

A Compendium of Most of What You Need to Know or The Modest Newsletter Didactic

Basic Theory for Friday Night (or any night for that matter)

by Andrea Brown

The piano keyboard is made up of a repeating series of white and black keys. The black keys alternate between sets of two (the “Twins”) and three (the “Triplets”). Whenever there is a black note between two white keys, the white notes on either side of the black note are NOT considered to be adjacent to one another, even though they do “touch” due the shorter length of the black key. Rather, the white keys are considered adjacent to the black key. This should be pretty easy to see on the accompanying diagram of the grand staff and piano keyboard (copied from *Scales Intervals Keys Triads Rhythm and Meter* [sic] by John Clough and Joyce Conley). One benefit of describing everything in terms of the piano keyboard is that the keyboard instruments are the only instruments that provide a visible key for every note represented on the grand staff.

Intervals

The distance between two notes is called an interval.

Half Steps and Whole Steps

Also called semi tones and whole tones. The interval between two adjacent keys is one half step. The interval between a black key and one of the white keys next to it is a half step. The interval between E and F is a half step, and so is the interval between B and C. A whole step is two half steps. The interval between C and D is a whole step, and so is the interval between B and C-sharp (C#).

Accidentals

There are five accidental symbols. They are naturals (♮), sharps (#), flats (♭), double-sharps (x), and double-flats (♭♭). There is a basic musical alphabet: C, D, E, F, G, A, B, C. A natural remains the same. C♮ is just C. A sharp raises the note one half step, therefore C# is the black note just to the right of C, and E# is played on the same note as F. A flat lowers the note one half step. B♭ is the black note just to the left of B, and F♭ is played on the same note as E. A double-sharp raises a note two half steps. Cx is played on the same note as D, and Ex is the black note to the right of F on the keyboard. A double-flat lowers a note two half steps. B♭♭ is played on the same note as A, and F♭♭ is the black note to the left of E.

Enharmonic Equivalents

As you can see from the preceding paragraph and on the accompanying diagram, there is more than one way to name all of the notes on the keyboard by using different accidentals. Notes that are played on the same key but given different names are enharmonic equivalents of one another. For example, C, B# and D♭♭ are all played on the note usually called C natural, and therefore are enharmonic equivalents. A#, B♭ and C♭♭ are enharmonic equivalents. What note would they be played on?¹

¹ Enharmonic equivalents exist only on keyboard instruments. On woodwinds, brass, and stringed instruments there is a difference between C and B#, C3 and Db, etc. There is a long explanation for this that I would

Diatonic and Chromatic Half Steps

There are two types of half steps. A chromatic half step is chromatic because the basic letter name remains the same. Because the basic letter name remains the same, chromatic half steps are written on the same line or space of the staff. C to C# is a chromatic half step, as is F to F#. A diatonic half step is diatonic because the basic letter name changes *scale-wise*, i.e. without skipping any note/letter names. This is important, because it is possible to write a half step from B# to D♭, but the basic letter name has not changed scale-wise: C is skipped, and therefore the half step is not diatonic. Because the basic letter name changes scale-wise, diatonic half steps are always written on adjacent lines and spaces on the staff.²

Diatonic Scales

Also called diatonic modes. Diatonic half steps are derived from the diatonic scale. A scale that has seven adjacent notes that move step-wise is called a diatonic scale.³ All of the notes in a diatonic scale are written on adjacent lines and spaces of the staff. All diatonic scales have five whole steps and two diatonic half steps. The scales sound differently from one another because the order of whole steps and diatonic half steps is different in each scale. In ancient music there were seven important scales. In Baroque, Classical, and Romantic period music only the Ionian and Aeolian scales are really important, but 20th Century composers make much more frequent use of the five remaining ancient scales (which are also becoming more familiar due to the revival of chant). I have copied out all of the scales and marked the placement of the diatonic half steps in each scale.

Major and Minor Scales

The major and minor scales are the same as the Ionian and Aeolian diatonic scales. You can see where the diatonic half steps occur on the accompanying handout.

Chromatic Scale

The scale composed entirely of half steps is called the chromatic tone. Shown on accompanying scale sheet. There are twelve different notes in this scale.

Whole tone scales

Scales composed entirely of whole steps. Because there are twelve notes in the chromatic scale and the whole tone scale skips every other note, there are two whole tone scales, each containing six notes.

Octatonic Scale

A scale containing eight notes, arranged in a pattern of alternating half steps and whole steps. There are three octatonic scales. Octatonic scales have become a staple of 20th Century music, mainly because it is possible to make many harmonies from the octatonic scale that coincide with diatonic harmonies (harmonies derived from diatonic scales), and because they have many chromatic properties due to the large number of chromatic half steps in each scale.

be happy to give, but it is beyond the scope of this mere introduction.

² Whole steps are nearly always diatonic, that is, the basic letter name changes.

³There are seven different notes with different names. However, to complete the scale it is necessary to repeat the first note an octave higher. For example, play a C major scale on the piano and stop at B, then play it again with C at the top. Then you will understand why the first note of the scale has to be repeated.

General Interval Names

2nd, 3rd, 4th, 5th, 6th, and 7th are general interval names. General names are given because of the number of lines and spaces between notes on the staff. Unlike Monopoly, where “GO” is not counted among the number of spaces you are allowed to move, a general interval includes the line or space on which you begin (where the first note is located). (The bottom note is always the first note considered when counting and naming intervals.) For example, the general interval between C and D is a 2nd. The line on which C is located is counted as “One,” and the space on which D is located is “Two.” What is the general interval between C and E? D and A? B and C?

Instead of using 1st, *prime* is the general name given to an interval where both notes are written on the same line or space. *Octave* is used in the place of 8th.

Specific Interval Names

Names like *major*, *minor*, *diminished*, *augmented*, and *perfect* are specific interval names. They give the quality of the general interval. For example, there are major and minor thirds; major, minor, and augmented sixths; major, minor, and diminished sevenths.

Major and Perfect Intervals

“In the case of 2nds, 3rds, 6ths, and 7ths, if (and only if) the upper note of the interval matches a note in the major scale built on the lower note, the specific name [of the interval] is *major*” (Clough and Conley, 29). This is NOT true in the case of 4ths and 5ths, only 2nds, 3rds, 6ths, and 7ths. So, if you are looking at D and C# above, you know from counting lines and spaces that the general name is 7th. To find out if it’s a major 7th, build a major scale from D. Because C# is part of the D major scale, the interval between D and C# is a major 7th.

“In the case of primes, 4ths, 5ths, and octaves, if (and only if) the upper note matches a note in the major scale built on the lower note, the specific name is *perfect*” (Clough and Conley, 39).

Augmented Intervals

“An interval one CST [chromatic half step] larger than a major interval is called *augmented*” (Clough and Conley, 32). This is also true of intervals one chromatic half step larger than perfect intervals. The distance between C and A is a major 6th. What is the interval between C and A#? C and F#?

Minor Intervals

“An interval one CST [one chromatic half step] smaller than a major interval is *minor*” (Clough and Conley, 31). What is the interval between C and A \flat ? D and C \sharp ?

Diminished Intervals

“An interval one CST [chromatic half step] smaller than a perfect interval is *diminished*” (Clough and Conley, 41). This is also true of intervals one chromatic half step smaller than minor intervals. What is the interval between C and F \flat ? C and E $\flat\flat$?

The Tritone

The tritone is probably the most dissonant sound in Western music. A tritone is an interval that contains six half steps. The tritone can be thought of as the division of the chromatic scale into two equal parts. It can also be thought of as an augmented 4th or a diminished 5th. The major scale contains a tritone (in C major, the tritone is between F and B). The chromatic scale contains many, and the octatonic scales can actually be thought of as the first four notes of a minor scale, repeated a tritone higher. This is more clear on the accompanying sheet.

*This is a very, very brief introduction to the basics of intervals and scales. I haven't mentioned harmony and triads/chords because it's very difficult to present in print without extensive diagrams. Please don't look at this and give up on theory forever. I've tried to organize this in such a way that it will be helpful for Friday night, which is why I haven't mentioned harmony yet.⁴ Harmony is impossible to follow without understanding intervals and scales. Please read this before the bash or you'll be lost very quickly, and please bring the diagrams with you to the bash. Thanks very much.

Fish - an interesting symbol, but what does it mean?

by Eric White

One website (nisbett.com/symbols) has a brief article on the history of the fish symbol. They date it a couple thousand years before Christ to demonstrate its broad history as a religious symbol. Regarding its contemporary use, the author mentions the ubiquitous nature of the symbol, "Everywhere you drive on the highway you can see the symbol of a: [*sic*] "FISH", on the rear of numerous cars, and trucks. It is now so popular it is used on everything from business cards to the yellow pages." Yes, this populism is true (regarding its "fortunateness", I will reserve judgment). To the populace, the fish has come to symbolize christianity (lower case is not typing error). The problem in the U.S. is "christianity" has become over used as to lose virtually all meaning whatsoever.

What are our options for fish? Before engaging in the heat of the discussion, let us first examine the fish itself which may be found in three primary forms: 1) the fish symbol alone; 2) The fish symbol with the name "Jesus" written in it; 3) The third option is the fish symbol with the Greek word, *icquj*, in it. There are serious problems with each of these which I will mention in reverse order. 3) Hardly anyone speaks Greek in this country today, and if they did, they would read the word "fish" written inside of a fish. 2) To write the name "Jesus" inside the fish symbol equates Jesus with the fish. The problem here should be self-evident, the fish does not stand for the man Jesus. This leaves us with the first, and most prevalent symbol, the simple outline of a fish. The fish alone now refers to "christianity." In other words, to place the fish symbol somewhere on my person or property aligns me with a certain religion - christianity as opposed to Islam, for example.

I contend that populism has changed, or perhaps erased, the true meaning of the fish symbol. The fish symbol stands for more than a religion, or the man for whom the religion is named. The fish stands for an orthodox tradition - Jesus Christ, God's Son, Savior. In this very short acronym, we find that Jesus Christ, while man, is also God. Plus, we have the gospel imbedded in the word, Savior. By transferring the meaning of the fish from an orthodox doctrine to a generalization of religion, we have indeed lost the meaning of the term.

The second question that comes to mind is its location on the car. It must be conceded that the fish symbol is done with a quality which distinguishes it from the bumper sticker, "No Jesus, no peace. Know Jesus, know peace." It is true that Islam has not produced a crescent moon for the backsides of the car, nor the Jews a tetragramaton or Star of David. The evolutionists have rejoined with the Darwin creature which has evoked an even wider variety of fish.

So, what is the point - does it matter if Christians put little fish on their bumpers? Perhaps they can with a few caveats. First, they must realize that it is not witnessing to anyone. The unsaved, and most saved, do not understand the symbol. Only knowledgeable Christians will know that the driver thinks he is a christian, even though their definition of Christianity may differ significantly from his. Second, and following from the first, one should realize that if another driver a) notices the fish; b) knows that it stands for Christianity; and c) claims himself to be a Christian, that the fellowship which

⁴Editor's note - a Tuesday wouldn't really do. If you don't get this you have missed the whole point of the article.

about to be shared is around a religion without significance as to orthodoxy, orthopraxy or orthopathy. In fact, the person who owns the car may have purchased it second hand. He may not even know the fish is there, let alone what it stands for. Or, he may like fishing. Third, those desiring the little fish should not get involved in the idiocy of 'darwin wars.' If they do, they deserve the Darwin Award.

A Philosophical Enquiry into the Origin of our Ideas of the Sublime and the Beautiful
by Edmund Burke

A book review of sorts by two exceedingly clever fellows

The great purpose of this book is to draw a distinction. The most important distinction that Burke wants to make in this book is the distinction between the Sublime and the Beautiful. He wants to point out that the sublime has to do with pain (by way of fear) and the beautiful has to do with pleasure. To do this he has to distinguish the states of pain and pleasure and the absence of both. He argues that pleasure is more than the absence of pain, and calls the conscious withdrawal of pain or the withdrawal of perceived pain, delight. He uses delight in this technical sense throughout the book. So pain and pleasure are not continuous, they are distinct altogether.

Burke believes, as is evident in his excellent preface on Taste, that a true taste for what is beautiful is universal--that is, that all men find beautiful things beautiful and repulsive things repulsive, more or less. He demonstrates this by an analogy to real taste--sweetness and bitterness. He illustrates how men typically associate pleasant things with sweetness, etc. Any pleasure in a bitter object, in Burke's view, is acquired. Burke's introduction provides very clear and convincing argumentation, on empirical grounds at least, that taste for good things is universal.

In his main treatise, Burke continues, at least partially, his argument that the beautiful and sublime are universal principles. His method of argumentation is through proofs from empirical observation. He shows that man reacts a certain way from the sight, sound, taste or touch of certain things. The reason for this reaction is man's natural bent toward relaxation and repulsion toward tension. Sublimity and Beauty can be ultimately reduced to tension and relaxation. A main point for Burke is that pain leads to tension and pleasure leads to relaxation.

I think it is important to keep in mind, when one reads this, that the kind of tension that each sense experiences is distinct. By pain/tension in the sense of sight, he does not mean the same sort of pain/tension that you get by pressing on your eyeball. Or again, the pain of being boxed on the ear is not the same pain as we experience when there is an unpleasant sound or a pleasant sound unpleasantly rendered (a bit of an impossibility if one takes this in the wrong way - what I have in mind is the church choir trying to do "All We Like Sheep" from the *Messiah*). Instead, things which relax the sight are, for example, curves and things gradual--the eye does not have to work at readjusting itself with hard angles. The pleasant/beautiful/relaxing works the same way that pain/tension does. It accords with the sense - like feeling something smooth accords with the touch. He even says that sleep is a form of relaxation which may help to explain why it is so pleasant except that it is hard to think that the ultimate effect of the beautiful would be to render us comatose. The problem I have in understanding Burke is that it seems that the most beautiful things accord so much with the senses that they seem almost not to be sensed!

Value of Burke (at least the value we perceive):

1 That it is not regularity that makes for beauty - rather, regularity, symmetry and proportion are conditions that must exist for beauty to be present, but when they appear alone they are not beautiful in and of themselves and therefore not essential parts of what beauty is. Regularity is necessary for beauty but not sufficient. He is very earnest about making this point and most convincing.

2 That gradualness - a form of relaxation - and variety are essential parts of what beauty is. I think it is a very helpful insight to realize that not the shocking or the angular or the-in-any-way-tense are essentially beautiful. The reason we are liable to confuse things is that we think sublimity is beautiful and Burke abolishes the notion. This goes back to his distinction of pain and pleasure as unrelated states and it is a very helpful and fruitful idea to think about and to use in thinking about aesthetics.

3 His distinction between sublimity and beauty is very helpful and he is particularly eager to work out some of the consequences of making this distinction when it comes to the subject of church architecture and to the place of fear (which is the basis of sublimity because it is a form of pain) in worship. There is much to provoke thought in Burke's ideas about the Sublimity of God. There is much for us to think about with regard to astonishment and awe and their basis in pain and fear.

Questions for Burke:

1. How do things ugly and things sublime relate? Burke, alas! does not really tell us.
2. What about all this empiricism? If one wants to argue that men universally find beautiful things beautiful, why do so many like ugly things (i.e., pop culture)? Or is popular culture not only widely accessible, but beautiful as well?
3. What does the empirical argument do to the beauty of God? We must assume that God is the most beautiful (and yet sublime) Being which exists. We must assume, being believers, that holiness is a great part of the beauty of the Beautiful. If all men are somehow drawn to beautiful things by some rational and empirical argument, we should likewise assume that all men are drawn to Supreme Beauty. Can we or should we dismiss Burke because our philosophical system cannot stomach it? The real question here is whether or not all men are drawn to beauty. Perhaps the answer is that beauty exists outside of men. In other words, the tree does make a sound even if nobody is around to hear it.⁵ Beauty exists with or without our sensing it. Anyone who takes this view, however, must sincerely wrestle with Burke's convincing argumentation.

R. G. Collingwood

Have you ever heard of R. G. Collingwood? Well, perhaps it is time you do! I have a shelf of favorite books - imaginary that is - on which one finds *The Great Gatsby*, *Till We Have Faces*, *The First Circle*, Perry Miller's biography of Edwards, Augustine's *Confessions*, among other things and there is recently added *The Idea of History* by the great R. G. Visit: <http://www.geocities.com/rgcollingwood/>

⁵This is not so clever in the opinion of one fellowe. When there is no perceiver you do not have the same occurrence, and certainly not what we perceive as sound. I think the not so clever fellowe is trying to make an object of what is a common subject. The point he makes can be maintained with the commonness of the subject without making it independent of perception, because beauty does not exist without our sensing it in any way that means anything to us anymore than a tree can exist as we perceive it without one of us to perceive it. Beauty is always the quality of something that is beautiful, or, we could say, there is no abstract and absolute beauty, there is an absolutely beautiful being. He is not beauty, but he has all the quality of beauty himself. This footnote, the more I regard it, seems to say nothing substantially interesting or helpful whatsoever. This is the sort of thing one gets when there are three opinions involved in writing an article (one belonging to one clever fellowe and the other two belonging to the more ambivalent fellowe).