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More than You Wanted to Know About Music When You Foolishly Signed Up for Music 10100

Professor Stephen Jablonsky

Spring 2018

The City College of New York
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Music 101: Introduction to Music
Professor Stephen Jablonsky

Class Hours: Monday and Wednesdays 2:00 to 3:15
Classroom: Shepard Room 177
Office: Shepard 80
Office Hours: Monday and Wednesdays 1:00 to 1:45 and 3:30-4:15
E-Mail: jablonsky@optimum.net
Website: www.stephenjablonsky.net

Course description: Concepts underlying the understanding and enjoyment of music. Examples from the classical repertoire highlight matters of form and content. Attendance at a Carnegie Hall concert, as well as guided classroom listening, aid in the development of listening and communication skills. 3 hr./wk.; 3 cr.

Required Textbook: The textbook has been designed by your instructor and will be sent to you as an email attachment. Updates will be sent to you periodically as email attachments. It is, therefore, important for you to check your email inbox on a regular basis. Even though the textbook is free you must read it as if it cost you $100. You are responsible for everything contained therein.

All the music covered in this class is available on YouTube.

Objectives: This course is designed to foster an understanding of the various contexts in which music is heard. Examples drawn from diverse historical and geographical repertoires will cultivate an awareness of stylistic similarities and differences. Students develop skills as active listeners, learning the vocabulary necessary to describe this experience both verbally and in writing. The purpose of the course is to introduce students to preeminent classical composers, performers, genres and styles, and their historical context.

General Education Proficiencies:
After completing this course you will have developed the following proficiencies:

Oral and written communication skills – Students will produce well-reasoned written or oral arguments using evidence to support conclusions.

Critical analysis – You will have had multiple experiences in critically and constructively analyzing information in different areas of study.

Information literacy – You will have had multiple experiences in gathering, interpreting, and assessing information from a variety of resources and in evaluating the reliability of this information.

Artistic/Creative expression proficiency – Students will identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring creative expression.
Grading:
Tests (40%)
Final Exam (10%)
Written Assignments (50%)

General Advice/Classroom Policies:

1. Absenteeism—two weeks allowed by college policy.
2. There will be absolutely no eating or drinking in this classroom.
3. Late assignments are penalized.
4. There are no makeup exams.
5. Plagiarism and cheating will not be tolerated. Turning something in with your name on it means you take full responsibility for its contents and pledge that it is your own work. See CUNY policy below.
6. Use the bathroom before you come to class.
7. When the class is over take all the stuff you brought with you.

CUNY Policy on Academic Integrity
As stated in the CUNY Policy on Academic Integrity: ‘Plagiarism is the act of presenting another person’s ideas, research or writings as your own. The following are some examples of plagiarism:

‘Copying another person’s actual words without the use of quotation marks and footnotes attributing the words to their source;

‘Presenting another person’s ideas or theories in your own words without acknowledging the source;

‘Using information that is not common knowledge without acknowledging the source;

‘Failing to acknowledge collaborators on homework and laboratory assignments.

‘Internet plagiarism includes submitting downloaded term papers or parts of term papers, paraphrasing or copying information from the internet without citing the source, and “cutting & pasting” from various sources without proper attribution.’

A student who plagiarizes may incur academic and disciplinary penalties, including failing grades, suspensions, and expulsion.

A complete copy of the CUNY Policy on Academic Integrity may be downloaded from the College’s home page.

ATTENDANCE: The college administration assumes that during any given semester you may need to absent yourself from class for any number of perfectly good reasons, so it is college policy that two weeks of absence should not be viewed as unreasonable. Hopefully, the fates will be kind to you and you can come to every class for which you paid. If you are absent you will want to check with your friend in class to see what you missed. When your attendance becomes problematic we need to talk.

LISTENING: You will notice that I do not assign listening to my students because I foolishly assume that you are truly interested in being exposed to the greatest music by the greatest composers without prompting from me. There are lists of such music in your textbook in the Genre section. All this music is free and easily accessible at YouTube so go and explore. If you want some suggestions from me feel free to write.
Dear Students:

Chances are you registered for Music 10100 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.

The college has hired me 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 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 teach about music and each of them has value. No matter which path I choose, I know one thing – I cannot 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.

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 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’s 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.

Dr. Jablonsky

Addendum: As you go through life you are either connecting or disconnecting from people you know. Occasionally a rift develops between me and one of my students, especially when information needs to travel between us. 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!

Hildegard von Bingen
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<td>FINAL EXAM</td>
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Music 101 Assignments

Assignment 1a
Due February 5: Send me a 100-word bio and head shot of you to share with the class. When you send me an assignment as an email attachment please label it with your name and the number of the assignment (ex. Mozart 1a).

Assignment 1b
Due Wednesday, February 14
600 words: The Role of Music and Dance in My Life

Write an autobiographical statement about the cultural environment in which you grew up. Share with me some significant memories of music and/or dance experiences.

Assignment 2
Due Wednesday, March 7
600 words: The Story of Music

Watch the following videos:
BBC Howard Goodall’s Story of Music 1 of 6 https://youtu.be/I0Y6NPahlDE
BBC Howard Goodall’s Story of Music 2 of 6 https://youtu.be/qMxsE8wawVA
BBC Howard Goodall's Story of Music 3 of 6 https://youtu.be/-LW9I55Q9Y

Report things you found interesting about each. This is a personal reaction paper. Was this a worthwhile assignment?

Assignment 3
Due Wednesday, April 9
600 words: Comparing Music Videos

Watch these videos about 20th century masters and compare them. Report back to me what was meaningful to you. This is a personal reaction paper.

Orchestral Music in the 20th Century https://youtu.be/QQJz7GBtSaE
Stravinsky’s Journey https://youtu.be/xIAtoxbt7LQ

Assignment 4
Due Wednesday, May 2
600 words: The Metropolitan Museum Treasure Hunt Report

This is an experiential report on your trip to the museum. Use the form in your textbook as a worksheet. What stayed with you the next day?

Assignment 5
Due Monday, May 16
600 words: Carnegie Hall Concert Report

You are to attend a concert at Carnegie Hall and report back to me about your before, during, and after concert experience. This is a personal reaction paper. Do not save this for the last minute or you will be sorry. Check which concerts have $10 student tickets.
Music and Dance at The Metropolitan Museum of Art

Your assignment is to visit the museum, located at 82nd Street and Fifth Avenue, and go on a cultural treasure hunt. You are to locate twenty pieces of art that have something to do with music or dance. Fill in the chart below with your treasures and then, in 600 words, describe your feelings about the trip and your favorite treasure. You may only use five examples from the instrument collection if it is open. Go and enjoy! If you go with a friend it is even better. Don’t pay the suggested admission fee.

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Some Helpful Hints for Writing Term Papers

All papers must come to me as either Word or Pages documents so I can edit them.

**Heading.** Contains your name, my name and title spelled correctly, class and section, and date. Make sure you have the correct title and when you write your paper make sure you stick to the topic.

**Submission.** Send me your paper as an email attachment. Label your file with your last name and assignment number (for example, Mozart 5). Send to jablonsky@optimum.net

**Margins.** One inch all around.

**Justifying.** Do not justify the right margin of the text.

**Line Spacing.** Use 1.5 line spacing. It is easy to read. Use only 12 point serif type.

**Line spacing.** Use one blank space after a comma and period.

**Punctuation.** Check a style manual if you are not sure of punctuation usage. Do not use too much or too little. Punctuation indicates the relationship of ideas. It also tells you when to breathe between clauses or sentences.

**Spelling.** Use a dictionary and/or Spell Check before you print.

**Tense agreement.** Make sure that the time elements in the sentence agree with each other.

**Singular/plural.** Make sure the quantity of the subject agrees with the form of the verb.

**Syntax.** Make sure the word order is correct. Try to make sure you have communicated exactly what you wanted to say in the simplest, most direct way. Sometimes it is better to break a lengthy, complicated sentence into two simpler ones.

**Grammar.** Make sure you handle adverbs and adjectives correctly. Adverbs modify a verb, adjective or other adverb. They often end with the letters "ly." Adjectives modify a noun. Do not mix them in a series.

**Past tense.** Many verbs end with the letters “ed” if the action is in the past.

**Constructions.** Use them only for dialogue or informal communication.

**Articles.** Foreign students should remember to use “a” and “the” before a noun.

**Redundancies.** Try not to repeat important words, phrases or ideas in the same or consecutive sentences.

**Word count.** Stay within the 90-110% range of the suggested length. For example, if the paper is to be 600 words long you may write anywhere from 540 to 660 words.

**Editing.** Read your paper out loud to make sure it represents your best work. If I am the first person to read your paper, you are in trouble.

**Warning:** Do not write a cosmic introduction or flowery conclusion.
Now that you’ve passed english 110,
how many of these rules do you remembir?!

1. Each pronoun agrees with their antecedent.
2. Verbs always has to agree with their subject.
3. Watch out for irregular verbs which has cropped up into our language.
4. Never use no double negatives.
5. A writer must not shift your point of view.
6. When dangling, don’t use participles.
7. Join clauses good like a smart conjunction should.
8. And don’t use conjunctions to start sentences.
9. Don’t use a run-on sentence you got to punctuate it.
10. About sentence fragments.
11. In letters themes reports articles and stuff like that we use commas to keep strings apart.
12. Don’t use commas, which aren’t necessary.
13. It’s important to use apostrophe’s right.
14. Don’t abbrev.
15. Check to see if you any words out.
16. In my opinion I think that the author when he is writing should not get into the crazy ridiculous silly annoying sloppy habit of making use of too many unnecessary words which he does not really need but uses anyway.
17. When you finish your paper you checked the tense agreement.
18. Then, of course, there’s the old one: Never use a preposition to end a sentence with.
19. Always use spelcheck.
20. Last, but certainly not least, avoid cliches like the plague.
YouTube Adventures in Sight and Sound

Here are some free videos that will greatly enhance your appreciation of music. These are all music that was employed by the Ballets Russes between 1909 and 1929. These videos should only be watched by people 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/XvXlfKypo0g

Debussy: Afternoon of a Faun

https://youtu.be/2GqGVkfUip8

Stravinsky: Le Sacre du printemps

https://youtu.be/_QZXrPljLj0

Ravel: Daphnis & Chloe

https://youtu.be/1s9vEQsTGyg

Borodin: Polovtsian Dances from Prince Igor

https://youtu.be/WgCfRH1VloQ
A Student’s Credo

I recognize that I am a professional student. That means that I will earn the grades for the courses in which I am enrolled. As a professional student I understand that

1. I must successfully pass prerequisite courses in order to prepare for the work in sequential ones. Any incomplete grades will be made up in a timely manner.

2. I must attend my classes regularly, understanding that I am only allowed two weeks of absences before I may be dropped from any course.

3. I must come to class on time as my punctuality reflects on my seriousness of purpose. I will help to keep the classroom a clean learning environment and will take all my stuff with me when I leave.

4. I must come to class prepared to work. I will bring with me the appropriate equipment and materials necessary for my active and engaged participation in the educational process.

5. I must hand in all assignments on time and I will make sure that they represent my best work.

6. I must let my instructors know when there is something I do not understand, either from what goes on in class or from the homework.

7. I must prepare for examinations by studying sufficiently far in advance that I do not need to cram at the last minute.

8. I must take organized and complete notes from both classroom lectures and homework readings. I understand that all learning is cumulative. I will also check my email regularly for any or all messages from my instructor or the college.

9. I must stay current. If I am absent from class I will contact one of my fellow students to find out what I have missed.

10. I must remember that I will only get out of the course what I put into it. As an adult I am responsible for me and my own academic success.

Your Name___________________________  Date________________
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?

- 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 ClPA Formula

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

---------------------------------------------

\[ M \times E \]

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

What you see above is a hypothetical formula 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. This formula has not been approved by any reputable mathematician. It is only one way of trying to explain why music sounds the way it does.

Beethoven (1770-1827)
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 extramusical?

**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

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<td>Kindness</td>
<td>Cruelty</td>
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<td>Heroism</td>
<td>Cowardice</td>
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Connecting the Dots
Stephen Jablonsky (2010)

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 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 forty-six years to the present. As chair of the Music Department I rarely spend a leisurely hour breaking bread with colleagues at the faculty dining room because there always seems 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 needs my attention. So, I usually microwave my lunch from home and spend 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: earlier this week 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 Grout/Palisca 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 quite well. 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 until recently. 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 last year 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 almost seven decades 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 music—barely enough to call myself professor. In truth, I continue to be more of a student than a professor, 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 going to give a concert in Poland soon that included the music of a Jew 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 ago when little of his music was available in print or recording. 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 stuff was there. The last piece I listened to was his Fifth Symphony which has no title so I am calling it "Man of Steel Symphony" (Stalin). 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 Schulhoff 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 25 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 15 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. In popular/popular music we usually know the performer better than the composer unless the singer is also the composer. C’est la vie!

Stephen Jablonsky
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 playfulfulness in equal measure.

I have always enjoyed the interaction between the composer 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 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 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.
Music as Narrative

Stephen Jablonsky

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. Great music 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.
A MUSIC LISTENER’S CHECKLIST

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

- **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)
  Con junct (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. 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.
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 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 integral multiples of the fundamental (2F, 3F, 4F, 5F, etc.). The series above 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 halfway 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.
Fascinating Rhythms

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.

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. 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.

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 patterns the most common of which are two beats per group (duple meter) or three beats per group (triple meter). These groupings are known as measures and are separated by bar lines when notated. 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.
**Time Signatures**

We use a fraction, known as a time signature, at the beginning of every piece to notate the meter. The numerator (upper number) tells us the number of beats per measure while the denominator (lower number) tells us which of our rhythmic symbols will represent the beat. The symbols (notes) in common use are as follows:

- The whole note—
- The half note— \( \frac{1}{2} \)
- The quarter note— \( \frac{1}{4} \)
- The eighth note— \( \frac{1}{8} \)
- The sixteenth note— \( \frac{1}{16} \)

As you can tell from their names, they are part of a relative value system that is based on a division by two. There are also double whole notes as well as 32\(^{st}\) notes, 64\(^{th}\) notes, and the very rare 128\(^{th}\) notes.

The time signature for marching music is 2/4 in which every measure has rhythmic symbols that add up to the equivalent of 2 quarter notes. When you are dancing the waltz the music you hear is written in 3/4 time. A great deal of music is written in 4/4 or what is known as common time, indicated by an upper case C instead of the fraction. In 2/4 time the first beat is accented and the second is not (ONE, two, ONE, two or LEFT-right, LEFT-right). In 3/4 time the first beat is accented and the two that follow are not (ONE-two-three, ONE-two-three). In 4/4 time the primary accent occurs on the downbeat and there is a subsidiary accent on the third beat that begins the second half of the grouping (ONE-two-three-four, ONE-two-three-four).

There are many pieces that have time signatures that use the eighth note to represent the beat. Perhaps the most common of these is 6/8. This is a form of dupl e meter in which each half of the measure is divided into three beats. We apply the term “compound” to 6/8, 9/8, or 12/8 meters that have triple divisions of the beat. In 6/8 time the main accent is on beat one and the subsidiary accent is on beat four (ONE-two-three-four, ONE-two-three-four). You may occasionally see a composition written in 3/8 time and the use of the less common eighth value usually indicates a desire on the composer’s part for a performance that feels lighter than 3/4 time.
The tempo often affects the way in which music will be perceived or performed. A piece in a moderate 3/4 time will be counted in groups of three beats but at a higher rate of speed it may be counted in one.

We use a variety of symbols called “rests” to indicate the absence of sound. The symbols in common use are as follows:

- The whole rest—○ below the middle line
- The half rest—○ above the middle line
- The quarter rest—•
- The eighth rest—
- The sixteenth rest—

Rests are more difficult to perform than notes because we must wait the appropriate amount of time without making a sound. For most of us that is often very hard to do. A rest does not mean “do nothing,” it means “count.” The longer the rest, the more patient you must be. It is often helpful to say “rest” when you are having difficulty with this form of negative sound space.

**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.

**Metronome** markings indicate the number of beats per minute. For example, “march time” (2/4) 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 owns a metronome, or they have a metronome app in their smart 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. From time to time, you may wish to employ these in the performance of a particular rhythmic etude.

**Ties and dots**

We join two notes together by the use of a tie, a curved line connecting two note heads. For example, in 4/4 time a half note may be extended by tying it to another note. To create a note that lasts three beats you may either tie a half note to a quarter or merely place a dot after the note head. This dot represents the quarter to which it is tied and is a form of abbreviation. The dot always represents half the value of the note that is dotted. Therefore, a dotted quarter note is equal in length to a quarter note tied to an eighth. And, a double dotted quarter is equal to a quarter tied to an eighth tied to a sixteenth. Rests may also be dotted.

**Dynamics**

Dynamics refer to the volume of sound (loudness). The following abbreviations from the Italian are in common usage. They are listed in order of loudness.

- *ppp—pianississimo* (as soft as possible)
- *pp—pianissimo* (very soft)
- *p—piano* (soft)
- *mp—mezzo piano* (moderately soft)
- *mf—mezzo forte* (moderately loud)
- *f—forte* (loud)
- *ff—fortissimo* (very loud)
- *fff—fortississimo* (as loud as possible)

To indicate an increase in volume we use the term *crescendo*. To indicate a decrease in volume the term *decrescendo* or *diminuendo* are used.
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.

Play these notes on your keyboard. It should not be too hard as they are almost all white notes. 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).
Measuring Intervals

The distance between two notes is known as an interval. We measure this distance using a scale. For example, the interval between C and D is known as a second because D is the second note of the C major scale. All intervals have two names— one tells the quality and the other tells the scale step. If you are measuring an interval using a major scale then you end up with the intervals shown on the first staff below. The intervals derived from minor and other scales are shown on the second staff. These interval measurements can begin on any note of the chromatic scale. Each interval has a different character. They serve as the foundation of all harmony.

A melody is a consecutive series of notes. The intervals between those notes tell us a great deal about the character of that melody. Chords are created when three or more notes are played simultaneously. The intervals between those notes tells us a great deal about the quality of what we hear, whether dissonant or consonant.
Various Scales

Four-note

Pentatonic

Whole tone

Major

Natural minor  Melodic minor  Harmonic minor

Octatonic 1  Octatonic 2

Chromatic
How The Choice of Scale Affects the Message

C major

Natural minor

Harmonic minor

Melodic minor

Lydian dominant

Chromatic

Pentatonic
Harmonizing with Triads

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 lays a 5th above the root (and a 3rd above the third) and is called the fifth (see Example 5-1, root position). 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.
Example 5-1. Inversions of Triads

<table>
<thead>
<tr>
<th>root position</th>
<th>first inversion</th>
<th>second inversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>(3)</td>
<td>(3)</td>
<td>4</td>
</tr>
</tbody>
</table>

In Example 5-1, the intervals above the bass are indicated for each position of the triad. This practice is known as **figured bass** in which the Arabic numerals serve as a convenient shorthand label for each form. This system, also known as **thoroughbass**, was essential to the instrumental chamber music of the Baroque Period during which the harpsichord player, as accompanist, often had the bass line and Arabic numerals and was expected to improvise the rest of the texture based on the information provided. In their most common form triads are abbreviated as follows:

- (root position) is assumed and is not notated;
- (first inversion) is abbreviated as 6;
- (second inversion) is notated as 6/4.

**Triads in other arrangements**

The triad is not always presented with all of the notes within an octave, called **close position**, as in Example 5-1 above. 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, E♭, and G, never C, D#, and G. Only the following combinations are possible (practice reciting these combinations to assure accuracy):

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

Therefore, whenever you see a chord that is in open position, or jumbled up, all you need to do is match what you see to the seven combinations above.

Here is an interesting question: How many C triads are there on the piano keyboard? In other words, how many combinations of C, E, and G are there?
The answer is 392. There are eight Cs, seven Es, and seven Gs. \(8 \times 7 \times 7 = 392\). Wow!

**The four types of triads**

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

<table>
<thead>
<tr>
<th>When the 3(^{rd}) is</th>
<th>And the 5(^{th}) is</th>
<th>The quality is</th>
</tr>
</thead>
<tbody>
<tr>
<td>minor</td>
<td>diminished</td>
<td>diminished</td>
</tr>
<tr>
<td>minor</td>
<td>perfect</td>
<td>minor</td>
</tr>
<tr>
<td>major</td>
<td>perfect</td>
<td>major</td>
</tr>
<tr>
<td>major</td>
<td>augmented</td>
<td>augmented</td>
</tr>
</tbody>
</table>

In Example 5-2 we see the four types of triads built on the root G. Only major and minor triads may be used as tonics. The diminished triad only appears as ii\(^o\), vi\(^o\), and vii\(^o\) while the augmented triad is occasionally used as an altered form of the dominant.

**Example 5-2. Types of Triads**

<table>
<thead>
<tr>
<th>Major triad</th>
<th>Minor triad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diminished triad</th>
<th>Augmented triad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Using chord symbols to name triads**

Every triad has two names—the name of the root and the name of the quality. Thus, a major triad with a root of G is named “G major” and is notated by the capital letter G. For major triads it is not necessary to indicate the quality in the label—if we see just the letter G we will know it refers to G major. A minor triad with a root of G is named “G minor” and is notated as Gm. Use “+” for augmented (or “aug”) and “o” for diminished (or “dim”). Do not use the archaic system that assigns a plus (+) to major and a minus (-) to minor. The minuses
that students write on their homework and test papers tend to get too small to read clearly and the negative appellation is an inappropriate value judgment.

Chord inversions can be notated by adding the bass pitch after a slash. For example, Am/C indicates an A minor triad with C in the bass (first inversion). This use of chord symbols is called lead sheet notation and is common in popular sheet music and jazz scores and is always written above the chord (Example 5-3). The simplest lead sheet scores do not contain information about inversions, but you would do well to use the slashes when appropriate because the bass line is so important in tonal music.

Example 5-3. America (opening)

\[
\begin{array}{cccc}
G & E m & A m/C & D \\
\text{\#3} & 4 & 3 & 2 \\
\end{array}
\]

\[
\begin{array}{cccc}
G & E m & C & G/D & D\# & E m \\
\text{\#3} & 4 & 3 & 2 & 1 \\
\end{array}
\]

Numbering the triads

We use Roman numerals to identify the scale step on which the triad is built and Arabic numerals to indicate the inversion. In this text the Roman numerals will appear in uppercase to represent major and augmented triads and in lowercase for minor and diminished. Thus, a C major chord in first inversion (with E in the bass) in the key of C major is labeled I\(^6\). The Roman numeral “I” indicates that the root of the triad (C) is the first note (tonic) of the key (C major). The Arabic numeral “6” indicates that the triad is in first inversion—that there is a 6\(^{th}\) between the bass and the root.

Note that the lead sheet name is the same no matter what key the triad is in. (Cm is the label for C-E@-G whether it is the tonic in C minor, the submediant in E@ major, or the subdominant in G minor. Note, also, that the same scale degree indicates a different triad in different keys (e.g., a I chord in CM is a C major triad, but a I chord in FM is an F major triad). In Example 5-4 we see that the same three triads are labeled differently according to the key in which they are found.

Example 5-4. Examples of Chord Labels

\[
\begin{array}{cccc}
C & E m & G \\
\text{\#3} & 4 & 3 & 2 \\
\end{array}
\]

CM: I iii V GM: IV vi I
It is essential to know both systems of notation thoroughly and to be able to translate from one system to the other rapidly. Whereas lead sheet notation treats all chords as isolated units without regard to key, the numbered scale step notation relates the chords to one another and also indicates their functions within the tonal system of a particular key.

To translate lead sheet notation into scale step notation, use a Roman numeral for the scale step of the root of the triad. Indicate the quality of the chord by the use of upper or lowercase. Then, add figured bass notation where necessary to show inversions. For example, the first chord in Example 5-5 is G major. In the key of GM a G major triad is I. The second chord, Em, is vi in GM. The third chord is Am/C, the supertonic in the first inversion (ii⁶).

Example 5-5. America (opening)

![Example notation](image)

GM: I vi ii⁶ V I vi IV V(♯) (vii) vi

The quality of triads in major keys

As may be seen in Example 5-7, major keys contain three major triads (I, IV, and V), three minor triads (ii, iii, and vi), and one diminished (vii). This distribution results in a hierarchy of importance. The major chords are the primary triads, the three triads you would learn if you could only learn three chords. There are four secondary chords and the unique one is vii, the only one of this family of chords that is diminished.

Example 5-7. Triad Qualities in Major

![Example notation](image)

DM: I ii iii IV V vi vii
The quality of triads in minor keys

The family of chords in minor is larger than in major due to the three forms of the minor scale. By comparing the triads in natural minor (Example 5-8) with those in major (Example 5-7) you will notice that in minor the tonic, subdominant, and dominant chords are all minor—the opposite of their qualities in major. Also, now it is the supertonic that is diminished, not the leading tone (which is replaced by the major subtonic). The mediant and submediant, which were minor, are now major. In many ways, major and minor chord collections seem to present two polarities.

Example 5-8. Triad Qualities in Natural Minor

Dm  Eo  F  Gm  Am  Bb  C

Dm:  i  ii  III  iv  Vm  VI  VII

The natural minor scale, formerly known as the Aeolian mode, contains a seventh tone that is a whole step below the tonic. Therefore, dominant harmonies built on that scale do not contain a leading tone and create an archaic “modal” sound, rather than a “tonal” one, when moving to the tonic. The problem of weak dominants is fixed by the addition of the leading tone to V and vii and the result is known as harmonic minor. In a sense, harmonic minor borrows the V and vii chords from major (Example 5-9).

Example 5-9. Triad Qualities in Harmonic Minor

Dm  Eo  F  Gm  A  Bb  C#o

Dm:  i  ii  III  iv  V  VI  vii
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 lead 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. Edgard 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.

The Mark II Sound Synthesizer at the Columbia-Princeton Lab
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, and 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
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 1000 years has been lost to fire and flood, but we do have an increasingly impressive body of work that allows us the 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 took place 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?
# Western Classical Music History

(Almost everything you need to know on one page)

## Medieval (to 1450)

<table>
<thead>
<tr>
<th>Composer</th>
<th>Composer</th>
<th>Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perotin</td>
<td>Leonin</td>
<td>Polyphony/Organum, counterpoint</td>
</tr>
<tr>
<td>Guillaume de Machaut</td>
<td>John Dunstable</td>
<td>Gregorian Chant, notation, Greek modes</td>
</tr>
<tr>
<td>Hildegard von Bingen</td>
<td>Guillaume Dufay</td>
<td>Isorhythm, motet, mass, troubadours</td>
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<td>Guillaume Dufay</td>
<td>Isorhythm, motet, mass, troubadours</td>
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## Renaissance (1450-1600)

<table>
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<td>Orlando di Lasso</td>
<td>Modal, imitative counterpoint, chorale</td>
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<tr>
<td>Johannes Ockeghem</td>
<td>William Byrd</td>
<td>Cantus firmus, printed music,</td>
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<td>Jacob Obrecht</td>
<td>Heinrich Isaac</td>
<td>Consort, polychoral, antiphonal</td>
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<td>Giovanni da Palestrina</td>
<td>Giovanni Gabrieli</td>
<td>Mass, madrigal, vocal style, lute</td>
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<td>John Dowland</td>
<td>Tomas Luis de Victoria</td>
<td>Tone painting, homorhythmic</td>
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<tr>
<td>Claudio Monteverdi</td>
<td>Henry Purcell</td>
<td>Major/minor, homophony, triads, equal tuning</td>
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<tr>
<td>Francois Couperin</td>
<td>Heinrich Schutz</td>
<td>Continuo/Figured bass, fugue, organ, violin</td>
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<td>Arcangelo Corelli</td>
<td>Antonio Vivaldi</td>
<td>Opera, oratorio, cantata, aria, harpsichord</td>
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<td>Girolamo Frescobaldi</td>
<td>Domenico Scarlatti</td>
<td>Concerto, overture, dance suite, trumpet</td>
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<tr>
<td>Johann Sebastian Bach</td>
<td>George Frederic Handel</td>
<td>Instrumental style, virtuosity, castrati, commerce</td>
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</tbody>
</table>

## Baroque (1600-1750)

<table>
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<td>Wolfgang Amadeus Mozart</td>
<td>Franz Joseph Haydn</td>
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<td>Ludwig van Beethoven</td>
<td>Franz Schubert</td>
<td>String quartet, minuet &amp; trio, piano, nature</td>
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<td>Frederic Chopin</td>
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<td>Johannes Brahms</td>
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<td>Gioacchino Rossini</td>
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<td>Giacomo Puccini</td>
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<td>Alexander Scriabin</td>
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<td>Giuseppe Verdi</td>
<td>Richard Wagner</td>
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## Classic / Romantic (1750-1900)

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<td>Arnold Schoenberg</td>
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Some Dates to Remember If Dates Are Important

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
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
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
1791    Death of Mozart. Haydn gets doctoral degree from Oxford
1827    Death of Beethoven. Death of William Blake
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, Philadelphia zoo is first in US
1861    South Carolina attacks Fort Sumter and American Civil War begins
1883    Death of Wagner. First vaudeville opens in Boston
1909    Diaghilev brings the Ballets Russes to Paris. Indianapolis Speedway opens
1913    Le Sacre du printemps (The Rite of Spring) premiers 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 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
2001    World Trade Center demolished. W's Iraq invasion destabilizes Middle East in 2003
2016    The Electoral College chooses a Russian spy as president, Brexit, Obama visits Cuba
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. When we hear something we like in someone else’s music we want to use it in our next composition. 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. Budding composers learn their craft by working with an experienced teacher who can evaluate the myriad subtleties of the compositional process and offer valuable suggestions and corrections.

**The Waring Blender Theory:** It is my contention that what we think of as original compositions are, in fact, only 5% original at best—that producing a personal style is like adding different ingredients together in a blender. 95% of what we call personal style derives from what we have absorbed from outside influences. To this mixture we add a touch of our own uniqueness. By throwing the switch, the blending process homogenizes all these ingredients into what we think of as originality.

If you are not curious about how music is put together, stop here and close the book. The reason we analyze music is to find out how the music we enjoy listening to is constructed—to tell us why it sounds the way it does. The process of analysis involves the labeling of agreed upon components as well as the interpretation of the relationship of these materials to one another. As analysts we must try to get inside the piece to see what makes it work the way it does. Every compositional process is a mind game that the composer plays with himself. Every game has an objective, game pieces, rules, and moves. The intellectual joy of every theorist is to postulate about what kind of game plan a certain composer may have employed in the act of writing a particular piece. The interesting thing about music composition is that although there are general stylistic guidelines which composers in particular periods seem to follow, each piece of music is a unique collection of compositional choices. Therefore, from the study of many individual pieces comes an understanding of general compositional strategies as well as an appreciation for those special moments of unexplainable genius.

**Structural units**

The first job of a theorist is to address the question of musical structure—just how are the sounds and silences of a musical composition organized? There is
nothing simple or obvious about it, as any beginning composer or analyst has discovered. There are innumerable problems of musical syntax and grammar that must be learned through much hard work. One begins by analyzing simpler pieces, such as folk songs, and later we get to the big stuff. Let us begin at the beginning.

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@ 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 a fertilized egg, 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. Everything we do in music is related to phrases; their composition, analysis, and performance. 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. Tonal compositions 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. If it cadences on the tonic it is called a **closed section** and if it ends with a half cadence or in a key other than the tonic it is considered an **open section**. A piece may have any number of sections. If it comprises two sections it is in **binary form** (A-A¹). The most common **ternary form** (three sections) has an A-B-A¹ 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. Movements are often in related keys.
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. 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.

q  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 :||).

q  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 scherzo. 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-A-C-A-D-A. The arch, or bow, rondo form has the symmetrical structure of A-B-A-C-A-B-A. 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-A-C-B-A 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. It has also been used for second and fourth movements as well. If there is a third movement it is usually in ternary form (minuet & trio). 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 tonicizations. 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 reorchestrated, 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).

### Sonata-rondo form

There is a hybrid form known as sonata-rondo that combines aspects of both its namesakes. It typically follows an A-B-A-C-A-B₁-A plan in which the first A and B are analogous to groups I and II in sonata form. The second A is the equivalent of the closing group while the C section is a development. The final A, B₁, and A serve as a kind of recapitulation and are entirely in the tonic. Like the forms from which this derives it may have many variants. Individual pieces may be judged to be somewhere on a scale that runs from sonata to rondo. The major difference between them is that in sonata-rondo the exposition (A-B-A) is not repeated as in most sonata forms. This form was often used for symphonic finales.
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, as did Haydn in the second movement of his “Surprise” Symphony. 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.
A Geocentric View From CCNY

- Our neighborhood: Manhattanville (our first famous resident was Alexander Hamilton). Harlem 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.
Locate these capital cities:

London
Vienna
Paris
Bucharest
Madrid
Berlin
Warsaw
Budapest
Ankara
Brussels

Dublin
Rome
Bern
Amsterdam
Helsinki
Stockholm
Copenhagen
Kiev
Athens
Prague

Moscow
Vatican City
Zagreb
Sarajevo
Vilnius
Sofia
Riga
Oslo
Reykjavik
Lisbon
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
» 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
» **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? Today I was driving to school, 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 Slonimsky rates him as “eminent,” which puts him one rung below “great.” At CCNY that evaluation would 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 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 made it into 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, and you be the judge.
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 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.

In 1948 Columbia Records introduced microgroove recordings on vinyl disks that were flexible and did not shatter if dropped. They spun at 33 1/3rpm so they contained a lot more music, almost 26 minutes on a side. A year later RCA introduced 7-inch 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.

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 handheld 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.
Joseph Bologne, Chevalier de Saint-Georges
1745-1799

The history of European classical music is filled with innumerable stories that seem stranger than fiction. None is more astounding than the life of Chevalier de Saint-Georges, perhaps the first important black composer. Why a blockbuster movie has not yet been made of him is hard to fathom. He was a champion fencer, virtuoso violinist, respected conductor, revolutionary colonel, and master composer. Not only that, he was handsome, an accomplished dancer, and apparently a noteworthy lover of aristocratic women. He was a friend of Mozart and was instrumental in commissioning Haydn to write his six Paris Symphonies that he conducted with great success.

Born on the island of Guadeloupe to a French plantation owner and his slave mistress, Joseph was taken to France for an education that would eventually lead him to the palaces and concert halls of Paris. Overcoming institutionalized racism he was elevated to high society and even played duets with Marie Antoinette, an association that later put him in jeopardy when the Terror began after the Revolution.

It is refreshing to know that music history is more than just dead white guys from Vienna. Researching his life and listening to his music can be most rewarding. He wrote some really good pieces, especially his violin concertos. Apparently he was as good with the violin bow and quill as he was with the sword.
From Blues to Rap

Adapted and embellished from History Detectives/THIRTEEN

For many, the 20th century was seen as "America’s century." It was a century in which the United States’ influence would be felt around the globe economically and politically. Nowhere is this truer than in the world of music. From jazz to rock, America was the birthplace to some of the most influential music the world had seen, 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 was the most important influence on 20th century music? One possible answer is African Americans and the musical culture they brought to this country – developed within the bonds of slavery. Their music and dance highly influenced the European-based culture that was already here. Later it blended with the contributions of immigrant populations.

Even before the 20th century began, blues music was evolving across the country 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 classical music in the 20th century.

Jazz’s influence on the world music scene would be nothing short of transformational. Jazz saw 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 of Louis “Satchmo” Armstrong 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.

Its ever-mutating style turned itself into the swing music of the late 1920s (The Jazz Age of The Great Gatsby) and 1930s. 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, Billie Holiday, and Frank Sinatra. Harlem was the place to go if you were in New York and wanted a good time.

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 and John Coltrane challenged your intellect much like the classical music of the time. Performers like Miles Davis 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.

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. 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 tradition that reaches back to ancient Greece. Rap music, with its semi-autobiographical lyrics and deep 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.
**Historical Repertoire**

Here is a sample of great music that culturally aware individuals should know.

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

Solo performance:

- Bugle call *Taps*
- Scarlatti Sonata in E major, L.23 (harpsichord, piano)
- Bach *Cello Suite 1, Prelude*
- Bach *Well-tempered Clavier: Prelude & Fugue 2 in Cm*
- Bach *Passacaglia and Fugue in Cm (organ)*
- Beethoven *Moonlight Sonata*
- Chopin *Preludes*
- Debussy *Syrinx*

Chamber Music:

- Beethoven *String Quartet 13*
- Mozart *Clarinet Quintet*
- Ravel *Introduction and Allegro*
- Messiaen *Quartet for the End of Time, Mvt. 1*
- Reich *Octet*

Symphonic Music:

- Mozart *Symphony 40*
- Beethoven *Symphony 5*
- Berlioz *Symphonie fantastique*
- Tchaikovsky *Symphony 4*
- Mahler Symphony 3
- Berio *Sinfonia, Mvt. 3*

The Concerto:

- Vivaldi *The Four Seasons*
- Bach *Brandenburg Concerto 2*
- Mozart *Piano Concerto 23*
- Haydn *Trumpet Concerto*
- Mendelssohn *Violin Concerto*
- Rachmaninov *Piano Concerto 2*
- Bartok *Concerto for Orchestra*

Song

- Traditional *Greensleeves* (Loreena McKennitt)
- Traditional *Oh, Danny Boy* (Peter Hollens, Elvis Presley)
- Traditional *Shenendoah* (Leonard Warren, Paul Robeson)
Schubert *Winterreise: Gute Nacht, Der Leiermann* (Dietrich Fischer Dieskau)
Faure *Apres un rêve* (Kiri Te Kanawa, Barbra Streisand)
Copland *12 Emily Dickinson Songs: 4. The World Feels Dusty* (Dawn Upshaw)
Barber *Hermit Songs: 8. The Monk and His Cat* (Marissa Miller)
Boulez *Le Marteau sans maître: L’Artisanat furieux*
Morricone *Nella Fantasia* (Park Ki Young)

Choral Music

Perotin *Sederunt Principes*
Palestrina *Pope Marcellus Mass*
Bach *Jesu, Joy of Man’s Desiring*
Handel *The Messiah, Hallelujah Chorus*
Delius *Songs of Farewell, Mvt. 5* (BBC Proms)
Traditional *Shenendoah* (Chanticleer)
Traditional *Lowlands* (Robert Shaw Chorale)
Ligeti *Lux Aeterna*

Opera

Purcell *Dido & Aeneas: Dido’s Lament*
Mozart *Don Giovanni: Commendatore Scene*
Verdi *Rigoletto, La Donna e mobile*
Wagner *Tristan und Isolde, Liebestod*
Puccini *Madama Butterfly: Love Duet, Un bel di vedremo, Finale*
Gershwin *Porgy & Bess: Summertime, My Man’s Gone Now, Bess, You Is My Woman Now*
Berg *Wozzeck: Act III*

Ballet Music

Tchaikovsky *The Nutcracker Ballet*
Rimsky Korsakov *Scheherazade*
Debussy *Afternoon of a Faun*
Ravel *Daphnis & Chloe*
Stravinsky *The Firebird, Petrushka, Le Sacre du printemps*
Copland *Billy the Kid*
The piano was invented around 1700 by Bartolomeo Christofori, an employee of the Medicis. 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.

- Scarlatti: Over 500 sonatas in one movement
- Cimarosa: He wrote 88. Pick one.
- 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 performers; one on a part; in a small to moderate size room.

- Perotin “Sederunt Principes”
- Machaut “Dame, de qui toute ma joie vient”
- Gesualdo “Moro, lasso, al mio duolo”
- 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
- 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 balanæ
- Joel Lullaby (Kings Singers)
The Symphony Through History

The symphony started out as part of the vibrant orchestral life of 18th century Vienna, the capital 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 rarer and more 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, 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
Shostakovich  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
Top: Gustav Mahler, Franz Liszt
Bottom: Pyotr Ilyich Tchaikovsky, Johannes Brahms
The Solo 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. 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
Bach
Mozart
Haydn
Beethoven
Chopin
Mendelssohn
Schumann
Grieg
Scriabin
Tchaikovsky
Brahms
Dvorak
Bruch
Rachmaninov
Shostakovich
Sibelius
Berg
Bartok
Gershwin
Prokofiev
Barber

The Four Seasons, Mandolin Concerto in C, Concerto: 2 Trumpets
Piano Concerto in D minor, Concerto for 2 Violins in D minor
Piano Concerto 23, Clarinet Concerto, Sinfonia Concertante
Trumpet Concerto
Piano Concertos 1-5, Violin Concerto
Piano Concerto 1 and 2
Violin Concerto
Piano Concerto, Cello Concerto
Piano Concerto
Piano Concerto
Violin Concerto, Piano Concerto 1
Double Concerto, Violin Concerto, Piano Concerto 2
Cello Concerto
Violin Concerto
Piano Concerto 2
Piano Concerto 1
Violin Concerto
Violin Concerto
Piano Concertos 2 and 3, Concerto for Orchestra
Piano Concerto in F, Rhapsody in Blue
Piano Concerto 3
Violin Concerto
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 aquatrain; 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.

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 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*

Messiaen *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. That is what I found after a one-hour search on the first three pages. It was quite a trip!

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 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 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 showed up in the 16th century and all owed instruments into the mix. The Requiem is a service for the dearly departed. Mozart was finishing his Requiem when he died in December 1791.

<table>
<thead>
<tr>
<th>Composer</th>
<th>Work</th>
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<tbody>
<tr>
<td>Machaut</td>
<td>Messe de Notre Dame</td>
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<tr>
<td>Dufay</td>
<td>“L’homme armé” Mass</td>
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<tr>
<td>Josquin</td>
<td>Missa Pange Lingua</td>
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<td>Palestrina</td>
<td>Pope Marcellus Mass</td>
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<tr>
<td>Monteverdi</td>
<td>Mass for Four Voices</td>
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<td>Vivaldi</td>
<td>Gloria</td>
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<td>Bach</td>
<td>Mass in B minor</td>
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<td>Mozart</td>
<td>Requiem</td>
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<tr>
<td>Beethoven</td>
<td>Missa Solemnis</td>
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<td>Verdi</td>
<td>Requiem</td>
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<td>Puccini</td>
<td>Messe</td>
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<td>Faure</td>
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<td>Durufle</td>
<td>Requiem</td>
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<td>Stravinsky</td>
<td>Mass</td>
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<td>Britten</td>
<td>War Requiem</td>
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<tr>
<td>Puccini</td>
<td>Polish Requiem</td>
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<td>Ligeti</td>
<td>Requiem</td>
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<td>Part</td>
<td>Berliner Messe</td>
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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, 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 bonae 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,
visibilium omnium et invisibilium.
Credo in unum Dominum Jesum Christum,
Filium Dei unigenitum,
Et ex Patre natum ante omnia saecula.
Deum de Deo, lumen de lumine,
Deum verum de Deo vero,
Genitum non factum,
consubstantiam 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 prodeedeth 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. In the 19th century many opera houses were built so that the growing middle class could enjoy the show as well. 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. Sometimes it gets to be so famous that it ends up being performed in strictly orchestral settings, divorced from the opera. Sometimes 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 composers write overtures that stand alone and do not introduce anything.

<table>
<thead>
<tr>
<th>Composer</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozart</td>
<td><em>Don Giovanni</em>, overture</td>
</tr>
<tr>
<td>Mozart</td>
<td><em>Magic Flute</em>, overture</td>
</tr>
<tr>
<td>Beethoven</td>
<td><em>Fidelio</em> and <em>Leonora</em> overtures</td>
</tr>
<tr>
<td>Beethoven</td>
<td><em>Egmont</em>, overture</td>
</tr>
<tr>
<td>Berlioz</td>
<td><em>Roman Carnival Overture</em></td>
</tr>
<tr>
<td>Rossini</td>
<td><em>William Tell</em>, overture</td>
</tr>
<tr>
<td>Weber</td>
<td><em>Der Freischutz</em>, overture</td>
</tr>
<tr>
<td>Glinka</td>
<td><em>Russlan and Ludmilla</em>, overture</td>
</tr>
<tr>
<td>Reznicek</td>
<td><em>Donna Diana</em>, overture</td>
</tr>
<tr>
<td>Smetana</td>
<td><em>The Bartered Bride</em>, overture</td>
</tr>
<tr>
<td>Verdi</td>
<td><em>La Forza del destino</em>, overture</td>
</tr>
<tr>
<td>Wagner</td>
<td><em>Lohengrin</em>, Prelude to Act III</td>
</tr>
<tr>
<td>Wagner</td>
<td><em>Tristan und Isolde</em>, prelude</td>
</tr>
<tr>
<td>Wagner</td>
<td><em>Die Meistersinger</em>, prelude</td>
</tr>
<tr>
<td>Tchaikovsky</td>
<td><em>Romeo &amp; Juliet</em>, fantasy overture</td>
</tr>
<tr>
<td>Tchaikovsky</td>
<td><em>1812 Overture</em></td>
</tr>
<tr>
<td>Brahms</td>
<td><em>Academic Festival Overture</em></td>
</tr>
<tr>
<td>Brahms</td>
<td><em>Tragic Overture</em></td>
</tr>
<tr>
<td>Delius</td>
<td><em>Irmelin</em> Prelude</td>
</tr>
<tr>
<td>Barber</td>
<td><em>School for Scandal</em>, overture</td>
</tr>
<tr>
<td>Bernstein</td>
<td><em>Candide</em>, overture</td>
</tr>
</tbody>
</table>
Music for the Ballet Through History

Ballet began in the Italian Renaissance courts of the 15th century. Thanks to Catherine de Medici (1519-1589) it spread to France where it 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 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.

- 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  
  - Agon
- Debussy  
  - Afternoon of a Faun
- Ravel  
  - Daphnis & Chloe
- Prokofiev  
  - The Prodigal Son
- Prokofiev  
  - Cinderella
- Copland  
  - Billy the Kid
- Copland  
  - Appalachian Spring
- Copland  
  - Rodeo
**Serge Diaghilev and the Ballets Russes**

**1909-1929**

**Original Music Commissioned by Diaghilev:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Work</th>
<th>Composer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>The Firebird</td>
<td>Stravinsky</td>
</tr>
<tr>
<td>1911</td>
<td>Petrushka</td>
<td>Stravinsky</td>
</tr>
<tr>
<td>1912</td>
<td>Daphnis &amp; Chloe</td>
<td>Ravel</td>
</tr>
<tr>
<td>1913</td>
<td>The Rite of Spring</td>
<td>Stravinsky</td>
</tr>
<tr>
<td></td>
<td>Jeux</td>
<td>Debussy</td>
</tr>
<tr>
<td>1914</td>
<td>The Nightingale</td>
<td>Stravinsky</td>
</tr>
<tr>
<td>1917</td>
<td>Parade</td>
<td>Satie</td>
</tr>
<tr>
<td>1919</td>
<td>La Boutique fantasque</td>
<td>Respighi</td>
</tr>
<tr>
<td>1921</td>
<td>Chout</td>
<td>Prokofiev</td>
</tr>
<tr>
<td>1922</td>
<td>Renard</td>
<td>Stravinsky</td>
</tr>
<tr>
<td>1923</td>
<td>Les Noces</td>
<td>Stravinsky</td>
</tr>
<tr>
<td>1924</td>
<td>Les Biches</td>
<td>Poulenc</td>
</tr>
<tr>
<td>1925</td>
<td>Les Matelots</td>
<td>Auric</td>
</tr>
<tr>
<td>1927</td>
<td>Le Pas d'Acier</td>
<td>Prokofiev</td>
</tr>
<tr>
<td>1928</td>
<td>Apollon Musagete</td>
<td>Stravinsky</td>
</tr>
<tr>
<td>1929</td>
<td>The Prodigal Son</td>
<td>Prokofiev</td>
</tr>
</tbody>
</table>

**Choreographers employed by Diaghilev:**

Mikhail Fokine, Vaslav Nijinsky, Leonid Massine, Bronislava Nijinska, George Balanchine

**Artists who supplied scenery and costumes:**

Leon Bakst, Alexandre Benois, Nicholas Roerich, Pablo Picasso, Andre Derain, Mikhail Larionov, Natalia Goncharova, Juan Gris, Marie Laurencin, George Braque, Maurice Utrillo, Max Ernst, Joan Miro, Pavel Tchelichev, Giorgio Chirico, Georges Roualt, Coco Chanel

**Conductors:**

Alexander Tcherepnine, Gabriel Pierne, Pierre Monteux, Richard Strauss, Ernest Ansermet, Roger Desormiere, Thomas Beecham
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. He 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. 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!”
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 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.

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. Many performers turn to drugs to help them with issues of nervousness. Most performers could use the help of a good psychotherapist from time to time. Many dream of a world-famous solo career but settle for orchestra work or teaching because there is very little room at the top.

To discover for your self 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.
Some Legendary Stars of Music in No Particular Order

Steve Reich
WC Handy
Miles Davis
Bobby McFerrin
Count Basie
Duke Ellington
Louis Armstrong
Bennie Goodman
Billie Holliday
Ravi Shankar
Tito Puente
Vladimir Horowitz
Joan Baez
Bob Dylan
Woodie Guthrie
Leonard Bernstein
Pierre Boulez
Zubin Mehta
Arturo Toscanini
Herbert von Karajan
Tommy Dorsey
Nat “King” Cole
Frank Sinatra
Tony Bennett
Paul McCartney
John Lennon
Gustav Mahler
Bob Marley
Enrico Caruso
Luciano Pavarotti
Leontyne Price
Placido Domingo
Andres Segovia
Jascha Heifetz
Elvis Presley
Beverly Sills
Isaac Stern
Paul Robeson
Stevie Wonder
Ray Charles
Bing Crosby
John Coltrane
Charlie Parker
Glenn Gould
Paul Simon
Rudolf Serkin
Dizzy Gillespie
Michael Jackson
Ella Fitzgerald
Mick Jagger
Johnny Cash
James Brown
David Oistrakh
Fritz Kreisler
Itzhak Perlman
Pablo Casals
Chuck Berry
Frank Zappa
Chet Atkins
Harry James
Maynard Ferguson
Rafael Mendez
Adolph Herseth
Gene Krupa
Buddy Rich
Dave Brubeck
Van Cliburn
Andre Watts
Arthur Rubinstein
Joan Sutherland
Sumi Jo
Andrea Bocelli
Maria Callas
Mario Lanza
Jessye Norman
Elisabeth Schwarzkopf
Ezio Pinza
Dietrich Fischer-Dieskau
Kirsten Flagstad
Feodor Chaliapin
Sviatoslav Richter
Jean-Pierre Rampal
Al Jolson
Pete Seeger
Harry Belafonte
John Denver
Leopold Stokowski
Famous Pianist Composers

Isaac Albeniz
Charles-Valentin Alkan
Leif Ove Andsnes
Anton Arensky
Carl Philip Emanuel Bach
Johann Sebastian Bach
Mily Balakirev
Bela Bartok
Ludwig van Beethoven
Leonard Bernstein
Georges Bizet
Johannes Brahms
Benjamin Britten
Feruccio Busoni
Frederic Chopin
Muzio Clementi
Aaron Copland
Henry Cowell
Claude Debussy
Rubin Goldmark
Louis Moreau Gottschalk
Enrique Granados
Edvard Grieg
Joseph Haydn
Scott Joplin
Franz Liszt
Edward Macdowell
Nicolai Medtner
Wolfgang Mozart
Leo Ornstein
Ignacy Jan Paderewski
Vincent Persichetti
Francis Poulenc
Sergei Prokofiev
Sergei Rachmaninov
Anton Rubinstein
Camille St. Saens
Erik Satie
Domenico Scarlatti
Franz Schubert
Robert Schumann
Alexander Scriabin
Dmitri Shostakovitch
Ignacy Jan Paderewski
Famous Violinist Composers

Johann Sebastian Bach
Arcangelo Corelli
Francesco Geminiani
Giuseppi Tartini
Giuseppi Torelli
Francesco Maria Veracini
Antonio Vivaldi
Joseph Haydn
Wolfgang Mozart
Franz Berwald
Nicolo Paganini
Pablo de Sarasate
Louis Spohr
Johann Strauss I
Johann Strauss II
Henryk Wieniawski
George Enescu
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.
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 take 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 with 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 know 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 lead 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:

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

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.
A Composer’s Complaint
Stephen Jablonsky

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 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 MIDI (Musical Instrument Digital Interface) which means that, with a synthesizer and a computer, we composers need no longer dream of hypothetical ensembles— they are at our fingertips. In the past ten years, the pencil has been replaced by the mouse. 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 mechanical, almost wooden. No matter how hard we try, it is not “real.” MIDI 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 eons 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 is 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.

Maybe Unpopular Music really isn’t 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.

Should, then, the music of Bach, Mozart and Wagner, 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?

When we look at the 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 thousands 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 indicate that, even for the few well-known Unpopular composers, the playing field is getting smaller all the time?

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?
The Goldberg Variations
Stephen Jablonsky

Towards the end of the semester, when there was some extra cash in the departmental till, I asked my faculty if there were some DVDs they would like to order for use next 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’s life. Much of the film was spent on his first recording, the *Goldberg Variations* of Bach.

The power of the film stayed with me into the next day, so I decided to put the CD of the Variations in the player in my car so I could refresh my memory of this keyboard monument of the Baroque. 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 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 *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 can come up with is 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 summer vacation has been unsettled by the myriad compositional problems that have been thrust upon me as a guy who cannot resist the temptation to analyze a piece that beckons 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 can report that I have already spent two hours this morning doing some preliminary analysis and I can see that this piece is like a musical Venus flytrap. Its savory flavors entice me to enter but I know there will be no exit. I am sorely tempted to get to the bottom of this matter, but having gone down two layers already I am not sure there is a bottom, or, if there is a bottom I am not worthy of diving that deep.
From what little I understand of these variations, it seems Bach did the pre-
jazz thing of dumping the melody and keeping the bass line as the
foundation for the thirty variations. In number 25 he adds chromatic
passing tones to the otherwise diatonic line and then adds a sequence-
based melody that gets really scary almost immediately. In the second
measure the tonal center shifts from G minor to F minor! If one of my
students had written a sequence that moves immediately to VIIIm in the
second measure I would mark it “wrong,” or at least highly questionable.
When I found that Bach put the bass line in the tenor starting in measure 9
that’s when I knew it was going to be rough going from hereon in, and that
is why I am taking a little break from looking at all those divinely-inspired
notes and am coming up for air. Returning to a piece that, like Tristan, has
a harmonic narrative that is continually obscured by a profusion of non-
harmonic tones that come too soon and often resolve way late might be just
the thing for some cold winter afternoon, but, hey, it is June, and this piece
is December.

Soon it will be lunchtime and I will have to leave my study and disconnect
from Mr. Gould and his Goldberg madness. The question is: when will 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 is a
remote possibility it might even be published years from now and be read
from start to finish by as many as five theorists spread across the globe. I
know one thing: the more time I spend with this piece the more I will realize
how wide is the gulf between Johann Sebastian Bach and all the rest of us
poor wretches.

What should I do? I am open to suggestion.
Mahler Apotheosis

Stephen Jablonsky

The fourth and final movement of Mahler’s Ninth Symphony 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 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 four-note descending scale 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.
Many years ago I went to a modern music festival that Pierre Boulez conducted with the London Philharmonic. 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 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 drama, not serial calculations and note sequencing. To be modern is not, in and of itself, a virtue. Modern does not 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 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 important emotional needs. Great music does both.

Sometimes the theory of modern compositional practice got in the way of the music. Think about the intriguing, influential philosophies of Cage in comparison to his often insipid music. In much of his music 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 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.

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 blah-blah. Music must first be engaging and entertaining, and then it can be art. It needs to be magical. 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.
Stravinsky: A Short Take

Stephen Jablonsky

Trying to understand Stravinsky's compositional process is probably impossible, or, at least, improbable. The "Neo-classicism" of Stravinsky is, in my opinion, a musical parallel to the art world's explorations of Dada and Surrealism. If you look at Dali's bent watches and try to tell the time you are attempting to do the same thing as making sense of Stravinsky's triads (non triads). You are correct that the harmonic material in *Pulcinella* ranges everywhere from completely tonal to completely bent out of shape—kind of like walking past fun house mirrors.

Remember, that you are trying to understand the mind of a great composer who was infinitely playful, comical, and a major troublemaker. This will not solve your technical problem but I hope it gives you some perspective as you try to sort out your data. By the time *Pulcinella* came along the diatonic tonal system was dead and buried. Stravinsky was using exhumed parts of this dead system in the same way that Dr. Frankenstein was trying to create new life from old parts. Got the picture? What made Stravinsky so great was the fact that no matter what he stole (and he stole a lot of different stuff throughout his long career) he processed it in his own unique way and it came out sounding like Stravinsky. You may come up with a lot of data and exquisite formulas but pinning down Stravinsky is much like herding cats.

Late in his career, when Stravinsky finally adopted many of the serial techniques invented by Arnold Schoenberg he used them in a way that sounded nothing like his Viennese contemporary. His ballet *Agon* is as fresh and bright as his earlier *Petrushka*, only the harmonic materials of tonality have been replaced with the vertical byproducts of tone rows.

What is amazing about Stravinsky was his ability to reinvent himself with great regularity much like his contemporary, Picasso, an equally dangerous provocateur who used distortion to great effect.
Stockausen is Dead

Stephen Jablonsky

Quite a number of years ago I made a visit to the opening of the 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 times had certainly changed.

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.....
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 footstep’s 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

**A cappella**: Singing without instrumental accompaniment.

**Accidentals**: The flats (@), sharps (#), or naturals (&) used to change pitch.

**Aleatory**: 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.

**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.

**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.

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

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

**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.

**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.

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

**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.

**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.

**Improvisation:** the act of spontaneous composition or embellishment.

**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.

**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.

**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:** To change keys or scales.

**Monophonic:** Music that contains only one line.

**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.

**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. 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.

**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: ¾ 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@).
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<td>Mascagni, Toch</td>
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<td>9</td>
<td>St. Saens, Lennon, Verdi</td>
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<td>Martinu, Sibelius</td>
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<td>Turina, Waldteufel</td>
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<td>Vaughan-Williams</td>
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<td>Messiaen, Franck, Gould</td>
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<td>Zemlinsky</td>
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<td>Carter, Berlioz</td>
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<td>20</td>
<td>Ives, Pasatieri</td>
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<td>Beethoven, Kodaly, Boieldieu</td>
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<td>21</td>
<td>Wellesz, Ran</td>
<td>17</td>
<td>Cimarosa</td>
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<td>Liszt</td>
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<td>MacDowell</td>
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<td>20</td>
<td>Hadley, Harbison, Holmboe</td>
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**LIBRA**

| 24 | Panufnik                                             | 25     | Rameau, Shostakovich, Le Jeune                      |
|    |                                                      |        |                                                    |
| 26 | Gershwin                                             | 28     | Mattheson, Schmitt                                 |
|    |                                                      |        |                                                    |

**SCORPIO**

| 23 | Lortzing, Rorem                                      | 24     | Berio, Crumb                                        |
|    |                                                      | 25     | Hassler, Bizet, J Strauss Jr                        |
| 26 | D Scarlatti                                          | 27     | Paganini, Argento, Nancarrow                        |
| 30 | Pachelbel?                                           | 31     | Vitri                                               |
| 2   | Dittersdorf                                          | 3      | Bellini, Scheidt, Ussachevsky                        |
| 5   | Sachs, Zador                                         |        |                                                    |

**SAGITTARIUS**

| 23 | Falla, Penderecki                                    | 24     | Joplin, Sarti, ?, Schnittke                         |
|    |                                                      | 25     | Taneyev, Thomson                                    |
| 27 | Koechlin, Haubenstock-Ramati                         | 28     | Lully, Rubinstein                                   |
| 29 | Donizetti                                            |        |                                                    |

**AQUARIUS**

| 20 | Hadley, Harbison, Holmboe                            |
A Matter of Style

Here is a list of various YouTube performances of Bach's Air from His *Orchestral Suite No. 3*. This composition from the early 18th century is so gorgeous that innumerable musicians want to play it again and again in the 21st century.

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](https://youtu.be/uMaSpnUGqu0)
Bobby McFerrin (vocal)
Pipe Organ  [https://youtu.be/uFwZeEF5uog](https://youtu.be/uFwZeEF5uog)
Andrew Huang  G-strings  [https://youtu.be/4CyLWOWz5uc](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](https://youtu.be/o-Mul81PPGs)
Classics Meet Cuba  [https://youtu.be/k0CKSZnpxDs](https://youtu.be/k0CKSZnpxDs)
Art Assessment Inventory

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?
Dance and Movement Elements
Five Movement Parameters

- **Body parts (What parts are moving?)**
  - individual parts of the body
  - the whole body
  - upper or lower half of the body
  - right and left side of the body (symmetry)
  - oppositional (right arm against left leg)
  - body part leading / sequential movement
  - varying roles of body's center of gravity

- **Actions (What task is the dancer doing?)**
  - stillness
  - turns: change direction
  - twists
  - jumps
  - traveling - move through space (walk, runs, etc.)
  - expand (make bigger) or contract (make smaller)
  - gesture
  - fall / recover

- **Space (Is the movement large or small?)**
  - 8 directions: front, right front corner, right side, right back corner, back, etc..
  - planes - surfaces (shaped, horizontal, vertical)
  - arc-like forms
  - spoke-like forms
  - carving
  - kinesphere: near, intermediate, far space
  - spatial tension - between parts or people
  - performing space: theater, outdoors, etc.
  - stage directions: up stage, down stage, stage right, etc.
  - floor patterns and designs
  - group formations

- **Relationships**
  - solo, small group, large group, variety
  - movements to each other: unison, mirroring, canon, etc.
  - with environment, stage space, locale
  - between people: focus, touch, support, defy, etc.
  - with music or soundscape
  - with costumes, props, lights
  - with aspects of form: repetition, contract and variation

- **Dynamics / Efforts**
  - attitudes toward:
    - flow - (bound, free)
    - weight: light or strong
    - time: tempo changes, sudden, sustained
    - space: direct or indirect
    - shape: embodiment of space
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)
Music Obituaries 2017

Al Jarreau (jazz singer)
Arthur Blythe (jazz saxophone)
Barbara Carroll (jazz singer/pianist)
Barbara Cook (Broadway)
Barbara Smith Conrad (opera)
Bea Wain (Big Band singer)
Brenda Lewis (opera)
Bruce Langhorne (folk/rock)
Buddy Greco (jazz pianist/lounge singer)
Butch Trucks (Allman Brothers Band)
Carol Neblett (opera)
CeDell Davis (blues)
Charles Bobo Shaw (jazz drummer)
Charles Bradley (soul singer)
Chester Bennington (Linkin Park)
Chris Cornell (grunge)
Christopher Wong Won (rapper)
Chuck Berry (Rock n’ Roll legend)
Clyde Stubblefield (pop drummer)
Dave Valentin (Latin jazz flute)
David Cassidy (singer/actor)
Della Reese (singer/actor)
Dmitri Hvorostovsky (opera)
Don Williams (country singer)
Eddie Kamae (Hawaiian guitar)
Fats Domino (rock legend)
Francis Thorne (composer)
George Avakian (record producer)
Glen Campbell (singer/actor)
Gord Downie (rock singer)
Greg Allman (Southern rock)
Halim El-Dabh (composer)
Jeffrey Tate (conductor)
John Abercrombie (jazz guitar)
Johnny Hallyday (rock singer)
Jon Hendricks (jazz singer)
Joni Sledge (disco)
Kurt Moll (opera)
Larry Coryell (rock/jazz guitarist)
Laura Flax (clarinet)
Maggie Roche (folk singer)
Malcolm Young (AC/DC)
Maurice Peress (conductor)
Mel Tillis (country singer)
Misha Mengelberg (jazz pianist)
Muhal Richard Abrams (pianist/composer)
Nat Hentoff (music critic)
Nicolai Gedda (opera)
Paul Zukovsky (violin)
Roberta Peters (opera)
Rosalie Sorrels (folk singer)
Sonny Burgess (rockabilly)
Stanislaw Skrowaczewski (conductor)
Tom Paley (New Lost City Ramblers)
Tom Petty (rock singer)
Veljo Tormis (composer)
William Onyeabor (Nigerian singer)
THE SOUND OF SILENCE

Larghetto

J. S. Zamecnik