

## A Brief History of Western Music

### Early Music

Little is known about music before the Christian Church. Illustrations on vases etc, suggest that the ancient Greeks/Romans sang, had flutes and pipes (eg the Aulos), simple stringed instruments, horns and drums. Although these existed and have been copied, we don't always know what notes they actually played, or which scales they made out of them (or if they played them together) as we have no written music. Presumably music for solemn religious services was different from lively dances.

The first written music we have is Christian Church music from around 800 to 900AD. Music existed before this, but less has survived. The church in 900AD worried about the amount of variety in services around Western Europe (due to poor communications), and writing music down meant it could be standardised. Churchmen wrote it as most people could not read or write, and they wrote down music as well as the services. Most written music therefore, comes from the church. Music helped people remember the words (especially as the texts were in Latin).

Music was Monodic (only one part) and called 'Plain or 'Gregorian' Chant. The words were biblical texts, and those of church services. A Mass is the words that **have** to be said (or sung) at a service. A Motet uses religious words, but doesn't have to be sung. Musicians tried to make music more important by 'Troping', but Tropes were soon banned. Troping is adding extra words which are not part of the original to make the music longer.

The Kyrie section of the Mass consists of the words "Kyrie eleison" (or Lord have mercy) These could be lengthened to: "**Lord**, giver of life, great omnipotent presence, in whom we worship, **have mercy**." This meant nicer music, but less concentration on the correct words. Tropes had to go. Additionally, texts had to be one note per syllable, and only a simple decoration (or "Melisma") on the penultimate syllable was allowed. The music is characterised by being 'Pulseless' (there is no strong beat at the start of a bar), and as single lines, words are very clear.

Music was constructed from Modes (not Scales). Each Mode was roughly the same as today's White Note Scale. The Dorian Mode started on D, and used : D,E,F,G,A,B,C,D. The Phrygian Mode was E,F,G,A,B,C,D,E. The Lydian Mode was F,G,A,B,C,D,E,F. The Mixolydian Mode was G to G. Then came the Aeolian Mode (A to A, later used as the Minor Scale), the Ionian mode (C to C, later used as the Major Scale), and the Locrian Mode B to B. There was also a system of 'sub' modes which used the same modes, but started half way up them. If you want to know what the difference was, try playing 'Old Macdonald' on the Piano starting on C, and then play it again starting on E (but sticking to the 'White notes'). The second one sounds Minor, because the Semitones are in a different place.

Each note was based originally on two things: 1) Every time you play a 'C' you hear not only that C, but the C above it, then the next G, C, E, G, Bb, C and a few more. These are called 'Natural Harmonics, and the 'nice' intervals like the 3<sup>rd</sup> and 5<sup>th</sup> we use in chords come from them. As 'natural' intervals they sound better. 2) Each note is mathematically related. An

### Listen To:

Plain Chant  
(or Gregorian)

Octave is twice the frequency, a 5<sup>th</sup> is 3/2 higher (or 3/2 times the frequency), a 4<sup>th</sup> is 4/3 higher, a Major 3<sup>rd</sup> is 6/5 higher (etc). 'Good' sounds were recognised at the time, but not the mathematical reasons for them.

If you check this out on actual frequencies, you will find out that the gaps between each note (the Tone or Semitone of today) were not all the same. You can prove (if you want), that the pitch of the C note as the 7<sup>th</sup> note of the Dorian Mode is different to the pitch of the C that is the 5<sup>th</sup> note of the Lydian Mode. The difference may not always be noticeable for an octave or two, but it did exist, and meant that instruments based on different notes or keys could **not always** play together. This delayed development of instruments and instrumental music.

As different voice had different ranges and couldn't always sing a particular mode, so some Modes needed to be adjusted to start on different notes (they were 'Transposed'). If the Dorian Mode starts on E instead of D, the set of notes becomes E,F#,G,A,B,C#,D,E to maintain the same pattern of Tone/Semitone intervals (as D,E,F,G,A,B,C,D) and that is where #s and bs became necessary. Compare this set to the notes of the Phrygian Mode on E (E,F,G,A,B,C,D,E). If sub-modes were transposed as well, it was possible to have 7 Modes and 7 'sub-modes' starting on each of 12 notes (168 different Modes). Compare this to 2 or 3 **Scales** starting on 12 Notes.

Polyphonic music uses more than one tune, but often is used to describe music with more than one part. It seems to have started with singing in parallel 5ths. This may have been people singing out of tune or in higher/lower voices but we know that by 1100, Leonin and Perotin **wrote** music for 2 separate parts (not necessarily in parallel). Composers from then on regularly wrote for two or more voices (in and out of church). Some pieces used not parallel parts, others had one part holding notes as an accompaniment or moving slower/faster than another, others had parts in contrary motion, and some experimented with using different intervals. The disadvantage was that the words could become obscured easily. The Mass words (from the service) therefore stayed as Plain chant until much later.

Although originally music may have moved in parallel 5<sup>ths</sup>, the 5<sup>th</sup> became a consonant (nice sounding) interval used at pauses or at the starts/end, and consecutive 5<sup>ths</sup> were avoided in the middle. This was why the Locrian mode was avoided (as you cannot get a fifth when B is the Tonic or key note). After that (certainly within 100 years), a 3<sup>rd</sup> part was tried. The 3<sup>rd</sup> did not become a consonant interval for a further while, and the 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> were used with equal favour as passing intervals. By the 13<sup>th</sup> and 14<sup>th</sup> centuries, what we see as consonant chords (using the third, fifth or sixth and octave) were common, and when music was composed these were the intervals concentrated on between parts.

Secular and Folk musics gradually developed their own way throughout this period. Folk music was passed on by mouth rather than written down, and therefore, what we know of it tends to be changed by time. It often adopted the new techniques that sacred music adopted (harmony parts and the particular intervals). One difference is stronger use of rhythms, and there is a lot of 6/8 (1 2 3 4 5 6) time signature in these. Music stayed modal longer (because of traditional vocal lines), and was often for solo voice with

**Listen to:**

Organum  
(Leonin and Perotin)

Ballads, Lais,  
Virelais and Rondeaux

Lionel Power

Machaut

Ockeghem

simple instrumental accompaniment because of the limitation of tuning but also for clarity of words. Drum and Drone accompaniment was common, with some copying or alternation of voice and tuned instruments, and later chord accompaniment. The tradition of Lute music (using chords to accompany a solo voice started around the 13<sup>th</sup> century (paralleling church music), and this tradition has influenced solo and pop song since.

As time went on, musicians started to write down secular music, so that it could be passed on. Secular Music includes court music as well as folk, and it was in many of the court circles that the music was written. Some songs were tales of love and chivalry for nobles. Collections of lute songs were written down as melody line with tablature. These and other simple instrumentations were written down for noble performers or the travelling musicians known as Minstrels, Jongleurs, Trouveres, or Troubadours. Their heritage still exists today with travelling entertainers.

Sometimes Sacred tunes were used by folk musicians, and sometimes Secular tunes were used in church. This is another reason why written notation of secular music survives. Machaud's "Missa a l'homme armée" (Mass for the armed man) uses a folk song in a mass service. Several composers used this tune. It is also worth remembering that a folk song is a 'song of our time'. It often tells a story (often, too, a moral or political warning). Examples are "Ring-a-ring-roses", and "Humpty-Dumpty", where the original meaning of the words has been obscured, due to being passed on only by song, and they survive as children's songs.

#### **Music Technology Notes:**

Bear in mind original Performance venues: When considering church music think about the following: Church music was often performed in large echoey buildings. Although churches at this time were more decorated (with tapestries, etc) they are still quite reverberant. Frequently the music allowed short pauses for notes to die away. Court Music may have similar acoustics to churches, although the rooms were smaller than cathedrals.

In folk music, the ambience is the opposite. Outdoor acoustics are very dry. No reverb is accurate (although echo can sometimes 'reflect' the performance venue). Large halls were rarely used for folk music, although court music can use the same effects as church music.

The nature of the human voice when performing several notes to a syllable is legato, in that a note tends to continue right up to the next, unless directions are given to shorten a note, or a new syllable/word is about to be uttered, or a breath is needed. The overall texture of a lot of church music therefore is somewhat overlapping, partly caused by this legato, but also by the echo back on the previous note.

Sequencing this music is unlikely to produce the exact cut-offs where a word or sentence ends, although if text is present, exact quantization can help. Words are usually pitched as part of a sentence. Using individual words from a bank gives the sort of odd effect that automated railway station announcements have. It is difficult to imitate a voice exactly, especially on longer notes due to sampling space required. It is therefore better to sequence instrumental music than vocal music.

#### **Listen to:**

Dufay

Dunstable

Dowland (Lute Music)

#### **L'homme Armée**

(anon, then by Machaut and various others)

## Renaissance Music.

Refers to the style starting from around 1450AD onwards. Renaissance means 'Rebirth', and Art/Music, starts to see changes in techniques. Art sees more use of perspective, and the use of symbols which suggest a meaning behind the obvious picture. In music, although there was little difference in the intervals used as consonants (3<sup>rd</sup> 5<sup>th</sup> 6<sup>th</sup> 8<sup>th</sup> with others in passing), polyphonic imitation was used extensively. Each voice starts in turn, and imitates the others (like a round) by singing the same tune. Different voice ranges mean that each part comes in an octave higher or lower, or a fifth higher or lower (due to the importance of the 5<sup>th</sup> from earlier music) other intervals are used, but less.

It was regarded as clever to imitate parts for as long as possible (always for more than 4 notes). Larger works are sectioned, with different tunes for different sections, but sections (within a movement) can overlap. Starting at different times causes lack of clarity in the text, although the text was still supposed to be more important than the music (and the council or Trent underlined this). As a result, the Mass was still often set to Plain Chant. In rich churches (where musicians were employed) such as St. Mark's in Venice, the spectacle seems to have been as important, and it is in places like this where the beautiful polyphonic masses of Palaestrina, etc were first heard (rather than the simple Plain Chant).

Polyphonic music makes words unclear (as each part sings words at different times) in church music and in the English Madrigals (short secular pieces by composers such as Gibbons, Tomkins, Weelkes, Farmer, etc). Madrigals started in Italy and were adopted by Elizabethan England where they were used extensively. They were written for court entertainment and used such ideas as nature being wonderful (this happens regularly in history: for example Marie Antoinette), Classical Gods, and of course Queen Elizabeth. Many of them were sung by 'Gentlemen' rather than professionals, so they had to be of interest to performers and audience.

Not surprisingly, they use emotion through speed and mode or key (they use both, as many were written after the change to keys), and gimmicks in text settings. Words were set to fit their meaning – for 'Shaking' the music shakes (a trill or tremolo). 'Ascending' (into heaven) was set to rising notes, whereas 'Descending' was set to falling notes. This was supposed to emphasise text and show the composer's skill. With several parts singing these words at different times, they weren't always clear, and harmonies didn't always help. One way to solve this was to emphasize words by setting them Homophonically (all parts use the same rhythm, or sing a word together). Another way is to use a 'Cantus Firmus' where one part intones (emphasises) words (often on Plainchant notes) to bring them out.

From the Renaissance period we have some instrumental group pieces (playing tunes as opposed to just bass, drum accompaniment). They often use imitative entry like the vocal works. Brass music is written for either sackbutts (forerunner to the Trombone: a brass instrument using a moving slide to change notes) or cornett(o)s (a wind instrument with a mouthpiece used in brass instruments). Music had to be written for brass instruments of the same type and key, and many pieces blend beautifully.

**Listen to:**  
Music of:  
Palaestrina

Vittoria

Lassus

Madrigals of:  
Gibbons

Tomkins,

Weelkes

Farmer

Wilbie

Bennett

By the end of this period, music was moving from modes to scales (based on the Ionian Mode as the 'Major scale', and on the Aeolian Mode as the 'Natural Minor'). Each Major Scale would be a transposition of the C Major Scale. The natural frequencies of the notes also needed to be adjusted so that the Tone/Semitone pattern of each scale was the same. In future, the note C in the scale of  $A_b$  was the same pitch as the note C in any scale. This is called 'Equal Temperament'. This meant that all instruments had to be playable in any key, so as to make possible combinations of different instruments and voices. On some instruments (like Trumpets), drilling holes in the metal helped, on others (like recorders) finger holes were drilled in slightly different places. On strings fingers were placed differently. Generally, the pitches of certain notes in certain scales were changed, and on some instruments (like trumpets) the original pitches are still playable.

Surviving music from the late Renaissance includes Operas by Monteverdi, which can be classified as Renaissance or Baroque (depending on how you see the Baroque). Monteverdi's Vespers (church Music written in 1610, technically after the Baroque Period started) use Cornett(o)s, Sackbutts, Strings (Viols), and Chittarones (string instruments longer than a guitar with more strings, but played similarly in 'spread chords'). In other pieces Shawms were the forerunner of the oboe, and Virginals/ Spinnets the forerunners of the Harpsichord (less strings). None of them were used after the Baroque period. Although their tuning was workable, instrumental development meant new names/shapes. Some problems continued. Low notes on brass instruments today need extra tuning slides to correct pitch.

Music grew in popularity with the nobility, who increasingly wanted to be seen as people of taste as well as power. Music was required for dance as well as song, and more was written down. Dance suites were written for court circles, and many of these suites survive today. They help understand the nature of different dances. There were still limitations with instrumental groups due to the technical difficulties caused by tuning means so it didn't really develop as quick as it could until (along with sacred music) it was affected by equal temperament, and the expansion of instrumental secular music became possible.

### **Music Technology Notes:**

The remarks about acoustics in early church music are still relevant here, with the added difficulty that the words may differ between parts. It is again quite easy to reproduce the overall texture of the performance created by slight echo, but additional care must be taken with the clarity of the words. On the other hand, the use of **Groups** of brass instruments means that these can sequence well, if you think about balance and dynamics. The tracks also blend well together. Madrigals can either assume the ambience of the court, or the dry acoustic of the garden.

The late Renaissance and early Baroque music of St. Marks in Venice uses an early version of 'surround sound' in that groups of musicians were placed on balconies around the audience, and pieces of music experimented with the different sounds of different sized groups from different directions. Few recordings have experimented with this yet. The early instruments of the period also offer different opportunities for experimenting with Midi timbres.

**Listen to:**  
Instumental  
Music of:

Gabrieli

Early works of  
Monteverdi

## Baroque Music.

The Baroque started with the words of Vincenzo Galilei: “**only a single line of melody with appropriate pitches and rhythms could express a given line of poetry**”. The Renaissance idea of setting individual words to appropriate music made the text confused. A whole line of music with a broadly unhappy feel could set the emotion to a whole line of broadly unhappy words, even if individual words were not. Put simply this was the start of ‘Major = Happy, Minor = Sad’. Although simplistic, this is underlined in science. Any note consists actually of a series of notes called the Natural Harmonics. Because most of these notes make up the Major chord, our subconscious accepts the sound as a concord (or acceptable sound) while the Minor chord is not of this series, and we find it subconsciously discordant (it makes us uneasy or possibly ‘sad’). Thus, these chords within a key, gave an underlying idea reflecting the emotion of the text. Baroque was not the original title. Composers of this period referred to their music as being of the ‘Second Practice’ or ‘Modern Style’ (meaning that Renaissance was the First Practice or Old Style).

With the scales becoming established, a common system of chords was developing. Chords under melodic lines enabled the sense (and emotion) of text to be much clearer, especially in developing genres (forms) using voice and instrument, such as Opera and Oratorio (Sacred Opera). The idea of the emotion for the sentence meant that what was needed ideally was a clear vocal line (where the words could be heard and understood, accompanied by chords related to the mood).

This happens in Opera where ‘*Recitative*’ (where the story is told) consists of a single vocal line of flexible speed (to give emphasis where needed) accompanied by simple strummed chords (on a lute or keyboard). Although this is clear for the text, the accompaniment is not very exciting. In the other sections of an Opera, the ‘*Aria*’ (or duet) fleshes out the detail of the story, and the ‘*Chorus*’ fills out the emotion of an event (where the emotion rather than the sense of individual words is important).

In both of these sections, the notes of the chords are used in tunes, bass lines, alberti patterns, etc, so that they sound more interesting. Much of the skill of the Baroque period was in developing complex instrumental parts to keep chord notes moving, at developing instrumental music, the relationship between instruments, and that between instrument and voice. The first movement of Bach’s Brandenburg Concerto no.2 starts with about 20 – 30 seconds of constant movement in the instrumental parts, but is based on only 2 chords.

As the subjects for early operas tended to be myths or classical (Greek or Roman) stories, or stories from the Bible (rather than the words of the church service), the development of Sacred and Secular Music started to go together. The structure of Operas and Oratorios was very similar (although Oratorios tended to be for concert performance). Different combinations of instruments in operas and in the Polychoral music of St. Marks inspired instrumental music to develop. Different instrumental sections in these early works developed into different movements.

Listen to  
**The Music of**

Cavalli

Monteverdi

Gabrieli (A/G)

Corelli

Vivaldi

Pachelbel

Albinoni

The Cantata also used a similar mixture of Recitative, Aria and Chorus. The Cantata originally meant 'sung together' as opposed to the Sonata which meant 'sounding together' or instrumental. By the time of Bach, it usually involved a chorale (or hymn) or two (which the audience would recognise, and understand how the text fitted, and a central aria with a recitative or two which were thoughts on the text for the day, or the event. Cantatas were often written for particular church calendar dates, but also for ceremonies (eg Weddings). This makes them different from Oratorios which were written (as said) to tell stories from the bible.

Telemann

Most surviving musical forms started in the Baroque period, even if they have changed. The symphony (sinfonia) was originally an instrumental piece in an Opera. The concerto (as we know it) developed along with instruments (although it started life as a vocal piece in the Renaissance). 'Sonata' originally meant 'Sounding Together' but became an instrumental form. Large numbers of instrumental dance suites were written.

Bach

The use of still-developing instruments and a system of tonality less than 50 years old provided a major impetus to composers of the Baroque Period. They were unsure about certain aspects of it, such as changing keys in a piece, and this remained an aspect that would only start to develop properly in the Classical and Romantic Periods. In Pachelbel's Canon, for example, the 8 notes that provide the permanent base throughout the piece are of only one scale. So are the chords that are used over them but they are constantly moved so that they are part of the tunes rather than fixed static chords and provide rhythm (instead of drums).

Handel

This idea of constant elaboration reflects the ideas of the period. Music was composed (as a rule) by composers employed as servants by wealthy landowners, royalty, and the church. The music that they were required to produce was to show the taste of the employer, and his lifestyle. Music, Art, Architecture, Costume, and Accessories were all ornate and elaborate. They had extra decorated bits on that were not necessary to the basic purpose of the object, but showed a desire for ornamentation. The original (derogatory) meaning of the word 'Baroque' meant 'Over ornate' even 'Vulgar'. In a lot of the music, the elaboration was put over by improvisation. A repetition of an idea allowed the player of the tune to decorate it. The Baroque style which overlapped the next (Classical) period, reflected the approach of one lifestyle, whereas the Classical period reflected another. The ideas like the music, spread gradually.

Baroque music starts and finishes in the same key. In most suites, all movements are in the same key. Often in Binary movements, the first section ends in such a way that the second half starts on a related key, but quickly returns to the 'Tonic' (home key). In longer pieces (such as the Brandenburg concerti) other keys are visited. It is not uncommon for the music to spend a short while in several (related keys) returning to the Tonic at significant moments. Imitation was also still used. A fugue has four separate parts entering. All imitate the first tune and only start on the Tonic or Dominant (1<sup>st</sup> and 5<sup>th</sup> notes of the scale).

The instruments were basically those of today's orchestra. The trumpet was still natural (single length of tube with no valves). The sackbutt was

Sweelinck

replaced by the Trombone (the bell became broader, allowing a louder sound). The basis for all ensembles was the string section (initially the viol family then later today's strings). As they were used so often on their own, only one instrument was needed on each part. The idea of a section of 5 or 6 came later. Wind instruments were similar to today (no clarinets yet, with occasional extras such as the oboe d'amore. Occasionally timpani were used in large ensembles.

Keyboards, although existing previously came much more into their own because of the emphasis on accompaniment. The church organ developed into the large powerful instrument we know today (from smaller 'Portative' organs more like the Harmonium), and the Harpsichord appeared. Its distinctive tone is an identifiable feature of Baroque music. It follows the bass part and the figured bass keyboard part (listing the chords). It was easily tunable to each key (although The FitzWilliam Virginal Book of Renaissance times had one piece in each key for a virginal), and was an improvement on previous keyboards having more strings per note.

The Harpsichord did not hold the pitch as well as the Pianos that followed (especially those with iron frames). The Piano (Full name Pian'e forte) was named because of its ability to play soft and loud, unlike the Harpsichord which had little variation in dynamics (the Harpsichord plucked strings rather than hitting them with a hammer). Between the two there was also an instrument called a Fortepiano (mechanism difference). For Baroque music in a large venue, the organ could provide the volume. The harpsichord could be easily moved into a small venue, to play with a smaller orchestra than we use today.

The last two Baroque composers were Bach and Handel. It is argued that Handel's music is more 'Classical' (in that it is more 'tune and chords' than Bach's where the tune and chords all consist of ornamented chords), but the Baroque period died when they did (around 1750). From 1720, other composers had been using classical ideas, and Bach (in particular) was regarded as out-of-date by then. Even Bach's sons (eg C.P.E.Bach) were writing classical music. It is argued that some of Handel's music (and Vivaldi's) is classical in approach (simplicity of melody and accompaniment) but this applies to most recitatives....

### **Music Technology Notes:**

The different instrumental timbres give a lot more opportunity to sequence music. With instruments like the harpsichord a lot of notes are played very fast (due to lack of sustaining) and sequencing is better at imitating short notes. Recording the instruments is similar to recording today's orchestral instruments, as the Baroque instruments developed into them. Miking a harpsichord (for example) is a lot like miking a piano.

Give considerations when recording or sequencing to balance and spatial positioning. Get someone to draw a diagram of the likely positioning of the instrumental group, and try to recreate this with the panning, volume and reverb controls. Be careful with eq: do not try to eq something you are unfamiliar with. Be aware of the likely acoustics of the original performance space. Make different allowances for large venues than small ones.

**Listen to:**

Scarlatti

## Classical Music.

As much an ideology as a musical style. As with most 'periods' it involved Art, Architecture, and society. The Classical age was 'The age of Enlightenment' where science improved through the ideas of Isaac Newton, where the church was being reformed by protestant movements, and where society was not seen to be dominated by outmoded feudal systems. The church still had an important role, but in a clean devotional way rather than the 'Baroque' over-elaboration.

Goals in Art Music and Architecture were to be reached through imitation of the Classics (Greek and Roman periods), or what the 18<sup>th</sup> century knew of them. Structure was important. Proportion of Music, Arts and Architecture had to appear to relate to the Classics. As composers had no idea of the **sound** of the music, the outline/basis/structure paralleled the ideas behind the other art forms. Classical Architecture of this period uses large staircases, large Doric Columns and Porticos on the front of symmetrical buildings. This is because surviving classical buildings (like the Acropolis) use these features. The structure supports a small (not substantial) amount of decoration.

In music, the Portico on the building can be viewed as the equivalent of the melody or melodic structure of music. It is supported by 2 or 3 'Columns' which are the keys that the music uses on the larger scale works. From any key, it is comparatively easy to move the music into the key with the closest number of Sharps or Flats (Usually the key of the 4<sup>th</sup> note of the scale, or the 5<sup>th</sup> note or the minor key of the 6<sup>th</sup> note – check this out with C major). Thus a symphony starting in D Major could easily have another section in A Major. As the Classical style matured (and was developed further in the Romantic period) more and more keys could be incorporated.

Also in the classical buildings is the use of 'Golden Section' or PHI. PHI is a number that occurs in nature more than would be expected randomly. The distance from the top of a persons head is 1.618 (approximately) times the distance from the navel to the floor (**or** the distance from the navel to floor is 0.618 (approximately) times the distance from tip of head to floor. The distance from shoulder to fingertip is 1.618 times elbow to fingertips (or elbow to fingertip is 0.618 times shoulder). Hip to floor is 1.618 times knee to floor, and this happens too with finger and toe joints, and other proportions of the body. Ditto male to female bees in a hive, some shell diameters, leaf structures etc. It is seen as evidence of divine intervention.

A further interest in this number is that if a line is divided so that the length of the whole line is 1.618 times the longer section, the longer section is also 1.618 times the shorter section. Because this proportion was recognized (in classical architecture) it was thought that structures using this number were 'naturally' beautiful and so it was copied in art and architecture. For example, in good classical architecture window height is 1.618 times window width. In Music, something significant happens at 0.618 of the way through a piece. This happens in Mozart's pieces (not in everyone's), and can be verified if his original metronome markings are stuck to accurately (by checking CD timings).

Listen to:  
Stamitz

CPE Bach

Haydn

Mozart

Clementi

An example of structure is 'Sonata Form' which is often used in movements of a 'large' work (Band size of 30 – 40 players, music length perhaps 30 minutes). This form was developed for the Sonata, but was used in the Symphony, the Concerto, and the String Quartet. The first movement of these forms has an 'exposition' section where main themes are 'exposed': one in the Tonic Key, followed by one usually in the Dominant. A 'Development Section' follows where the themes are worked on in different keys, and then comes the 'Recapitulation Section' where both themes appear again in the home key. Although Baroque music uses different keys, it rarely has structured sections based on keys (although it develops tunes in different keys).

**Listen to:**  
Cherubini

The forms of music mentioned above became standardised in the Classical period. The Symphony got four movements (Fast Slow Dance Fast, and used all orchestral instruments). The String Quartet became a standard of 2 violins, a viola, and a cello (instead of a range of different string groups). The concerto (already 3 movements from the Baroque) used Sonata Form in the first movement with the additional complication (again Baroque) that the soloist and Orchestra alternated on tunes. Other structures that appeared were the Sonata Rondo (ABACABA with a key change in the B or C sections) also used in later pieces.

Beethoven

Band sizes increased because of the desire to try out new combinations. The wind quartet and string quartet were put together to form the 'orchestra', but as they were louder, more string instruments were necessary to balance them (and because the timbre of several violins was different to just one). Wind ensembles were used in Baroque music, but 90% of Baroque music uses a backing or 'Ripieno' group of strings: (Easier to tune together, and balance).

Early music of  
Schubert

The desire for different textures increased the orchestra still further. Double wind (two of each) and the invention of the clarinet, and the use of brass (trumpets and horns) mean that the size of Classical groups is larger, and the textures can vary from solo, through duet and trio, up to full orchestra of 30 – 40 players. The Brass went through 75 years or so where they were mainly used to provide power on simple parts (using natural trumpets and horns) to back an orchestra, rather than change the timbres as a Romantic orchestra does. Alternate sections of the orchestra contrast timbres, textures, and dynamics.

Schumann

Classical music also developed instrumental dynamics. They were used as something of a gimmick in some orchestras (the sight of a 'large' group of musicians all suddenly getting louder together excited an audience). In existing Baroque music there is rarely evidence of dynamics. In most classical music they are there as standard.

Mendelssohn

**Music Technology Notes:**

Pretty much as Baroque except that the largest Baroque group was likely to be 10 players or so. By the end of the classical period the orchestra could be 30 players or more. Think about miking up sections in an orchestra rather than individual players. Think also about the balance and positioning of the players, and the acoustic of the venue.

If sequencing, think of the sound of 8-10 violins on a part. It is different to individual instruments, and cannot be reproduced just by exactly copying a track. It would be more accurate to copy a track several times and stick in an extremely small delay in each to simulate several instruments playing as closely as possible. Each track could also be eq'd slightly differently to reflect different harmonic proportions on the different instruments.

### Romantic Music

Is in many ways a development of classical music. The structures used were classical, and initially so were the instruments. Romantic musicians, artists, and architects saw in art the struggle of humankind against nature. Everything that was achieved was a triumph. In a Turner landscape, there is an overpowering element (perhaps in the clouds or mountains). There are things to be overcome, rather than just seen in the background. Sometimes the clouds or mountains are 'menacing' or perhaps 'benevolent'. In music, the aim was to add an emotion. Frequently this went hand in hand with putting an image of picture behind the music. This was done through use of different keys, and colouring them with tunes, development, and different timbres and textures.

From 1800 to around 1830 and possibly later (for example with Brahms), Romantic Music tried to fit this emotion into the classical structures it inherited. Early on composers realised that these structures limited the expressive nature of the music (even Beethoven, which is part of the reason for assigning some of his music to Romanticism).

Largely speaking, though, the symphonies of Beethoven, Schubert, Schumann, and Mendelssohn fit within the classical structures, and limit the image or idea so that it conforms (to musical repetition, etc). It was not, really, until Hector Berlioz, that serious changes were made to the structures to facilitate his ideas. His 'Harold in Italy' is a mixture of Symphony and Concerto, and his other symphonies have different numbers of movements (from 4) which are set around stages of the story, rather than following the traditional format of Fast, Slow, Dance, Faster.

Dances of this period are characterized by the Strauss family who wrote hundreds of Waltzes, Polkas, Esquadrilles, and Foxtrots. Romantic dances like the waltz were considered Risqué due to the fact that dancers touched each other more than was seemly. Dances were written in 2, 3, and 4 beats. The tradition of a New Year's Day Dance playing music by the Strauss family has survived until the twentieth century in some cities. Again, tempo and style were based on classical structures and harmonies, but the more 'passionate' nature of the dancing makes them Romantic.

This means that many Romantic pieces are set around an image, and many pieces that are associated with an idea are Romantic (Mendelssohn's Wedding March, Wagner's Wedding March, Grieg's Funeral March, Dvorak's New World, for example). An idea can also be seen in Beethoven's Symphony No. 6 'The Pastoral' where the music is used to portray countryside scenes (peasants, storms, rejoicing, etc). In Wagner, too, at the end of the period, keys are assigned natures, so that Db major could be 'pure love' perhaps, whereas Ab major might be 'tainted' love.

### Listen to:

Later music of Beethoven

Songs by Schubert and Schumann

Programmatic music by Mendelssohn

Berlioz

Bizet

Grieg

Lizst

Chopin

Wagner

Strauss (R, J, and J II )

This is still just one stage away from the Major = Happy idea. To make emotions or ideas more obvious, larger orchestras and more dynamics were needed to give a full range of ideas their head. While a classical orchestra of 30 – 40 might use dynamics from *pp* to *ff*, the Romantic Orchestra of up to 100 players used dynamics such as *pppp piu possibile* or *fff*. It added extra instruments, such as piccolo, cor anglais, Eb clarinet, contra-bassoon, valved trumpets and horns trombones, bass-trombone, tuba, and full range of percussion (possibly from colonial influence).

The Romantic ideals were very suitable for Opera, too. Although the idea of a picture behind the music was admirable, it is easier to show emotion if there are words as well. The extensive use of keys allowed a singer to subtly change the mood of their emotion through a song. The structure of Opera changed too. Early Opera often proceeded in Musical Numbers. A singer would get to the end of a song and stop for applause before the Opera went on. Great for Music but awful for the plot. In later Romantic Opera, the music and the action became continuous and the story proceeded from start to finish without pause. Some Operas became three hours long in the process, but they made more sense.

Wagner's operas go further, in assigning short tunes to particular characters or objects so that when they are played, the character is recalled to mind. The character can also be painted in a negative or positive light depending on the key their tune is played in. The tunes can develop if the character does, and linked with other tunes associate the character with another person or object. The tunes are called **Leitmotifs**. The Music became part of the scenery giving clues to the causes of events. It is a bit like 'Cluedo' in that an Actor can stand on stage singing 'who could have done this?' while the orchestra play the tunes indicating it was done by Professor Plum, in the Conservatory, with the Coat-hanger.

The Romantic idea lasted into the 20<sup>th</sup> century. Many other schools of composition arose, but as a reaction. Some considered that the range of keys used by Romantic Composers had reached a limit and no future existed for music using keys. This started with a piece by Wagner 'Tristan and Isolde' written in 1864 where phrases in the music finished on a 7 chord rather than a standard triad. This implied that music did not need to resolve on to standard chords, and therefore standard tonal relationships were invalid. The argument that developed from this suggested that music did not need to use keys, and led towards experiments in Atonality.

Towards the end of the 19<sup>th</sup> century, too, there was a reaction to the domination by Austro-German composers, and Grieg, Sibelius, Elgar, and Dvorak in the 19<sup>th</sup> and 20<sup>th</sup> century used native music from their own countries to 'identify' music with their own peoples (Nationalists). They used folk song and other local music to do this. Other composers used the idea that music could be 'Tonal' ie use single notes as anchors but not whole scales or keys. Some of the music of Malcolm Arnold, Nielsen, Simpson, and perhaps Shostakovich uses this idea. The French style of late Romanticism moved as far as possible from what they saw as Heavy, Bombastic Austro Germanic music to light delicate (sometimes with small groups) and tasteful music. This moved later into French Impressionist Music (as is described in the 20<sup>th</sup> century section).

**Listen to:**

Brahms

Dvorak

Kodaly

Grieg

Tchaikovsky

Mussorgsky

Mahler

Fauré

Ravel

And in the 20<sup>th</sup> century:

Elgar

Vaughan-Williams

Holst

Delius

**Music Technology Notes:**

The comment about recording large orchestral groups is more relevant here. Large orchestras of up to 100 players need to be miked by section, and the recording media needs to be able to cope with the difference in volumes from as quiet as possible to as loud as possible. Sometimes as a result, the dynamics are compressed (and compression is likely to be essential in recording). The dynamics and timbre changes are essential for the expression in the music.

In sequencing, legato music can be incorporated by quantizing so that notes overlap. Expression incorporates use of slight *Rubato* where the tempo is slightly flexible. This can be done (gently) through the mastertrack. Slight swells in volume can be put in. It takes an idea of the nature of a tune (and listening to recordings) to swell a tune at moments that make sense. Once again, all of the problems with vocal music are there, with the additional problem of putting emotion into it.

**20<sup>th</sup> Century Music.**

Incorporates many different styles and fusions of styles. The approach to most of them was a reaction to (or desire to extend) traditions discussed above. Some reasons have been mentioned above, and some of the approaches will be discussed in the Jazz and Pop history sheets. A short list (with examples of composers using each technique) is:

**Atonalism** (Schoenberg). Atonal music is any music that doesn't use keys. Schoenberg took music gradually away from tonal music by using notes not part of the key, and by deliberately juxtaposing notes that did not traditionally form part of a chord. The term for a group of notes played together like this is a 'Note Cluster'. Schoenberg used other techniques like serialism in some works, but did not adhere to them. One of his main directions was in the expression of the music (which related to the artistic expression of the 'second Viennese school'). He was an expressionist who creates an image in the music. Unlike Romanticism, the image is that of the creator's view of the subject, rather than just a picture postcard of it. Remember: All of the music below is Atonal.

**Serialism.** (Webern). Uses all 12 pitches equally. Strict serialism says that a pitch cannot be repeated (at any octave) until all 12 have been used. A row of pitches (called a tone row) can be transposed (moved higher or lower), inverted so that the intervals between notes are turned upside down ( eg: up a major third instead of down), reversed or retrograde (backwards), or a combination. It also suggests that dynamics and expression associated with each note would be changed with the tone row. Because of the limitations in using pitches, the row was split between different instruments and octaves. Splitting rows up meant some unusual dynamics occur (*pp espressivo* on one short note). This splitting was called 'Klangfarbenmelodie' (sound colour) where different instrumental sound contributes to the tune. This was used in other atonal music as well. Webern was a strict serialist, while Berg and Schoenberg used serialism in conjunction with other musical influences.

**Listen to:**

Shostakovich

George Lloyd

Schoenberg

Berg

Webern

(Some Stravinsky)

**Bitonality** (Stravinsky). Bitonal music uses two keys. Sometimes together (as in Rite of Spring, where Stravinsky uses an Eb Major chord over an E Major Chord) but not necessarily at every single moment. Debussy, for example creates 'Tonal ambiguity' where the key is not certain. He does this by using (for example) the chord of Eb major with a C in the bass. This could be seen as bitonal as C Minor uses two of the three notes in the Eb major chord. Key movement within bitonal music can (obviously) be twice as complicated as single keys moving.

**Listen to:**  
Stravinsky

(and some  
Debussy)

**Impressionism** (Debussy). The impressionist schools of art created pictures by using combinations of colours to create an overall impression of an image rather than drawing lines. Close-up, all that could be seen were the colours. Further away, and the colours resolved into the appearance of lines and shapes that made up the image. Using two colours creates a third. By changing one of the colours, the emotion or effect of the image changed (Monet painted five pictures of Rouen Cathedral, and by changing the mix of colours created it at midnight, in afternoon sun, on a foggy morning, etc). Pointillist techniques meant using extremely small blobs of colour to create the overall image.

Debussy

As described above, the French version of Romantic Nationalism consisted of delicate, refined, and tasteful pieces of music. Generally the nature of these was expressive, without being overbearing. This music became impressionist when it started using aspects of twentieth century atonality combined with some Romantic key relationships. The music related to the impressionist art by using combinations of different tonalities or atonalities. Debussy's 'Prelude a l'apres midi d'un faune' when seen as a whole relates to a fawn dreaming on a sunny afternoon. Seen in minute detail, it consists of Major chords, Minor chords, Whole tone clusters, chromaticism, modality, etc. Pointillism relates to these being individual chords.

**Modernism** (Stockhausen). Modernism can be defined as change for the sake of change. It seeks to be inventive without necessarily regarding the past as valuable or using anything from the past. In music, this can involve the use of all twelve pitches, random-ness, use of new sounds, etc. The implication is that it disregards normal tonalities, normal melodic organization or progression, normal instrumentation (or normal use of instrumentation), etc. So it can include electronic sound, or serialism. Bitonality tends to suggest that something of the previous system is being used, so overall there may be degrees of Modernism. It includes a self-defence mechanism that if anything traditional is used (however it is used) such as standard instruments, it may argue that it is not modernist. Most styles of music started between 1900 and 1950 were in some way Modernist in rejecting tradition or in deliberately avoiding it.

Stockhausen

Cage

Berio

As an example, take Stockhausen's '*Contrapuncti*' where musicians are directed to use certain notes (in any order and in any rhythm) for a specified period of time. While they do this, another group may be playing a different group of notes (or overlap). At any particular time, the sound world will consist of a group of notes specified by the composer, but which notes play together is down to chance. Rhythms and the order of notes is also random (or may be specified). The expectation is that no musician will sabotage this by taking the group of notes and turning them into a tune!

<p><b>Post-Modernism</b> (Britten &amp; Tippett)  Post-Modernism holds that there are certain things from the past that <u>are</u> valuable, and which should continue to be used, albeit in a new creative way which changes some things. Thus music in the twentieth century can be tonal without relying on keys (as with Shostakovich who is sometimes also a Romantic composer) in that it centres around particular pitches (rather than keys). It can use traditional instruments without peculiar techniques, can add them to unusual instruments (as in Arnold's concerto for Rock Band, or Tippett using an electric guitar in 'The Icebreak').</p> <p>Most Music since 1950 has been Post-Modern, as a general recognition seems to have taken place that Modernism is unpopular with large audiences. Post Modernism can include Minimalism, Impressionism, Bitonality, Serialism, or any style that uses some traditional performance techniques (and possibly music composed after modernism).</p> <p><b>Minimalism</b> (Reich) and <b>Post Minimalism</b> (Adams). Minimalism in decoration involves use of as few objects as possible. The music uses as few changes as possible, so two parts may be set to gradually move from each other by adding a very short extra beat to one (cf Reich's clapping music) or gradually changing a motif. Generally speaking, the music gradually changes over a period of time, and gradually adds or subtracts things. It is also argued that minimalism in music uses elements of pop music, but it is not clear how this happens. It is more related to association.</p> <p>Post minimalism takes into account all of these things, but uses traditional ideas of structure to make sharper changes at points, or change things quicker. This can be seen to good effect in 'The Chairman Dances' by John Adams which is a seen from his opera 'Nixon in China'</p> <p><b>Alternative Orchestras</b> (Parch)  Harry Parch constructed his own instruments. Some of these were made of large glass jars that contained varying amounts of water. He called this 'Cloud Chamber Music'. Some other composers and musicians have used traditional instruments in different ways (playing violins with the back of the bow, blowing down wind instruments without actually making a sound, etc).</p> <p><b>Experimental Techniques such as Prepared Piano</b> (Cage)  John Cage put objects onto the flat strings of a grand piano. These included coins, keys, etc and meant that each note made a different sound when the key was played. The result of this was a variety of timbres became available from a single instrument. Music was written on standard stave notation (rhythms, pitches, etc) and the variety of timbres imitated <i>Klangfarbenmelodie</i> (see above).</p> <p><b>Sprechstimmer</b> (Schoenberg and Berio)  This (or Srechtspiel as it is also called) uses a singer to perform music. Schoenberg expects the singer to declaim words using pitches, but not just as musical notes. The vocal line rises and falls in pitch (a bit like using a fretless string instrument), but is not resolved onto particular notes. It is more an emotional guide, despite using a stave to notate it.</p> <p>Berio goes several stages further. He uses a single line stave on which he</p>	<p><b>Listen to:</b>  Britten</p> <p>Tippett</p> <p>Cloke</p> <p>Adams</p> <p>Reich</p> <p>(possibly Turnage, Nyman, Einaudi)</p> <p>Parch</p> <p>Cage</p> <p>Schoenberg</p> <p>Berio</p>
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writes the rhythm (using altered musical notes). Notes are above or below this line. Singers can 'laugh' or 'stutter' or hiss or use a range of vocal techniques. In this way the voice becomes more of an instrument than just a vessel for the words. Like Schoenberg he still makes use of associated techniques such as dynamics and tempo and some note values.

In 'Martin Luther King' Berio splits the words to their smallest possible phonetic components, and states these (consonant, vowel, etc). Then the voice moves onto syllables, and finally onto the entire words.

**Random or Chance Music** (Cage and Stockhausen)

There are various ways of doing this. One consists of writing down the last two or three digits of phone numbers from a phone directory and assigning them to musical notes (like midi does). John Cage's most famous piece 4m33s consists of total silence for this period of time (the performers mount the stage and sit totally still). The philosophy is that whatever happens during this time (nervous laughter, background noise, etc) is an element of the performance. If there is no external noise, you hear a very faint buzzing which is your nervous system and the pulse of your heart. This could be viewed as having pitch and rhythm.

Stockhausen in *Contrapunctus* and other works, sets up groups of musicians to play sets of notes. He dictates the set of notes, and the time period when they are played (eg 'for 30 seconds') but allows them to play these notes in any order, rhythm, and sometimes any octave, dynamic. They may overlap (in time) with one or more other groups playing the same or different sets of notes under the same sort of instructions. Thus, although the general sound world at any particular time has been dictated by the composer, the individual notes that sound together are an element of chance. The ethos of the whole piece is that the music is not sabotaged by musicians playing 'tunes'.

**Electro-Acoustic Music** (Varèse).

Interest in 'Clean' sound inspired Varèse to abandon string instruments and concentrate on wind and brass. He moved onto early electronic instruments such as the Ondes-Martenot and Theremin. He was also interested in sound moving around an area (surround sound) and his 'Poeme Electronique' was performed at the New York world fair in 1951.

Since then, electro-acoustic sound has expanded because of the equipment available. It tends to consist of structured sound-scapes using layers of altered and natural samples and C Sound (sometimes in combination with music). Musical phrases are replaced by 'Gestures'. It overlaps with the latest developments in synthesized dance music, but is not so beat driven.

**'C' sound** (Stockhausen).

Computer sound. This meant more in the days when computers were less used. Most pop music uses a computer in preparation now. A lot of music uses midi driven sounds. Sound generated by a computer, or sine waves, or structured sounds without beat or rhythm, also mainly fit into the previous category of electro-acoustic sound.

Cage

Stockhausen

Varèse

Moog

Stockhausen

**Sound Sculptures.**

Refers to a piece of art work where sound rather than music is structured. This differs from electro-acoustic sound only in that the sounds contained can be natural, acoustic, or even musical. Sound sculptures can include electro-acoustic sound or C sound.

**Twentieth Century Romanticism**

Can be new, such as the use of tonally centred music as well as keyed music (Nielsen, Shostakovich, Britten, Tippett). On the other hand, Film Music almost universally adopts the techniques of nineteenth century romanticism with no changes other than new instrumentation and use of pop music. There are exceptions such as Planet of the Apes which creates sounds from another world.

**The 'Don't quite fit' brigade:**

Arguably Britten could turn his hand to anything. Birtwhistle has modernistic elements, but possibly postmodern or romantic expressive ideas, Bartok (use of some folk, and some twentieth century ideas). For more detail, see **Twentieth Century Accompanied Vocal Music** alphabetical glossary (available from Geoff Cloke)

**Music Technology Notes.**

Quite a lot of the sections above include their own description of the inclusion of Music Technology. All Atonal techniques which include performance instruments can be recorded or sequenced. When all is said and done, recording is a reproduction of the original, and sequencing is creating an alternative reproduction. It is easier to sequence some aspects of *Sprechstimme* (such as the techniques used by Berio, above) than it is to sequence more traditional voice techniques. The reason for the inclusion of Music Technology Notes is to make them more relevant to **BTEC National Diploma in Music and National Diploma in Music Technology Unit 18 Music and Society** and in the Twentieth Century for **Contemporary Music in Practice**.

**Further Reading**

Also available on the Twentieth Century Music is a complete glossary of terms and wide range of composers. This is entitled **Twentieth Century Accompanied Vocal Music**, and was written for **OCR unit G356** to accompany this topic. These are related to specific works which generally are available to be downloaded from itunes.

Also available is **A History of Jazz and Pop Styles** which is available from Zigzag education (and again, has a list of suggested listening). This is relevant to **Edexcel, OCR, AQA A Level Music Syllabuses, as well as BTEC National Diploma in Music, National Diploma in Music Technology, BTEC Award in Music, BTEC Award in Music Technology**, notably in **Unit 31 Pop Music in Practice**

**Listen to:**

Pop techno composers or Jarre, '80's, etc.

Elgar

Vaughan Williams