School of Music

New York University

Queens College

The 92nd Street Y

The City College of New York

The Juilliard School

The New School

Wagner College

Yeshiva University

A COMPOSER'S COMPLAINT

Being a composer, especially a classical composer, is like being a mother. For a protracted period of time you carry within you the seed of a compositional idea and one day it gestates. After much travail, often filled with conflict, pain and anxiety, you give birth to a new offspring. But this is where the similarity ends. The mother then spends the ensuing years rearing and enjoying the fruits of her labor, but for the composer it is entirely different. The moment the piece is completed it usually spends the next few months or years--that is, if the composer is lucky and it happens at all--waiting to be adopted by a performer, much like the unwanted child of a pregnant teenager who, at the moment of birth, is taken away with the expectation that it will be given to others to raise.

Like the composer, the young girl may meet her progeny sometime in the future only to discover that the child was not raised in a fashion she would have chosen. Often, when the composer finally gets to hear the work in question the performance either does not conform to a preconceived interpretation or it is badly played (composition abuse?). Usually, even the best of performances does not measure up to the state of perfection in which the piece was originally conceived in the composer's imagination.

That was in the old days when, with quill, pen, or pencil in hand, the composer spent weeks or months bent over the composition table trying to imagine the tonal possibilities for an imaginary ensemble.

Today things are different. We have computers. We composers need no longer dream of hypothetical ensembles playing our music—they now are at our fingertips. In the past twenty years, the pencil has been replaced by the mouse and keyboard. Now, however, we are no longer like that pregnant teenager, we are more like Pinocchio's Papa Geppetto. We can create a living being, but it is somewhat mechanical, almost wooden. No matter how hard we try, it is not "real." The computer does allow us to immediately test our compositional theories but still we dream that someday a group of great musicians will bring our wooden puppet to life before a thunderously applauding Carnegie Hall audience. The review in *The New York Times* the next morning proclaims our genius to the world (O.K., time to stop dreaming).

It is fortunate that we compose classical music to satisfy some inner need, for, if we depended upon our craft to earn us a decent living, it might be a long time before we could put enough bread on the table to feed a family of four. Meanwhile, we carry on, creating beauty for beauty's sake, realizing that, even for the most successful of us, the rewards of recognition and appreciation are meager at best when compared with the adulation awarded to stars of popular music. Did you know, for example, that while a gold album in popular music represents the sale of a million disks, in the classical genre it represents only 50,000? Think hard! How many classical musicians do you remember seeing at the Grammys? Maybe it's time to change the term Classical Music to Unpopular Music. Some suggest that this unpopularity is deserved because our musical language has become too difficult to understand on first hearing, which is generally the only chance a classical composer gets. Viewed in perspective, it is hard to

imagine that the musical monuments of the past were ever easy to appreciate in their own time; after all, Bach, Mozart, and Beethoven were modernists in their day.

Maybe Unpopular Music really is not for everyone. After all, the Big Mac and the ham and cheese sandwich are much more popular than Sole Meuniere, Peking Duck, and Beef Wellington. And it may be more than just a matter of taste or budget. If everyone had the cash, would they spend it on haute cuisine on a daily basis? Maybe yes, probably no. It does seem that our recent obsession with Lite cuisine has carried over to our listening preferences. Music in the Age of Hip-Hop is almost devoid of true melody and harmony. It is now the poetry that reigns supreme accompanied by some repetitive beats, all of which signal that we are in a different musical world from that in previous centuries.

Should, then, the music of Stravinsky, Bartok and Ives, like rich food, be enjoyed only rarely, on special occasions? While each of us must decide what our daily diet of culture will be, most would agree that Unpopular Music should play at least some small part. But if that is so, why must that small part consist, mostly, of the contributions of deceased Unpopular composers? Are we living composers doomed to receive our just desserts only in heaven or on rare occasions on public television?

When we look at the small array of Unpopular music being played in concert halls and the media, we realize that only a handful of talent is represented. What about the forgotten ones, those untold numbers of composers whose music is virtually lost to us on dusty library shelves, in lonesome archives, and even refuse dumps? Are they like minor league ball players hoping to be discovered? Must they always dream of next season? Maybe even the minor leagues are a dream--for most of them are like Sunday afternoon softballers. Often, they are not even footnotes to hardball history. Does the fact that WNCN (FM) and WQXR (AM) dumped their classical formats years ago indicate that, even for the few well-known Unpopular composers, the playing field is getting smaller all the time? Thanks to YouTube many of the forgotten are finally accessible but are only discovered by accident when searching for someone else.

Ultimately, we must ask ourselves if there is there a place, or even a need, for the output of the myriad forgotten composers, those who have no difficulty quantifying their obscurity. It is possible that their contribution is purely statistical-- that, in order to produce its Beethovens, a society must have a significantly large number of composers toiling away so that, from among this vast number, a few may rise to the top and represent the efforts of their generation. If it sounds like ants or bees, maybe there is a parallel. It may seem strange to think of composers, those lofty artists, as cultural drones, but the description may be very appropriate.

Of course, this complaint should not be limited to the creation of music. It pertains to all the arts and, by extension, to every human endeavor. This means that most everyone, even many of the "stars," suffers the same malady. What, then, is the cure we all seek? Is it love, recognition, appreciation, pride? How about all four, and more? That's what makes us human. Wait a minute...

Composers are human?

DVORAK IN NEW YORK

I am sure you are aware of the concept of six degrees of separation. It postulates that all the people on the planet are somehow related by no more than six degrees. Well, Antonin Dvorak was a Czech composer who, on first inspection seems to be very far away in both time and space. But I am here to tell you that he is related to you, my young reader, more than you would suspect.

Back in the 1960s I was a substitute teacher at Stuyvesant High School that was, at that time, located on East 17th Street. After school each day, as I walked to the subway, I passed a building on the same street that had a plaque that stated that Dvorak had lived there. That must have been convenient for him because he had been brought to America to be the director of the newly formed National Conservatory of Music that was located on the same spot as I was teaching. He served in the position from 1892 to 1895 because he had been seduced by the promise of an enormous salary and short hours. The school was founded by Jeannette Thurber, a wealthy and daring philanthropist, to educate women and blacks alongside the usual white male students who might attend. Unfortunately The Panic of 1893 caused the Thurber family much economic distress and they were forced to cut Dvorak's salary in half.

One of the reasons that Dvorak crossed the Atlantic was his curiosity about musical life in America. He was much taken by the music of African-Americans and Native Americans, and felt that their contribution to our cultural life was under appreciated. Obviously, much of that music infected his brain because he used similar melodic ideas in the music he wrote here. In 1893 he was commissioned by the New York Philharmonic to write his Symphony No. 9. It is, without doubt, his finest work, and was received with tumultuous applause. The following year he wrote his famous Cello Concerto in B minor.

Two months before coming to America Dvorak hired a young American violinist who was just finishing his studies at the Prague Conservatory as his assistant. This fellow came from the Czech-speaking community of Spillville, Iowa. In the summer of 1893 Dvorak took his family to Iowa for a protracted visit and while there wrote his American String Quartet. That same year he also got to conduct his Symphony No. 8 at the Columbian Exposition in Chicago. His time here was well spent but without sufficient remuneration.

Prompted by homesickness and financial worries, in April of 1895 Dvorak returned to Europe where his career was on the ascendant thanks to much help from Johannes Brahms. His last years were filled with composing and conducting and he was even honored by Emperor Franz Joseph even though he was ethnically an outsider. He died in 1904 at the age of 62 with much music still unfinished. As it turns out he wrote his best stuff here in America. Despite much protestation the house he had lived in was torn down in 1991 to make room for an expansion of Beth Israel Hospital.

By now you are wondering about those six degrees of separation, so here goes: You are my student and I studied with Mark Brunswick, he studied with Rubin Goldmark, and he studied with Dvorak. So, there are four degrees between you and Dvorak. The next time you listen to The New World Symphony your appreciation will be enhanced by the connection.

A MAHLER APOTHEOSIS

Gustav Mahler was the most important Viennese musical figure at the turn of the 20th century. He came to New York in 1908 to conduct the Metropolitan Opera and later conducted the New York Philharmonic from 1909 to 1911 when he left because he was afflicted with heart problems and the strain of conducting was too much for him.

During this period he wrote his amazing Ninth Symphony. The fourth and final movement of which is, without doubt, one of the great finales in the history of symphonic music. Its slow, majestic demeanor describes a farewell to life that is profound at the beginning and becomes ethereal as the movement draws its last breath. Recently, listening to this piece brought to mind two questions for which I am not sure there are hard and fast answers. It is even possible that there are no answers, a prospect that may reinforce their importance.

Every measure of this masterpiece is filled with almost magical musical materials that force me as theorist to ponder why it is that some music seems to be saying something important while other well-crafted pieces I have encountered seem to utter very eloquent but vapid musical narratives, what Shakespeare called “much ado about nothing.”

The second question concerns the ability of the music to transcend this level of importance and rise to some exalted place that seems to be the very apotheosis of the entire score. There are four such measures that appear on p. 170 of the orchestral score (mm. 5-8) that haunt me every time I hear them. They seem to be the distilled essence of the entire symphony and utter some special truth about the human spirit for which I have no words. Marked *dolcissimo*, this passage’s poignant affect has never faltered since I first heard it as an undergraduate more than a half century ago.

There is another such musical moment that I know of that does the same magic trick as the Mahler. It is a two-measure fragment, measures 81 and 82, in the fabulous love duet, “Bess, You Is My Woman Now” from George Gershwin’s opera, *Porgy and Bess*. Each measure contains the same descending tetrachord harmonized with different chords. This is the moment where the two lovers commit to each other and the effect is devastating. There is a poignancy that is indescribably powerful and never fails to bring tears to my eyes. These two bars transcend human understanding as only music can do.

I have spent my entire professional career investigating the structure of musical masterpieces and attempting to transmit my findings to my students and colleagues, but I have never attempted to answer philosophical questions such as these. I have studied the linear and harmonic elements of this musical fragment that lasts just thirty seconds until I was blue in the face and I am still no closer to an answer than I was when I started. All of which begs the question, “When you are confronted by magic is it in your best interest to know how the trick is done?” I am almost ready to conclude that the answer to that question is “no,” for child-like wonder may be a precious gift to be cherished and preserved, especially by theorists in their golden years.

VARESE IN NEW YORK

Edgard Varese (1883-1965) was a French-born composer who was injured in World War I and moved to the United States in 1915. He lived in Greenwich Village and hung out with the artistic crowd at local cafes. It was there that he made contact with forward thinking musicians who were interested in new compositional practices and the promises of electronic instruments. The excitement of life in NYC was the inspiration for his first major orchestral work, *Ameriques*, written in 1921. It was first performed by the Philadelphia Orchestra under Leopold Stokowski in 1926. It is scored for a massive orchestra and continues the spirit of sophisticated primitivism that Stravinsky started with his *Rite of Spring* in 1913.

Interestingly, almost all of the music Varese wrote in Europe was destroyed in a warehouse fire in Berlin, so he virtual started over again here in the New World. One of the first new pieces was *Hyperprism* that was performed by Stokowski in 1924. The work is scored for winds and percussion and sounds like nothing else written up until then. Its unique style and extreme dissonance were cutting edge and appropriate for the age but not destined to make him a comfortable living from an adoring public. The same aesthetic is present in his massive *Arcana* that followed in 1927.

Varese was very active in *avant garde* musical circles and in 1921 founded, along with Carlos Salzedo, the International Composers' Guild dedicated to performing the most experimental American and European scores. During the six years the Guild was in existence he composed some of his best-known works including *Offrandes*, *Octandre*, and *Integrales*. The following year he established a similar organization in Germany with Ferruccio Busoni. It was around this time that he met Louise Norton, the editor of a Dada magazine, who would later become his wife and biographer.

In 1928 he went to Paris to recompose some sections of *Ameriques* to include the ondes Martenot, a newly invented electronic instrument. This was followed in 1930 with *Ionisation*, the first classical composition for percussion only. The ondes Martenot is again featured in *Equatorial* completed in 1934. This piece, like many of Varese's chamber works is scored for unique combinations of instruments. In this case it is four trumpets, four trombones, piano, organ, Theremin or ondes Martenot, six percussionists, and a bass singer who intones an ancient Mayan chant.

Varese continued to be highly productive as composer, electronics inventor, and scientist. These interests culminated in the production of *Poeme electronique* that was broadcast through four hundred speakers in Le Corbusier's Philips Pavilion at the 1958 World Fair in Brussels. The two million visitors who experienced this time-space performance were of differing minds when it came to its appreciation.

Although Varese's total compositional output only amounts to about three hours of music, he was extremely influential among almost all adventurous composers both here and abroad. In his lifetime there were a few 78RPM recordings of his works in the 1930s and a small number of LPs in the 1950s so his music was mostly known through rare live performances. He had a number of successful students while in New York and the rest of us learned a great deal about the composition of his sound objects from the more frequent performances and recordings made since his death in 1965. His wife, who authored his biography, *Varese: A Looking-Glass Diary*, died at age 98 in 1989.

BARTOK IN NEW YORK

Bela Bartok (1881-1945) was one of the 20 greatest composers of the 20th century. He was the quintessential Hungarian patriot, but when Hitler made things intolerable for good people, Bartok and his wife, Ditta, fled their homeland in 1940. They were later joined by their son Peter who enlisted in the US Navy and served in the Pacific for the remainder of the war. Their other son, Bela, remained behind and survived the war. This was not his first time on these shores. He made his American debut at Carnegie Hall in 1927 playing his *Rhapsodie for Piano and Orchestra*. He was here through 1928 making other concert appearances with Fritz Reiner and Joseph Szigeti.

Although the Bartoks were safe from the madness in Europe their time here was not emotionally or financially comfortable. They had moved to a foreign country in middle age where they were not happy grappling with English. The demand for them as concertizing pianists was not great and his music was not widely known on this side of the Atlantic. He did manage to get a research fellowship at Columbia University and was able to engage in ethno-musicological study and transcription of the Serbian and Croatian folk material in the Columbia Library. This was all well and good because Bartok had been a keen student folk music as a young man but the stipend from Columbia barely put food on the table. Fortunately, he had a coterie of friends who were ready to help support him so they lived comfortably above the poverty line.

One of the other problems he faced here was medical. His symptoms began with stiffening of the shoulders followed by bouts of fever a couple of years later. It was not until 1944 that he was diagnosed with leukemia but by that time not much could be done to save his life. When his illness prevented him from giving concerts the Baldwin Piano Company took back the concert grand they had loaned him for his apartment. I still have great difficulty imagining them doing that to one of the musical giants of the century. Sometimes human cruelty and stupidity know no bounds.

Even though his body was failing him his mind bristled with creativity. Serge Koussevitsky, the conductor of the Boston Symphony, commissioned him to write something for that organization. The result was *The Concerto for Orchestra*, one of the great masterpieces of the century. It was premiered in December 1944 to rave reviews. It is still an audience favorite and always will be. That year he was commissioned by Yehudi Menuhin to write his powerful *Sonata for Solo Violin*. The following year, his last, he composed the gorgeous *Piano Concerto No. 3* for his wife's birthday so she would have something to play when he was gone. He died a month before her birthday with some of the scoring unfinished, but the music he created thrills audiences lucky enough to hear it today. He died while working on his *Viola Concerto* with the solo part completed but not the scoring of the orchestra. Both pieces were finished for him by one of his students, Tibor Serly.

Bartok died in West Side Hospital and was buried in Ferncliff Cemetery in Hartsdale. His funeral was attended by only ten people. In 1988 his body was reburied in a state funeral in Budapest next to his wife who passed in 1982. Bartok's portrait appeared on the 1000 Hungarian forint note printed between 1983 and 1992. There is a bust and plaque of him at 309 West 57th Street, his last residence. He also lived at 3242 Cambridge Avenue in the Bronx. There are statues of him in many cities around the world.

STRAVINSKY IN NEW YORK

If you had to pick one word to describe Igor Stravinsky that word would be “peripatetic.” This was a fellow who was born in Russia in 1882 and travelled his whole life until finally ending up in New York. He matured in an around St. Petersburg studying law to please his parents but wanting to do music. He came under the guidance of composer Nicolai Rimsky-Korsakov who became his musical father. In 1909 two of his compositions were played in a public concert where they were heard by Serge Diaghilev who was, at the time, planning to present Russian opera in Paris. Diaghilev hired him to do some orchestrations and then commissioned *The Firebird* ballet and the rest, they say, is history. It was 1910 and Stravinsky was now famous. In the next couple of years he went on to write *Petrushka* and *The Rite of Spring* thus cementing his place in the pantheon of great composers. He did a number of other scores for the *Ballets Russes* ending with *Apollo* in 1928. Years later he composed *Orpheus* and *Agon* for George Balanchine’s NYC Ballet. His musical style changed a few times over the years forcing his adoring audience to follow him in new directions. In that regard he was much like Picasso.

Although he had enjoyed spending his summers in the Ukraine, the family lived in Russia in the summer and in Switzerland in the winter. In 1920 he and his family moved to France and lived in number of different locations. The family became French citizens in 1934 after moving to Paris. In 1939 his wife died of tuberculosis and he sailed alone to America to deliver the Norton Lectures at Harvard. In 1940 he married his second wife, Vera, in Massachusetts after an affair with her that had lasted almost two decades. He was a lover of women and may have even had an affair with Coco Chanel.

Because World War II was consuming Europe at that time he stayed in America and moved to West Hollywood and became a naturalized citizen in 1945. There he was a stranger in a strange land. He did socialize with the growing community of émigrés that had fled from Europe. He took lunch with Rachmaninoff and was especially fond of carousing with the English authors, especially Aldous Huxley, who shared his fondness for hard liquor.

His last move occurred in 1969 when he took up residence at The Essex House on Central Park South. He only lived there two years, dying of heart failure in 1971. When news of his death was published the next day every composer within a 100 miles of the city convened at Frank E. Campbell Funeral Home on Madison Avenue. There the musical community said their farewells to a man who had defined and changed the direction of music in the 20th century several times. It was amazing to see all the musical luminaries gathered around his coffin and chatting nearby. We were all his children.

He was eventually buried on San Michele Island outside of Venice next to his wife. The marble slab over his grave only says “Igor Stravinsky.” He lies not far from the friend who had catapulted his career so many years before, Serge Diaghilev.

Stravinsky wrote no music while he was here in The Big Apple, but it did not matter because he had already created many of the musical monuments of his time. He was short of stature but loomed large as a musical giant for the ages. His *Rite of Spring* was the standard against which all orchestral music in the 20th century was measured.

RACHMANINOFF IN NEW YORK

The 1917 October Revolution, Vladimir Lenin, and the confiscation of his summer home; all of this was too much for an emotionally fragile Sergei Rachmaninoff so he packed up his family and they left Russia never to return. Luckily, in the midst of all the madness and mayhem in Moscow he had received an offer to perform in Scandinavia and off they went. By this time Rachmaninoff was a forty-four year-old, well-known pianist, composer, and conductor and was much in demand in Europe and especially the United States. On November 1, 1918 he and his family sailed from Norway. Eleven days later they were safely ensconced in the Sherry Netherlands Hotel on Fifth Avenue. Despite being in recovery from the Spanish Influenza he got a new manager and was booked for a concert tour. Finally his economic circumstances were stabilizing after years of uncertainty.

In 1920 he signed a lucrative recording contract with the Victor Talking Machine Company (RCA) that added to his financial security. The following year he purchased an apartment at 33 Riverside Drive. It served as a center of Russian socializing and culture on the Upper West Side. Among the musical notables who frequented his dinner parties was Vladimir Horowitz who would remain a champion of Rachmaninoff's music to the end of his days.

Travel was in his blood and in 1930 he supervised the construction of a villa in Switzerland. It was to be his summer retreat until 1939 when World War II began. He loved boating on Lake Lucerne and was relaxed enough to compose his *Rhapsody on a Theme by Paganini* in 1934 and his Third Symphony in 1936. Upon his return to the States the Philadelphia Orchestra celebrated the 30th anniversary of his first trip to America in 1909 by presenting a week of Rachmaninoff's music. The festival at Carnegie Hall was conducted by Eugene Ormandy and the composer himself.

After some minor surgery in spring 1940, Rachmaninoff spent the summer recuperating on Long Island where he composed the only piece of his written entirely on these shores. His *Symphonic Dances* was premiered by Ormandy the following January. Rachmaninoff spent the next three years doing extensive recordings. In 1942 his health began to decline and he was advised to move to a warmer climate to aid in his recovery from a number of ailments. He and his wife moved to Beverly Hills nearby to his friends Horowitz and Stravinsky. Despite his ill health he did attempt to complete what he had planned to be his last tour in 1942-43. He gave his last concert at the University of Tennessee but was forced to cancel the rest of the tour and return to California where he died in March 1943.

His will stated that he wanted to be buried in Moscow near his friend Scriabin, but his American citizenship gained only a month earlier in NYC made that impossible. He is interred at Kensico Cemetery in Westchester. His last NYC residence was 505 West End Avenue to which he had moved in 1926 when the building was new. He spent his whole life struggling with physical and emotional pain but left us a small body of work in a very personal style that will surely stand the test of time. His Piano Concerto No. 2 is, perhaps, his most successful and beloved composition. The recordings he made with those immense hands of his are still collectors' items to this day.

IRVING BERLIN IN NEW YORK

The Great American Songbook is a hypothetical collection of the greatest popular tunes written between the end of World War I and Neil Armstrong landing on the moon. A large portion of that songbook was written by one man, Irving Berlin. His is a great American success story. He was born Israel Beilin in the Russian Empire in 1888. His father was a cantor in the synagogue who, like millions of other immigrants, relocated his family to New York prompted by the cruelty of the czars and their pogroms. The gateway to America was first Ellis Island and then life on the Lower East Side. His early years were, like so many, a struggle with poverty. He left school at thirteen and began singing in neighborhood bars for penny tips from generous customers.

His career moved up a step when he began plugging songs at Tony Pastor's Music Hall on Union Square followed by a stint as a singing waiter at the Pelham Café in Chinatown. Around that time he taught himself how to play the piano and started fooling around with songwriting. As luck would have it, his first published tune had his name spelled "Berlin" as we know it today. He gained more experience working in Tin Pan Alley and in 1911 he composed his first world-famous song, "Alexander's Rag Time Band." He was on his way to stardom.

In 1912 he married Dorothy Goetz. They honeymooned in Havana where, unfortunately, she caught typhoid fever and died six months later. His experience of sadness inspired many of his future songs. This low point in his life did not last long. In 1914 he wrote the tunes for *Watch Your Step*, a ragtime revue that starred Irene and Vernon Castle. Berlin was twenty-six and enjoying sudden fame and fortune. His productivity increased and by 1918 he had written hundreds of songs, mostly topical ditties that had brief success. All the while he was moving from ragtime to lyrical, romantic ballads a prime example of which is "A Pretty Girl is Like a Melody" of 1919. The song, written for the Ziegfield Follies, was so popular Florenz Ziegfield used it as the theme song for all his subsequent shows.

When America entered World War I in 1917 the Army drafted Berlin and stationed him on Long Island where he was expected to write patriotic songs to help the war effort. This he did with zeal. His all-soldier musical revue "Yip Yip Yaphank" included the well-known "Oh! How I Hate to Get Up in the Morning" and "Mandy." The proceeds from the show were used to support the camp's service center. A song that he had written for the show but decided not use was "God Bless America."

After the war he returned to show business and in 1921 built the Music Box Theater on 45th Street to showcase his talents. Song after song continued to flow from his fertile imagination. In 1925 he met his second wife and wrote a song for her called "Always" which remains a classic to this day. This was followed by other classics such as "Blue Skies," "Puttin on the Ritz," and "Marie." His catalog is enormous.

In 1938 he took "God Bless America" out of the drawer and gave it to Kate Smith to sing on the 20th anniversary of Armistice Day. Since then this beloved song has become the unofficial national anthem. Berlin gave all the royalties from the song to the Boys Scouts and Girl Scouts who, over the years, have received millions of dollars thanks to his generosity. He wrote hundreds of hits, perhaps none bigger than "There's No Business Like Show Business" from *Annie Get Your Gun* in 1946. He was America's songwriter.

SOME OF IRVING BERLIN'S SONGS YOU PROBABLY KNOW

Alexander's Rag Time Band

All Alone

All By Myself

Always

Anything You Can Do

Blue Skies

Cheek to Cheek

Count Your Blessings

Doin' What Comes Naturally

Easter Parade

The Girl That I Marry

God Bless America

Happy Holiday

Heat Wave

How Deep is the Ocean?

I Got the Sun in the Morning

I Love a Piano

I've Got My Love to Keep Me Warm

It's a Lovely Day Today

Let Yourself Go

Let's Face the Music and Dance

Let's Take an Old-Fashioned Walk

Mandy

No Strings

Oh! How I Hate to Get Up in the
Morning

A Pretty Girl is Like a Melody

Puttin' On the Ritz

Say It With Music

There's No Business Like Show Business

This is the Army Mr. Jones

Top Hat, White Tie and Tails

What'll I do?

When I Lost You

White Christmas

You Can't Get a Man with a Gun





Dvorak, Mahler, Varese, Bartok, Stravinsky, and Rachmaninoff



STEPHEN FOSTER

In the annals of music history there have been many contributors to the general repertoire who did not live to see their 40th birthday. The names of Pergolesi, Mozart, Schubert, and Chopin come immediately to mind, but the list is actually very long. If you do a little digging you come up with composers such as Lili Boulanger and George Gershwin. You can add to that illustrious list the name of Stephen Foster who is regarded by many as the "Father of American Music." He certainly was one of the greatest songwriters in the history of this country. Songs like "Oh! Susanna", "Hard Times Come Again No More", "Camptown Races", "Old Folks at Home" ("Swanee River"), "My Old Kentucky Home", "Jeanie with the Light Brown Hair", "Old Black Joe", and "Beautiful Dreamer" are still remembered by those who love the synergy of lyrics and melody.

His songs are not only highly entertaining but they tell us much about life in the mid-nineteenth century. Foster was born in Lawrenceville, Pennsylvania in 1826. His family saw to it that he got a good education and he wrote his first composition when he was fourteen. In 1846 he dropped out of college and moved to Cincinnati to work with his brother. It was there in 1848 that he wrote his first hit song, "Oh! Susanna," that became a favorite of the men who participated in the California Gold Rush of that year.

He then returned to Pennsylvania where he signed a contract with the Christy Minstrels. In the early 1850s he penned a large number of his most memorable tunes. Many of them were employed in black face minstrel shows, a form of entertainment that disappeared with the times and would never be performed in this post-civil rights era. It is amusing that many of his songs had Southern themes even though he never spent any time in that part of the country except for a honeymoon steamboat excursion to New Orleans and back in 1852.

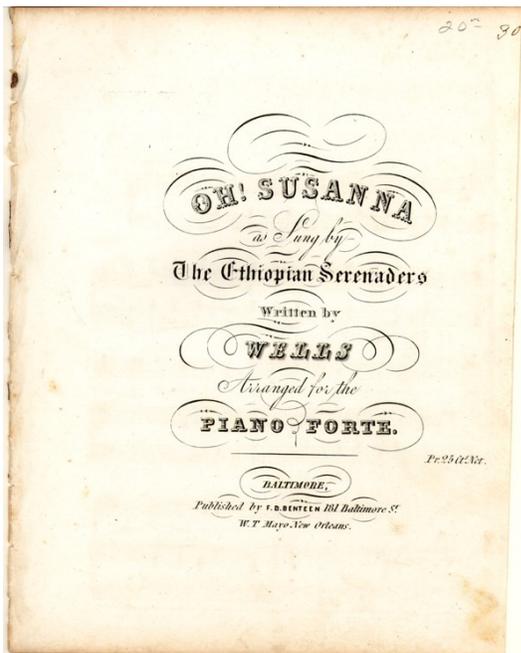
Foster spent the last four years of his life in New York City and, unfortunately, we have no record of him from that period. He was a prime example of someone who achieved fame and fortune and lost it all, possibly to drink and gambling. Anyway, in January of 1864 he came down with a fever while residing in a second-rate hotel in the Bowery. In a weakened state he fell, cutting his neck. He was found in a pool of blood and died three days later at Bellevue Hospital. Ironically, shortly after his death "Beautiful Dreamer" was published and probably would have provided him with funds sufficient to make him financially comfortable. But like so many musicians his end was tragic.

His music is forever woven in the fabric of American life. "My Old Kentucky Home" is the eponymous state song. "Old Folks at Home" became the official state song of Florida. It is worth mentioning that the great Charles Ives quoted many of Foster's tunes along with other American classics in his complex instrumental music. How important was Foster? An album of his songs won the folk music Grammy in 2005—141 years after he left us. In 1935 Henry Ford bought what he thought was Foster's birthplace and moved it to his museum in Michigan. The legacy of Foster lives on.

If you do more research on Foster, also check out James Bland. He was also a great 19th century songwriter and his life journey was the opposite of Foster. He started life in Flushing and ended up in Merion, PA. His "Carry Me Back to Old Virginny" is now a state song. He also died in poverty and obscurity. Music is a tough business!

Oh! Susanna

This is one of the most popular songs ever written. These are the original lyrics from 1848. I include them here to give you some sense of life in mid-19th century America. The racism inherent in each stanza is an issue we are still grappling with today. What does it say about America that we have taken this long to address this problem?



Stanza 1

I came from Alabama,
Wid my banjo on my knee,
I'm gwyne to Louisiana,
My true love for to see;
It rain'd all night the day I left,
The weather it was dry,
The sun so hot I froze to death,
Susanna, don't you cry.

Chorus

Oh! Susanna, Oh don't you cry for me,
I've come from Alabama
Wid my banjo on my knee.

Stanza 2

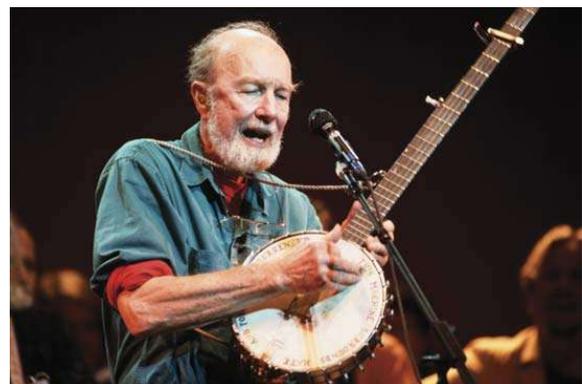
I jumped aboard de telegraph,
And trabbled down de riber,
De lectric fluid magnified,
And killed five hundred nigger.
De bullgine bust, de horse run off,
I really thought I'd die;
I shut my eyes to hold my breath,
Susanna, don't you cry.
Chorus: Oh! Susanna...

Stanza 3

I had a dream de odder night
When ebery ting was still,
I thought I saw Susanna
A coming down de hill;
The buck-wheat cake was in her mouth,
The tear was in her eye;
Says I, "I'm coming from de south,
Susanna, don't you cry."
Chorus: Oh! Susanna...

Stanza 4

I soon will be in New Orleans,
And den I'll look all round,
And when I find Susanna,
I will fall upon de ground.
And if I do not find her,
Dis darkie'l surely die,
And when I'm dead and buried,
Susanna, don't you cry.
Chorus: Oh! Susanna...



Pete Seeger and his banjo

CHARLES IVES

Charles Ives was the Nikola Tesla of American music. The products of his imagination were so far advanced that they still sound modern a hundred years after their creation. He is the first homegrown musical genius whose output compares favorably with that of the leading composers from Europe. His father was a bandmaster in Danbury, Connecticut, who had served in the American Civil War. Ives learned a great deal about music composition from the unusual tutelage he received from his dad. As a result, Ives became a church organist at fourteen about the time he started composing. He was a fine athlete and captained the baseball team for Hopkins Grammar School. He studied music at Yale where he also played varsity football.

Upon graduation he went to work as an actuary in the insurance business. In 1907, at age 33, he and a friend from college started their own insurance company; a good move because he was never going to be able to support a family on the money he made from music composition. In fact, it may be said that, in his lifetime, his music was as great as it was unappreciated. His success with estate planning and insurance was the inverse of his fame in the music business. Ives was undoubtedly a brilliant but rather intense young man. Over the years he suffered what he called "heart attacks" but were probably psychosomatic episodes. After recovering from the one in 1907 he went into creative overdrive and composed many of his most important works. After the attack he suffered in 1918 he composed very little.

On May 7, 1915 news reached New York of the sinking of the RMS Lusitania on its way to England. Here is what Ives later wrote about that day and about the composition of the third movement of his *Orchestral Set No. 2* that is based on that event.

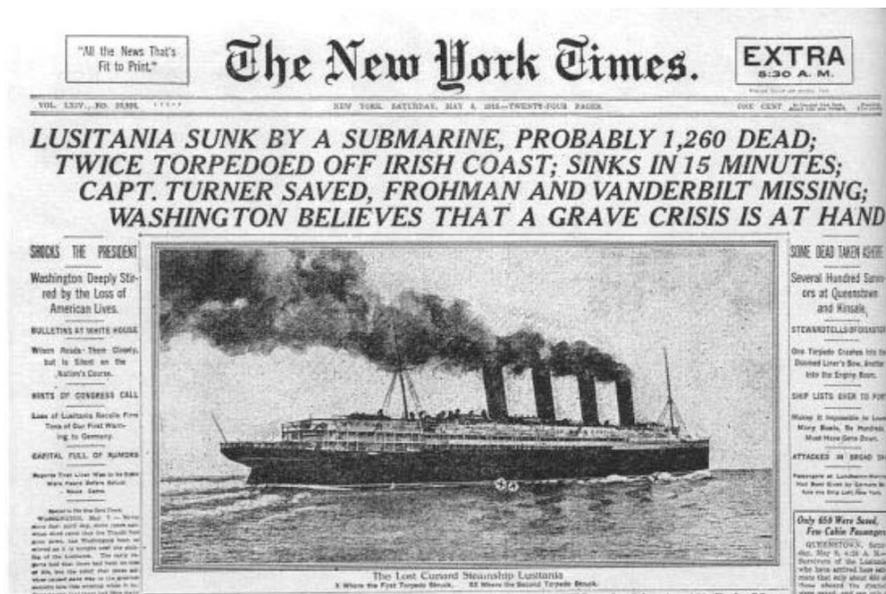
From Hanover Square North, at the End of a Tragic Day, the Voices of the People Again Arose...

There's a personal experience behind [the third movement], the story of which I will now try to tell. We were living in an apartment at 27 West 11th Street. The morning paper on the breakfast table gave the news of the sinking of the Lusitania. I remember, going downtown to business, the people on the streets and on the elevated train had something in their faces that was not the usual something. Everybody who came into the office, whether they spoke about the disaster or not, showed a realization of seriously experiencing something. (That it meant war is what the faces said, if the tongues didn't.) Leaving the office and going uptown about 6 o'clock, I took the Third Avenue "L" at the Hanover Square Station. As I came on the platform, there was quite a crowd waiting for the trains, which had been blocked lower down, and while waiting there, a hand-organ, or hurdy gurdy was playing on a street below. Some workmen sitting on the side of the tracks began to whistle the tune, and others began to sing or hum the refrain. A workman with a shovel over his shoulder came on the platform and joined in the chorus, and the next man, a Wall Street banker with white spats and a cane, joined in it, and finally it seemed to me that everybody was singing this tune, and they didn't seem to be singing for fun, but as a natural outlet for what their feelings had been going through all day long.

There was a feeling of dignity all through this. The hand-organ man seemed to sense this and wheeled the organ nearer the platform and kept it up fortissimo (and the chorus sounded out as though every man in New York must be joining in it). Then the first train came and everybody crowded in, and the song eventually died out, but the effect on the crowd still showed. Almost nobody talked--the people acted as though they might be coming out of a church service. In going uptown, occasionally little groups of would start singing or humming the tune.

Now what was the tune? It wasn't a Broadway hit, it wasn't a musical comedy air, it wasn't a waltz tune or a dance tune or an opera tune or a classical tune, or a tune that all of them probably knew. It was (only) the refrain of an old Gospel Hymn that had stirred many people of past generations. It was nothing but--"In the Sweet Bye and Bye." It wasn't a tune written to be sold, or written by a professor of music--but by a man who was but giving out an experience.

This third movement is based on this, fundamentally, and comes from that "L" station. It has secondary themes and rhythms, but widely related, and its general makeup would reflect the sense of many people living, working, and occasionally going through the same deep experience, together.



I should share with you that the first movement of *Orchestral Set No. 2* is a dream state based on the much beloved music of Stephen Foster. Also, if you want the ultimate Ivesian New York experience, listen to his *Central Park in the Dark* written in 1906, and, while you are at it, listen also to *Orchestral Set No. 1, Three Places in New England*. Prepare to be amazed. This strangely beautiful experimental music like nothing you have ever heard. His music was modern then and it remains so today.

GEORGE GERSHWIN

I begin with a confession. Back in 1965 when I was courting my first wife I discovered that she had a small record collection in her room that included Gershwin's *Piano Concerto in F*. When this lovely young lady asked me what I thought of the piece I foolishly spouted a prejudicial remark that was born of my burgeoning interest in the European musical *avant garde*. At the time I was just getting into Stravinsky and Schoenberg and snobbishly looked down on Gershwin as someone less than those masters from across the pond. Well, that was a long time ago and I have learned much in the interim. Late in life I seriously investigated the works of Gershwin and found, much to my delight and surprise, that he truly was a master of American music.

My initial reaction was not unlike the reception he got from his contemporary critics who could not abide with a pop and jazz musician who was trying his hand at classical music. They were not prepared for a triple threat creature like Gershwin who defied classification because he excelled at whatever he attempted. He wrote many of the greatest show tunes in the history of musical theater. He was a brilliant jazz pianist who translated that talent into the likes of *Rhapsody in Blue*. And, he was also the classical composer who produced such masterpieces as the tone poem *An American in Paris* that successfully employs the compositional practice of his beloved Debussy.

His all too brief life began in 1898 in Brooklyn. His first piano instruction came from his sister but he soon moved to a professional teacher, Charles Hambitzer. When it was obvious that he needed composition lessons he studied with Rubin Goldmark who was also the teacher of Aaron Copland and many other budding young composers at the time. He began his career as a fifteen year-old song "plugger" on Tin Pan Alley. His first published song, composed at age 17, earned him fifty cents. His first national hit, "Swanee," followed two years later. From there it was an easy move to composing for Broadway with his brother Ira, a City College dropout, and Buddy DeSylva as lyricists. With DeSylva he produced *Blue Monday* a one-act jazz opera that served as a forerunner for his later operatic efforts.

1924 was the year Gershwin composed *Rhapsody in Blue*. The score was orchestrated by Ferde Grofé because Gershwin was busy on Broadway, and was premiered by Paul Whiteman at Aeolian Hall. That piece established his career as a serious composer and has proven to be his most popular work.

Gershwin's crowning achievement was his 1935 opera *Porgy & Bess*. Despite being one of the most important operas of the 20th century it was not a financial success partly due to its subject matter. The opera is set in an African-American neighborhood in South Carolina, Catfish Row, and the entire cast is black. The opera is rather long and dark but does contain songs that will live forever, not the least of which is the lullaby, "Summertime," that is universally famous.

In 1936 Gershwin moved to Hollywood to write music for the movies with the intention of becoming sufficiently wealthy so he could devote himself full-time to classical composition. The following year he began to suffer the effects of a brain tumor from which he died at age 38. The eulogy at his memorial service was orated by his good friend and tennis buddy, Arnold Schoenberg. He is buried in Westchester Hills Cemetery with the rest of his family. His music is eternal.

GETTING STARTED WITH GEORGE GERSHWIN SONGS

A Foggy Day
But Not for Me
Embraceable You
Fascinating Rhythm
I Got Rhythm
Let's Call the Whole Thing Off
Love is Here to Stay
Love Walked In
Nice Work If You Can Get It
Of Thee I Sing
Oh! Lady Be Good
S' Wonderful
Somebody Loves Me
Someone to Watch Over Me
Stairway to Paradise
Strike Up the Band
Swanee
That Can't Take That Away from Me
The Man I Love
The Real American Folk Song
They All Laughed

Porgy & Bess:

Summertime
A Woman is a Sometime Thing
My Man's Gone Now
I Got Plenty of Nothing
Bess, You is My Woman Now
Oh! I Can't Sit Down
It Ain't Necessarily So
I Loves You Porgy
There's A Boat That's Leaving
Oh, Lawd, I'm On My Way



DUKE ELLINGTON

Although the United States of America was founded on egalitarian principles we have ended up, like all other societies, with class distinctions. As a result of the industrial revolution we ended up have a small upper class of industrial magnates many of whom, like Commodore Vanderbilt, Jay Gould, and Henry Clay Frick, chose to reside in New York. At the other end of the economic spectrum an aristocracy developed in the world of jazz. Beginning with King Oliver, a number of jazz musicians chose to give themselves aristocratic titles that for the most part were well earned by outstanding contributions to their art. Along with Count Basie there was also Edward Kennedy Ellington who is known to us as Duke Ellington.

He began life in 1899 in Washington, D.C., but spent most of his life in New York and died here in 1974. Over the fifty years of his amazing career he helped to elevate jazz to new heights. At age seven he started taking piano lessons from a woman with the unlikely name of Marietta Clinkscales. Both his parents were pianists so he took to the instrument immediately. Like many kids his age he was more interested in playing baseball than practicing the piano. As it turns out he was also a very talented artist and, for a while, earned money by painting signs in the day while he gigged at night. He even turned down a scholarship to the Pratt Institute because he wanted to be a musician.

When the drummer in his band was invited play in New York, Ellington decided to go with him. They stayed for a while in Harlem but found it hard to break into the jazz scene so they returned home. Their funk did not last long. In 1923 his band got a gig in Atlantic City that landed them a play date at the prestigious Exclusive Club back in Harlem. From there they moved to the Hollywood Club in midtown. He stayed there for four years. In 1926 he signed with agent-publisher Irving Mills and started to have his music published and frequent recordings were made.

In 1927 King Oliver turned down the opportunity to be the house band at The Cotton Club and the job fell to Ellington. The Cotton Club was a whites only venue and his adoring audience filled the house almost every night. It was the place to be uptown. Music is a business of connections, and in 1929 Ellington got connected to Florenz Ziegfield. For several months his band played on stage for the hottest show on Broadway. Good connections got him into his first film entitled *Black and Tan* followed by a spot in an Amos 'n' Andy film, *Check and Double Check*. By 1930 his career was well on its way.

The 1930s were a difficult time in America and the music business suffered like everyone else. Regardless, Ellington kept writing and performing with a variety of groups. At this time he moved to the more prestigious William Morris Agency. At the end of the decade Billy Strayhorn entered Ellington's life and served for decades as his right hand man providing lyrics, making arrangements, and even conducting when Ellington was not available. In the 1940s Ellington started to experiment with compositions that were longer than the three minutes dictated by the duration of a 78rpm record. The first of these was "Black, Brown, and Tan" premiered in Carnegie Hall in 1943. The early 1950s were a low point in his career but an appearance at the Newport Jazz Festival in 1956 put him back on the map. He was most certainly one of the moving forces in jazz and his influence was wide spread and continues to inspire musicians well into the 21st century. He is featured on a 2009 US Mint quarter for D.C.

AARON COPLAND

In the mid-1930s, in the middle of the Great Depression, an American composer made the conscious decision to stop being a strict modernist and change the course of his compositional practice. His choice of melodies and harmonies from then on would be more appealing to a wider musical audience. Interestingly, in doing this, he became the quintessential American composer. He reached into the national soul and found a means to express the dreams and aspirations of a nation that was struggling to survive. If music is a metaphor for life, his music was America.

From that description you would expect me to be talking about some talented musician from the mid-west with strong agrarian roots in the great cornfields of Kansas. Well, you would be wrong. The fellow I am referring to was Aaron Copland, a Jewish boy from Brooklyn who probably did not know how to milk a cow or harvest corn. He tapped into the folk music of North America and came up with scores that are as American as apple pie.

He was born in 1900 and at age fifteen began to devote himself to composing music that, like all neophytes, was derivative and stylistically unfocused. He studied with Rubin Goldmark between 1917 and 1921 and absorbed those lessons with relish. Like many Americans in search of cultural refinement he then traveled to Paris and studied with Nadia Boulanger. Upon his return to the States he rented a studio in the Empire Hotel and started making connections in the New York musical scene. One of his early supporters was Serge Koussevitsky who performed Copland's *Symphony for Organ and Orchestra* in 1924.

In 1926 he composed what may be his first authentic, mature work, his *Piano Concerto*. Its style is a comfortable blend of contemporary dissonance and jazzy tunes and rhythms. For him this foray into jazz was only a temporary way station. His style moved quickly in the direction of the European modernists and a prime example of this trend was his *Piano Variations* of 1930. It is all well and good to be modern but it does not pay the rent or garner adoring fans. The search for a wider audience found its fulfillment in *El Salon Mexico* that was inspired by a trip south of the border in 1936. In this work he found a new voice that was tuneful and rhythmically energetic and was immediately appealing.

His next highly successful work was the ballet *Billy the Kid* (1939) that uses five cowboy tunes as the source material. He was now getting so well known that he was invited to write scores for two films, *Of Mice and Men* and *Our Town*. These scores walk the very fine line between classical rigor and populist pandering. Many contemporary critics could not abide his success and did not understand his genius of appearing to be simple while employing very sophisticated, innovative compositional techniques. He went on to write two more brilliant scores, *Rodeo* (1942) and *Appalachian Spring* (1944) that proved to be huge successes. His *Lincoln Portrait* and *Fanfare for the Common Man* have become almost patriotic clichés that are performed with great frequency at important events and national holidays.

His creativity started to wane in the 1950s and by the 1960s he returned to being a modernist experimenting with Schoenberg's 12-tone system without much success. He died at the ripe old age of 90 at his home in Westchester.

JEROME KERN

It is very important for you to carry proper identification and contact information on your person whenever you go out. How do I know that? Because, in 1945, Jerome Kern, a wealthy Broadway and Hollywood composer, was walking on Park Avenue and 57th Street when he had a cerebral hemorrhage and fell to the sidewalk. All he had on him was his ASCAP card so they rushed him to the poor persons' ward at a second-class hospital. Later, when they found out who he was, he was moved to a better hospital where he died six days later with his wife and his librettist, Oscar Hammerstein II, at his side. He died not far from where he was born on Sutton Place in 1885.

Kern was in New York to work on a new production of his crowning achievement, *Show Boat*, the Broadway show that changed musical history. In 1927, with the support of Florenz Ziegfeld, he and Hammerstein set to music the book by Edna Ferber. At that time all Broadway shows were frothy entertainments with little plot and lots of dancing, silly songs, and pretty girls. Ferber's book rides an emotional roller coaster from highs to lows, and the lows were way below acceptable standards of the time. The story touches upon alcoholism, drug addiction, and miscegenation. In staging this production they were going against the grain and changing the course of theater history. They were also risking financial ruin, but the show is so wonderful and has so many great songs that it continues to thrill audiences almost a century later.

Some of the immortal songs from *Show Boat* include "Old Man River," "Can't Help Lovin' Dat Man," "Make Believe," "You are Love," "Life Upon the Wicked Stage," and "Bill." The show was filmed in 1936 and 1951 and theater revivals and opera presentations occur around the world with great frequency.

Kern had been writing songs and shows since he dropped out of high school, so he was already a wealthy man. In fact, in 1929, before the stock market crash, he sold his personal library at auction for \$1.7 million because he felt it was too much of a responsibility. In the four decades he was contributing to the musical life of America he wrote 700 songs for 104 shows and films. This was one busy guy!

His musical training started with his mother who was a skilled pianist. Later he attended the New York College of Music and afterward went to Europe to study theory and composition. When he returned he was a highly knowledgeable musician who knew the popular and classical repertoire. He was also a very lucky guy. In 1915 he was supposed to sail to England with a colleague on the RMS Lusitania but overslept because of a late night card game. The Lusitania was torpedoed by the Germans with a great loss of life and was one of the reasons American entered the war two years later. Lucky for us and for him! If he had sailed we never would have had the 1932 movie *Music in the Air* with the songs "The Song is You" and "I Told Every Little Star" and the 1933 classic *Roberta* with "Smoke Gets in Your Eyes," "Let's Begin," and "Yesterdays."

The complete list of his memorable tunes would take pages and pages so I will just mention the hit song from his last Broadway show *Very Warm for May* (1939), "All The Things You Are." Great tune, great harmonies, great lyrics! There were loads of talented songwriters in the annals of Broadway musicals, but he was a composer for the ages.

ALL THE THINGS YOU ARE

JEROME KERN

Phrase A

Phrase A1

Bridge

Phrase A2

You are looking at a lead sheet of the Kern tune. It shows you the melody and chords.

This song has four phrases: A A1 B A2

The phrase lengths are: 8 + 8 + 8 + 12 = 36 bars

The number under each new note is the place in the chord that accompanies it:

R is the root, 3 is the 3rd, 5 is the 5th, and 7 is the 7th, 9 is the 9th

Some of the melody notes are not chord tones and provide momentary dissonance:

App is appoggiatura (leaps too far), *Sus* is suspension (held over), *P* is passing

RICHARD RODGERS

If you are at all musical it is relatively easy to write a song. However, to write a great song you need talent, skill, and luck. It helps if you are inspired by great lyrics. In June of 1902 a boy was born in the Arverne section of Queens who would grow up to redefine the Broadway musical and leave us a repertoire of 900 tunes many of which, once heard, are never forgotten. That lad was Richard Rodgers who, like most musically talented kids, starting playing the piano at a very early age and picked it up with ease. In his teen years he was already composing songs for summer camp shows. After attending DeWitt Clinton High School in Manhattan he studied at Columbia but later switched to the predecessor of Juilliard, The Institute of Musical Art.

Through a friend of his brother, in 1919, he met Lorenz Hart who became his first lyricist. For six years they struggled to achieve success and finally made a breakthrough with the song "Manhattan" for a benefit show for the Theater Guild. From then on their star was in ascent. For the remainder of the 1920s they wrote a string of successful shows. The pair spent the early 1930s in Hollywood producing a number of hit songs for film. Their return to Broadway in 1935 resulted in another string of hit shows including "On Your Toes," "Babes in Arms," "I Married an Angel," "The Boys From Syracuse," "Pal Joey," and "By Jupiter."

When Hart died in 1943 Rodgers hooked up with Oscar Hammerstein II. Their first show together was *Oklahoma!* Its innovative structure signaled that a new era in Broadway shows had begun. This blockbuster was the first show since Jerome Kern's *Showboat* in 1927 to be a complete drama set to great music. Their string of successes continued with *Carousel* (1945), *South Pacific* (1949), *The King and I* (1951), and *The Sound of Music* (1959). What makes these five shows unique is the fact that every song in the show immediately went into the Great American Songbook.

Most of the shows that Rodgers wrote with Hart and Hammerstein were beautifully orchestrated by Robert Russell Bennett. In 1952, when I was eleven and my brother was seven, NBC aired a 26-part documentary about World War II called *Victory at Sea*. It featured themes by Rodgers arranged by Bennett. After the initial run in prime time it was picked up by Channel 11 and played for years after school. My brother and I, like so many of our generation, were addicted to its powerful naval images and inspiring music. I cannot tell you how many times we watched those riveting episodes but we still reminisce about the hundreds of hours we spent together glued to the television screen.

Interestingly, Rodgers and Hammerstein seemed to have lost their magic touch after *The Sound of Music*. Their next three shows were flops including a *Cinderella* made for TV. When Hammerstein died in 1960 Rodgers wrote both the words and music to *No Strings* (1962) that produced only one memorable song. I am sure the disappointments of his last years were artistically troubling but he was very wealthy, with a big, gorgeous house in Fairfield CT. He and Hammerstein had garnered 15 Oscars, 2 Grammys, 35 Tonys, and 2 Emmys. A theater on 46th Street is named after him, as is a school on West 89th Street. His 43 shows left an indelible mark on the history of musical theatre. "You'll Never Walk Alone" from *Carousel* is an anthem for the ages.

THE SONGS OF RICHARD RODGERS

A Cockeyed Optimist

A Real Nice Clambake

Bali Ha'i

Bewitched, Bothered, and Bewildered

Bloody Mary

Blow High, Blow Low

Climb Every Mountain

Dites-Moi

Do-Re-Mi

Edelweiss

Falling in Love with Love

Getting to Know You

Happy Talk

Hello Young Lovers

Honey Bun

I Could Write a Book

I Enjoy Being a Girl

I Have Dreamed

I Whistle a Happy Tune

I'm Gonna Wash That Man

I'm In Love with a Wonderful Guy

If I Loved You

June is Bustin' Out All Over

Love Makes the World Go Round

Mister Snow

Mountain Greenery

My Favorite Things

My Heart Stood Still

Oh What a Beautiful Mornin'

Oklahoma!

Out of My Dreams

People Will Say We're in Love

Shall We Dance?

Sixteen Going on Seventeen

So Long, Farewell

Soliloquy

Some Enchanted Evening

Something Wonderful

The Sound of Music

The Surrey with the Fringe on Top

The Sweetest Sounds

There is Nothing Like a Dame

There's a Small Hotel

This Can't Be Love

This Nearly Was Mine

We Kiss in a Shadow

What's the Use of Wond'rin

You'll Never Walk Alone

You've Got to Be Carefully Taught

Younger Than Springtime

STEPHEN SONDHEIM

No discussion of the Broadway musical would be complete without mentioning Stephen Sondheim. As it turns out his contribution to the theater was inevitable. In 1940 his divorced and abusive mother moved ten year-old Stephen from a large apartment on Central Park West to a farm in Doylestown, Pennsylvania. They lived not far from the summer residence of Oscar Hammerstein II who wrote all those wonderful lyrics for Jerome Kern, Sigmund Romberg, and Richard Rodgers. Hammerstein took young Stephen under his wing and taught him the tricks of the trade. They were like family until Hammerstein died in 1960. Stephen was an avid student and went on to create a long trail of great lyrics and memorable music.

His first taste of success came when he teamed with Leonard Bernstein to create *West Side Story* in 1957. He then wrote his own music and lyrics for a chain of hits including *Gypsy* (1959), *A Funny Thing Happened on the Way to the Forum* (1962), *Company* (1970), *Follies* (1971), *Pacific Overtures* (1976), *Sweeney Todd* (1979), *Merrily We Roll Along* (1981), *Sunday in the Park with George* (1984), and *Into the Woods* (1987). His first hit song was "Send in the Clowns" from *A Little Night Music* written in 1973.

Along the way there were failures, lest you think it was all roses. A good example is *Assassins* that opened off-Broadway in 1990 and ran for 73 performances. He also wrote lyrics for Richard Rodgers' flop *Do I Hear a Waltz?* (1965). Their teamwork was continually hindered by Rodgers' alcoholism. There were other projects that never got finished but he did devote himself for many years to tutoring aspiring writers and composers and even helped Lin-Manuel Miranda in the early stages of *Hamilton*.

The dramatic power of Sondheim's shows primarily comes from his ability to weave a fascinating tale. His lyrics are brilliantly witty and the music serves the stories well but he never wrote enough hit songs to compare with the likes of Gershwin, Berlin, or Rodgers. Here are some of Sondheim's songs you may have heard:

Being Alive
The Ladies Who Lunch
Broadway Baby
Not While I'm Around
Pretty Women
The Ballad of Sweeney Todd
You Could Drive a Person Crazy
Anyone Can Whistle



CAROLE KING

In 2013 President Obama awarded Carole King the fourth Library of Congress Gershwin Prize for Popular Song. She was the first lady to be so honored. Two years later she was feted at the Kennedy Center for her lifetime contributions to American culture. Not bad for the daughter of a Jewish fireman who was born in Manhattan in 1942. Her parents met when they were both students at Brooklyn College. Carol Klein was musical from a very young age and had a talent for words as well. Her mom gave her the first piano lessons when she was four. She started performing publicly when she was a student at James Madison High School where she changed her name to Carole King. She met the first of four husbands as a student at Queens College and they went on to write many songs together.

She ended her long career at age 70 with four Grammys. Her prodigious output of pop hits qualified her for the Songwriters Hall of Fame as well as the Rock and Roll Hall of Fame. She is retired now and lives in Idaho of all places where she is an environmental advocate.

She made 25 solo albums one of which held the record for most weeks at No.1 for more than 20 years. It is estimated that she has sold more than 75 million albums worldwide, so I guess you could say she was successful. Quite a number of her songs were recorded by other artists and were big hits. In the 1960s she composed "Chains" that was later recorded by the Beatles. "The Loco-Motion" was a big hit for her babysitter Little Eva. Bobbie Vee went gold with "Take Good Care of My Baby." Everyone danced to the Drifters rendition of "Up on the Roof." The Chiffons went to the top of the charts with "One Fine Day." The list goes on and on but I will end it with Aretha Franklin performing "A Natural Woman." By now you get the idea. She wrote a lot of great songs. I am sure you know "I Feel the Earth Move." If you don't, get to YouTube in a hurry.

Perhaps her biggest album, *Tapestry* (1971), featured the song "You've Got a Friend" that James Taylor made famous. "It's Too Late" is also from that album. She has also written music for television and movies, and occasionally appeared as an actress in her prime. Currently on Broadway there is a musical entitled *Beautiful: The Carole King Story*. It is not the best show ever, but the songs are so good the show has been running for five years.



TRAVEL IN THE AGE OF TRUMP

Mohammed Fairouz, a native New Yorker, is an important young composer who enjoys frequent performances of his music both here and abroad. He usually travels internationally with ease. But in 2017, after arriving at JFK Airport from London Heathrow, he proceeded as usual to the Automated Passport Control machine and scanned his documents and fingerprints that proved he was a legitimate American citizen. As he did so, an officer approached and told him that he needed to report for additional screening. She did not explain why, except to say that his name was “super-common and potentially problematic.” So he followed her to a separate room for further interrogation.

There, they took away his luggage and laptop and told him that he could not use his mobile phone. Other officers then aggressively escorted him to another room and had him sit in a hard plastic chair without the ability to listen to music or read a book. Again, he was not given much information other than that this “could take hours,” something he did not need to hear after an eight-hour trans-Atlantic flight.

He spent almost four hours in that seat without access to anything he owned. It was a total waste of time and the treatment was always discourteous, even abusive. He and the other detainees in that room, without arrest or charge, were being treated as if they were criminals. He sat there as an American citizen with the wrong name and wrong appearance. Whenever anyone objected to their treatment they were told they could file a written complaint with the proper authorities, but right now they had to shut up and sit down. To all assembled the prospect of filing a complaint seemed like a fool’s errand. Eventually he was allowed to enter the country of his birth, emotionally less for wear.

Airports in other countries have a dedicated line for their citizens and residents. Those lines are designed to expedite the process of getting passports stamped so that entry is as seamless as possible. The passport process often ends with a welcome home greeting. Indeed, many have this experience in the United States – but not everyone. The men and women at US Customs and Border Protection are now on high alert for anyone who does not look or sound “right” thanks to an administration that is intolerant and belligerent towards immigrants and people of color. America can do better than this but things will only improve when the lying and vitriol from our chief executive ceases to trickle down to the guardians at our gates.



THE GRAWEMEYER WINNERS

The human race is an interesting species. We are capable of creating great joy and beauty and are also the purveyors of much cruelty and destruction. We even give prizes for these deeds. For cruelty and destruction we award you a prominent place in history. For joy and beauty there are any number of prizes. Near the top of the list of significant awards for positive contributions to society are the Grawemeyer Awards bestowed each year since 1985 by the University of Louisville. The awards were the idea of industrialist and philanthropist H. Charles Grawemeyer who wished to make the world a better place, or at least recognize attempts by others to do so.

Among the awardees of this prize are a number of composers who are in some way connected to New York City. The first of these was **Joan Tower** a pianist and composer who received the award in 1990. She was born in 1938 in New Rochelle and spent her youth in Bolivia. She returned to New York for study and received her doctorate from Columbia University in 1968. In 1969 she was one of the founders of the award-winning Da Capo Chamber Players who premiered a great deal of new music. She got the Grawemeyer for her *Silver Ladders* written in 1986. She teaches at Bard.

In 1991 **John Corigliano** got the prize for his first symphony that was written for the Chicago Symphony Orchestra. John was born in New York City where his father was the concertmaster of the New York Philharmonic for 23 years. He has enjoyed great success as a composer. He has won five Grammys and an Academy award for his score for *The Red Violin*. His opera *The Ghosts of Versailles* was premiered at the Met. He is a distinguished professor at Lehman College.

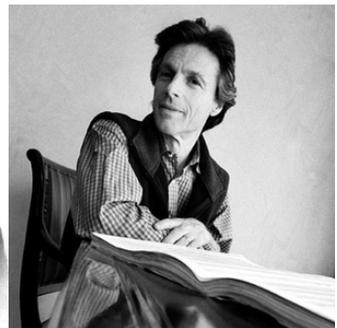
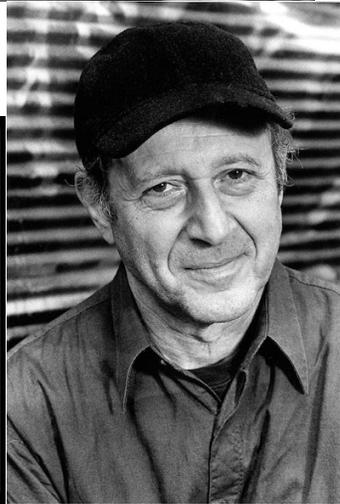
The 2001 winner was **Pierre Boulez** who was music director of the New York Philharmonic from 1971 to 1977. He is one of France's most important composers of the 20th century. His recordings of modern music with the great orchestras of the world are an important legacy.

In 2005 **George Tsontakis** won the prize for his second violin concerto. He was born in Astoria and is a graduate of the Juilliard School where he studied with Hugo Weisgall and Roger Sessions. He is the founding director of the Aspen Contemporary Ensemble and has taught at Brooklyn College, CCNY, Sarah Lawrence, and is now at Bard.

In 2007 **Sebastian Currier** received the award for his composition, *Static*. He is a graduate of the Manhattan School of Music and the Juilliard School. We consider him a temporary New Yorker for his years spent studying here even though he grew up in Rhode Island.

Last, but not least, is **Peter Lieberman** who won in 2009 for his *Neruda Songs*. He was born in NYC to a distinguished family. His mother was a ballerina and choreographer and his father was president of Columbia Records. After getting his degree from Columbia University he went to Colorado to study with a Buddhist master. He wrote a number of wonderful songs for his wife to sing. Sadly, she died of breast cancer just before he was diagnosed with lymphoma from which he died in 2011.

COMPOSERS BORN IN NEW YORK



Richard Rodgers, Aaron Copland, Stephen Sondheim
Meredith Monk, Steve Reich, Lin-Manuel Miranda,
John Corigliano, John Williams, Jerome Kern, Peter Lieberson

MUSICAL PERFORMERS

On the following page you will see an abbreviated list of outstanding performers from the classical, jazz, rock, and folk traditions. Each of these people has a fascinating story associated with their rise to fame. Undoubtedly, they were all very talented at birth and somewhere in their youth someone recognized their potential and helped to foster their talent. Talent is the ability to learn something quickly and easily. To understand talent all you have to do is go to YouTube and enter "talented five year-old pianist" and you will see what I mean. It is amazing to see little kids whose feet do not reach the pedals of the piano performing Bach and Mozart with gay abandon and apparent ease. Only a few of these little geniuses will have significant lifetime careers.

Talent is not enough to make a career in the difficult world of music because there are so many talented little kids just like you who also want to be rich and famous and play at Carnegie Hall. What is required is ten years of weekly lessons from a knowledgeable and caring mentor. Along with all those trips to your teacher's studio are the thousands of hours of practice that are necessary to become an accomplished professional. Sometimes the pressure on these gifted children is more than they can bear and they give up practicing or suffer an injury that ends their career.

Because music is a business you will also need a manager who knows how to properly introduce you to the competitive world of musical performance. They have the contacts and connections to make things happen for you. It takes a lot of planning and preparation to get you into the upper echelons of the business. Without the help of powerful people you can often spend years unrecognized and unsuccessful. So many times we see someone burst upon the music scene as an overnight sensation without realizing how many years they struggled in the shadows waiting for their moment in the spotlight.

The music business is very competitive and, in fact, there are numerous competitions around the world for pianists, violinists, conductors, and the like. Because there are only so many stages and so many nights in the year, the world does not need all of the performers that the world's conservatories are turning out each year. Even if you win a major competition you still have a long way to go to establish a permanent career. Performing at the highest levels can often be very stressful and many very talented people fall by the wayside, often due to drugs, depression, or injury. How many musicians have we lost to a lifetime of addiction and occasional overdose?

To discover what is involved in creating and maintaining a musical career I highly recommend you reach for your Internet connector and check out some or all of the people on the next page. What you will encounter are tales of triumph and tragedy, each one more fascinating than the next. Call me when you finish and we'll talk.



Sergei Rachmaninoff

110 LEGENDARY STARS OF MUSIC IN AMERICA

Here is a sampling of great singers and instrumentalists from the last century. Check them out 10 each week. These are people you should know.

Adolph Herseth
Al Jolson
Andre Watts
Andrea Bocelli
Andres Segovia
Aretha Franklin
Arthur Rubinstein
Barbara Streisand
Bennie Goodman
Bessie Smith
Beverly Sills
Billie Holliday
Bing Crosby
Bob Dylan
Bob Marley
Bobby McFerrin
Buddy Rich
Burl Ives
Charlie Parker
Chet Atkins
Chet Baker
Chuck Berry
Count Basie
Daniel Barenboim
Dave Brubeck
David Oistrakh
Dietrich Fischer-Dieskau
Dinu Lipatti
Dizzy Gillespie
Duke Ellington

Elisabeth Schwarzkopf
Ella Fitzgerald
Elton John
Elvis Presley
Enrico Caruso
Etta James
Ezio Pinza
Feodor Chaliapin
Frank Sinatra
Frank Zappa
Fritz Kreisler
Gene Krupa
Glenn Gould
Harry Belafonte
Harry James
Huddie Ledbetter
Ignacy Jan Paderewski
Isaac Stern
Itzhak Perlman
James Brown
James Galway
Janis Joplin
Jascha Heifetz
Jean-Pierre Rampal
Jessye Norman
Jim Morrison
Jimi Hendrix
Joan Baez
Joan Sutherland
John Coltrane
John Denver
John Lennon
Johnny Cash
Josh White
Kirsten Flagstad
Leontyne Price
Louis Armstrong
Luciano Pavarotti
Mahalia Jackson
Maria Callas
Mario Lanza
Martha Argerich
Marvin Gaye
Maynard Ferguson

Merle Haggard
Michael Jackson
Mick Jagger
Miles Davis
Myra Hess
Nat "King" Cole
Odetta Holmes
Pablo Casals
Patsy Cline
Paul McCartney
Paul Robeson
Paul Simon
Peggy Lee
Pete Seeger
Placido Domingo
Rafael Mendez
Ravi Shankar
Ray Charles
Roy Orbison
Rudolf Serkin
Sarah Vaughan
Steve Reich
Stevie Wonder
Sumi Jo
Sviatoslav Richter
Thelonious Monk
Tito Puente
Tommy Dorsey
Tony Bennett
Van Cliburn
Vladimir Horowitz
WC Handy
Whitney Houston
Willie Nelson
Woodie Guthrie
Yo-Yo Ma



THE CONDUCTOR

A conductor has many jobs. He or she is responsible for producing a concert that is so successful that people not only feel like they got their money's worth, but they have a powerful impression they take away with them that they remember the next day and beyond. The conductor is usually referred to as "maestro," meaning teacher. Their job begins many months or even years before the concert when the program is planned so that a well-balanced selection of music will be performed in the allotted time. Most professional concerts are planned for two hours. That means you will perform approximately 90 minutes of music if you start five minutes late so late comers can be seated, and allow for a twenty minute intermission so people can intake water or relieve themselves of it. In the old days people used to smoke while they conversed with their companions in the lobby about what transpired in the first half of the concert.

Once the program is planned, the conductor must spend weeks or months studying the score or scores so they know the music inside and out. They must seek out the original intentions of the composer and blend it with their own interpretation. They need to know what every member of the ensemble will sing or play, and the problems attendant with its performance. When they show up at the first rehearsal they have to know which parts to rehearse first so that time is not wasted, and at the end they can play the entire concert in what is known as the dress rehearsal, the last run through before the concert. They must have a concept of the music that is secure and musical and be able to transmit it to the ensemble with few words and copious expressive gestures.

They are primarily responsible for the speed at which the music will be played, the tempo. If the music slows down or speeds up, they are the ones who control that process. They also make sure that the dynamics are properly balanced so that the important musical material is clearly transmitted to the audience. The larger the ensemble the more they need a conductor because players may be very far apart and need to be unified in their efforts. The conductor also needs to cue players when they enter after long periods of rest so they do not worry about counting measures.

Most importantly, they need to make sure that everyone plays the right notes at the right time. They are the provider who gives the ensemble the comfortable feeling that it is being led by someone who is supremely talented, knows the music, and is cognizant of the needs of the players. They need the confidence that all will be well.

As in all things, there are wonderful conductors and there are fakers. Sometimes you can tell the difference just by watching to see if the musicians are actually watching their leader or are they relying on themselves for security. A conductor may signal their intentions using a baton, if they know how to use one. A good baton is about the length of the forearm. You know things are not good if the conductor is using a pencil. Sometimes they just use their hands. Some conductors jump all over the place and put on quite a show while others limit their gestures to the minimum required for the task. In the end, we judge the conductor by the quality of the performance and the power of the exhilaration we experience on the way home.

THE ORCHESTRA

Traditionally, when we think about an orchestra we are envisioning an ensemble comprised of strings, woodwinds, brass, and percussion. However, over the past three centuries the constituency has ranged far and wide. From the smaller chamber orchestra to the grand symphony orchestra the number of players can be as little as 12 to as much as 112. The size of the orchestra depends on the repertoire being played as well as the financial resources of the organization.

Here are three sample sizes:

Mozart Orchestra	Berlioz Orchestra	Stravinsky Orchestra
1 flutes	2 flutes (piccolo doubled)	5 flutes (piccolo, alto)
2 oboes	2 oboes (English horn doubled)	5 oboes (English horn)
2 bassoons	2 clarinets (piccolo doubled)	5 clarinets (piccolo, bass)
2 French horns (contrabassoon)	4 bassoons	5 bassoons
2 trumpets	4 French horns	8 French horns
timpani	4 trumpets	5 trumpets (piccolo, bass)
6 violin I	3 trombones	3 trombones
6 violin II	2 tubas	2 tubas
4 violas	2 timpanists	2 timpanists
3 cellos	1 percussionist	3 percussionists
1 string bass	2 harps	
	14 violin I	16 violin I
	12 violin II	14 violin II
	10 violas	12 violas
	10 cellos	10 cellos
	8 string bass	8 string basses

Each instrumental group has a principal player. They are responsible for making sure the section plays synchronously and they perform the solos. The leader of the first violins is known as the concert master, a prestigious position. There are currently six Class A orchestras in America: New York, Boston, Philadelphia, Chicago, Cleveland, and Los Angeles. They have the biggest budgets and the best players. All players are chosen by audition. Those who audition have been invited from other orchestras or conservatories. Once chosen it is a lifetime position, unless old age or health reduce the level of their playing abilities. Until the later years of the 20th century all major orchestras were men only clubs. Women were excluded for any number of spurious reasons, but things have been changing slowly but surely. A few orchestras even have a woman conductor!

Running an orchestra requires a sizable support staff and can be very expensive. Many orchestras in America have been faced with financial difficulties because the federal and state governments do not see fit to support the arts as they do in other places in the world. In the past several years a number of orchestras have been out on strike.

ARTURO TOSCANINI

There was a time when Arturo Toscanini was a household name to radio audiences throughout America. You can thank David Sarnoff, the head of the Radio Corporation of America, for that. He had always wanted radio to make a significant contribution to the life of the average American family. By 1937 Sarnoff was successful enough to fulfill his dream, so he invited Toscanini to broadcast Saturday afternoon concerts from a brand new Studio 8-H in Rockefeller Center. In order to do this Sarnoff gave him an orchestra, the NBC Symphony. It was comprised of the best musicians money could buy. They were employed for an unheard of 52-week contract. Two famous conductors, Artur Rodzinski and Pierre Monteux, were brought on board to hire the musicians and train them in anticipation of Toscanini's arrival. The maestro's first concert with them was on Christmas Day. As usual he conducted from memory because he had poor eyesight.

Sarnoff had hired Toscanini because he was by this time one of the most famous musicians in the world. He was born in Parma in 1867 and started his musical career as a cellist and even played under Giuseppe Verdi in Milan. He got into conducting by chance but, bit by bit, created a fine reputation that resulted in his directing the premieres of Puccini's *La Boheme* and Leoncavallo's *Pagliacci*. By 1898 he was principal conductor at La Scala, the most prestigious opera house in Italy. He stayed with them for a decade until he moved to NYC to conduct the Metropolitan Opera (1908-1915). When his term with the Met was over he was supposed to return to Europe on the *Lusitania* but, as luck would have it, he cut his engagements short and left a week earlier on a different ship.

He returned to New York in 1926 to assume the directorship of the New York Philharmonic. Amazingly, in 1930, with that orchestra, he was the first non-German to conduct at Wagner's theatre in Bayreuth, Germany. In 1936 he was asked to lead the first concerts of the newly formed Palestine Orchestra that later became the Israel Philharmonic. He conducted at the Salzburg Festival from 1934-1937 and was much in demand everywhere except in fascist Italy.

Toscanini led the NBC Symphony from 1937 to 1954 and during part of that time lived at Wave Hill, a beautiful 28-acre estate, in Riverdale. The hundreds of concerts that he directed were all recorded on various media that are all housed at the New York Public Library. In 1940 he took the orchestra on a tour of South America. On his return he complained in writing to Sarnoff about the use of his musicians for other NBC activities. In protest he refused to sign his renewal contract so Leopold Stokowski conducted the orchestra from 1941 to 1944. In 1950 Studio 8-H was converted to a television facility so the orchestra moved to Carnegie Hall where the acoustics were better and the ambience warmer. He conducted his last broadcast there, an all-Wagner program, on April 4, 1954. My father took me to that concert and I still remember sitting in the next to the last row of the balcony. From that vantage point Toscanini appeared very small—not the musical giant of legend.

You will be amused to know that Studio 8-H is now the home of Saturday Night Live.

LEONTYNE PRICE

Leontyne Price is widely regarded as the first African-American singer to earn international acclaim in the world of opera.



She was born in 1927, in Laurel, Mississippi, to James Anthony Price, a carpenter, and Kate Baker Price, a midwife with a beautiful singing voice. She demonstrated real talent as a child and sang a great deal at church in her youth. After graduating from high school, Price attended The Juilliard School on a full scholarship. She landed important roles in school opera productions and was scouted by important composers and producers.

In 1952, Price made her Broadway debut as St. Cecilia in the revival of Randall Thompsen's *Four Saints in Three Acts*. Immediately following the show's three-week engagement, she was cast in a touring production of George Gershwin's *Porgy and Bess*. For the next two years, Price dazzled audiences with her stunning portrayal of Bess, gaining acclaim with her flawless vocal interpretations. During her tour with the show, she married co-star William Warfield, who portrayed Porgy.

In 1955, Price starred in the NBC Opera Theatre's production of Giacomo Puccini's *Tosca*. This performance led to a string of other TV opera roles. Her San Francisco Opera debut in 1957 was the start of an international career that sent her to major opera houses both here and abroad.

Price's debut at the Metropolitan Opera House in 1961 as Leonora in Verdi's *Il Trovatore* was such a success it marked the beginning of her residency as one of the opera's principal sopranos.

Price gave her farewell performance as Aida at the Met in 1985. It was telecast and hailed as one of the most successful operatic performances in the Met's history. Throughout her career, Price's recordings earned her numerous honors, including more than a dozen Grammy Awards. She rose to stardom as a woman of color in a time and profession where the odds were stacked against her. She opened doors through which others followed.

LEONARD BERNSTEIN

It is entirely possible that Leonard Bernstein was the most famous classical musician of the late 20th century. He was a composer, conductor, pianist, TV personality, and author. He was like a volcano, constantly erupting with new ideas and new projects. He was a man of the media and knew how to be seen and heard at will. People like him are driven by some unknown force that compels them to excel. I will always remember how he conducted, like some crazy man dancing himself to exhaustion up to the last chord of the piece. He finished every concert drenched in sweat as if he had sacrificed himself in the service of music. Afterwards, in the green room where he greeted well-wishers, he would chain smoke by lighting one cigarette with another. This was a metaphor for a man who was burning his candle at both ends.

He was born in Lawrence, Massachusetts, in 1918. His grandmother insisted that he be named Louis, but when she died he changed it to Leonard. He was fifteen. Not surprisingly, he was interested in music from an early age and took immediately to the piano. He was actively engaged in musical activities in high school and at Harvard and began making important contacts with the likes of Aaron Copland. He did graduate work at the Curtis Institute where he learned conducting from Fritz Reiner and piano discipline from Isabelle Vengerova.

Upon graduation he moved to New York and roomed with his friend Adolph Green who ran a comedy troupe along with Betty Comden and Judy Holiday in Greenwich Village. In 1940 he spent the summer at Tanglewood in Serge Koussevitzky's conducting class. The conductor of the Boston Symphony Orchestra became his music mentor and father figure. For a couple of years Bernstein served as his assistant.

In 1943 he was appointed assistant conductor to Artur Rodzinski at the New York Philharmonic and made his Carnegie Hall conducting debut when Bruno Walter came down with the flu and was unable to perform. From 1945 to 1947 he was the music director of the New York City Symphony an organization founded the previous year by Leopold Stokowski. It was during this period that he started to be recognized as a composer of note with his *Jeremiah Symphony*. He also started to perform in Europe and Israel, a connection that would last until his final days.

He became music director of the New York Philharmonic in 1958 and served until 1969, after which he was conductor laureate. During that time he was noted for promoting obscure composers such as Charles Ives, Jean Sibelius, and Gustav Mahler. His fame became nation wide when he went on CBS television with his fifty-three Young People's Concerts. Now he was educating a generation of new audience members.

In 1956 Bernstein's operetta, *Candide*, with libretto by Lillian Hellman, was premiered to enthusiastic applause. The following year his most famous creation, *West Side Story*, hit Broadway like a storm. It turned out to be his most famous work much to his chagrin because it was popular music, not classical. He would never be another Mozart.

The details of Bernstein's career are so copious they require more space than can be allotted here, so I invite you to check him out online. Some highlights include his memorial concert for JFK, his work at the Metropolitan Opera, his score for *On the Waterfront*, his Mahler Festival at the Vienna Philharmonic, the Charles Eliot Norton Lectures at Harvard, and conducting in East Berlin after the fall of the wall. His private life is a tale for another time. Lenny was bigger than life and twice as grand.

YUJA WANG

Talent is the ability to learn something with great ease and facility. You are born with talent. Everybody has at least one talent. You can see what talent looks like if you go to YouTube and do a search for “9 year-old pianist.” What you find, among others, is an adorable little Chinese girl playing *Arabesque No. 1* of Claude Debussy. This youngster is so short she is almost standing so she can reach the pedals while she plays with a technique and maturity that belie her age. There are lots of cute kids on the Internet who display amazing talent at very young ages. Most of these people do not end up with international careers that have them traveling abroad for months at a time.

The Chinese girl I referred to above is Yuja Wang. She started playing the piano at age six and went on to study at the Central Conservatory in Beijing at age 11 and later at the Curtis Institute in Philadelphia at 15. She stuck to her music studies and by age 21 was an internationally recognized star. That was ten years ago.

Now the Internet is filled with wonderful videos of her breathtaking performances. She has been booked to perform with the major orchestras around the world for years to come. It does help that she is both attractive and vivacious. She is known to wear gorgeously revealing outfits on stage that add to the drama of the occasion. Her enthusiasm and love of music make her a hit with audiences of every persuasion.

Her big time breakthrough came when she replaced an ailing Martha Agerich at the Boston Symphony in 2007. She performed the Tchaikovsky *First Piano Concerto* with such aplomb that her career was assured with the closing chords of that popular masterpiece. The following year she toured with the Academy of St. Martin in the Fields, the YouTube Symphony orchestra, the Lucerne Festival Orchestra, the Royal Philharmonic Orchestra, and the Hong Kong Philharmonic Orchestra. That gives you an idea of what a career that is just getting of the ground looks like. Since then it has only gotten better. She made her Carnegie Hall debut in 2011. The reviews were glorious and since then the concert halls have been filled.

Yuja lives in New York but does not spend much time at home because the demand for her talents is so great. In 2017 she was Musical America Artist of the Year! In recent interviews she has started to show signs of wear. All those airport delays, long flights, impersonal hotel rooms, interminable interviews, and endless restaurant dinners with managers and conductors are starting to lose their appeal.



PIERRE BOULEZ

In 1962 I was a senior music major at the City College of New York. Because I was only twenty years-old and had no employable skills I had no career prospects after graduation so I applied to a number of universities for graduate work in music composition. On a lark, I applied to Harvard with my paltry portfolio of amateurish compositions and, for reasons unknown, I was admitted, so off I went.

In my second semester there I was standing on the front steps of the Music Building on the first day of classes smoking a Marlboro when up walks the famous French composer Pierre Boulez, our visiting professor. In those days both faculty and students wore jackets and ties to class but this musical revolutionary wore no tie and was sporting moccasins on his feet. It was love at first sight.

I was enrolled in his Analysis of 20th Century Masterpieces class that met before lunchtime. In those days Pierre lectured 85% in English, 10% in French, and 5% in German, so most of the undergraduates who were auditing the class dropped after a few weeks. After class it was often the case that Pierre lunched with a few of the graduate students at a nearby café where the adventurous among us smoked his unfiltered *Gauloise* cigarettes in an attempt to be really cool. The lunchtime chats were a wonderful continuation of topics covered in class. With us he shared the secrets of Stravinsky, Schoenberg, Webern, and Bartok. At the end of the semester we both went home, he to Baden Baden and I to Manhattan.

Two years later he returned to Carnegie Hall with the BBC Orchestra so my new wife and I had a chance to catch up with him. He did not return until 1969 when he was invited to audition for the position of music director of the New York Philharmonic. I remember those two weeks of rehearsals and concerts because it was a dramatic departure from what had transpired under the previous music director, Leonard Bernstein. Pierre discovered that, left to their own devices, the orchestra did not tune properly so he taught them how to do that. There were a couple of instances when he had to discipline some misbehaving members of the orchestra like errant schoolboys.

He won the audition process and started at NYP in 1971 the same year as the famous film *The French Connection* featuring Gene Hackman. Early in his tenure there were instances when he heard and corrected people playing out of tune or playing wrong notes. It was for that reason that he quickly became known as "The French Correction." He stayed for six years and trained the orchestra to play at a higher level, especially in the performance of modern music. His programming innovations included summer concerts known as The Rugs where the seats on the ground floor were removed and people lay on pillows on the floor. He also instituted a contemporary music festival in Greenwich Village that presenting exciting chamber works too small for Avery Fisher Hall, as it was known at the time.

For the six years Pierre was in New York my wife and I were his family. We shopped together when he needed clothing and broke bread together in our tiny apartment on the Upper West Side. Many were the times that we joined him for 11pm after-concert dinners at his favorite French restaurant, *Le Poulailier*, across the street from Lincoln Center. In 1977 he was happy to leave New York because the president of France had built him IRCAM, a music research and performance center in the heart of Paris.

JIMMY LEVINE AND STEVE JABLONSKY



1. James Levine was for four decades the music director of the Metropolitan Opera in Lincoln Center. He struggled with health problems and surgeries for years, and missed two full seasons after a serious spinal injury in 2011. For a while he even conducted from a motorized wheelchair. But the pain and strain of Parkinson's disease got to be too much even for such a stalwart as himself. So in April 2016 he announced his retirement at age 72. In total he conducted an astounding 2551 performances.

"For more than four decades the Met has been my artistic home, and I am tremendously proud of all we have been able to achieve together as a company," Mr. Levine said in a statement, "from expanding the repertory to include new and seldom-heard works, to the development of the orchestra and chorus into one of the glories of the musical world."

"Although I am unable to spend as much time on the podium as I would like," he added, "I am pleased to step into my new role and maintain my profound artistic ties to the Met."

2. You are probably aware of the concept of Six Degrees of Separation—the premise that all human beings on the planet are related. Well, here is another case in point. The above story may seem remote to you but there is a connection. In 1958 I was a student at the Aspen Music Festival in Colorado and Jimmy Levine stayed in the same motel, Ed's Beds, in the room next to mine for the eight weeks of the summer.

I was a trumpet student and he was a piano student. We did not really get to know each other because I was 16 and he was 15 and, as budding musicians, we were both emotionally retarded. When the summer ended he went back to Cleveland and I went to Manhattan and we never saw each other again. Now we

are both in our 70s and he is struggling with health issues and I have never felt better—the luck of the draw!

So, you know me and I knew Jimmy...how many degrees is that?

3. July 11, 2017: I am walking on the third floor of the Westchester Mall and I pass the Godiva chocolate store and notice a man in an expensive wheelchair checking out the victuals. He looks a lot like James Levine but I could not be sure so I asked the elderly woman who was his companion if that was he. She confirmed my suspicion so I said to him “I have something of yours that you forgot in Ed’s Beds.” Fifty-nine years ago he left his copy of the score to Bartok’s Piano Concerto 3 on his closet shelf and I found it. I have been meaning to return it but didn’t know how. He said I could keep it and so I shall, gladly.

4. Jimmy is now in a lot of trouble based on his sexual behavior for a very long time. There were always rumors about his predilection for young boys but it took decades for those molested by him to come forward. We are now in a period where the misconduct of men in power is no longer being overlooked and tolerated. Heads are on the chopping block in industry and the arts. Jimmy is now embroiled in controversy from which he may not come out unscathed. This is a sad state of affairs for all concerned and we would all like to live in a world where people are not prayed upon, but rather treated with dignity and respect. Our nation has a long way to go before we get there. With a self-admitted molester as president it may take a little bit longer.



Metropolitan Opera House at Lincoln Center

JOHN LENNON

“Sic transit gloria mundi” is a Latin phrase that comes from the papal coronation ceremony in Saint Peter’s basilica in Rome. “Thus passes the glory of the world” is a potent reminder that no matter how important or famous you may be, it is entirely possible you will leave this earth and be forgotten. How long that will take usually depends on how good or bad you were while you were here. It may also depend on whether your contribution to society is still affecting people today.

Back in 2012 I was serving as chair of the music department and one of my pleasant tasks was to welcome students entering the college. One day I was performing my duties wearing a T-shirt that featured the faces of the four Beatles. At the end of my interview with a new student I asked this young fellow if he recognized the people on my shirt. His reply was negative and later it got me thinking about the passage of time.

The Beatles were, perhaps, the most successful and influential pop music group of the second half of the 20th century. Their fame was worldwide. They were as instantly recognizable as Muhammad Ali. I remember when they arrived JFK Airport in 1964 and then performed on the Ed Sullivan show. It was big, very big! They have sold over 800,000,000 physical and digital albums. However, the band broke up and went their separate ways in 1969 and that was probably a quarter century before this neophyte student was born. So what did I expect?

The band suffered a fatal blow when their beloved manager, Brian Epstein, died in 1967. From then on things started to go south and eventually they broke up with bitterness and resentment. After Lennon left The Fab Four, he married Yoko Ono and together they issued a new album in 1970. The following year they moved to New York taking up residence at the Dakota, a stately old apartment house on West 72nd Street.

His first few years in America were filled with anti-war, anti-Nixon activities. The administration in Washington was incensed that so famous an alien would vociferously protest their Vietnam endeavor. Tricky Dick tried very hard to get him deported but finally the matter was settled in 1976. These were turbulent times that affected every citizen. These were also difficult days for John and Yoko who separated for 18 months.

When the famous couple reunited they produced a son, Sean, who was born on John’s 35th birthday. At this time Lennon took a five-year hiatus from recording and devoted himself to his family. In October of 1980 he recorded and released a single, *Starting Over*, followed by an album a month later. Creative juices were flowing again.

On December 8th he and Yoko returned home from an evening out and were met at the front door of their building by a lone gunman, Mark David Chapman, who shot the pop legend four times in the back. Lennon was rushed to Roosevelt Hospital where he was pronounced dead on arrival. Yoko spread his ashes in Central Park.

In 1985, Strawberry Fields, a small section of Central Park, was dedicated to his memory as a musician and peace activist. This meditative spot features a special mosaic that was donated by the city of Naples. Nearby there is a plaque that lists the 121 countries that endorse Strawberry Fields as a Garden of Peace.

TITO PUENTE

In April 1923 two Puerto Rican immigrants gave birth to a son in Harlem Hospital. Little Tito grew up in what we call Spanish Harlem, or the Upper East Side of Manhattan. As a youth he learned to play a number of instruments beginning with the piano and later the saxophone and percussion. His professional career had its modest start at age thirteen but it later lead to a spot in the Machito Orchestra.

During World War II he was drafted and served in the navy for three years. He was discharged with a Presidential Unit Citation for gallant service aboard the service carrier USS Santee that saw action in nine battles in the Atlantic. Having served, he qualified for the GI Bill that allowed him to study at the Juilliard School of Music where he got a solid grounding in all aspects of music.

The 1950s were good years for Tito. He brought new excitement to an audience hungry for the excitement of Afro-Cuban and Caribbean dance music. In 1958 he released his first album, *Dance Mania*. It was an instant success. He was so well known many fans thought he was Cuban. Throughout his career he continued to experiment with a mixture of styles from a wide variety of sources including jazz. One of his most famous tunes was "Oye como va" (1963) that has been recorded by many other artists including Carlos Santana, Celia Cruz, and Julio Iglesias.

For his achievements in performance and composition he received five Grammy awards starting in 1979. In 1990 he was honored with the James Smithson Bicentennial Medal for contributions to American musical life. Five years later he was granted the Billboard Latin Music Lifetime Achievement Award at the same time he was given a doctoral degree at Berklee College of Music. His list of honors goes on and on but you get the idea. Most significant for me was the naming of East 110th Street as Tito Puente Way because my mother's family owned a fish store on that street in the early years of the 20th century when it was a Jewish neighborhood. Of course, I have to mention that he appeared in two delightful episodes of "The Simpson's" as a music teacher at Springfield Elementary School. Now that's big time!

His discography contains the names of over 80 albums that span the years 1951 to a posthumous issue in 2012. Before most of my current students were born he performed at the closing ceremonies of the 1996 Summer Olympics in Atlanta.

I close by mentioning his City College connection. Oscar Hijuelos, a C.C.N.Y. creative writing alum, won the 1990 Pulitzer Prize for Literature with his *The Mambo Kings Play Songs of Love*. Two years later a film was made from the book and in it Tito plays himself in a critical scene in a jazz nightclub. It is no wonder that Tito received the National Medal of Arts in 1997 three years before his death due to heart failure.



BOB DYLAN

The article in Wikipedia describing the life and career of this amazing fellow is 30,000 words long. That is how many words it takes to attempt to define who or what Bob Dylan has done and meant to life in America. The article begins by stating that he is an American singer-songwriter, author, and painter, but by the time you get to the end of the article you are overwhelmed with data and totally unsure you understand who he really is. In the 77 years he has been on the planet he has reinvented himself so many times he is a kind of cultural chameleon. He started his career imitating his favorite rock and roll heroes and later switched to folk music, inspired by the likes of Woody Guthrie, on his way to the realm of pop. Throughout his career he has tapped into all the various forms of American music, from country to ballads to jazz, and processed them into something he calls his own. His life, his style, and his career have been like a rolling stone. Whenever music critics attempt to come to terms with this phenomenon they find that he is an elusive target, restless, and constantly evolving.

His personal life suffered from the same peripatetic nature. Over the years there have been countless numbers of women flowing in and out of his life. Many of these visitors were one-night stands while others were more serious affairs starting with Suze Rotolo who appears with him on one of his early album covers. For a while, in the 1960s, he was hooked up with folksinger Joan Baez. This tryst was followed by two marriages that ended in divorce. Marrying a genius is rarely a good idea.

This cultural conundrum began life as Robert Allen Zimmerman living in a tight-knit Jewish community in Minnesota. He began singing in high school bands and, as if driven by demons, has not stopped performing and creating for one minute since then. He dropped out of college at the end of his first year and in January of 1961 arrived in New York City ready to do his thing in Greenwich Village clubs. As things started to heat up he legally changed his name to Robert Dylan in 1962 and got himself an agent. To date he has made 38 studio albums that have sold more than 100 million copies and has performed thousands of times on tours all over the world. His songs have been part of America's struggles for freedom and justice through difficult times. Repeatedly, his poignant combination of melody and lyrics has captured the essence of the age and become an anthem of resistance. A prime example is "Blowin' in the Wind" recorded in 1963 during the struggle for civil rights. In 1965 "Like a Rolling Stone" helped redefine what a folk/pop single could convey to an adoring audience both here and abroad.

Dylan is a prime example of a performer who desired fame and fortune but soon discovered that your life belongs to your fans and now you want them to leave you alone. It is tough to have it both ways. In a desperate search for peace and tranquility he temporarily converted to Christianity. Dylan has won almost every award you can think of including 12 Grammys and an Academy Award. Add to that the Polar Music Prize, the Prince of Asturias Award, the Presidential Medal of Honor, and finish with the Nobel Prize for Literature in 2016 and you begin to understand that Dylan has, for more than half a century, been more than just a singer of songs.



JOHN LEWIS JAZZ MASTER

In the late 1970s the CCNY Music Department decided to be very adventurous and institute a 64-credit degree devoted to the study of jazz. At the time this was very innovative because jazz was, at most institutions of higher learning, not considered a proper subject of study. To get the program started we needed to hire new faculty members who were jazz musicians. One of the first people we employed was John Lewis of the Modern Jazz Quartet. Even though I was a classical composer I was asked to be the academic advisor for the entering jazz students and so I got to share an office with John and the director of the program, Ed Summerlin. John and I were roommates for eight years and hardly ever spoke to each other. While it is true that most musicians are emotionally retarded in one way or another, John chose his words as carefully and sparingly as he chose the notes he lovingly played on the piano. He was always nattily dressed and was a man of class and distinction, but at the end of eight years we hardly knew each other—probably his fault and mine. I was young and he was quiet.

John was raised in New Mexico and attended university there. After graduating he joined the army where he met and performed with the drummer Kenny Clarke. It was he who convinced John to move to New York where they both auditioned for the Dizzy Gillespie band. John composed, arranged, and performed for Dizzy from 1945 to 1948. After their European tour John decided to head out on his own so he could do more of his own thing. For three years he worked with a variety of big names and in 1951 joined with Kenny, vibraphonist Milt Jackson and bassist Ray Brown to form what became the Modern Jazz Quartet.

From 1952 to 1974 John was the de facto leader of the group. He was the most musically literate and had the strongest background in theory and composition. He spent a good deal of time teaching the other members things they needed to know to get them to be a new and refined voice in jazz. Their sound was a blend of jazz and classical that featured frequent alternations between composed sections and free improvisation. They had a unique sound all their own. During his time with them he also had other outlets for his energy and creativity. He was head of faculty for the Lenox School of Jazz summer sessions. He was also director of the Monterrey Jazz Festival from 1958 to 1983. He was also heavily involved in Third Stream music performance along with Gunther Schuller and Orchestra USA.

After the quartet disbanded in 1974 John engaged in a wide variety of musical activities. In 1989 he was awarded an honorary doctorate from the Berklee College of Music. His discography includes albums recorded with a large number of jazz luminaries besides the 37 albums made with MJQ. Not surprisingly, John also liked to record Bach. There is no question about the quality of his compositions or the unique style of his performances. His influence as a teacher spread his message far and wide to students on many continents. He was the consummate musician and gentleman. I am sorry we did not get to know each other better. He died in 2001 but his humility and personal style stay within all who were privileged to know him.



BUDDY RICH

This is a nation of immigrants. Except for those whose ancestors were native to North America everyone else came here by boat, plane, bus, or on foot. The richness of our cultural fabric is a product of our diversity. In the late 19th and early 20th centuries many immigrants arrived first at Ellis Island out in New York harbor. There they were processed by immigration officers and screened for health problems. When approved, they got on a ferry and sailed to lower Manhattan, the polyglot melting pot of those heroically seeking a new life in a new land. From there they got on trains and went to towns all over America where friends and family were waiting for them. Many others decided to remain in the Big Apple and make their way in a city that was growing by leaps and bounds. After residence in the tenements of the Lower East Side many families relocated to the other boroughs.

As World War I raged in Europe, a Jewish family living in Sheepshead Bay, Brooklyn, gave birth to son who would grow up to be a great musician and major entertainer. In September 1917 Bernard Rich entered this world and shortly thereafter began drumming on everything within reach. Before he turned two he became a part of his parents' vaudeville act and later became a highly paid child performer. His stage antics continued non-stop until his untimely death at age 69.

His career in the world of jazz began at age 20 and he soon became the drummer for important bandleaders such as Bunny Berigan and Artie Shaw. In 1942 he responded to his nation's call to duty and joined the Marines as a judo instructor. He did not see action and was medically discharged. Returning to civilian life he played on and off with the Tommy Dorsey band as well as bands led by Benny Carter, Harry James, Les Brown, Charlie Ventura, and Charlie Parker, all jazz luminaries.

During the last 21 years of his life he lead his own band. He did a lot of clinics at high schools and colleges searching for new talent. He was constantly giving young musicians an opportunity to develop their talents in a band that was forever evolving in style and constituency. He was a frequent guest on television beginning in the 1950s with The Steve Allen Show and later The Tonight Show with Johnny Carson. Undoubtedly, his most popular TV appearance took place in 1981 when he visited The Muppet Show where he drum battled with "Animal."

His unbridled personality and astounding talent made him an entertainer of the first order. He is considered, perhaps, the best drum technician that ever lived. His playing was often fast and furious. The energy that boiled within him was the impetus for amazingly muscular performances of big bands for half a century.



BARBRA STREISAND

Musical talent is very often an inherited trait. If your mother was a singer and her father was a cantor in the synagogue you could very well end up being Barbra Streisand. If your father was a talented pianist and his father was first trumpet at the Schubert Theater you could end up being Stephen Jablonsky.

Barbara was born in April 1942 in Brooklyn, the source of abundant musical talent. Her father, Emmanuel, earned a masters degree from CCNY and was a school superintendent at the Elmira Reformatory where he taught English to the youth incarcerated there. In the summer of 1943 Emmanuel took a summer job in the Catskill Mountains where a lot of working folks from NYC vacationed. It was there that he had an epileptic seizure and died suddenly at age 35. His passing plunged his family into economically dire straits forcing them to move in with her grandparents. Things looked very bleak, but, fear not, the story has a happy ending.

Barbara graduated from Erasmus Hall High School in 1959 and went to live in Manhattan with dreams of being an actress. With little early success in that direction a friend suggested she try singing and the rest, they say, is history. By 1961 she was getting somewhere and even appeared on The Jack Paar Show. Her career took a major leap forward later that year when she landed the role of Miss Marmelstein in the Broadway hit I Can Get It For You Wholesale.

It took three more years for Columbia Records to finally allow a girl who was too Brooklyn, too unattractive, and too Jewish to record an album. Much to their surprise it stayed on the charts for nearly 18 months and her success was assured. An invitation from Hollywood changed her name to Barbra and her residence to Malibu. Her first film, Funny Girl in 1968 earned her an Oscar. Other films followed but were not overly successful until The Way We Were in 1973. Everyone loved her film romance with Robert Redford and the song from the film was her first number-one hit. Later in the 1970s her appearance with Kris Kristofferson in the remake of A Star is Born and her album Guilty with Barry Gibb qualified her as a superstar.

Well, to make a long story short, this lady who couldn't get into the Actor's Studio as a teenager ended up making 17 films. She has won two Academy Awards, 9 Golden Globes, 10 Grammy Awards, 5 Emmy Awards, a special Tony Award, 4 Peabody Awards, the Presidential Medal of Freedom, and a Kennedy Center Honor. Her father would be happy to know that his little girl is the best selling female singer of all time.



NEW YORK CITY BALLET

New York City Ballet is an organization that was founded in 1948 by **George Balanchine** and **Lincoln Kirsten**. Balanchine and Jerome Robbins were the first choreographers to create signature works for the company. Leon Barzin was the first music director. The company was resident at City Center of Music and Drama on 55th Street. Later it moved to The New York State Theater at Lincoln Center that was designed by architect Philip Johnson to Balanchine's specifications. That theater is now known as the David H. Koch because the billionaire donated a great deal of money to its renovation. A large number of extremely talented dancers worked under Balanchine's direction until his death in 1983. His repertoire has influenced ballet companies around the world. Balanchine was succeeded by Peter Martins who resigned amidst difficult personal circumstances in 2018.

NYCB has performed a repertoire of over 600 different ballets in its 70 years of existence. On average the company dances 60 of these in any given season. If you wish to see the details of the repertory it is available online.

Balanchine was a great admirer of **Igor Stravinsky's** music and he set many of the master's compositions to dance. They first worked together at the *Ballets Russes* in 1928. The ballet was *Apollo*, still an audience favorite. They worked together again on *Orpheus* (1948) and *Agon* (1957), both modern masterpieces. Balanchine used many other Stravinsky works as inspiration for his choreography over the years, and, from time to time, NYCB has performed Stravinsky festivals.



RECENT NEW YORK PHILHARMONIC MUSIC DIRECTORS

Jaap van Zweden 2018-
Born: Amsterdam, Netherlands 1960
Nationality: Dutch



Alan Gilbert 2009-2017
Born: New York City 1967
Nationality: American

Lorin Maazel 2002-2009
Born: Nueilly-sur-Seine, France 1930
Died: Castleton, VA 2014
Nationality: American

Kurt Masur 1991-2002
Born: Brieg, Germany 1927
Died: Greenwich, CT 2015
Nationality: German

Zubin Mehta 1978-1991
Born: Mumbai, India 1936
Nationality: India / America

Pierre Boulez 1971-1977
Born: Montbrison, France 1925
Died: Baden-Baden, Germany 2016
Nationality: French

Leonard Bernstein 1958-1969
Born: Lawrence, MA 1918
Died: New York City 1990
Nationality: American

Dimitri Metropoulos 1949-1958
Born: Athens, Greece 1896
Died: Milan, Italy 1960
Nationality: Greek

Leopold Stokowski 1949-1950
Born: London, UK 1882
Died: Nether Wallop, UK 1977
Nationality: British

Artur Rodzinski 1943-1947
Born: Split, Croatia 1892
Died: Boston, MA 1958
Nationality: Polish

Sir John Barbirolli 1936-1941
Born: London, UK 1899
Died: London, UK 1970
Nationality: British

Arturo Toscanini 1928-1936
Born: Parma, Italy 1867
Died: New York City 1957
Nationality: Italian



STEINWAY & SONS

There is a very good chance, if you attend a piano recital in the major cities of the world, the piano on the stage will be a Steinway. About 80% of concert halls use their instruments. For 165 years the firm has been producing some of the finest musical instruments that money can buy. And, if you want to purchase a Steinway you are going to need some serious cash. I just checked online with a local piano dealer and found they have a very nice, refurbished concert grand for only \$98,500. The piano in question is 100 years old but has been lovingly maintained. If you want a new Model D you are going to be somewhere in the mid-six figures.

Why does a good piano cost that much? The answer is not surprising. The instrument has over 20,000 parts and takes about a year and a half to construct. It also took decades of innovations to create the modern instrument you see in the showroom. That beauty is the technological result of more than 126 patents and improvements.

Heinrich Engelhard Steinweg emigrated from Germany in 1850 and started the company in Manhattan three years later. He had been making pianos back home so he knew what he was doing. Over the years the name changed to Steinway and the factory moved to Astoria, Queens. That location supplies pianos for the Americas and the one established in Hamburg, Germany in 1880 supplies the rest of the world.

The pianos were so well received by great musicians that Steinway Hall was constructed on East 14th Street in 1866. It included the second largest concert venue in the city as well as a grand showroom at the entrance. The New York Philharmonic played there until their move to Carnegie Hall in 1891. In 1925 Steinway Hall was demolished and a move was made to 57th Street. That location was sold in 2013 and the company relocated to 1133 Sixth Avenue the following year.

It is quite obvious that, when times are good, people with money are happy to spend the extra dollars on what is, essentially, a lifetime investment. In 1988 Steinway sold their 500,000th instrument (see below). In 2015 the 600,000th piano was specially built and sold for \$2.4 million. In anticipation of the landmark, the factory spent 6000 hours over four years to make this one of a kind instrument for some lucky customer.

Steinway makes upright pianos like the ones you see in many classrooms, rehearsal studios, and taverns. For concert halls and living rooms they make six sizes of grand pianos ranging from the Model S (5'1") to the Model D (8'11"). They also make two less expensive lines of instruments under the Boston and Essex label. For those of you who cannot play the piano they have the Spirio model that plays itself from CDs.



NYC MUSICIANS' BIRTHDAYS

Capricorn

Dec 22 Edgar Varese
Giacomo Puccini
28 Roger Sessions

Jan 6 Mark Brunswick
7 Ulysses Kay
8 Benjamin Lees
12 Morton Feldman
15 Elie Siegmeister
16 Lin-Manuel Miranda

Aquarius

22 George Balanchine
24 Norman Dello Joio
Leon Kirchner
27 Jerome Kern
28 Richard Danielpour
31 Phillip Glass
Feb 1 Victor Herbert
6 Stephen Albert
8 John Williams
10 Yuja Wang
Leontyne Price
16 John Corigliano

Pisces

Mar 2 Kurt Weill
4 Mario Davidovsky

8 Alan Hovhannes
9 Samuel Barber
10 Lorenzo Da Ponte
11 Henry Cowell
16 David Del Tredici
Sebastian Currier

Aries

22 Stephen Sondheim
25 Bela Bartok
Arturo Toscanini
26 Pierre Boulez
Apr 1 Sergei Rachmaninoff

3 Mario Castel-Nuevo
Tedesco
20 Tito Puente

Taurus

23 Jan Meyerowitz
24 Barbra Streisand
29 Duke Ellington
May 2 Lorenz Hart
3 John Lewis
Pete Seeger
6 George Perle
7 Pyotr Ilyich Tchaikovsky
8 Louis Moreau Gottschalk
10 Milton Babbitt
Robert Prince
17 Peter Mennin

Gemini

23 Irving Berlin

24 Bob Dylan

28 Stanley Persky

Jun 5 Laurie Anderson

6 Vincent Persichetti

9 Charles Wourinen

15 Otto Leuning

17 Igor Stravinsky

23 James Levine

Cancer

26 Jacob Druckman

28 Richard Rodgers

29 Bernard Herrmann

Jul 4 Stephen Foster

7 Gustav Mahler

8 George Antheil

12 Oscar Hammerstein II

Leo

24 Ernest Bloch

Leo Kraft

27 Enrique Granados

Aug 1 Jerome Moross

15 Lukas Foss

Marion Bauer

Virgo

25 Leonard Bernstein

Stefan Wolpe

Sep 2 John Zorn

5 John Cage

6 Joan Tower

8 Antonin Dvorak

17 Charles Tomlinson Griffes

Libra

26 George Gershwin

Oct 3 Steve Reich

9 John Lennon

13 Hugo Weisgall

20 Charles Ives

Scorpio

23 Miriam Gideon

24 George Tsontakis

25 Peter Lieberon

Nov 1 Mohammed Fairouz

14 Aaron Copland

20 Meredith Monk

22 Gunther Schuller

Sagittarius

24 Scott Joplin

Dec 3 Paul Turok

5 Stephen Jablonsky

10 Morton Gould

11 Elliot Carter

18 Edward MacDowell

GRAMMY MUSICAL GENRES

Pop

Dance/Electronic

Contemporary Instrumental

Rock

Alternative

R&B

Rap

Country

New Age

Jazz

Gospel/Contemporary Christian

Latin

American Roots (Folk, Bluegrass, Blues)

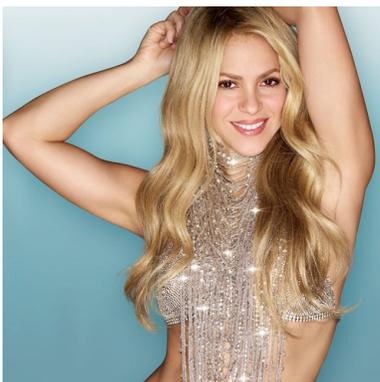
Reggae

World Music

Musical Theatre

Music for Visual Media

Classical (Orchestral, Opera, Choral, Chamber)



NECROLOGY: MUSICIANS WHO LEFT US THIS YEAR

Daryl Dragon, 76 (Captain and Tenille)

Christine McGuire, 92 (McGuire Sisters)

Clydie King, 75 (Backup Singer)

Michel Legrand, 86 (Movie Composer)

Oliver Mtukudzi, 66 (Zimbabwe)

Ethel Ennis, 86 (Pop Singer)

Hilde Zadik, 101 (Opera)

Mac Wiseman, 93 (Bluegrass)

Andre Previn, 89 (Pianist, conductor)

Keith Flint, 49 (Pop Singer)

Hal Blaine, 90 (Pop Drummer)

Dick Dale, 81 (Surf Guitarist)

Andre Williams, 82 (R&B Singer)

Scott Walker, 76 (Pop Singer)

Kim English, 48 (Gospel Singer)

Earl Thomas Conley, 77 (Country singer)

Heather Harper, 88 (Opera)

Beth Carvalho, 72 (Godmother of Samba)

Jorg Demus, 90 (Classical Pianist)

Leon Redbone, 69 (Pop singer)

Dr. John, 77 (New Orleans Pop)

Dave Bartholomew, 100 (R&B)

Bushwick Bill, 52 (Hip Hop)

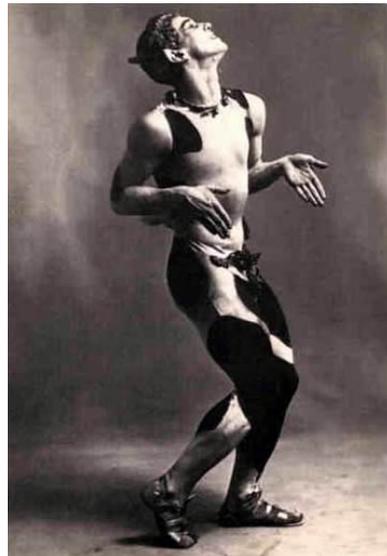
Jerry Carrigan, 75 (Pop Drummer)

STARS OF 20TH CENTURY DANCE

Here is a list of dancers, choreographers, and producers who helped make the world of dance so special in the 20th century. I suggest you research each of these contributors and then give yourself three dance history credits. Watching great dancers interpret great music is something you never forget. This is by no means a complete list but it will get you started in the right direction.

Agnes de Mille
Alvin Ailey
Anna Pavlova
Arthur Murray
Bill T. Jones
Bill Robinson
Bob Fosse
Bronislava Nijinska
Busby Berkeley
Erick Hawkins
Fred Astaire
Frederick Ashton
Gene Kelly
George Balanchine
Ginger Rogers
Hermes Pan
Isadora Duncan
Jerome Robbins
Jose Greco
Jose Limon
Katherine Dunham
Kenneth MacMillan
Lar Lubovitch
Leonide Massine
Margot Fonteyn
Maria Benitez
Maria Tallchief
Marie Rambert
Mark Morris

Martha Graham
Maurice Bejart
Michael Jackson
Michael Kidd
Mikhail Baryshnikov
Moira Shearer
Paul Taylor
Robert Joffrey
Roland Petit
Rudolf Nureyev
Ruth St. Denis
Serge Diaghilev
Shirley Temple
Sol Hurok
The Nicholas Brothers
Tommy Tune
Twyla Tharp
Vaslav Nijinsky
Walt Disney



ART ASSESSMENT INVENTORY

For those who chose not to take Art Appreciation these are some critical questions to ask when confronted by a work of art:

Am I identifying with this work?

How close to reality is it? Is it abstract?

What is it made of? Is the medium part of the message?

How do I feel about the colors? What is their range and quantity?

How bright is it? Is it shiny?

How much contrast is there?

Does shadow play an important part in the total effect?

Am I impressed by the artist's technique or lack of it?

How does the size of the object affect my judgment of it?

Is there anything special about its shape?

Am I affected by the actual or implied texture?

What kinds of lines are used: simple or complex, straight or curved?

Are there any style references?

Does the work have multiple layers of meaning? Are there any hidden messages?

How are the elements arranged? Is it symmetrical?

Is the work mobile or static?

How is perspective handled?

Is it decorative or functional?

Is it narrative?

Does it seem to overflow its borders?

Does it contain nationalistic or historical elements?

Under what conditions am I viewing this work?

How does it make me feel?

Would I like to possess it? Do I have a place for it?

How much does it cost?

Can I afford it?

THE STAR-SPANGLED BANNER

Our national anthem is a prime example of why lawyers should not make musical decisions. The Congress of the United States made this song the national anthem by congressional resolution in 1931. It was signed into law by the not so wonderful president, Herbert Hoover. There are musical issues with the tune, and the lyrics were problematic since Francis Scott Key penned his poem, "The Defence of Fort M'Henry," in 1814. Do you know all the words?

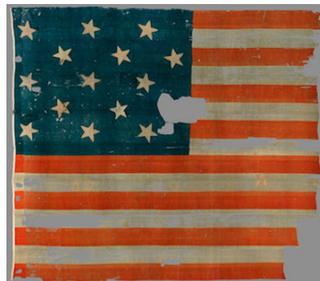
The song that accompanies those lyrics was written for a men's social club in London, the Anacreontic Society. While sober it is a difficult tune to sing. Because it is predominantly disjunct and jumps all over the place it does not sound solemn or dignified which is not surprising since its original purpose was as a drinking song for rowdy young men. The other problem is the range. The distance from the lowest note to the highest is an octave and a half. When we get to the "rockets red glare" half the participants cannot sing that high and drop an octave or stop singing.

The other problem is the third stanza of the original poem. The author was part of the American military force that attempted to halt the advance of the British on their way to our nation's capitol. The Battle of Bladensburg has been long hidden from history books because the American defenders were routed by a British force that was assisted by a company of Colonial Marines that was comprised of runaway slaves who fought with the British to gain their freedom. Apparently Key was sufficiently incensed by his black adversaries that he included them in the third stanza that has since been dropped from the official version. Key's enemy marched the last eight miles to Washington D.C. and burned all the government buildings.

There is little doubt that God Bless America or America The Beautiful would have been better choices. Better words and better music!

*And where is that band who so vauntingly swore,
That the havoc of war and the battle's confusion
A home and a Country should leave us no more?
Their blood has wash'd out their foul footsteps' pollution.
No refuge could save the hireling and slave
From the terror of flight or the gloom of the grave,*

*And the star-spangled banner in triumph doth wave
O'er the land of the free and the home of the brave.*



GLOSSARY OF MUSICAL TERMS

Absolute music: Music not associated with words or visuals.

A cappella: Singing without instrumental accompaniment.

Accidentals: The flats (b), sharps (#), or naturals (♮) used to change pitch.

Aleatoric: Music that employs chance operations in its composition or performance.

Alto: The lowest female voice or an instrument that plays in that range; or a type of C clef.

Antecedent: The first phrase of a period and is followed by the consequent.

Antiphonal: Two or more groups of performers answering each other

Aria: Italian for solo song.

Arpeggio: The notes of a chord played in succession, not simultaneously.

Articulation: The way two consecutive tones are connected (legato) or detached (staccato).

Bass: The lowest male voice; or the F clef that is used to notate the tones below middle C.

Beat: The regular pulse underlying all metrical music; often confused with rhythm.

Binary: A musical form that is in two parts often separated by a full cadence.

Blue note: Scales 3, 5, or 7 lowered for expressive purposes as in jazz or blues.

Cadence: The rhythmic, melodic, and/or harmonic way a phrase ends.

Cadenza: Improvised embellishment of penultimate cadence in sonata form.

Canon: An imitative polyphonic piece that uses only one melody.

Cantata: A piece to be sung. May also include instruments.

Chorale: a Lutheran hymn tune often harmonized in four parts.

Chord: Any three or more notes used as a harmonic unit; may contain 3 to 12 notes.

Chromatic: Music that frequently uses most or all twelve semitones within an octave.

Clef: A sign used to indicate the placement of notes on the staff. The ones in common practice are the G clef (treble), the F clef (bass), and the C clef (alto or tenor).

Coda: A small section added at the end of the recapitulation.

Composer: An obsessive-compulsive individual who spends much of their life creating music in a desperate attempt to let others know how they feel. They often die young.

Concerto: a sonata for orchestra and soloist.

Concerto grosso: a concerto with more than one soloist.

Conjunct: Music that moves mainly by step and is usually easier to perform than disjunct music. Conjunct music often feels smooth and controlled.

Consequent: The second phrase of a period that answers the antecedent.

Consonant: Pleasant sounding harmony; music without tension.

Counterpoint: The art or craft of writing polyphony; or a line that accompanies the melody. It is short for point-counter-point (note against note).

Density: The quantity of different notes or parts played simultaneously. It may range from a solo to an immense orchestra and/or chorus.

Diatonic: Music that employs the major or minor scale.

Disjunct: Music that moves mainly by skip. The bigger the skips the more difficult it is to perform or to follow as a listener. It may occasionally feel wild and crazy.

Dissonance: Harmonic tension. It is often followed by a resolution to consonance.

Dominant: The fifth note of a major or minor scale, or the chord built on that note.

Downbeat: The first beat in every measure.

Duet: Music for two individual performers who are, hopefully, playing in tune with each other.

Duple: Refers to meter that has two beats per measure. Example: 2/4 time.

Duration: The length of a single tone or an piece of music. It may range from seconds to hours.

Dynamics: The range of loudness as indicated by terms such as piano and forte.

Ensemble: A group of musicians performing the same piece at the same time.

Etude: A piece of music designed to teach a particular technical skill.

Exposition: The first section of sonata form. It contains two groups of ideas.

Finale: The last of several movements or the end of an opera.

Folk music: Music performed by ordinary people who are often vary talented but may be musically illiterate or lack conservatory training. In America much of it is played on stringed instruments such as the fiddle, guitar, or banjo by people with bad teeth.

Fool: Someone who struggles to begin learning music past the age of 21.

Fugue: Imitative polyphonic composition best written by Bach.

Grand opera: A serious story that is sung throughout. Big production values.

Half step: The smallest interval between two notes.

Harmony: The practice of combining different notes simultaneously; the use of chords.

Hemiola: In six-beat groupings a shift from duple to triple meter or vice versa.

Heterophonic: a musical texture in which everyone plays the same melody with slight variations or differing embellishments.

Homophonic: Music that has one melody accompanied by chords.

Hymn: A song in praise of a deity.

Impresario: A producer of opera, concerts, or ballet.

Improvisation: the act of spontaneous composition or embellishment.

Intermezzo: A piece of music played between acts of a play or opera.

Interval: The distance between two notes as measured in scale steps.

Inverted: A chord in which the root is not the lowest note.

Key signature: The flats or sharps at the beginning of a piece that indicate the key.

Key: Music that employs the notes of a major or minor scale is said to be in a key.

Keyboards: Instruments that have an array of black and white keys such as the piano, organ, harpsichord, or celesta. The piano has 88; usually more than you need.

Legato: Smoothly connect notes that are the opposite of staccato.

Libretto: The text of an opera given to audience members in a little book.

Madrigal: A polyphonic vocal setting of a secular poem.

Major: Scales that use the following sequence of whole and half steps: W W H W W W H. Perceived as happier than minor. Should be practiced every day.

Measure: The distance between the strongest regularly accented beats. In music notation it is separated by two bar-lines.

Medium: The type of instrument or voice that is producing the music, either acoustic or electronic. The medium is often a significant part of the message.

Melisma: A long vocal phrase on one syllable.

Melody: A succession of tones that seem to have a formal coherence; a tune.

Meter: The grouping of beats into regular patterns of accented and unaccented. It may be duple, triple, compound, or mixed. Clapping the beats helps you find the meter.

Metronome: An instrument used to measure beats per second. Does not do rubato!

Minor: Scales that employ a lowered third degree. Perceived as sadder than major.

Minuet: The most popular triple meter dance of the 18th century.

Modulate: A gradual change of keys or scales.

Monophonic: Music that contains only one line.

Motet: A polyphonic setting of a religious text, usually in Latin.

Motive: a brief succession of pitches that is used to build larger musical structures.

Music theory: An attempt to explain why music sounds the way it does. A masterpiece is greater than the sum of the theories that try to explain it.

Natural: A note that is neither flat (♭) nor sharp (#). Example: E♮

Noise: A sound consisting of numerous random pitches; the opposite of tone.

Opus: Latin for work. A publisher's numbering system. The plural is opera.

Pentatonic: A scale having five notes, two less than the seven of major and minor.

Performer: Often a highly skilled musician who thinks they know better than the composer how a particular piece should be played. They are usually overpaid (popular) or underpaid (classical and jazz), and often have egos that outstrip their talent.

Phrase: The musical equivalent of a sentence. It ends with a cadence and a breath.

Pitch: The sound of a note as measured in vibrations per second. A♮ is 440Hz (cps).

Pizzicato: A technique of plucking a stringed instrument.

Polyphonic: Music that contains two or more lines. It is often hard to write properly.

Popular music: Music designed to reach the widest possible audience. It is often associated with huge sums of money, illicit drugs, and hysterical teenagers.

Psalmic: A prayerful vocal setting that uses many syllables for one pitch.

Range: The distance between the lowest and highest notes that are sung or played.

Recapitulation: A modified restatement of the exposition.

Register: The range in which a collection of pitches are found. It may be high, middle, or low; also the place where paltry profits are stored in jazz clubs and the like.

Rhythm: The relative duration of notes and the silence between them.

Root: The note on which a chord or triad is built.

Scale: A succession of step-wise tones that span an octave. It often goes up and down.

Scherzo: a fast minuet.

Semitone: The smallest scalar interval; a half step. Example: C to C# or E to E♭.

Soprano: The highest female voice or the uppermost part in a harmony.

Staccato: Play notes separately with spaces in between. The opposite of legato.

Staff or Stave: The five lines that are used in music notation. It contains four spaces.

Subdominant: The fourth step of the major or minor scale, or the chord built on that note.

Syllabic: A vocal setting that uses one note per syllable.

Symphony: A sonata for orchestra; usually in four movements.

Tempo: The speed of a piece as indicated by a word (usually Italian) or metronome marking. It usually ranges from largo to presto with andante and allegro in between.

Tenor: The highest male voice, or a type of C clef. In opera he is usually the hero.

Ternary: A musical form that is in three distinct parts. It is often A-B-A.

Texture: The fabric of the music; the relationship of the parts. The way musical lines are woven together. It may be monophonic, homophonic, polyphonic, or heterophonic.

Theme: a memorable melody that is the focus of a larger work.

Tonal: Music that uses the scales or harmonies of major or minor.

Tone: A sound of measurable pitch as opposed to a noise; or the quality of the sound.

Tonic: The first step of a scale; also a refreshing drink or hair product.

Treble: The G clef that is used to notate the tones above middle C.

Triad: A chord consisting of three notes built in thirds. Example: C – E – G.

Trio: Music that contains three individual parts, or three people who perform together.

Triple: Music that has three beats per measure. Example: $\frac{3}{4}$ time.

Tune: a simple melody or the act of correcting pitch

Unpopular music: Music designed for a small discriminating audience. This includes most classical music and contemporary jazz. Tickets are either free or very expensive.

Vibrato: Technique to improve the richness of the sound

Virtuoso: A highly skilled musician who you pay a lot to see in person.

Volume: The loudness of the music as measured in decibels. 125dB really hurts!

Whole step: An interval that contains two semitones. Example: A – B (bypasses B \flat).

**I LIKE THE ISLAND MANHATTAN
SMOKE ON YOUR PIPE AND PUT THAT IN!**

("America" from West Side Story)

