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Notes on History and Theory of Modern Classical Music (Modern Abstract Art Music)

Introduction:

Average listeners have difficulty with most Modern Art Music, making it an acquired taste. However, similar to Modern music, much "new music" from previous periods, at the time it was created, was considered to be painfully dissonant and/or incomprehensible. For example, Beethoven framed a revolutionary attitude toward musical expression leading to the "expression-at-all-costs" movement known as "romanticism." Average listeners were shocked at the dissonant and incomprehensibility of this "new music." However, Beethoven had certain financial patrons who supported avant-garde musical developments, freeing Beethoven from the need to produce culturally popular music. Mozart, as well, was criticized for producing music that was "too notey" for the average listener to comprehend (however, Mozart did not have as many rich and forward looking financial patrons as did Beethoven).

Much of the experimental music of the Modern period developed from the closing period of Romantic style music. With Beethoven as their visionary leader, Romantics valued extreme, supra-personalized expressive content, above all things. To make their new and original expressive points, Romantic composers had to go ever further beyond the bounds of traditional musical language to achieve their expressive ends. These expressive desires began to outstrip the traditional tonal language. Following Beethoven's lead, Wagner (who also had a rich patron, Ludwig II of Bavaria) worked to advance accepted musical language with extreme chromaticism and quickly shifting tonal centers (frequent modulation). Tristan and Islode is sometimes described as marking the start of modern music. One material revolution in Tristan was the extreme use of open cadences. A traditional tenant of tonal music was to complete a piece with a dissonant high tension offset by an immediately following consonant relief – i.e. a closed cadence. In Tristan, Wagner litters the piece with open cadences - over 4 hours without a tension relieving closing consonance, until the end. His objective was to depict the unrelieved tension of sexual desire the main characters felt throughout. This expressive Rubicon (total abandonment of traditional tonal language), approached by Wagner, was fully crossed during the first quarter of the 20th Century - led by innovations of Claude Debussy and fully realized by Arnold Schoenberg, who invented the first system of atonal music. Both of these composers were materially influenced by the innovations and movements away from the traditional tonal system by Wagner.

A parallel development of the late 1900's and early 2000's under the Romantic style was the promotion of Nationalistic music, largely by composers from countries not directly participating in the development of European traditional tonal music (Italy, France, Germany, Austria, etc.). Composers such as Dvorak, Bartok, Smetana, Sibelius, Rimsky-Korsakov, Ives, Elgar, etc. produced Nationalistic music under the Romantic style.

The great historical dislocations of the two World Wars and the reaction in Art Music to Nationalism were huge. Many believed the Wars were the result of excessive emotion (manifested in the Romantic

Style) and Nationalism. The reaction of Modern music was to abandon both Romance and Nationalism and focus on a more intellectual and technological style of music that was "dry" of emotional expression.

Further, many of the historical influences on music that forced composers to cater to the wishes of the populace were rejected. Historically, composers were dependent on the church and the aristocracy for funding and had to cater to their tastes and preferences. After the enlightenment, composers became dependent on both rich sponsors and on the popular tastes of the masses as they were forced into commercialism (e.g., the popular trends in Italian Bel Canto opera). Finally, during the war years, many composers were forced by politicians, either through financial incentive or totalitarian directives to cater to the political leaders' tastes (Stalin and Hitler through terrorism – FDR through New Deal financial injections into the arts, as subject to the tastes of Eleanor Roosevelt, to develop an American music). Musical directions during much of the Modern period represented a rejection by composers of these historical influences. They developed in the direction of an esoteric style, understandable and appreciated only by the musical professionals. Milton Babbitt was famously quoted as having said: "I dare suggest that the composer would do himself and his music an immediate and eventual service by total, resolute and voluntary withdrawal from this public work to one of private performance and electronic media." Much Modern music development was done through academia, as colleges grew in financial influence in the post World War era. This led to a split developing between academically focused Art Music and the growth of popular focused Jazz, Folk, Country and Rock music. A further contributor was the post WWII economic rebuilding efforts, when there developed a lack of commercial opportunities for Art Music composers. This further led them to focus on abstract and academic musical developments, without consideration of popular interests.

Modern music evolved based on the chaos and uncertainty, the violence and adventure, the collapse of consensus, the fascination with new technology and new sounds and the rancid commercialism that defines our era overall. Add the return to improvisation in the rise of jazz, recognition of non-European sounds and traditions, and a growing role for women as both performers and composers, and we find a musical century like none other. Even the idea of repetition for its own sake became somehow acceptable, offering a "stability" otherwise unfound. For the average listener, the simple speed of change in Modern music styles added to confusion. For example music of the Baroque Period lasted 150 years, Classical lasted ~ 75 years and Romantic lasted 85 years. During those periods, most composers spent their entire careers in this sole style of music. In contrast, many Modern composers reinvented their styles many times, adding to popular confusion. Igor Stravinsky began his style in the Russian nationalist style he inherited from Rimsky-Korsakov, moved on to invent and compose in the Neo-Classical Style (utilizing musical forms from the Baroque and Classical periods) and finally closed his career by adopting the atonal style of Serial music (highly intellectual and formalized music invented by Schoenberg but adopted by Stravinsky through the interpretation of Anton Webern).

Throughout the 20th Century there has been unparalleled musical experimentation and diversity. In the flight from Romanticism (beginning in the early 1900's) composers created many strange new sounds. Impressionism, begun by the French, was largely a reaction against German Romanticism (i.e., Richard Wagner). Expressionism, harshly dissonant and atonal, came from Arnold Schoenberg.

Neoclassicism began about 1929 (invented by Stravinsky) and for years was the dominant trend. Examples include: Stravinsky's *Octet for winds* and *L 'histoire du soldat*, Prokofiev's *Classical Symphony* and Hindemith's *Lodus tonalis*, a piano piece and his *Fourth String Quartet*. The Neoclassical trend included the revival of counterpoint texture and forms: fugue, toccata, madrigal and passacaglia. Stravinsky-type dissonance shocked the music world. "New Age" music also arose which concerns itself with meditation, ecology and mysticism. Jazz also has had a significant impact on Art Music in the century. Pre-WWII jazz included: ragtime, blues, Dixieland jazz, the big-band sound and boogie-woogie. After WWII came progressive jazz, cool jazz, soul jazz and rock.

The new century of increasing new scientific, technological and intellectual reality made many composers unwilling to continue writing music the likes of which they believed had already been written. The time was ripe for a new set of approaches to melody, harmony and rhythm. Three important trends emerged in the 1st half of the 20th Century, following Romanticism - Paris germinated Impressionism; Vienna germinated Expressionism and locally germinated Nationalism:

1) By the late 1800's, French music began to capture what French visual art (impressionism) and literature (symbolist poetry) had already captured: the essence of the French language itself. The French composer, whose music marked the definitive break with the common practice, with traditional tonality and German compositional methods (i.e., Wagner), was Claude Debussy. His major compositional influences were:
   - The French language, with its blurred edges and infinite nuance;
   - Romantic style of self-expression - Debussy grew up during the 19th Century and the overwhelming bulk of his music is programmatic;
   - Romantic literature extolling expression and descriptive images, in particular, the symbolist poets Mallarme, Verlaine and Rimbaud;
   - French impressionist painting: "Impressionism" is a visual manifestation of the French language, an art movement that celebrates light, blended and nuanced color. With blurred edges and objects in flux, perception of an image was more important than the substance of the image itself.

   Debussy's innovative approach to the orchestra offered a virtual infinity of possible instrumental combinations and colors and had made him the single most influential and imitated orchestrator in the last one hundred years. Examples include *Le Mer*, *Prelude to the Afternoon of a Faun*, and importantly, his only opera: *Pelleas and Melisande*.

   Also from this Parisian musical center came the music of the Russian composer Igor Stravinsky. Stravinsky relocated to Paris after the Russian Revolution and is generally categorized with Debussy as representative of the French school. However, his greatest innovation came from his Russian Nationalism period which included his composition of the ballet *The Right of Spring (Le Sacre du printemps).* It was in this piece that Stravinsky broke away from the traditional metrical rhythm and introduced the concept that rhythm could be a dominant feature of music, even superceding melody in importance.

2) In the early 1900's, Vienna was Paris's only musical rival and was at the heart of the Austrian-German musical tradition. While Debussy and Stravinsky both grew out of Romanticism, their musical debts to the past were ultimately less important than their innovation. This is not so with the music of Arnold Schoenberg, whose music is a clear and purposeful continuation of the tradition of German music:
   - The German Lutheran Church emphasized the use of vernacular language and did not discourage the use of polyphony and musical instruments in its liturgical music.
   - Beethoven's tenants of musical unity through motivic development (music composition as self-expression, and originality is an artistic goal) became the underpinning of German music through the 19th and early 20th Centuries.
   - There was also the expressive nature of late 19th century Germanic Romantic style and its tendency to turn inward to the recesses (the often dark recesses) of the human psyche for inspiration. The artistic movement associated with this "inward psychological investigation" is called Expressionism.

   Expressionism may be understood as the German answer to French Impressionism. Where French Impressionism celebrated light, movement and an expressive substance divined from the outside world, German Expressionism drew its expressive substance form the deepest reaches of the soul. Schoenberg and his students Alban Berg and Anton Webern are often referred to as the second Viennese school and collectively their music constitutes the launching pad of German Expressionistic music.

   Between 1908 and 1913, Schoenberg experimented with suspending the rules of traditional tonal harmony and composed music in which melody, polyphony and motivic development and transformation were the be-all and end-all. He created a type of music ruled not by the constructs of tonal harmony but by pure motivic development and transformation.

3) As the 20th Century began, Nationalist composers from Bohemia and Russia and Impressionist musicians from the French school, helped end the long era of German musical ascendency. Artists from France, Germany and Italy, with their nations' long tradition of music composition, felt less moved to make patriotic or nationalistic statements than composers from other regions that lacked a universal musical traditional such as Finland, Norway, Bohemia, Hungary and Poland. For example, Smetana and Sibelius made deliberate efforts to absorb, collect and utilize folk musing to speak of their counties history and culture.

Out of these three important trends, sprang new kinds of music, with a whole new sound called "new" music or "modern" music or "Twentieth-century" music.

At the beginning of the 20th Century, the new science of recorded sound began to develope. By its end, most every cultured home on the planet had a radio, television, video, CDs, DVDs and computers. In 1900, musical experience was chained to live concert performances. By century's close, recordings had forever altered this landscape. Corrections, edits and retakes, the very idea of perfection and immortality, the creation of jet-driven international standards -- all this had altered, profoundly, our

concept of standards, performance practices and authenticity. Whether or not our music was any the better for these technologies remains a difficult and unanswered question.

After Debussy's introduction of Impressionism from Paris, Igor Stravinsky (1882-1971) and his great ballet suites ('*Petrouchka*', '*Firebird*' and -- above all - *'Rite of Spring'*) changed forever our notions of rhythm and energy in music. Although Strvinsky was born in Russia, he rose to prominence in Paris, before later settling in LA. What Debussy did for timbre (elevating it to a level equal to rhythm, pitch and harmony) so Stravinsky did for rhythm, by demonstrating how rhythm alone could be used as a thematic, dramatic, narrative and developmental musical element. Although he was first considered as simply a talented successor to his teacher Rimsky-Korsakov in St Petersburg, Stravinsky's role and place in twentieth century music became equal to that of Bach or Beethoven in theirs. Given a career-building boost by the legendary Alexander Siloti, who introduced him to Diaghilev, the composer went on to write in virtually every field of musical endeavor.

Moving to Arnold Schoenberg (1874-1950), Stravinsky's alleged Viennese rival and certain counter-weight. Schoenberg was the beneficiary of a classical Viennese musical education and recognized, earlier than any other, that the traditional systems of tonality were exhausted. Instead of these older methods, Schoenberg came to insist on a re-birth to music. He created "serial" (or dodecaphonic, or 12-tone, or tone-row) procedures, organizing musical sounds in new and arbitrary ways. Schoenberg's own Op 25, his *Piano Suite*, offers a clear path into this music. No less worthy is Schoenberg's romantic *Transfigured Night,* a masterpiece which may help open the ear to his later and extraordinary *Pierrot Lunaire* and *Gurre-Lieder*.

Arnold Schoenberg remains for many, a hard sell and this remains a terrible problem. In a way, he left a larger school and many more disciples than ever Stravinsky could have hoped. Although purely serial procedures resulted in a dwindling-vortex of few and fewer listeners, its brilliance of analysis also freed music in vital ways. So too stands the work of Schoenberg's extraordinary pupils: Alban Berg (1885-1935) and Anton Webern (1883-1945). Berg's voice may be heard at its finest in his *Violin Concerto* and in his opera *Wozzeck.* Webern's *Symphony for Small Orchestra* and *String Quartet Op 28*, are among his most admirable achievements.

Across the century we also find brilliant work of significantly regional or national genesis. Ravel and Debussy, Elgar and Vaughan Williams, Bartok and Janacek, De Falla and Ginastera, Lutaslawski and Penderecki, Berio and Dallapicolla, Boulez and his circle, Prokofiev and Shostakovich - are all composers of such burning voice and excellence that their music bounded well beyond any borders. In the USA, recognition must be given to Charles Ives (born the same year as Schoenberg), Aaron Copland, Elliott Carter, and the three Georges: Crumb, Rochberg, and Gershwin.

Two other influential giants of the 20th Century should also be recognized: Benjamin Britten (1913-1976) and Olivier Messiaen (1908-1992).

Britten was an amazing prodigy who matured to write tonal music of inspired beauty, depth and pain. Among Britten's dozen masterworks must rank his *Peter Grimes,* perhaps the greatest tonal opera of the twentieth century. Listen to its *Four Sea Interludes* and then move into the harrowing revelation

and self-denial of the opera as a whole - you will discover why so many people are so moved by this music.

Messiaen was a very different composer, exploring in both a public and private language, the message of the Catholic Church he so adored and transcended. Add to that language: the call of birds, the radiance of the organ, a personal gift of synesthesia (in his case, the interchangeability of sight and sound), a meticulous rhetoric in rhythm and one is inevitably led to his symphonic masterwork, the ten-movement *Turangalila.* Start with Messiaen's *Banquet Celeste* for solo organ, move to his *Chronochromie* and then be ready for the astonishing tour de force of *Turangalila.*

In Messiaen (and a hundred worthy others) can also be found the steady advance of fascinating and artificial sounds. From the experiments of Theremin and Martenot (new electronic instruments) in the post-World War I era, to the musique concrète of post-World War II France, and on to early work at the Columbia, Bell and RCA labs and the breakthroughs of Robert Moog and IRCAM at Paris and CCRMA at Stanford, much of the story of 20th Century music has to do with these often stunning and curious new instruments and effects.

Musical theater (opera and ballet) ought not to be considered apart from the general development of musical creativity but it must be so treated for the discussion of music creativity for the first two-thirds of the 20th Century. For the first time since the origins of opera, about 1600, the theater ceased to be a primary generating or creative force in musical evolution. Virtually all developments in music had started in opera (Baroque forms represented an effort to make operatic music comprehensible to non-vocal musics; the Concerto, Symphony and Overture all broke off from their origins in opera). Opera, long at the leading edge of musical development, has become an ultra-conservative institution, resistant to change and highly dependent on routine. By contrast, dance has been closely identified with new musical developments. This success has been achieved in part by weaning dance away from theater in the direction abstract forms. The fact that so many of Stravinsky's major works were written for the theater (i.e., ballet) is often overlooked. Ballet, of course occupies primary position in 20th century music theater (with opera secondary): the famous Diaghilev/Stravinsky ballets – including *Pulcenella and Rite of Spring*– and later the Stravinsky collaboration with Balanchine culmination in the remarkable *Agon* of 1957. The Stravinsky-Balanchine ballet is characterized by the development of equal, abstract closed forms of movement and sound which in no way intersect or "express" each other but remain completely independent if parallel. These ballets are often referred to as Non-Story ballets, abstract works, in contrast to Story ballets such as *The Nutcracker Suite* or *Swan Lake*.

Jim Babcock's Basic Understanding of Modern Music

I am now going to "try" to explain the essentials of "modern music," based on my non-musician understanding. I'll start with a boiled down description of traditional Western tonal music that dominated from 1600 to 1900. I will then point out a few of the most important composers and their most important "modern" works with a description of how the works changed aspects of traditional tonal music. I will further conclude this section with some broad definitions of categories of modern music and then outline some characteristics and genres of modern miusic.

The tonal basis of traditional western music developed from the medieval period through the Renaissance and then were codified at the beginning of the Baroque (1600) by such composers as JS Bach and JP Rameau. Traditional tonality is what the Western human ear hears as normal and pleasing. This is based on a combination of habit of exclusively hearing the Western tonal tradition and on certain of the properties of the music itself.

Traditional Western tonal music:

1) Based on the diatonic scale (intervals) – scale with the 8 white keys (Do, Re, Mi, etc.).

2) Use of major and minor scales. While there are 12 semitones in an octave (concept of musical range in pitches), the diatonic scale has only 8 keys (or notes) which have various groupings (some with one semi-tone and some with two semi-tones per note).

   4 whole tone notes x 2 each = 8 semitones
   4 semitone notes x 1 each = 4 semitones
   8 notes of the diatonic = 12 semitones

   The major and minor scales (or modes) are two specific groupings and orderings that are based on this Western tradition.

3) Generally the music is consonant, meaning, within either the major or minor scale, a specific ordering of keys is constructed with the simplest of ratios of vibrations per second (e.g. 1:1, 2:1, 3:2, 6:5). These combinations produce what is perceived at a sweetness or pleasantness to the Western human ear. The source of the pleasantness relates to the harmonies of the overtone series of the succeeding notes.

4) The musical notes of a piece are usually in a tight range of notes within this diatonic scale (the note range is usually limited to the Do and the next 8 notes higher, and back).

5) The groups of notes generally have a tonal center or key center (e.g. around the note C) and stay within a single scale (major or minor). The piece of music will involve creating a sense of tension within a key center (combination of vibrations per second and a resolution back to the tonal center (note C, as an example). *

6) The meter or rhythm of the music is regular with a constant repeating pattern.

*= Atonality, in its narrowest sense, is music that lacks a tonal center. More broadly, it describes music that does not conform to the system of hierarchies that characterizes tonal music from the seventeenth to the nineteenth centuries. This broad sense is described in 1-6, above.

1) Ludwig van Beethoven (1770-1827): Traditional tonal musical basis was the world into which Beethoven entered. Beethoven was a revolutionary and stretched the limits of tonality and classicism – ultimately putting an end to the Classical period and introducing the Romantic period.

Symphony No 3, "Eroica", in E flat Major (1805).

Tonality – places an unexpected C # note in the first movement, perhaps the most famous single note in the entire symphonic repertoire. This C sharp does not belong to the home key of E flat. Throughout the 1st movement, Beethoven plays games with the conventions of modulations (key changes), ending up in the remote key of E minor in the Development Section and deliberately crunching the notes to get back to the home key at the end.
Dissonance – Breaking with the genteel traditions of the 18th century, the dissonant harmonies sound shocking even today.
Rhythm- the time signature of ¾ (normally associated with dance) was a strange choice for an opening movement. Beethoven also uses off beats and syncopations to disrupt the rhythm and disorient the listener.

2) Richard Wagner (1813-1883)

Tristan und Isolde (1859).

Tristan und Isolde has often been cited as a landmark in the development of Western music. Throughout, Wagner uses a remarkable range of orchestral color, harmony and polyphony, doing so with a freedom rarely found in his earlier operas. The very first chord in the piece, the Tristan chord, is of great significance in the move away from traditional tonal harmony as it resolves to another dissonant chord.

The opera is noted for its numerous expansions of harmonic practice; for instance, one significant innovation is the frequent use of two consecutive chords containing tritones (very dissonant note combinations/overtones).

Tristan und Isolde is also notable for its use of harmonic suspension—a device used by a composer to create musical tension by exposing the listener to a series of prolonged unfinished cadences, thereby inspiring a desire and expectation on the part of the listener for musical resolution (tension without resolution). While suspension is a common compositional device (in use since before the Renaissance), Wagner was one of the first composers to employ harmonic suspension over the course of an entire work. The unresolved tension represents unresolved or unconsummated sexual tension in the opera.

3) Franz Liszt (1811-1886)

Bagatelle sans tonalite (1885).

The Bagatelle is a waltz in a typical sectioned dance form, with repeated sections given inventive variation. While this piece is not especially dissonant or atonal in the same sense as in Schoenberg's music, it is extremely chromatic, in that it lacks any definite feeling for a tonal center. Chromaticism is the opposite of the traditional diatonic and major/minor scales. It is the use of notes not belonging to the diatonic scale (i.e., using sharps, flats or naturals alien to the key). The chromatic scale comprises twelve ascending or descending semitones. As noted above, the octave is broken into 12 semitones that are grouped into 8 notes for the diatonic scale. Chromaticism uses

all 12 keys in an octave (both the white and black keys). A chromatic chord is a musical chord that includes at least one note not belonging to the diatonic scale associated with the prevailing home key.

The Bagatelle remains one of Liszt's most adventurous experiments in pushing beyond the bounds of tonality, concluding with an upward rush of diminished sevenths. Some have analyzed the piece as being constructed around a symmetrical chord, with the B-F tritone symbolizing Mephistopheles as part of this chord. The lack of a definite key feeling, these critics continue, is due to the piece's reliance on mainly tritone and diminished seventh harmony, as well as the piece's ending in an indefinite manner. The main theme, marked *Scherzando*, alternates between F-sharp and F-natural, suggesting an oscillation traditional between major and minor modes.

A contrasting *appassionato* section contains a bass line of C-sharp, D, E-flat, E, F, that conforms to a standard tonal progression in D minor. Moreover, the motivic activity between this bass line and the melodic features of the introduction strengthens the significance of D as a tonal center, overriding sectional contrasts.

4) Claude Debussy (1862-1918)

<u>Prelude a l'apres-midi d'un faune</u> (1894).

The work that ushers Debussy into his second (Impressionistic) period is *Prelude to the Afternoon of a Faun* (1894). It is probably his best known work. Many Impressionistic techniques (changes from traditional Western tonal music) can be seen in "Prelude." They are:

- Orchestration
    - Impressionistic use of tone color
    - new orchestral combinations
    - lyrical wind writing
    - preference for muted string sounds and "nonheroic" brass
    - delicate percussive sounds
    - extensive use of harp
    - soloistic writing
- Melody and Harmony
    - importance of melody over harmonic progression and rhythm
    - harmony as a dimension of melody instead of as accompaniment
    - use of modes and scales such as the whole-tone and pentatonic
    - free chromaticism
    - ambiguous harmonies and tonal centers
    - mixture of functional and non-functional progressions
    - rich chords
    - nonfunctional use of 7th and 9th chords
    - chord planing
    - fragmentary melodies

- Rhythm
    - complex and non-metrical rhythms
- Texture
    - subtle polyphony
    - chord planing
    - harmony as a dimension of melody instead of as accompaniment
- General
    - allusion and understatement
    - overall concern for private communication

5) Richard Strauss (1864-1949)

<u>Elektra</u> (1909).

A difficult, musically complex work which requires great stamina to perform. The role of Elektra, in particular, is one of the most demanding in the dramatic soprano repertoire. Despite being based on ancient Greek mythology, the opera is highly modernist and expressionist.

Strauss's adaptation of the story focuses tightly on Elektra, thoroughly developing her character by single-mindedly expressing her emotions and psychology as she meets with other characters, mostly one at a time. The other characters are Klytaemnestra, her mother and one of the murderers of her father Agamemnon. The music for Klytaemnestra is the only atonal music that Strauss wrote.

Musically, *Elektra* deploys dissonance, chromaticism and extremely fluid tonality in a way which recalls but moves beyond the same composer's *Salome* of 1905 and thus *Elektra* represents Strauss's furthest advances in modernism - from which he later retreated. The bitonal or extended Elektra chord is a well known dissonance from the opera while harmonic parallelism is also prominent modernist technique.

6) Arnold Schoenberg (1874-1951)

<u>Three Pieces</u>, for piano (1909).

The first two, of the three, are often cited as marking the point at which Schoenberg abandoned the last vestiges of traditional tonality, implying the language of common-practice harmony that had been inherent in western music for centuries. The functionality of this traditional language, to Schoenberg at least, had become stretched to bursting point in some of the more chromatically saturated works of Wagner, Mahler, Richard Strauss and indeed some of Schoenberg's own earlier tonal works such as the string sextet *Verklärte Nacht*, Op. 4 of 1899.

Although there are vestigial, superficial remnants of tonal writing, such as lyrical melody, expressive appoggiaturas and chordal accompaniment, tonal hearing and tonal analysis are difficult to discern.

The use of the term *expression* is also especially pertinent when applied to the third of the Three Pieces, whose violent emotional language, juxtaposing extremes of mood and dynamic, can be seen in the context of Schoenberg's other expressionist works of that year such as the last of the *Five Orchestral Pieces*, Op. 16 and, most revealingly, the monodrama *Erwartung*. Atonal characteristic of these pieces is a lack of motivic repetition or development and a rejection of traditional notions of balance and cadential, goal-oriented movement, supposedly deferring the musical discourse to a kind of stream of consciousness or subjective emotional expression.

7) Alexander Scriabin (1872-1915)

Sonata #9, "the Black Mass" (1913).

Like Scriabin's other late works, this piece is highly chromatic and atonal. The *Black Mass* Sonata is particularly dissonant because many of its themes are based around an interval of a minor ninth, one of the most unstable sounds. Its marking 'legendaire' exactly captures the sense of distant mysterious wailing which grows in force and menace. The opening theme is constantly transformed, from the early trill arpeggio's sounding unsettling and then completely shifting, eventually tumbling in rapid cascades into a grotesque march. Scriabin builds a continuous structure of mounting complexity and tension and pursues the combination of themes with unusual tenacity, eventually reaching a climax as harsh as anything in his music. The piece ends with the original theme reinstated.

Some have suggested Scriabin's extremely complicated chromaticism is only effectively borderline atonality and thus not quite as revolutionary as the work of Schoenberg. Like Scriabin's other sonatas, it is both technically and musically highly demanding for the pianist, sometimes extending to three staves as opposed to the standard two used in piano music.

7) Igor Stravinsky (1882-1971)

The Rite of Spring (1913).

The *Rite*, represents predominantly revolutionary changes in rhythm from that of the traditional Western tonal music. In his previous *The Firebird*, Stravinsky had begun to experiment with bitonality (the use of two different keys simultaneously). He took this technique further in *Petrushka*, but reserved its full effect for *The Rite* where, as the analyst E.W. White explains, he "pushed [it] to its logical conclusion." White also observes the music's complex metrical character, with combinations of duple and triple time in which a strong irregular beat is emphasized by powerful percussion. The music critic Alex Ross has described the irregular process whereby Stravinsky adapted and absorbed traditional Russian folk material into the score. He "proceeded to pulverize them into motivic bits, pile them up in layers and reassemble them in cubistic collages and montages."

The music historian Donald Jay Grout has written: "*The Sacre* is undoubtedly the most famous composition of the early 20th century ... it had the effect of an explosion that so scattered the

elements of musical language that they could never again be put together as before." According to many critics, the 1913 premiere might be considered the most important single moment in the history of 20th century music and its repercussions continue to reverberate in the 21st century. Ross has described *The Rite* as a prophetic work, presaging the "second avant-garde" era in classical composition—music of the body rather than of the mind, in which "[m]elodies would follow the patterns of speech; rhythms would match the energy of dance ... sonorities would have the hardness of life as it is really lived."

Among 20th-century composers most influenced by *The Rite* is Stravinsky's near contemporary, Edgard Varèse, who had attended the 1913 premiere. Varèse, according to Ross, was particularly drawn to the "cruel harmonies and stimulating rhythms" of *The Rite*, which he employed to full effect in his concert work *Amériques* (1921), scored for a massive orchestra with added sound effects including a lion's roar and a wailing siren. After the premiere of the Rite, the writer Leon Vallas opined that Stravinsky had written music 30 years ahead of its time, suitable to be heard in 1940. Coincidentally, it was in that year that Walt Disney released *Fantasia*, an animated feature film using music from *The Rite* and other classical compositions. The *Rite* segment of the film depicted the Earth's prehistory, leading to the extinction of the dinosaurs.

Each one of the above represents revolutionary steps against traditional Western tonal music. Ultimately, this led to the period were atonally dominated, starting most obviously by Arnold Schoenberg in 1909. Atonality gathered more support by professional composers. For example, Stravinsky began to adopt many elements of atonality (after the death of his rival, Schoenberg, in 1951). Stravinsky's ballet, Agon (1957) uses many atonal methods.

Pierre Boulez (1925 - 2015) became a dogmatic follower of atonality (also referred to as 12-tone system) as illustrated by his quote: "Any musician who has not experienced… the necessity of 12-tone system is USELESS." Further, Milton Babbitt (1916-2011) was misquoted as saying: "Who Cares if You Listen" as an example of the professional musician's disregard of the more popular and traditional tonal styles with a preference for the abstract and complex atonal style.

In general, atonal music is regarded as modern music. Many define "modern" as any music composed by Igor Stravinsky. In the 1960's and 70's Minimalism began to gain traction and has led the way to a return of tonality. This return is known as post-modernism. One definition of the period of modern music starts with Schoenberg's Three Pieces, in 1909 and concludes with the rise of Minimalism in the 1960/70's (there are many exceptions to these dates). During this time-frame of the development of Modern Music, many composers experimented with many different styles - I have tried to outline the most important in the following section.

<u>Broad Categories of Modern Music</u>

Modern music (broadly used) can be broken into the following sub-categories (that are addressed in depth in the Addendum). Beyond the obvious, date defined, 20th Century and 21st Century, there are no clear and generally accepted definitions for many of these terms, leading to the nebulous form of some of my discussions. I will try to add some clarity based on my understanding of the terms.

- 20th Century

  Is most obviously date defined Art Music, created during the years from 1900 to 1999. At the beginning of the 20th century, composers of classical music were experimenting with an increasingly dissonant pitch language, which sometimes yielded atonal pieces. Following World War I, as a backlash against what they saw as the increasingly exaggerated gestures and formlessness of late Romanticism, certain composers adopted a Neoclassic style, which sought to recapture the balanced forms and clearly perceptible thematic processes of earlier styles. After World War II, 20th Century composers sought to achieve greater levels of control in their compositional process (e.g., through the use of the Twelve Tone technique and later Total serialism). At the same time, and conversely, composers also experimented with means of abdicating control, exploring indeterminacy or aleatoric (some part of composed music left to the discretion of the performer; improvisation) processes. Many composers totally avoided the expression of emotion as a reaction to World War II. They believed the war was the result of too much emphasis on emotional expression. Stravinsky was an example with his composition of music that was totally "dry" of emotional expression. Technological advances led to the birth of electronic music. Experimentation with tape loops and repetitive textures contributed to the advent of Minimalism. Still other composers started exploring the theatrical and cinematic potential of the musical performance.

- 21st Century

  Art Music that was created during the years from 2000 to the present day. 21st Century Art Music is a diverse art form. Some elements of the previous century have been retained, including Post-modernism, Polystylism and Eclecticism, which seek to incorporate elements of all styles of music irrespective of whether these are "classical" or not—these efforts represent a slackening differentiation between the various musical genres. The combination of classical music and multimedia is a notable practice in the 21st Century; the Internet, alongside its related technologies, are important resources in this respect. The number of important female composers has also increased significantly.

- Modern and High Modern

  Modernism is regarded by some writers as an historical period extending from about 1890 to 1930 and apply then the term Postmodernism to the period after 1930. Other writers assert that Modernism is not attached to any historical period, but rather is "an attitude of the composer; a living construct that can evolve with the times." The clearest definition (to me) is music that breaks away from traditional tonality and traditional metrical rhythms is considered Modern music (including the followers of Shoenberg and Stravinsky).

  High Modernism is a sub-category Modern, characterized by an unfaltering confidence in science and technology as means to reorder the social and natural world. The High Modernist movement was particularly prevalent during the Cold War, especially in the late-1950s and 1960s. It is associated with the attempts of composers to gain total control over all aspects of music (Total

Serialism) which ultimately led to electronic music, whereby composers were able to eliminate the uncontrolled element of performers and directly and tightly control all aspects of music composition.

- Postmodern and Contemporary Classical

  Postmodern music is not a distinct musical style, but rather refers to music of the Postmodern era or music that follows aesthetical and philosophical trends of the Postmodern era. The Postmodernist movement formed partly in reaction against Modernism. Essentially, it is defined as the slow return to traditional tonal music and to a less mathematically controlled form of composing (against Total Serialsim). The dogmatic Pierre Boulez had created an atmosphere in which composers were afraid to deviate from the Serialism style, demagogically promoted by Boulz. Some define postmodern as the period in which Stravinsky entered his neoclassical period (approx. 1930) while others define it as the period in which the dominance of atonality and Total Serialism waned (approx. 1960).

  One of the most striking and confusing aspects of contemporary classical music is the bewildering range of styles employed by today's composers, from the quasi-medieval simplicity of Arvo *Part's Fratres* to the computer-assisted complexities of Kaija Saariaho's *Nymphea* (to name just two examples). The roots of this diversity extend back to the 1960s, the decade in which the modernist tradition (begun with Schoenberg's early atonal works culminated in the serial experiments of the Darmstadt School) lost its pre-eminent position. Composers finally tired of its proscriptive laws and many grew bored with the monochrome and angst-ridden music which it tended to produce, even in the hands of its finest composers.

  One of the first and most notable breaks with modernism came with the advent of Minimalism, whose various practitioners – Riley and Reich in the US, Andriessen in Holland, Part and Gorecki in Eastern Europe – all rejected serialism's anarchic complexity in favor of simpler and more consonant styles. Other composers soon followed suit by returning to previously outlawed types of material. In England and Germany, musicians such as Maw, Holloway and Rihm began to look back to late-Romantic music for their inspiration. In Russia, Alfred Schnittke developed his notion of "polystylism," with its free mingling of musics past and present. Subsequently, younger composers like the post-minimalist Michael Torke and the eclectic Mark-Anthony Turnage have continued to open up the previously highly-guarded frontiers of classical music to a host of new influences, not only from the classical past but also the works of pop, jazz and world music.

  This collective turn towards a more inclusive and less dogmatic aesthetic – often described as postmodernism – is much more than a simple act of artistic nostalgia or escapism. For many composers, the failure of serialism to provide a coherent universal language was proof that Western musical tradition had reached an impasse and that the only way forward was backward, toward traditional tonality. Not that the modernist tradition is absolutely dead: younger composers such as Magnus Lindberg and George Benjamin continue to pave distinctly innovative paths. But for the time being, the promised land of a totally new music (perhaps using the potentially limitless resources of computer-generated sound) remains some way over the horizon.

Meanwhile, one of postmodernism's positive byproducts has been the way in which contemporary classical music had increasingly re-entered the musical mainstream. Works of audience-pleasers like Gorecki and Tavener achieving a mass popularity never enjoyed by their more challenging predecessors.

Contemporary classical describes music composed in the classical tradition by composers of the latter half of the 20th century and current times. Contemporary classical music incorporates technological developments of the modern era (recording, electronic instruments) while maintaining a composition style rooted in notation. Contemporary classical music also incorporates artistic developments in sculpture, film and particularly dance. Many of the best known contemporary classical composers are most widely known for their film scores, e.g. Philip Glass and Michael Nyman. Some date contemporary classical as post 1945 and some as post mid 1970s.

Post 1945 - The term, Contemporary Classical, may be employed in a broad sense to refer to the post-1945 modern forms of post-tonal music from the death of Anton Webern (including serial music, Concrete music, experimental music, etc.).

To some extent, European and the US traditions diverged after World War II (~1945). Among the most influential composers in Europe were Pierre Boulez, Luigi Nono and Karlheinz Stockhausen. The first and last were both pupils of Olivier Messiaen. An important aesthetic philosophy of this group was Serialism, which took as its starting point the compositions of Arnold Schoenberg and Anton Webern. However, some more traditionally based composers such as Dmitri Shostakovich and Benjamin Britten maintained a tonal style of composition despite the prominent Serialist movement.

In America, composers like Milton Babbitt, John Cage, Elliott Carter, Henry Cowell, Philip Glass, Steve Reich, George Rochberg and Roger Sessions, formed their own ideas. Some of these composers (Cage, Cowell, Glass, Reich) represented a new methodology of experimental music, which began to question fundamental notions of music such as notation, performance, duration, and repetition, while others (Babbitt, Rochberg, Sessions) fashioned their own extensions of the twelve-tone serialism of Schoenberg.

Mid-1970s - Contemporary classical music can also be understood as belonging to a period that started in the mid-1970s with the retreat of modernism (post modernism). Today, musical taste has blown wide open. If you love music, chances are that you like lots of different things: Ornette Coleman and Bruce Springsteen and Dmitri Shostakovich and Sufjan Stevens. If you're a longtime orchestra subscriber, you may be passionate about Brahms but leery of the unfamiliar names and sounds that occasionally emerge onto concert programs. The earliest seminal works of so-called Minimalism share a lyric freshness. They do indeed take a step away from the conventional narrative of traditional classical music forms. Rather than taking a theme and develop it, they put musical elements together and let them shift into different, ever-changing combinations, like images in a kaleidoscope. The classic example is Terry Riley's *In C* from 1964, consisting of 53 numbered phrases that are played by any number of musicians, lasting anywhere from 10 minutes

to a couple of hours, creating a dreamy, beguiling, mutable colorscape in the process. Equally iconic is Reich's *Music for 18 Musicians*, which references influences all the way back to medieval chant in the way it revolves around the same 11 chords, played at different speeds, within the compass of individual human breaths.

Generally speaking, classical music in the 20th century was taken over by Serialism. The resulting works are sometimes fascinating, but seem difficult and unappealing to many lay audiences. The following generation of composers shied away from serialist strictures. Minimalism was one reaction; Neo-romanticism (a return to the melodic, tonal, timbral values of romantic music) was another. This story is a little too pat (for one thing, Neo-romanticism has been a force in American music throughout the 20th century - see Samuel Barber) but it's certainly true that David Del Tredici, for one, got a lot of attention back in the 1980s when he turned from serialist orthodoxy and began writing big, lush scores for full orchestra (including *Final Alice*).

Like Minimalism, Neo-romanticism is a facile and not entirely accurate label. It's often applied, for instance, to John Corigliano, who writes well for orchestra and with an acute sense of the past (his 1991 opera *The Ghosts of Versailles* is one of the best syntheses of the grand opera tradition and contemporary music that anyone's managed to come up with) but whose sensibility, sound and sophistication are firmly rooted in the present. The Neo-romantic sensibility, however, is kept most vividly alive in contemporary American opera, which tends to pursue a kind of Broadway-like accessibility in a tonal musical language, from William Bolcom's *A View from the Bridge* to Jake Heggie's recent *Moby-Dick*.

Neo-romanticism isn't the only path composers use to access traditional forms with a fresh eye. Some of today's most successful orchestral composers are writing symphonies and concertos — like Jennifer Higdon, whose *Percussion Concerto* won a Grammy in 2010 and *Violin Concerto*. Higdon writes athletic, energetic music that's smart and solid and wins over audiences, bright and forward-propelled as a Tour de France rider.

Another acclaimed recent concerto was written by the Finnish composer-conductor Esa-Pekka Salonen, best known in this country for the years he spent as music director of the Los Angeles Philharmonic (1992-2009). His *Piano Concerto* sounds as if it had been written to reassure that, when he stepped down from the post to devote himself entirely to composing, he was going to float off into the world of the avant-garde. Without losing the quirky touch of his earlier compositions, this concerto is rife with references to its virtuosic predecessors in the canon: You can hear hints of Prokofiev, Rachmaninov, Ravel in what amounts to one long finger-busting, hyperactive, crowd-pleasing outburst.

"Younger generations" are notoriously slippery things in this field: Anybody under 50 still counts as "young." "Young," indeed, becomes more about an attitude than chronological age: Writing music that incorporates electric guitar and acoustic violin is now a hallmark of the 50-something set, from Steven Mackey, the guitarist turned Princeton teacher, to the Bang on a Can All-Stars, the performing arm of the eponymous composers' collaborative (formed by David Lang, Michael Gordon and Julia Wolf). The idea that good music can bring together a range of traditions, from

rock to West African drumming to Javanese gamelan, is today a given for most younger composers and emerges in surprising ways.

Another current trend that's been on the rise over the last five decades is the return to the age of the composer-performer. Those who write music and want it performed go out and play it themselves (like Derek Bermel, a clarinet player whose Clarinet Concerto *Voices* mingles elements of a wide range of musics in ways both thoughtful and fun) or form their own bands.

"Alt-classical" is a term coined to describe the indie-rock sensibility of a lot of these genre-defying efforts, which are becoming ever more prevalent on every level of the musical establishment. Riccardo Muti and the Chicago Symphony Orchestra took the notable step last year of naming, as co-composers in residence, Mason Bates, who has an active career as a DJ as well as writing works for places like the San Francisco Symphony, and Anna Clyne, another 30-something who incorporates sampling and amplification in her music.

That's not to say that all young composers are wedded exclusively to rock-inspired sounds: simply that genre boundaries no longer function as limits. Nico Muhly, who turns 30 this summer, is one of the most successful composers around, with two operas (one, *Two Boys*, appeared at the Metropolitan Opera in 2013-14); a musical omnivore, he is inspired by everything from the English choral tradition to Icelandic pop to Philip Glass. And Jefferson Friedman, who has played with several rock groups and has written some of the best contemporary string quartets. Here are a few iconic works by a few major living composers, not yet mentioned:

George Crumb, *Black Angels*, a searing expressionistic string quartet written during the Vietnam War by a distinctive musical maverick.

Meredith Monk, *Songs of Ascension*, the latest recording by one of our greatest innovators, rich treasure from the seam of expanded vocal techniques and artless sound juxtapositions that she's been mining tirelessly for decades.

Frederic Rzewski, *The People United Will Never Be Defeated*, an hour-long, impassioned, political, eclectic set of variations (including shouting at the piano) on a Chilean protest song.

Elliott Carter, *First String Quartet*, a breakout work from 1951 that still sounds as radical and new as it did when it was written, by the grand old man of the 20th-century American establishment.

Pierre Boulez, *Pli selon pli*, one of the longest and in many ways most beautiful pieces, a lyrical exegesis on poems by the French symbolist poet Stephane Mallarme in which a high soprano soars over and around the instruments of the orchestra, written by a former lion of European serialism who mellowed considerably in his later years.

Characteristics of Modern Music:

Harmony: Dramatic things happened to harmony in the 20th century. Composers found new and different chord constructions and progressions and new types of dissonance. Not only were cords superimposed on one another, but one strain of harmony was plunked atop another, akin to simultaneous melody in counterpoint music (called "polyharmony").

Melody: For the first time in hundreds of years, melody was de-emphasized. Melody gave way to rhythm, harmony and tone color. It also lacks the repetition of earlier melody and is harder to hear and, to many, less popular.

Orchestration: Whereas orchestras had become increasingly large in the Romantic period, the trend in the 20th century was toward a smaller, leaner orchestra, geared to the music being composed. The Romantics had emphasized tone color and the composition of orchestras reflected this. With the increased emphasis on rhythm, 20th century percussion instruments became more important and many composers deemphasized stringed instruments.

Rhythm: Rhythm truly came into its own in the 20th century music. It is more varied, complex and more energetic than ever before. Some composers experimented with "polyrhythm," writing works that feature as many as five different rhythmic patterns at the same time. This was driven by Stravinsky but Bartok is also an example. In its complexity, rhythm differs greatly from the steady, pulsating, consistent and persistent rhythm of the Baroque era.

Texture: While there was a strong back-to-Bach trend (back to counterpoint), it was with 20th century emphaisis on dissonance that most stands out. It can be heard in the string quartets of Bartok and the chamber music of Hindemith.

Tonality: The most important development in the 20th century was in tonality. Traditionally composers wrote in one key at a time, but this broke down in the Late Romantic era and in the 20th century. Some composers were "atonal," writing in no key at all. Others were "bitonal," writing in two keys at once or "polytonal," writing in a number of keys at the same time. In some music, the tone center, the foundation of Western music, disappeared. Some composers were polytonal, polyharmonic and polyrhythmic as there was a drive to experiment. Another major difference involves the music "inner core" – emotion and expression. This was a post WWII reaction to the fear that excess emotion unleashed the violence of WWII. As Stravinsky stated: "I consider music is by its very nature essentially powerless to express anything at all…I evoke neither human joy nor human sadness." Stravinsky was known to be coldly logical and brilliantly intellectual. Some conservatives have complained that too many 20th century musicians experimented for the sake of experimentation, ignoring that communication was the primary function of art. Many of the "New Music" composers emphasized greater detachment and objectivity than is found in most Romantic music; a return to Baroque counterpoint; formal order and discipline; a return to absolute (as opposed to program) music; and an emphasis on technique rather than content.

Vocal Genres of Modern Music:

- Choral music – Good things happened to choral music in the 20th century. The post-Romanticism period led a few to a return to Bach contrapuntal style. In taking this route, several 20th century composers created choral works designed to show off the voice rather than the instrument. These include Debussy and Ravel, both of whom wrote a set of three a cappella (unaccompanied) choruses; Stravinsky with his *Symphony of Psalms*; and Vaughan Williams who wrote various choral works.

Instrumental Genres of Modern Music:

- Ballet – An offshoot of opera, modern ballet took off during the first few years of the 20th century, after the appearance of Tchaikovsky's *Swan Lake*, *Sleeping Beauty* and the *Nutcracker* toward the end of the 19th century. Borodin, Stravinsky, Ravel, Richard Strauss, Debussy, Prokofiev, Bartok and Vaughan Williams all wrote ballets. The best-know is Stravinsky's *Rite of Spring*, criticized at the time for its "biting" dissonance, "savage" rhythms and "primitive" sounds.
- Chamber music – Chamber music can be broken down into two camps, traditional and radical. Ravel, Debussy and Faure are examples of traditional and Hindemith and Bartok are examples of radical. The radicals, with their experimentation, focused on chamber music formats. Some have suggested that chamber-music audience traditionally has been a more intellectual one, more interested in thought than emotion. Thus chamber audiences are more receptive to the atonal and more dissonant sounds of the radicals. One technique of the atonalists was concentration on repetition and on combining rhythmic patterns for which chamber music is well suited. A more traditional piece would be Faure's *Quintet No 1 in D Minor for Piano and Strings.* A radical piece would be Bartok's six string quartets.
- Concerto - The Romantic concerto spotlighted the soloist in contrast to earlier concertos, which featured greater equality between the soloist and the orchestra. The 20th century concerto tends to go back to the pre-Romantic style, in part because modern orchestras are themselves such star performers that they are not easy to dominate.
- Symphony – It is not realistic to try to characterize a 20th century symphony. 20th century composers (at least those interested in writing symphonies) looked for ways to adapt the traditional form of symphony to changing musical styles, harmonies and rhythms. One major aspect of 20th century music was the obscured tonality – weakening, or absence, of the concept that music must return to a central note in order to achieve what was called sense of rest and finality (resolution). But the structure of the symphony did not accommodate obscured tonality. It demanded a tonal logic from which some or the 20th century composers were escaping. Different composers found different ways to handle this problem. Some composed no symphonies at all (Debussy). Some ignored new music and wrote Romantic style symphonies (Mahler's 5th, 6th 7th and 9th). Some also composed in Classical style (Prokeofiev's *1st Symphony* called the *Classical*) and others in Baroque. Sebelius was the most popular symphonist in mid-1900's. His music had solid tonal foundation even though the harmony was dissonant. He was perhaps the most original in his concept of symphony form. Many 20th Century movements are based on a collection of fragmentary ideas which fuse and coalesce as the music proceeds. Stravinsky wrote 2 "symphonies": *Symphonies of Wind Instruments* (with no emotion or picturesque) and *Symphony of Psalms* for chorus and orchestra, based on a Latin text. Many composers followed the lead of

Schoenberg and produced no real symphonies at all. Generally, large architectural forms were not suitable for the techniques on 20th century composers. In general, it's difficult to summarize themes of 20th century symphonies; every composer composed his own style.

- Symphonic poem –While similar in structure to the Romantic symphonic poem, this was apt to be less noble, more realistic and sometimes uglier and more brutal than the earlier Romantics would have liked. Strauss's *Eine Alpensinfonie* of 1915, not a success, is an example.
- Symphonic suite – An instrumental suite unrelated to the Baroque dance suite and different from the Late Romantic suite, this form, which emerged early in the 20th century, was more of a cross between a symphony and a tone poem. Usually a work with shorter movements than the former and less "program" than the latter. An example is the orchestral version of Ravel's *Mother Goose*.

Detailed Description of Modern and Modern Sub-Categories
Important Modern Composers by Sub-Category (listed alphabetically) and Examples of Their Music

During the mid 20th century, music evolved in many different directions. Some composers took Schoenberg's "serial" system to new limits. The rise of jazz, as well as an increasing awareness of non-Western music, provided additional inspiration for many, while others ventured into electronic music by manipulating sounds and noises recorded on tape - a style known as *musique concrète*. Yet another route was that of "chance" music, notably in the work of John Cage, in which the elements of a composition or performance could be determined by, say, "the throw of the dice."

In the 1930s and 1940s, many composers returned to forms and techniques of the Baroque and Classical eras. This "Neoclassical" style was a reaction to the emotional, dramatic character of Romanticism. The Neoclassicists turned to past models as a vehicle for expressing their ideas. The Neoclassicists wrote for small chamber ensembles and preferred a tightly knit treatment of thematic material. They did not copy 17th and 18th century forms, but took elements, such as the fugue, and added their own modern harmonies and rhythms. An example of this is Stravinsky's opera *The Rake's Progress* (1951).

The rapid advances in technology during the late 20th century are partly responsible for the emergence of a wide variety of musical forms. Electronics played an important role in the development of music, both classical and popular, from the 1960s onward. The ability of the synthesizer to generate artificial tones and sounds attracted composers such as John Cage, Edgard Varèse, and Karlheinz Stockhausen. Beginning in the 1970s, the use of computers, with their ability to memorize and play back whole compositions, discouraged live performances. Many composers turned to writing film scores, for which the precision of computerized music is ideally suited.

Minimalism, which emerged in the 1960s, focuses on the development of a single aspect of music, such as pitch or rhythm, while keeping other elements constant. This approach owes much to Indian raga music, in which the pattern of music changes very little. Computers play a large part in minimalist music because they can make fine, precise alterations. Steve Reich, for instance, made tiny changes in pulse by playing two identical patterns at the same time and slightly altering the speed of one of the patterns.

All history is provisional and contemporary history even more so, because of the well known problems of dissemination and social power. Who is "in" and who is "out" is often more important to who is known than the music itself. In an era with perhaps as many as 40,000 composers of concert music in the United States alone, first performances are difficult and second performances even more so. The lesson of obscure composers in the past becoming important later applies doubly so to contemporary music, where it is likely that there are "firsts" before the officially listed first, and works which will be later admired as exemplars of style, which are as yet, unheralded in their own time.

A. **20th Century**

B. **21st Century**

C. **Modern and High Modern**

D. **Postmodern and Contemporary Clasical**

E. **Description of Categories (alphabetic) and Important Composers**

A. 20th Century

The single most important moment in defining the course of music throughout the 20th Century was the widespread break with traditional tonality, affected in diverse ways by different composers in the first several decades of the century. From this sprang an unprecedented "linguistic plurality" of styles, techniques, and expressions. In Vienna, Arnold Schoenberg (1874-1951) developed **Atonality**, out of **Expressionism** that arose in the early part of the 20th century. He later developed the **Twelve-Tone Technique** which was developed further by his disciples Alban Berg (1885-1935) and Anton Webern (1883-1945); later composers (including The Frenchman, Pierre Boulez, 1925-2016) developed it further still. Stravinsky (1882-1971) (in his last works) explored twelve-tone technique, too, as did many other composers; indeed, even Scott Bradley (American, 1891-1977) used the technique in his scores for the Tom and Jerry cartoons.

i. Turn of the 20th-century - Classical music was without a dominant style and was highly diverse. It was characteristically **Late Romantic** in style. Composers such as Gustav Mahler, Richard Strauss and Jean Sibelius were pushing the bounds of **Post-Romantic** symphonic and tonal composing. Indeed, Strauss' operas: *Electra* and *Salome* are considered the limit of tonal composing. After these compositions, Strauss returned to a more tonal style in his later operas. At the same time, the **Impressionism** movement, spearheaded by Claude Debussy, was being developed in France. Maurice Ravel's music, also often labeled **Impressionistic**, explores music in many styles, not always related to **Impressionism**. Many composers reacted to the **Post-Romantic** and **Impressionist** styles and moved in quite different directions.

   At the end of the 19th century, the **Romantic Style** was starting to break apart, moving along various parallel courses, such as **Impressionism** and **Post-Romanticism**. In the 20th century, the different styles that emerged from the music of the previous century influenced composers to follow new trends, sometimes as a reaction to that music, sometimes as an extension of it, and both trends co-existed well into the 20th century.

ii. Early part of the 20th century **–** In the early part of the 20th century, many composers wrote music which was an extension of 19th-century **Romantic Music** and traditional instrumental groupings such as the orchestra and string quartet remained the most typical. Traditional forms such as the

symphony and concerto remained in use. Gustav Mahler and Jean Sibelius are examples of composers who took the traditional symphonic forms and reworked them. Some writers hold that the Schoenberg's work is squarely within the late-Romantic tradition of Wagner and Brahms and, more generally, that "the composer who most directly and completely connects late Wagner and the 20th century is Arnold Schoenberg."

Styles of music developed called: **Free Dissonance** and **Experimentalism.** Charles Ives integrated American and European traditions as well as vernacular and church styles, while using innovative techniques in his rhythm, harmony, and form. His technique included the use of **polytonality**, **polyrhythm**, **tone clusters**, **aleatoric elements** and **quarter tones**. Edgard Varèse wrote highly dissonant pieces that utilized unusual sonorities and futuristic, scientific-sounding names. He pioneered the use of new instruments and electronic resources.

iii. After the First World War - Many composers started returning to the past for inspiration and wrote works that drew elements (form, harmony, melody, structure) from Schoenberg's new **Twelve-Tone Technique**. This type of music was labeled **Neoclassicism**. Igor Stravinsky (*Pulcinella* and *Symphony of Psalms*), Sergei Prokofiev (*Classical Symphony*), Ravel (*Le tombeau de Couperin)* and Paul Hindemith (Symphony: *Mathis der Maler*) all produced **Neoclassical** works. **New Objectivity** was an artistic attitude that arose in Germany in the 1920s in reaction to the perceived excesses of **Expressionism**.

Italian composers such as Francesco Balilla Pratella and Luigi Russolo developed musical **Futurism**. This style often tried to recreate everyday sounds and place them in a "Futurist" context. The "Machine Music" of George Antheil (starting with his Second Sonata, *The Airplane*) and Alexander Mosolov (most notoriously his *Iron Foundry*) developed out of this.

The process of extending musical vocabulary by exploring all available tones was pushed further by the use of **Microtones** in works by Charles Ives, Julián Carrillo, Alois Hába, John Foulds, Ivan Wyschnegradsky and Mildred Couper among many others. **Microtones** are intervals that are smaller than a semitone; human voices and unfretted strings can easily produce them by going in between the "normal" notes, but other instruments will have more difficulty—the piano and organ have no way of producing them at all.

iv. The 1940s and 50s - Composers, notably Pierre Schaeffer, started to explore the application of technology to music in **Musique Concrète**. The term **Electro Acoustic Music** was later coined to include all forms of music involving magnetic tape, computers, synthesizers, multimedia, and other electronic devices and techniques. Live electronic music uses live electronic sounds within a performance (as opposed to preprocessed sounds that are overdubbed during a performance), John Cage's *Cartridge Music* being an early example.

Spectral Music is a further development of **Electro Acoustic Music** that uses analyses of sound spectra to create music. Cage, Berio, Boulez, Milton Babbitt, Luigi Nono and Edgard Varèse all wrote **Electro Acoustic music**.

v. From the early 1950s onwards – John Cage (1912-1992) introduced elements of chance into his music. The term **Experimental music** seems to have been coined by Cage who was interested in writing complete works that performed an unpredictable action. According to the definition "an experimental action is one outcome of which is not foreseen." The term is also used to describe music within specific genres that push against their boundaries or definitions, or else whose approach is a hybrid of disparate styles, or incorporates unorthodox, new, distinctly unique ingredients.

vi. Mid-Century - Important cultural trends often informed music of this period, romantic, modernist, neoclassical, postmodernist or otherwise. Igor Stravinsky and Sergei Prokofiev were particularly drawn to **Primitivism** in their early careers, as explored in works such as *The Rite of Spring* and *Chout*. Other Russians, notably Dmitri Shostakovich, reflected the social impact of communism and subsequently had to work within the strictures of **Socialist Realism** in their music. Other composers, such as Benjamin Britten (*War Requiem*), explored political themes in their works, albeit entirely at their own volition. **Nationalism** was also an important means of expression in the early part of the century. The culture of the United States, especially, began informing an American vernacular style of classical music, notably in the works of Charles Ives, John Alden Carpenter, and (later) George Gershwin. **Folk music** (Vaughan Williams' *Five Variants of Dives and Lazarus*, Gustav Holst's *A Somerset Rhapsody*) and **Jazz** (Gershwin, Leonard Bernstein, Darius Milhaud's *La création du monde*) were also influential.

vii. In the latter quarter of the 20th century - **Eclecticism** and **Polystylism** became important. These, as well as **Minimalism**, **New Complexity**, and **New Simplicity**, are more fully explored in the later section of **Description of Categories**.

B. 21st Century

- For its October 2009 edition, the BBC Music Magazine asked 10 composers, mostly British, to discuss the latest trends in western classical music. The consensus was that no particular style is favored and that individuality is to be encouraged. The magazine interviewed:
  i. John Adams
  ii. Julian Anderson
  iii. Henri Dutilleux
  iv. Brian Gerneyhough
  v. Jonathan Harvey
  vi. James MacMillan
  vii. Michael Nyman
  viii. Roxanna Panufnik
  ix. Einojuhani Rautavaar
  x. John Tavener

- The works of each of these composers represent different aspects of the music of this century but these composers all came to the same basic conclusion: music is too diverse to categorize or limit.

This, of course, is a large contributor to the confusion among average music listeners with 21 Century music. In his interview with the magazine, Dutilleux argued that "there is only good or bad music, whether serious or popular."

i. John Adams is a Pulitzer Prize-winning American composer with strong roots in **Minimalism**. His best-known recent works include *On the Transmigration of Souls* (2002), a choral piece commemorating the victims of the 11 September 2001 attacks (for which he won the Pulitzer Prize for Music in 2003) and the opera *Doctor Atomic* (2005), which covers Robert Oppenheimer, the Manhattan Project and the building of the first atomic bomb. In October 2008, Adams told BBC Radio 3 that he had been blacklisted by the U.S. Homeland Security department and immigration services.

ii. Julian Anderson, a British composer, combines the music of traditional cultures from outside the western concert tradition with elements of **Modernism, Spectral Music** and **Electronic Music**. His large-scale *Book of Hours* for 20 players and live electronics premiered in 2005.

iii. French composer Henri Dutilleux, active from the mid-1940s until his death in 2013, followed the **Impressionist** and **Neoclassical** tradition of Maurice Ravel, Claude Debussy, and Albert Roussel. His last works include *Correspondances* and *Le temps l'horloge*, both of which are song cycles.

iv. English composer, Brian Ferneyhough, often styled the "Father of **New Complexity,**" has recently started writing works which reference those of past composers. His *Dum transisset* are based on Elizabethan composer Christopher Tye's works for viol; the fourth string quartet references Schönberg. His opera *Shadowtime* (libretto by Charles Bernstein), which premiered in Munich in 2004, is based on the life of the German philosopher Walter Benjamin.

v. Jonathan Harvey, a British composer, was Composer-in-Association with the BBC Scottish Symphony Orchestra from 2005 to 2008. His 21st-century works include the large-scale cantata *Mothers Shall not Cry* (2000), written for the BBC Proms Millennium, and the orchestral works *Body Mandala* (2006) and *Speakings* (2008).

vi. James MacMillan is a Scottish composer and conductor influenced by both traditional Scottish music and his own Roman Catholic faith. His most recent works include operas (*The Sacrifice* premiered in 2007) and a *St John Passion* (2008).

vii. Michael Nyman is an English **Minimalist** best known for his film score for *The Piano*. He often borrows from Baroque music and is an acclaimed composer of operas, including (in this century) *Facing Goya* and *Sparkie*. The latter work draws its inspiration from a talking budgie (an Australian parrot). His shorter works often written for his own Michael Nyman Band.

viii. Although there have been women composers in earlier centuries (Hildegard of Bingen, Francesca Caccini, Clara Schumann, Fanny Mendelssohn and Amy Beach are well-known

examples), the 21st century has seen an increase in their number and importance. Roxanna Panufnik, in the aforementioned interview with the BBC, says:

"Attitudes towards women composers have changed during the past few decades. Even after women started getting careers, it took a while before they could find work as composers, but we got there in the end, thanks to role models such as Judith Weir, Nicola Lefanu, and Thea Musgrave. Hip young things like Tansy Davies and Emily Hall will exert a great influence on the new music scene in the next ten years."

The trend started in the latter quarter of the 20th century when Thea Musgrave was joined by such prominent composers as Weir, LeFanu, Sofia Gubaidulina, Pauline Oliveros, Meredith Monk, Maryanne Amacher, Ellen Taaffe Zwilich, Kaija Saariaho and Joan Tower—many of whom are only now becoming recognized as important. The trend continues with such people as: Davies, Hall, Unsuk Chin, Onutė Narbutaitė, Julia Wolfe, Jennifer Higdon, Olga Neuwirth and Rebecca Saunders.

ix. Einojuhani Rautavaara is a Finnish composer writing in a variety of forms and styles. His opera *Rasputin* premiered in 2003 and he has written a large—and rapidly growing—body of orchestral and chamber works.

x. John Tavener, another British composer, draws his inspiration from eastern mysticism and the music of the Orthodox Church.

- 21st Century Multimedia and music
  - The work *In Seven Days* (2008), by Thomas Adès, was composed for a piano, an orchestra, and six video screens. The video segments were created by Tal Rosner, Adès's civil partner.
  - Judith Weir's opera Armida was premiered on television, rather than on stage. Channel 4 commissioned the work in 2005. The libretto, also written by Weir, updates Torquato Tasso's 1581 epic poem, setting it in a modern Middle-East conflict which alludes to but never specifically mentions the Iraq War. Weir's opera calls for props that could not be used practically in an opera house, such as a helicopter.
  - In 2008, Tan Dun was commissioned by Google to compose *Internet Symphony No. 1 - "Eroica"* to be performed collaboratively by the YouTube Symphony Orchestra. This work used the internet to recruit orchestra members and the final result was compiled into a mash up video, which premiered worldwide on YouTube.

- 21st Century Film-score and TV-theme-music composers who also write classical music
  - Howard Goodall, a composer for TV series, was Classic FM's Composer-in-Residence for 2009 and was named *Composer of the Year* at the Classical BRIT Awards in 2009.

- 21st Century Technology in music production
  - With the growing popularity of the home computer and the vast improvements in music production applications during the 21st century, home-based composers and performers are no longer limited to the facilities of designated recording studios. Though the technology was

available in the 1990s, home computers were not capable of replicating the functionality of a professional production facility. Home users can now quickly and easily sample, record and produce their own music using their own home recording studios and promote it via the internet.

- There are numerous types of applications involved in music production. While many will allow the user to play musical notation back via MIDI (through either external electronic instruments or internal "virtual instruments"), some of them are dedicated solely to notation, others are dedicated solely to live performance, yet others are dedicated solely to the production (i.e. recording) process itself, while a few present all these capabilities in one package. Many of these applications have capabilities to store live sound in WAV, MP3, or MP4 format and often have functions which can transform the sound (changing the pitch, stretching the sound, merging sounds together, adding effects and so on). Of course, there are widely used applications which are dedicated to recording sound in digital formats and some offer these transforming functions.

C. Modern and High Modernism

In music, **Modernism** does not refer to a specific calendar time period (unlike 20th and 21st Century Music). **Modernism,** in music, is a philosophical and aesthetic stance underlying the period of change and development in musical language that occurred around the turn of the 20th century, a period of diverse reactions in challenging and reinterpreting older categories of music, innovations that lead to new ways of organizing and approaching harmonic, melodic, sonic, and rhythmic aspects of music. Examples include the celebration of Arnold Schoenberg's rejection of tonality in chromatic post-tonal and twelve-tone works and Igor Stravinsky's move away from metrical rhythm.

High Modernism is distinguished by the following characteristics:

- A strong confidence in the potential for scientific and technological progress, including a reliance on the expertise of scientists, engineers, bureaucrats and other intellectuals.
- Attempts to master nature to meet human needs (this also includes attempts to control and change human nature).
- An emphasis on rendering complex environments or concepts comprehendible through ordering.
- Disregard for historical, geographical and social context in development.

D. Postmodern and Contemporary

Although **Postmodernism** is defined as music that does not strictly follow atonality, there are many other perspectives of this nebulous term some of which are outlined below.

Postmodernism in music is not a distinct musical style, but rather refers to music of the postmodern era. Generally, **Postmodernism** is a reaction to modernism, but it can also be viewed as a response to a deep-seated shift in societal attitude. According to this latter view, **Postmodernism** began when historic (as opposed to personal) optimism turned to pessimism, at the latest by 1930. John Cage is a prominent figure in 20th-century music, claimed with some justice both for **Modernism** and **Postmodernism** because the complex intersections between **Modernism** and **Postmodernism** are

not reducible to simple schemata. His influence steadily grew during his lifetime. He often uses elements of chance: *Imaginary Landscape No. 4 for 12 radio receivers* and *Music of Changes* for piano. *Sonatas and Interludes* (1946–48) is composed for a prepared piano: a normal piano whose timbre is dramatically altered by carefully placing various objects inside the piano in contact with the strings (a concept inspired by some of Henry Cowell's 'String Piano' techniques).

- Fredric Jameson, a major figure in the thinking on **Postmodernism** and culture, calls **Postmodernism** "the cultural dominant of the logic of late capitalism," meaning that, through globalization, postmodern culture is tied inextricably with capitalism. Drawing from Jameson and other theorists, David Beard and Kenneth Gloag argue that, in music, **Postmodernism** is not just an attitude but also an inevitability in the current cultural climate of fragmentation. As early as 1938, Theodor Adorno had already identified a trend toward the dissolution of "a culturally dominant set of values," citing the commoditization of all genres as beginning of the end of genre or value distinctions in music.

- As the name suggests, the **Postmodernist** movement formed partly in reaction to the ideals of **Modernism**, but in fact **Postmodern** music is more to do with functionality and the effect of globalization than it is with a specific reaction, movement, or attitude. In the face of capitalism, Jameson says, "It is safest to grasp the concept of the postmodern as an attempt to think the present historically in an age that has forgotten how to think historically in the first place."

- Jonathan Kramer posits the idea (following Umberto Eco and Jean-François Lyotard) that **Postmodernism** is less a surface style or historical period (i.e., condition) than an *attitude*. Kramer enumerates 16 characteristics of **Postmodern** music:

    1) is not simply a repudiation of modernism or its continuation, but has aspects of both a break and an extension
    2) is, on some level and in some way, ironic
    3) does not respect boundaries between sonorities and procedures of the past and of the present
    4) challenges barriers between 'high' and 'low' styles
    5) shows disdain for the often unquestioned value of structural unity
    6) questions the mutual exclusivity of elitist and populist values
    7) avoids totalizing forms (e.g., does not want entire pieces to be tonal or serial or cast in a prescribed formal mold)
    8) considers music not as autonomous but as relevant to cultural, social, and political contexts
    9) includes quotations of or references to music of many traditions and cultures
    10) considers technology not only as a way to preserve and transmit music but also as deeply implicated in the production and essence of music
    11) embraces contradictions
    12) distrusts binary oppositions
    13) includes fragmentations and discontinuities
    14) encompasses pluralism and eclecticism

15) presents multiple meanings and multiple temporalities
16) locates meaning and even structure in listeners, more than in scores, performances, or composers

In the broadest sense, **Contemporary Music** is any music being written in the present day. In the context of classical music the term has been applied to music written in the last quarter century or so, particularly works post-1975. A more restrictive use applies the term only to living composers and their works (perhaps only their recent works). Since "contemporary" is a word that describes a time frame, rather than a style or a unifying idea, there are no universally agreed criteria for making these distinctions.

Generally "**Contemporary Classical Music**" consists of post-1945 modern forms of post-tonal music after the death of Anton Webern.

1945–75:

- To some extent, European and the US traditions diverged after World War II. Among the most influential composers in Europe were Pierre Boulez, Luigi Nono, and Karlheinz Stockhausen. The first and last were both pupils of Olivier Messiaen. An important aesthetic philosophy as well as a group of compositional techniques at this time was **Serialism**, which took as its starting point the compositions of Arnold Schoenberg and Anton Webern.
- In America, composers like Milton Babbitt, John Cage, Elliott Carter, Henry Cowell, Philip Glass, Steve Reich, George Rochberg, and Roger Sessions, formed their own ideas. Some of these composers (Cage, Cowell, Glass, Reich) represented a new methodology of **Experimental Music**, which began to question fundamental notions of music such as notation, performance, duration, and repetition, while others (Babbitt, Rochberg, Sessions) fashioned their own extensions of the twelve-tone serialism of Schoenberg.

1975-Present:

Since the 1970s there has been increasing stylistic variety, with far too many schools to name or label. However, in general, there are three broad trends. The <u>first</u> is the continuation of modern avant-garde traditions, including musical experimentalism. The <u>second</u> are schools which sought to revitalize a tonal style based on previous common practice. The <u>third</u> focuses on non-functional triadic harmony, exemplified by composers working in the minimalist and related traditions. A very recent development in contemporary music is generally called: “alt-Classical.” This is basically classically trained musicians who perform various types of Art Music with mixed rock and classical instruments in small and casual venues. The following are categories generally considered to be **Contemporary**:

- **Modern**
- **Serialism**
- **Post-modernism**
- **Polystylism**

- **Conceptualism Minimalism and Post –minimalism**
- **Post-classic Tonality**
- **"World Music" Influence**
- **Rock Influence**
- **Historicism**
- **Experimentalism**
- **Electronic Music**
- **Neo-Romanticism**
- **New Simplicity**
- **New Complexity**
- **Spectral Music**
- **Contemporary Choral Music**

E. Descriptions of Categories (alphabetic) and Important Composers

Alt-Classical

Ambient

- **Brian Eno (1948-?)**

American Classical Sound

- **Charles Ives (1874-1954)**
- **Carl Ruggles (1876-1971)**
- **Nadia Boulanger (1887-1979)**
- **Walter Piston (1894-1976)**
- **Virgil Thomson (1896-1989)**
- **Roger Sessions (1896-1965)**
- **Henry Cowell (1897-1965)**
- **Elliott Carter (1908-2012)**
- **Samuel Barber (1910-1981)**
- **Conlon Nancarrow (1912-1997)**
- **George Crumb (1929-?)**
- **Joan Tower (1938-?)**
- **John Harbison (1938-?)**

Art Rock Influence

- **Rhys Chatham (1952-?)**
- **Scott Johnson (1952-?)**
- **Steven Mackey (1956-?)**

Atonality and Twelve –Tone Technique

- **Arnold Schoenberg (1874-1951)**

- **Alexander Scriabin (1871-1915)**
- **Anton Webern (1883-1945)**
- **Alban Berg (1885-1935)**

Contemporary Classical Music

- **Harrison Birtwistle (1934-?)**
- **Judith Weir (1954-?)**
- **George Benjamin (1960-?)**
- **Osvaldo Golijov (1960-?)**
- **Michale Torke (1961-?)**
- **Mark Adamo (1962-?)**
- **Thomas Ades (1971-?)**

Dada or Dadaism

Electroacoustical Music

- **IRCAM**

Electric Music

- **Edgar Varese (1883-1965)**
- **Iannis Xenakis (1922-2001)**
- **Pierre Boulez (1925-2016)**
- **Luciano Berio (1925-2003)**
- **Karlheinz Stockhausen (1928-2007)**
- **Kaija Saariaho (1952-?)**
- **Magnus Lindberg (1958-?)**

Experimentalism

Expressionism

Folk Influenced Classical Music

- **Marie-Joseph Canteloube (1879-1957)**

Futurism

Historicism

- **Max Reger (1873-1916)**
- **Fritz Kreisler (1875-1962)**
- **Henk Bouman (1951-?)**

Impressionism

- **Paul Dukas (1865-1935)**
- **Mauruce Ravel (1875-1937)**

Indetermanism

- **John Cage (1912-1992)**
- **Pierre Boulez (1925-2016)**
- **Morton Feldman (1926-1987)**

Jazz-Influenced Classical Composition

Late/Post Romantic Style

- **Franisco Tarrega (1852-1909)**
- **Isaac Albeniz (1860-1909)**
- **Enrique Granados (1867-1916)**
- **Manuel De Falla (1876-1946)**
- **Joaquin Rodrigo (1901-1999)**

Les Six

- **Eric Satie (1866-1925)**
- **Arthur Honnegger (1892-1955)**
- **Darius Milhaud (1892-1963)**
- **Francis Poulenc (1899-1963)**

Micropolyphony (Polypolyphony)

- **Gyorgy Ligeti (1923-2006)**

Microtonal Music

- **Ferruccio Busoni (1866-1924)**

Minimalism

- **La Monte Young (1935-?)**
- **Terry Riley (1935-?)**
- **Stephen Reich (1936-?)**
- **Philip Glass (1937-?)**
- **Michael Nyman (1944-?)**

Post-Minimalism

- **William Duckworth (1943-2012)**
- **John Adams (1947-?)**

Movies

- **John Williams (1932-?)**

- **Tan Dun (1947-?)**

Musique Concrete

- **Pierre Schaeffer (1910-1995)**

Neoclassisism

- **Ottorino Resphghi (1879-1936)**
- **Carl Orff (1895-1982)**

Neoromanticism

- **Michape Tippett (1905-1998)**
- **John Corigliano (1938-?)**
- **Christopher Rouse (1949-?)**
- **Daniel Catan (1949-2011)**

Neoclassisicm Devotional Music

- **Henryk Gorecki (1933-2010)**
- **Arvo Part (1935-?)**
- **John Tavener (1944-2013)**

New-Age

- **Steven Halpern (1949-?)**
- **Andreas Vollenbeider (1953-?)**

New Complexity

- **Brian Fernyhough (1943-?)**
- **James Dillon (1950-?)**

New Objectivity

- **Paul Hindemith (1895-1963)**

New Simplicity

- **Karlheinz Stockhausen (1928-2007)**
- **Wolfgang Rihm (1952-?)**

Polystylism/Eclecticism

- **Hans Henze (1926-2012)**
- **Alfred Schnittke (1934-1998)**
- **Frank Zappa (1940-1993)**

Primitivism

Process Music

Serialism

- **Oliver Messiaen (1908-1992)**
- **Darnstadt School**
- **Bruno Moderna (1920-1973)**
- **Luigi Nono (1924-1990)**
- **Pierre Boulez (1925-2016)**
- **Karlheinz Stockhausen (1928-2007)**

Socialist Realism

Spectral Music

- **Gérard Grisey (1946-1998)**
- **Tristan Murail (1947-?)**

Tape Loop

Totalism

- **Mikel Rouse (1957-?)**

Total Serialism

- **Milton Babbitt (1916-2011)**

"World Music" influence

- **Toru Takemitsu (1030-1996)**

- **Alt-Classical**

  Young classically trained musicians are increasingly exploring additional ways to express themselves. Historically, young conservatory musicians aspired to play as soloists with major orchestras. Today, many of them are forming bands instead. The ensembles of the new alt-classical world are poised somewhere between traditional classical music and contemporary culture. It's hard to define exactly what kind of music they play. "It always seems to be so many adjectives," says Gina Biver, founder of the Fuse Ensemble. "You just say contemporary art music or modern art music; that's close. We have scores written out. All our musicians are classically trained. We have cellos and contrabass, but I also play electric guitar."

  The style has been likened to post-minimalists and 'totalists' as employing stylistic aesthetics which combined with their populist, accessible fixations to the movement as a presentational idea. The musicians attended conservatories and went through the same rigorous training as their predecessors, but they have not inherited their teachers' battles. For them Serialism and Minimalism are equally useful tools in a gestural language that draws on rock, jazz, hip-hop, world music and every reconfiguration of classical language from medieval times through Romanticism. And though there was a time when classical-music students played little but classical music, these musicians have played it all. Today you can hardly find a composer under 40 who did not play in rock bands as a teenager. Some still do, but now they include orchestral instruments and computers alongside electric guitars and basses, drums and electronic keyboards. In all this music the timbres, the textures and, often, the energy are those of rock, but the structures, substance and time scales are rooted in classical music. Electric guitars may simmer or wail, and drums may pound, but this is not the stuff of pop hits. When you listen to the Now Ensemble or the amplified, heavily processed string quartet Ethel or groups led by the composers Missy Mazzoli, Du Yun, Judd Greenstein, Caleb Burhans or Bryce Dessner, you inevitably wonder whether you're hearing a rock band or a chamber group, and whether it matters. A polished composer like Jefferson Friedman can have it both ways. Having poured his stylistically wide-ranging thoughts into his string quartets, he happily allowed the electronica group Matmos to remix them, adding beats and other sounds, and cutting and pasting musical lines. Several of these composers have the D.J.-remix-mash-up culture of post-1980s pop in their blood.

  What's certain is that, following in the footsteps of groups like the Kronos Quartet and the Bang on a Can All-Stars, these ensembles perform any and all music, from Steve Reich to Radiohead, Javanese gamelan to the Renaissance composer Josquin, in instrumentations that might include anything from violin to (in the case of Washington's Great Noise Ensemble) amplified Coke cans. And unlike traditional classical groups, you can't even tell what they are by their names. Instead of the Juilliard Quartet or the St. Paul Chamber Orchestra, we have Alarm Will Sound, eighth blackbird, itsnotyouitsme.

  This isn't some lunatic fringe of experimentalism. The spirit of these groups is permeating, and invigorating, the whole classical music world. Armando Bayolo, who founded the Great Noise Ensemble through a Craigslist announcement, says: "I really feel groups like Alarm Will Sound and eighth blackbird represent the future of classical music."

There are two main aspects of the alt-classical idea:

1) Represents an attempt to break down the traditional concert format, which can seem stiff and off-putting to the younger crowd whom all musicians these days would like to attract. The New York performance space Le Poisson Rouge, a club-style venue that features contemporary and classical music acts, is drawing attention nationwide. Nick Kendall, a 31-year-old violinist/bluegrass-jazz-uncategorizable for the Time for Three (classically trained string trio) said: "The crowd is so mixed, all the young people, the vibe in there" - "If I could sustain a living playing in those kinds of places, I would do it all the time."

2) They are increasingly featured on mainstream, traditional concert series and orchestra programs. The Library of Congress series, committed to new music since its inception, has presented Alarm Will Sound and the Absolute Ensemble, both "bigger groups that are at home in so many worlds," says Ann McLean, one of the library's three senior producers for concerts and special projects. Young musicians today, she says, "go back and forth with more ease than you would have heard five years ago."

This season, the library is offering a particular concentration of edgier groups, such as Brooklyn Rider and the Jack Quartet, both string quartets with a band like mentality and a funky/contemporary vibe.

This world is centered in New York, though it has counterparts elsewhere (Reykjavik, Iceland, seems unusually influential at the moment). The school of young New York composers uses pop influences, timbres and instruments even more explicitly. Others have included a collection of primarily hyper-tonal Scandinavians, whose work – while often solely utilizing 'classical' instruments – surely falls much closer to post-rock than to anything even produced by New York totalists.

In New York, the venues include Le Poisson Rouge and the Cornelia Street Café in Greenwich Village and Galapagos in Brooklyn. These are like jazz clubs: you can nurse a drink while listening to a performance, but the atmosphere is quiet and focused. However, it would be wrong to suggest that the young composers who have created this burgeoning alternative world have no interest in the big institutions. Nor do they disdain the standard repertory. Most would love to have their works performed by major orchestras, and some get lucky: Anna Clyne and Mason Bates were appointed composers in residence at the Chicago Symphony; Nico Muhly will have a work performed at the Metropolitan Opera. They have other models too.

An eclectic selection of some recent CDs representing different facets of the "alt-classical" sound:

- Alarm Will Sound: "a/rhythmia" - This powerhouse chamber ensemble has created a kind of dance album with arrangements of music – by Ligeti and Nancarrow, Gordon and Josquin, and many others – that has as its common thread a strong rhythmic profile.

- Christopher O'Riley: "Out of My Hands" - After CDs focused mainly on Radiohead, Elliott Smith, and Nick Drake, O'Riley here offers his brand of classical-piano cover treatment to songs by Nirvana, Pink Floyd, Tori Amos, and others.
- Time for Three: "3 Fervent Travellers" - Includes a lot of the original music, as well as Leonard Cohen's Hallelujah and, of course, the Orange Blossom Special.
- Heritage Orchestra/DJ Yoda: Gabriel Prokofiev's Concerto for Turntables and Orchestra - Sergei Prokofiev's grandson is a prominent figure in London's alt-classical. His classical-meets-hip-hop concerto (sounding not quite like either) is composed in conventional movements with unconventional sounds: the soloist, a DJ, spins specially-made recordings of the orchestra.

Two of several indie labels that play a role in this genre are:

- Cantaloupe Records: Bang on a Can's recording label offers a de facto definition of the alt-classical concept: Alarm Will Sound, So Percussion, the Bang on a Can All-Stars. Recent releases include John the Revelator, composer Phil Kline's powerful response to the texts of the Catholic Mass; and Untitled, the latest from composer David Lang.
- New Amsterdam Records: This start-up label is showcasing the younger generation of alt-classical artists and composers, including the violist Nadia Sirota and the NOW Ensemble.

- **Ambient**

  Ambient music is a genre of music that puts an emphasis on tone and atmosphere over traditional musical structure or rhythm. Ambient music is said to evoke an "atmospheric," "visual" or "unobtrusive" quality. According to one of its pioneers Brian Eno: "Ambient music must be able to accommodate many levels of listening attention without enforcing one in particular; it must be as ignorable as it is interesting." As a genre it originated in the United Kingdom at a time when new sound-making devices such as the synthesizer, were being introduced to a wider market.

  Ambient developed in the 1970s from the experimental and synthesizer-oriented styles of the period. Ambient had a revival towards the late 1980s with the prominence of house and techno music. Eventually, ambient grew a cult following in the 1990s. Genre offshoots include dark ambient, ambient house, ambient industrial, ambient dub, psybient and ambient trance. As a genre, ambient music usually focuses on creating a mood or atmosphere through synthesizers and timbral qualities. It often lacks the presence of any net composition, beat, or structured melody. Ambient did not achieve large commercial success, being criticized as having a "boring" and "over-intellectual" sound. Nevertheless, it has also attained a certain degree of acclaim throughout the years.

  As an early 20th-century, French composer Erik Satie used Dadaist-inspired explorations to create an early form of ambient / background music that he labeled "furniture music" (*Musique d'ameublement*). This he described as being the sort of music that could be played during a dinner to create a background atmosphere for that activity, rather than serving as the focus of attention. Brian Eno is generally credited with coining the term "Ambient Music" in the mid-1970s to refer to music that, as he stated, can be either "actively listened to with attention or as easily ignored, depending on the choice of the listener," and that exists on the "cusp between melody and texture."

Eno has acknowledged the influence of Erik Satie and John Cage. In particular, Eno was aware of Cage's use of chance. Eno also acknowledged influences of the drone music of La Monte Young (of whom he said, "La Monte Young is the daddy of us all") and of the mood music of Miles Davis and Teo Macero, especially their 1974 epic piece, "He Loved Him Madly" (from *Get Up with It*).

Beyond the major influence of Brian Eno, other musicians and bands added to the growing nucleus of music that evolved around the development of "Ambient Music." While not an exhaustive list, one cannot ignore the parallel influences of Wendy Carlos, who produced the original music piece called "Timesteps" which was then used as the filmscore to *A Clockwork Orange*, as well as her later work *Sonic Seasonings*. Other significant artists such as Mike Oldfield, Jean Michel Jarre and Vangelis, also Russian electronic music pioneer Mikhail Chekalin, have all added to or directly influenced the evolution of ambient music. Adding to these individual artists, works by groups such as Pink Floyd, through their album *Endless River*.

Space music, also spelled spacemusic, includes music from the ambient genre as well as a broad range of other genres with certain characteristics in common to create the experience of contemplative spaciousness. Many of the earliest performers were associated with the Berlin School of electronic music, which continues to inspire the genre. Space music ranges from simple to complex sonic textures sometimes lacking conventional melodic, rhythmic, or vocal components, generally evoking a sense of "continuum of spatial imagery and emotion," beneficial introspection, deep listening and sensations of floating, cruising or flying. Space music is used by individuals for both background enhancement and foreground listening, often with headphones, to stimulate relaxation, contemplation, inspiration and generally peaceful expansive moods and soundscapes. Space music is also a component of many film soundtracks and is commonly used in planetariums, as a relaxation aid and for meditation.

Brian Eno (born 15 May 1948), professionally known as **Brian Eno** or simply **Eno**, is an English musician, composer, record producer, singer, and visual artist, known as one of the principal innovators of ambient music. He joined the band Roxy Music as synthesiser player in the early 1970s, initially not appearing on stage with them at live shows, but operating the mixing desk, processing the band's sound with a VCS3 synthesiser and tape recorders, and singing backing vocals. He then progressed to appearing on stage as a performing member of the group, usually flamboyantly costumed. Roxy Music's success in the glam rock scene came quickly, but Eno soon became tired of touring and of conflicts with lead singer Bryan Ferry. Eno's solo music has explored more experimental musical styles and ambient music. It has also been immensely influential, pioneering ambient and generative music, innovating production techniques and emphasising "theory over practice." He also introduced the concept of chance music to popular audiences, partially through collaborations with other musicians.

- **American Classical Sound**
  Charles Ives (October 20, 1874 – May 19, 1954) was an American modernist composer. He is one of the first American composers of international renown, though his music was largely ignored during his life, and many of his works went unperformed for many years. Over time, he came to be

regarded as an "American original." Ives combined the American popular and church-music traditions of his youth with European art music and was among the first composers to engage in a systematic program of experimental music, with musical techniques including polytonality, polyrhythm, tone clusters, aleatoric elements, and quarter tones, foreshadowing many musical innovations of the 20th century. Sources of Ives' tonal imagery are hymn tunes and traditional songs, the town band at holiday parade, the fiddlers at Saturday night dances, patriotic songs, sentimental parlor ballads, and the melodies of Stephen Foster.

Ives was born in Danbury, Connecticut, the son of George Ives, a U.S. Army bandleader in the American Civil War, and his wife Mary Parmelee. A strong influence of Charles's may have been sitting in the Danbury town square, listening to his father's marching band and other bands on other sides of the square simultaneously. George Ives' unique music lessons were also a strong influence on Charles; George Ives took an open-minded approach to musical theory, encouraging his son to experiment in bitonal and polytonal harmonizations. It was from his father that Ives also learned the music of Stephen Foster. Ives became a church organist at the age of 14 and wrote various hymns and songs for church services, including his *Variations on 'America,'* which Ives wrote for a Fourth of July concert in Brewster, New York. The work is considered challenging even by modern concert organists. Ives moved to New Haven in 1893, enrolling in the Hopkins School, where he captained the baseball team. In September 1894, Ives entered Yale University, studying under Horatio Parker.

Soon after Ives graduated from Yale, he started work in the actuarial department of the Mutual Life Insurance company of New York. In 1899, he moved to the insurance agency Charles H. Raymond & Co., where he stayed until 1906. In 1907, upon the failure of Raymond & Co., he and his friend Julian Myrick formed their own insurance agency Ives & Co., which later became Ives & Myrick, where he remained until he retired. During his career as an insurance executive and actuary, Ives devised creative ways to structure life-insurance packages for people of means, which laid the foundation of the modern practice of estate planning.

In 1906, Ives composed the first radical musical work of the twentieth century, *Central Park in the Dark*. Ives composed two symphonies — *The Unanswered Question* (1908), written for the unusual combination of trumpet, four flutes, and string quartet. *The Unanswered Question* was influenced by the New England writers Ralph Waldo Emerson and Henry David Thoreau. Around 1910, Ives began composing his most accomplished works including the *Holiday Symphony* and *Three Places in New England*. The *Piano Sonata No. 2, Concord, Mass.,* known as the "Concord Sonata," was one of his most remarkable pieces. This piece contains one of the most striking examples of Ives' experimentalism. In the second movement, he instructed the pianist to use a 14¾ in (37.5 cm) piece of wood to create a massive cluster chord. The piece was a typical Ives as it juxtaposed various elements and it was very mysterious. Another remarkable piece of orchestral music Ives completed was his *Fourth symphony*. This symphony is notable for its complexity and over sized orchestra.

Ives's musical experiments, including his increasing use of dissonance, were not well received by his contemporaries. Furthermore, the difficulties in performing the rhythmic complexities in his

major orchestral works made them daunting challenges even decades after they were composed. Early supporters of his music included Henry Cowell, Elliott Carter and Aaron Copland. Another pioneering Ives recording, undertaken during the 1950s, was the first complete set of the four violin sonatas, performed by Cleveland Orchestra.

Charles "Carl" Ruggles (March 11, 1876 – October 24, 1971) was an American composer of the "American Five" group. He wrote finely crafted pieces using "dissonant counterpoint", a term coined by Charles Seeger to describe Ruggles' music. His method of atonal counterpoint was based on a non-serial technique of avoiding repeating a pitch class until a generally fixed number such as eight pitch classes intervened. He wrote painstakingly slowly so his output is quite small. Famous for his prickly personality, Ruggles was nonetheless friends with Henry Cowell, Edgard Varèse, Charles Ives, Ruth Crawford Seeger and Charles Seeger. Conductor Michael Tilson Thomas has championed Ruggles' music, recording the complete works with the Buffalo Philharmonic and occasionally performing *Sun-Treader* with the San Francisco Symphony. Especially later in life, Ruggles was also a prolific painter, selling hundreds of paintings during his lifetime.

Ruggles was born in Marion, Massachusetts on March 11, 1876. His mother died at an early age and he was raised mainly by his grandmother. Ruggles' father, Nathaniel, was rumored to have a gambling problem and lost most of the family's inherited wealth. Ruggles was never very close to his father and did not see him from the age of 29 onwards. He modified his given name *Charles* to the more Teutonic *Carl* at an early age, partially due to his great admiration for German composers, especially Richard Wagner and Richard Strauss. He began taking violin lessons at the age of four with a local itinerant music teacher.

Eventually Ruggles had to work to support himself as his family's financial situation worsened. He worked a number of odd jobs and started to teach violin and music theory privately, though teaching did not provide much income or success. In 1902 he started writing music criticism for the *Belmont Tribune* and the *Watertown Tribune*. This continued until July 1903. Ruggles' reviews are characteristically brash. He did not hesitate to express his opinion, laudatory or not.

In 1906, he met Charlotte Snell, a contralto, and he began a search for steady employment so he and Charlotte could marry. This led him to Winona, Minnesota, to work for the Mar D'Mar School of Music as a violin teacher. He became active as a soloist as well, eventually directing the Winona Symphony Orchestra. Ruggles continued to direct the symphony after the music school closed. In 1912 Ruggles moved to New York and began writing an opera based on the German play *The Sunken Bell* by Gerhart Hauptmann. Due to both his sluggish composing pace and anti-German sentiment as a result of World War I, he never finished the opera, though he submitted a version to the Metropolitan Opera. He destroyed what he had written after he decided he lacked the instinct required for the stage. Ruggles continued to compose, supplementing his income by giving composition lessons. For his son's fourth birthday in 1919 he wrote *Toys* for soprano and piano, his first composition in his atonal, contrapuntal style. He continued to live and compose in New York until 1938, when he began teaching composition at the University of Miami, where he remained until 1943. He then moved to a converted one-room school in Vermont where he spent

his time revising compositions and painting. He also painted hundreds of paintings over the course of his lifetime and he was offered the opportunity to have one-man shows.

According to Donal Henahan, Ruggles "spoke with an earthiness that shocked many people." He smoked cigars and told dirty stories. He attacked his fellow composers, sneering at almost everyone but Ives. Known for his profanity, Ruggles was also anti-semitic. For example, he wrote to Henry Cowell about, "that filthy bunch of Juilliard Jews ... cheap, without dignity, and with little or no talent," especially targeting Arthur Berger. His friend Lou Harrison dissociated himself from Ruggles after the 1949 performance of *Angels* because of the older composer's racism, noting specifically a luncheon at Pennsylvania Station in New York at which Ruggles shouted anti-black and anti-semitic slurs. Ruggles died in Bennington, Vermont, on October 24, 1971, after a long illness.

Ruggles' compositional style was "trial and error. He sat at the piano and moved his fingers around, listened hard to the sounds... shouting out some of the lines." According to Ruggles himself, he never learned any music theory and never analyzed other composers' pieces. The majority of his early works (before *Toys*) were destroyed, leaving their compositional style a matter of speculation. Reviews suggest similarities to late 19th century Romanticism.

His dissonant, contrapuntal style was similar to Arnold Schoenberg's, although he did not employ the same twelve tone system. He used a method similar to, and perhaps influenced by, Charles Seeger's dissonant counterpoint and generally avoided repeating a pitch class within 8 notes. He only completed ten pieces due to his lengthy process of composition and revision.

Sun-Treader, his best known work, was scored for a large orchestra. It was inspired by the poem "Pauline" by Robert Browning, particularly the line "Sun-treader, light and life be thine forever!" The most common intervals in the piece are minor seconds, perfect fourths and augmented fourths. One group of intervals he uses are fourths in sequence where the respective notes are either 13 or 11 semitones apart; the other is three notes which are chromatically related, though often separated by an octave. Another distinctive feature of *Sun-Treader* is the presence of "waves," both in dynamics and pitch. Pitches will start low, then rise up to a climax, then descend again. Within the ascent (and descent) there are small descents (and ascents) leading to a self-similar (fractal) overall structure. *Sun-Treader* premiered in Paris on February 25, 1932. Jean Martinon conducted the Boston Symphony Orchestra in its U.S. premiere in Portland, Maine, on January 24, 1966, as part of a Bowdoin College tribute marking Ruggles' 90th birthday.

Nadia Boulanger (16 September 1887 – 22 October 1979) was a French composer, conductor and teacher who taught many of the leading composers and musicians of the 20th century. She also performed as a pianist and organist. From a musical family, she achieved early honours as a student at the Paris Conservatoire but, believing that she had no particular talent as a composer, she gave up writing music and became a teacher. In that capacity, she influenced generations of young composers, especially those from the United States and other English-speaking countries. Among her students were those who became leading composers, soloists, arrangers and conductors, including: Aaron Copland, Quincy Jones, John Eliot Gardiner, Elliott Carter, Dinu Lipatti,

Igor Markevitch, Virgil Thomson, David Diamond, Daniel Barenboim, Philip Glass and Ástor Piazzolla.

Boulanger taught in the US and England, working with music academies including the Juilliard School, the Yehudi Menuhin School, the Longy School, the Royal College of Music and the Royal Academy of Music, but her principal base for most of her life was her family's flat in Paris, where she taught for most of the seven decades from the start of her career until her death at the age of 92. Boulanger was the first woman to conduct many major orchestras in America and Europe, including the BBC Symphony, Boston Symphony, Hallé, New York Philharmonic and Philadelphia orchestras. She conducted several world premieres, including works by Copland and Stravinsky.

Walter Piston Jr, (January 20, 1894 – November 12, 1976), was an American composer of classical music, music theorist and professor of music at Harvard University. His students included Leroy Anderson, Leonard Bernstein and Elliott Carter. Piston was recognized in his lifetime as the ultimate musical craftsman, producing a body of orchestral and chamber work distinguished by its quintessential neo-classic qualities of clarity and proportion. Piston was born in Rockland, Maine. In 1905 the composer's father, Walter Piston Sr, moved with his family to Boston, Massachusetts. Walter Jr first trained as an engineer at the Mechanical Arts High School in Boston, but was artistically inclined. After graduating in 1912, he enrolled in the Massachusetts Normal Art School, where he completed a four-year program in fine art in 1916. During the 1910s, Piston made a living playing piano and violin in dance bands and later playing violin in orchestras led by Georges Longy. During World War I, he joined the U.S. Navy as a band musician after rapidly teaching himself to play saxophone. While playing in a service band, he taught himself to play most wind instruments. "They were just lying around," he later observed, "and no one minded if you picked them up and found out what they could do." Piston was admitted to Harvard College in 1920.

On graduating summa cum laude from Harvard, he chose to go to Paris, living there from 1924 to 1926. At the Ecole Nationale de Musique in Paris, he studied composition and counterpoint with Nadia Boulanger, composition with Paul Dukas and violin with George Enescu. A noted educator, Piston taught at Harvard from 1926 to 1960 and wrote three significant music textbooks: *Harmony* (1941), *Counterpoint* (1947), and *Orchestration* (1955). Among Piston's many noted students were Elliott Carter, Leonard Bernstein and Arthur Berger.

Virgil Thomson (November 25, 1896 – September 30, 1989) was an American composer and critic. He was instrumental in the development of the "American Sound" in classical music. He has been described as a modernist, a neoclassicist, a composer of "an Olympian blend of humanity and detachment" whose "expressive voice was always carefully muted" until his late opera *Lord Byron* which, in contrast to all his previous work, exhibited an emotional content that rises to "moments of real passion," and a neoromantic. Thomson was born in Kansas City, Missouri. He displayed an extraordinary intelligence at an early age. As a child, he befriended Alice Smith, great-granddaughter of Joseph Smith, founder of the Mormon faith. After World War I, he entered Harvard University thanks to a loan from Dr. Fred M. Smith, the president of the Reorganized Church of Jesus Christ of Latter Day Saints and father of Alice Smith. At Harvard, Thomson focused his studies on the piano work of Erik Satie. He studied in Paris on fellowship for a year, and after

graduating, lived in Paris from 1925 to 1940. In Paris he forged relationships with such prominent cultural figures as James Joyce, Ernest Hemingway, E. E. Cummings, Aaron Copland, Ezra Pound, Igor Stravinsky, Pablo Picasso, Orson Welles, Jean Cocteau and Gertrude Stein. He eventually studied with Nadia Boulanger and became a fixture of "Paris in the twenties." His most important friend from this period was Gertrude Stein, who was an artistic collaborator and mentor to him.

Following the publication of his book *The State of Music*, he established himself in New York City as a peer of Aaron Copland and was also a music critic for the *New York Herald-Tribune* from 1940 through 1954. His writings on music and, his reviews of performances in particular, are noted for wit and independent judgments.

In the 1930s, he worked as a theater and film composer. His most famous works for theater are two operas with libretti by Gertrude Stein, *Four Saints in Three Acts*, especially famous for its use of an all-black cast, and *The Mother of Us All*, as well as incidental music for Orson Welles' Depression-era production of *Macbeth*, set in the Caribbean, known as *Voodoo Macbeth*. In addition, Thomson was famous for his revival of the rare technique of composing "musical portraits" of living subjects, often spending hours in a room with them before rushing off to compose his impression in music. Many subjects reported feeling that the pieces did capture something unique about their identities even though nearly all of the portraits were absent of any clearly representational content.

Later in life, Thomson became a sort of mentor and father figure to a new generation of American tonal composers such as: Ned Rorem, Paul Bowles and Leonard Bernstein, a circle united as much by their shared homosexuality as by their similar compositional sensibilities. Women composers were not part of that circle, and some have suggested that, as a critic, he pointedly ignored their works, or adopted a patronizing tone.

Roger Sessions (December 28, 1896 – March 16, 1985) was an American composer, critic and teacher of music. He was one of America's musical icons with an incalculable influence on the compositional landscape of the twentieth century. A composer of rare accomplishment, deeply passionate, he attained a level of craftsmanship which nearly 75 years of work honed into profound knowledge and skill. In addition, the accomplishments of his numerous students, including such luminaries as Milton Babbitt and David Diamond, mark Sessions as a teacher of no common stature.

Born in Brooklyn, Sessions was an early bloomer. By the age of 14, he had already composed a complete opera, and entered Harvard University, where he studied music. Following graduation from Harvard in 1914, Sessions enrolled for further studies at Yale with Horatio Parker (who also counted Charles Ives among his pupils). Accepting a position at Smith College in Massachusetts, Sessions worked privately with Ernest Bloch in New York and, when Bloch was invited to become director of the newly formed Cleveland Institute of Music, Sessions went along as his assistant, remaining there until 1925.

From 1925 to 1933 Sessions lived and worked in Europe, first in Florence, then later in Rome and Berlin. During these years the musical establishment began to take notice and Sessions scored a marked success with his *Suite from the Black Maskers* in 1928, while his *First Symphony* had been

performed to lukewarm response in Boston the previous season. Sessions' earliest music had been written in a lush, chromatic style. By the time of the *Black Maskers*, however, he had begun to favor a leaner, rather neo-Classical language.

Following his return to the States in 1933 Sessions accepted teaching positions at a number of American institutions including Boston University 1933-1935, Princeton 1935-1945, Berkeley 1945-1951, Princeton again from 1953-1965 and Juilliard from 1967 on. Beginning with the important *Violin Concerto* of 1935, Sessions' music became increasingly complex. During the 1950s he adopted serial compositional techniques, though he used them with great flexibility, always suiting the techniques to match his own highly unique compositional voice -- see, for instance, the remarkable *Third Symphony* of 1957.

Henry Cowell (March 11, 1897 – December 10, 1965) was an American composer, music theorist, pianist, teacher, publisher and impresario. His contribution to the world of music was summed up by Virgil Thomson, writing in the early 1950s:

> Henry Cowell's music covers a wider range in both expression and technique than that of any other living composer. His experiments begun three decades ago in rhythm, in harmony, and in instrumental sonorities were considered then by many to be wild. Today they are the Bible of the young and still, to the conservatives, "advanced."... No other composer of our time has produced a body of work so radical and so normal, so penetrating and so comprehensive. Add to this massive production his long and influential career as a pedagogue and Henry Cowell's achievement becomes impressive indeed. There is no other quite like it. To be both fecund and right is given to few.

Born in rural Menlo Park, California, to two bohemian writers—his father was an Irish immigrant and his mother, a former schoolteacher, had relocated from Iowa—Cowell demonstrated precocious musical talent and began playing the violin at the age of five. While receiving no formal musical education (and little schooling of any kind beyond his mother's home tutelage), he began to compose in his mid-teens. By the summer of 1914, Cowell was writing truly individualistic works, including the insistently repetitive *Anger Dance* (originally *Mad Dance*). That fall, the largely self-taught Cowell was admitted to the University of California, Berkeley, as a protégé of Charles Seeger. After two years at Berkeley, Cowell pursued further studies in New York where he encountered Leo Ornstein, the radically "futurist" composer-pianist. Still a teenager, Cowell wrote the piano piece *Dynamic Motion* (1916), his first important work to explore the possibilities of the tone cluster. It requires the performer to use both forearms to play massive secundal chords and calls for keys to be held down without sounding to extend and intensify its dissonant cluster overtones. Beginning in the early 1920s, Cowell toured widely in North America and Europe as a pianist, playing his own experimental works, seminal explorations of atonality, polytonality, polyrhythms, and non-Western modes. Cowell later made such an impression with his tone cluster technique that Béla Bartók requested his permission to adopt it. Another novel method advanced by Cowell, in pieces such as *Aeolian Harp* (ca. 1923), was what he dubbed "string piano"—rather than using the keys to play, the pianist reaches inside the instrument and plucks, sweeps, and otherwise manipulates the strings directly. Cowell's endeavors with string piano techniques were

the primary inspiration for John Cage's development of the prepared piano. In early chamber music pieces, such as *Quartet Romantic* (1915–17) and *Quartet Euphometric* (1916–19), Cowell pioneered a compositional approach he called "rhythm-harmony": "Both quartets are polyphonic, and each melodic strand has its own rhythm," he explained. "Even the canon in the first movement of the *Romantic* has different note-lengths for each voice."

In 1919, Cowell had begun writing *New Musical Resources*, which would finally be published after extensive revision in 1930. Focusing on the variety of innovative rhythmic and harmonic concepts he used in his compositions (and others that were still entirely speculative), it would have a powerful effect on the American musical avant-garde for decades after.

Cowell pursued a radical compositional approach through the mid-1930s, with solo piano pieces remaining at the heart of his output—important works from this era include *The Banshee* (1925), requiring numerous playing methods such as pizzicato and longitudinal sweeping and scraping of the strings and the manic, cluster-filled *Tiger* (1930). Much of Cowell's public reputation continued to be based on his trademark pianistic technique: a critic for the *San Francisco News*, writing in 1932, referred to Cowell's "famous 'tone clusters,' probably the most startling and original contribution any American has yet contributed to the field of music." A prolific composer of songs (he would write over 180 during his career), Cowell returned in 1930–31 to *Aeolian Harp*, adapting it as the accompaniment to a vocal setting of a poem by his father, *How Old Is Song?* He built on his substantial oeuvre of chamber music, with pieces such as the *Adagio for Cello* and *Thunder Stick* (1924) that explored unusual instrumentation and others that were even more progressive: *Six Casual Developments* (1933), for clarinet and piano, sounds like something Jimmy Giuffre would compose thirty years later. His *Ostinato Pianissimo* (1934) placed him in the vanguard of those writing original scores for percussion ensemble. He created forceful large-ensemble pieces during this period as well, such as the *Concerto for Piano and Orchestra* (1928)—with its three movements, "Polyharmony," "Tone Cluster," and "Counter Rhythm"—and the *Sinfonietta* (1928), whose scherzo Anton Webern conducted in Vienna. In the early 1930s, Cowell began to delve seriously into aleatoric procedures, creating opportunities for performers to determine primary elements of a score's realization. One of his major chamber pieces, the *Mosaic Quartet* (String Quartet No. 3) (1935), is scored as a collection of five movements with no preordained sequence.

Cowell was the central figure in a circle of avant-garde composers that included his good friends Carl Ruggles and Dane Rudhyar, as well as Leo Ornstein, John Becker, Colin McPhee, French expatriate Edgard Varèse and Ruth Crawford. Cowell and his circle were sometimes referred to as "ultra-modernists," a label whose definition is flexible and origin unclear (it has also been applied to a few composers outside the immediate circle, such as George Antheil, and to some of its disciples, such as Nancarrow). In 1925, Cowell organized the New Music Society, one of whose primary activities was the staging of concerts of their works along with those of artistic allies such as Wallingford Riegger and Arnold Schoenberg, who would later ask Cowell to play for his composition class during one of his European tours. In 1927 Cowell founded the periodical *New Music*, which would publish many significant new scores under his editorship, both by the ultra-

modernists and many others, including Ernst Bacon, Otto Luening, Paul Bowles, and Aaron Copland.

During this era, Cowell also spread the ultra-modernists' experimental creed as a highly regarded teacher of composition and theory—among his many students were George Gershwin, Lou Harrison, who said he thought of Cowell as "the mentor of mentors," and John Cage, who proclaimed Cowell "the open sesame for new music in America."

Cowell, who did not consider himself to be homosexual, was arrested and convicted in 1936 on a "morals" charge involving a 17-year old male. Sentenced to a decade-and-a-half incarceration, he would spend the next four years in San Quentin State Prison. There he taught fellow inmates, directed the prison band and continued to write music at his customary prolific pace, producing around sixty compositions, including two major pieces for percussion ensemble: the Oriental-toned *Pulse* (1939) and the memorably sepulchral *Return* (1939). He also continued his experiments in aleatory music: for all three movements of the *Amerind Suite* (1939), he wrote five versions, each more difficult than the last. Interpreters of the piece are invited to simultaneously perform two or even three versions of the same movement on multiple pianos. In the Ritournelle (Larghetto and Trio) (1939) for the dance piece *Marriage at the Eiffel Tower*, performing in Seattle, he explored what he called "elastic" form. Cowell had contributed to the *Eiffel Tower* project at the behest of Cage, who was not alone in lending support to his friend and former teacher. Cowell's cause had been taken up by composers and musicians around the country, although a few, including Ives, broke contact with him. Cowell was eventually paroled in 1940; he relocated to the East Coast and the following year married Sidney Hawkins Robertson (1903–1995, married name Sidney Robertson Cowell), a prominent folk-music scholar who had been instrumental in winning his freedom. Cowell was granted a pardon in 1942. Despite the pardon—which allowed him to work at the Office of War Information, creating radio programs for broadcast overseas—arrest, incarceration, and attendant notoriety had a devastating effect on Cowell. Conlon Nancarrow, on meeting him for the first time in 1947, reported, "The impression I got was that he was a terrified person, with a feeling that 'they're going to get him.'" The experience took a lasting toll on his music: Cowell's compositional output became strikingly more conservative soon after his release from San Quentin, with simpler rhythms and a more traditional harmonic language. Many of his later works are based on American folk music, such as the series of eighteen *Hymn and Fuguing Tune*s (1943–64); folk music had certainly played a role in a number of Cowell's prewar compositions, but the provocative transformations that had been his signature were now largely abandoned. And, as Nancarrow observed, there were other consequences to Cowell's imprisonment: "Of course, after that, politically, he kept his mouth completely shut. He had been radical politically, too, before."

No longer an artistic radical, Cowell nonetheless retained a progressive bent and continued to be a leader in the incorporation of non-Western musical idioms, as in the Japanese-inflected *Ongaku* (1957), *Symphony No. 13*, "*Madras*" (1956–58) (which had its premiere in the eponymous city), and *Homage to Iran* (1959). His most compelling, poignant songs date from this era, including *Music I Heard* (to a poem by Conrad Aiken; 1961) and *Firelight and Lamp* (to a poem by Gene Baro; 1962).

Despite the break in his friendship with Ives, Cowell, in collaboration with his wife, wrote the first major study of Ives's music and provided crucial support to Lou Harrison as his former pupil championed the Ives rediscovery. Cowell resumed teaching—Burt Bacharach, J. H. Kwabena Nketia, and Irwin Swack were among his postwar students. Perhaps liberated by the passage of time and his own seniority, in his final years Cowell again produced a number of impressively individualistic works, such as *Thesis* (Symphony No. 15; 1960) and *26 Simultaneous Mosaics* (1963).

Elliott Carter, Jr. (December 11, 1908 – November 5, 2012) was an American composer who was twice awarded the Pulitzer Prize. His compositions are known and performed throughout the world; they include orchestral, chamber music, solo instrumental and vocal works. He was extremely productive in his later years, publishing more than 40 works between the ages of 90 and 100, and over 20 more after he turned 100 in 2008. He completed his last work, *Epigrams* for piano trio, on August 13, 2012. Carter Jr. was born in Manhattan, the son of a wealthy lace importer. As a teenager, he developed an interest in music, and received encouragement in this regard from Charles Ives (who sold insurance to Carter's family). While he was a student at the Horace Mann School, he wrote an admiring letter to Ives, who responded and urged him to pursue his interest in music. In 1924, a 15-year-old Carter was in the audience when the Boston Symphony Orchestra (BSO) in the New York première of *The Rite of Spring*. When Carter attended Harvard, starting in 1927, Ives took him under his wing and made sure he went to the BSO concerts conducted by Serge Koussevitzky, who programmed contemporary works frequently. Although Carter majored in English at Harvard College, he also studied music there and at the nearby Longy School of Music. His professors at Harvard included Walter Piston and Gustav Holst. He did graduate work in music at Harvard, from which he received a master's degree in music in 1932. He then went to Paris to study with Nadia Boulanger. Carter worked with Boulanger from 1932 to 1935 and, in that year, received a doctorate in music (Mus.D.).

Carter's earlier works are influenced by Stravinsky, Harris, Copland and Hindemith and are mainly neoclassical in aesthetic. He had a strict training in counterpoint, from medieval polyphony to Stravinsky and this shows in his earliest music, such as the ballet *Pocahontas* (1938–39). Some of his music during the Second World War is fairly diatonic and includes a melodic lyricism reminiscent of Samuel Barber. His music after 1950 is typically atonal and rhythmically complex, indicated by the invention of the term metric modulation to describe the frequent, precise tempo changes found in his work. While Carter's chromaticism and tonal vocabulary parallels serial composers of the period, Carter did not employ serial techniques in his music. Rather he independently developed and cataloged all possible collections of pitches (i.e., all possible three-note chords, five-note chords, etc.).

Among his better known works are the *Variations for Orchestra* (1954–5); the *Double Concerto for Harpsichord, Piano and Two Chamber Orchestras* (1959–61); the Piano Concerto (1964–65), written as an 85th birthday present for Igor Stravinsky; the *Concerto for Orchestra* (1969), loosely based on a poem by Saint-John Perse; and the *Symphony of Three Orchestras* (1976). He also composed five string quartets, of which the second and third won the Pulitzer Prize for Music in

1960 and 1973 respectively. *Symphonia: Sum Fluxae Pretium Spei* (1993–1996) is his largest orchestral work, complex in structure and featuring contrasting layers of instrumental textures, from delicate wind solos to crashing brass and percussion outbursts. *Interventions for Piano and Orchestra* received its premiere on December 5, 2008, by the BSO.

If there are any composers who wrote more profoundly joyful, or youthful, music than Elliott Carter, I've yet to discover them. He's the closest any of us will probably ever experience to new music's Haydn. While Carter was born and grew up in the downtown New York, that is not the place where he discovered the musical language that would fuel more than 60 years of phenomenal creativity. It was in the desert of Arizona in 1950-51 that Carter made his breakthrough discoveries in musical time and space. After a year of compositional soul-searching, Carter finished his *First String Quartet*, a 45-minute musical dreamscape, whose structure was suggested, Carter says, by a Jean Cocteau film, Le sang d'un poète. In the quartet, you can hear the key to Carter's later music, from the way the piece melts four main movements into one gigantic superstructure, to how the music moves from one speed to another so seamlessly that you don't notice it happening until you realise you're in a new musical dimension (listen to the opening minutes of the quartet's fourth movement to hear his mastery of the technique known as "metric modulation"). The sounds this quartet makes are thrillingly varied, from torrentially fast music to lyrical intensity and yet the whole thing is made coherent by the use of a new harmonic device that Carter had found (a chord dauntingly called the "all-interval tetrachord"; basically, a collection of four notes – say, C, D flat, E flat and G – that contains the potential to generate every musical interval you can think of, the ultimate composer's toolkit).

Before the *Quartet*, Carter's music was a brilliant, ambitious vision of New Deal neo-classicism, music that was influenced by his studies with Nadia Boulanger in Paris. But Carter's early life in New York (in the 1920s and 30s) had also introduced him to the music of Charles Ives – who championed the younger composer, Alban Berg, George Gershwin and, his biggest single musical influence, Stravinsky's *Rite of Spring*, which, in the 20s, was still sending shock waves.

But nothing any of these composers had written prepared the musical world for Carter's music of the later 50s, 60s, and 70s. He composed in those days painstakingly slowly and he had to, because in pieces such as the *Double Concerto* for harpsichord and piano ("a masterpiece, and by an American composer," Stravinsky somewhat patronisingly said), or the *Concerto for Orchestra*, the *Second and Third String Quartets* or the *Symphony of Three Orchestras*, he explodes the ideas he discovered in his *First Quartet* into mind-bending musical regions. Instead of one stream of musical time and texture, Carter puts several on top of each other. In his *Third Quartet*, the four players are split into two duos who play different music at different speeds simultaneously – which the players, have somehow to co-ordinate. In the *Concerto for Orchestra*, written in 1969, Carter splits the ensemble into four, each associated with a different harmony and a different kind of motion. To listen to this *Concerto for Orchestra* is to experience all of the drama of a seasonal year, a whole cycle of birth, death, and renewal, in a mere 20 minutes. A favorite piece from Carter's heroic period is the 1964-5 *Piano Concerto*, partly because it makes an extraordinarily energetic and sometimes terrifying noise – such as the moment when the orchestra attempts to suffocate the

pianist with a vapour-like veil of sound, but also because it's a piece whose labyrinthine depths of meaning and motion could sustain a lifetime of listening.

Since the 1980s, something has happened to Carter's productivity. He has got faster and more productive. He has been able to harness the discoveries of his earlier music so that he didn't have to start from scratch every time he puts pen to paper. As Daniel Barenboim commented, "Carter's music is always in good humour, you feel its high spirits, the tongue-in-cheek, the recklessness." Each of the pieces he has written in his last 20 years is an explosive highlight, from the miniatures he has composed for his friends, to the concertos he composed for the Boston Symphony and the Asko Ensemble, the works for voice he has increasingly written.

1) *First String Quartet* (1951) – is the work that opened the door to Carter's musical universe. According to Carter:

> Among the lessons taught to me during the composition of my First Quartet was on about my relationship with performers and audiences. For as I wrote, an increasing number of musical difficulties arose for prospective performers and listeners, which the musical conception seemed to demand. I often wondered whether the quartet would ever have any performers or listeners. Yet within a few years of its composition it won an important prize and was played more than any work I had written up to that time. It even received praised from admired colleagues. Up to this time, I had quite consciously been trying to write for a certain audience – not that which frequented concerts of traditional music, nor that which had supported the avant-garde of the '20's (which in the '40's had come to seem elitist) but a new, more progressive and more popular audience. I had felt that it was my professional and social responsibility to write interesting, direct, easily understood music. With this quartet, however I decided to focus on what had always been one of my own musical interests, that of 'advanced' music and to follow out, with a minimal concern for their reception, my own musical thoughts along these lines. Now I think there is every reason to assume that if a composer has been well taught and has had experience, then his private judgment of comprehensibility and quality is what he must rely on if he is to communicate importantly.
>
> The First Quartet was written in the undisturbed quiet of the Arizona desert, and, like the desert horizons I saw daily while it was being written, the quartet presents a continuous unfolding and changing of expressive characters – one woven into the other or emerging from it – on a large scale. The general plan was suggested by Jean Cocteau's film Le sang d'un poète, in which the entire dream-like action is framed by an interrupted slow-motion shot of a tall chimney being dynamited. Just as the chimney begins to fall apart, the shot is broken off and the entire movie follows after which the shot of the chimney is resumed at the point it left of, showing it disintegration in mid-air and closing the film with its collapse on the ground. A similar interrupted continuity is employed in this quartet's starting with a cadenza for cello alone that is continued by the first violin alone at the very end. On one level, I interpret Cocteau's idea (and my own) as establishing the difference between external time (measured by the falling chimney, or the cadenza) and internal dream time

(the main body of the work) – the dream time lasting but a moment of external time but from the dreamer's point of view, a long stretch. In the First Quartet, the opening cadenzas also act as an introduction to the rest, and when it reappears at the end, it forms the last variation in a set of variations.

The First Quartet is designed in four large sections: Fantasia, Allegro scorrevole, Adagio and Variations.

2) *Concerto for Orchestra* (1969) – According to Carter:

> The general character of my Concerto for Orchestra, which the New York Philharmonic Society commissioned for its 125th anniversary, was suggested by the Nobel prize-winning poem Vents ("Winds") by the French poet who calls himself St. John Perse. The poem had attracted me by its expansive, almost Whitmanesque, descriptions of a United States constantly swept by forces like winds, forces that are always transforming, remolding, or obliterating the past and introducing the fresh and the new. In the course of the poem many such changes are described, as, for instance, winds that disintegrate and blow away the meaningless husks of past season – of "hommes de paille" – and scatter seeds and moisture for the next season. From time to time a shaman is invoked who magically encourages the words of the winds and the poet himself speaks in a prophetic voice. But Perse's poem only served as a point of departure, for as I worked on this Concerto, the music naturally began to take precedence over the poem and I began to find Perse's poetic tone, especially his, to me, rather contrived primitivism, did not correspond to the tone of the work that was taking shape and so I took no further thought of the poem after a certain point and followed the musical conceptions the workd seemed to impose on me.
>
> In a piece that deals primarily with the poetry of change, transformations, reorientation of feelings and thoughts and gradual shifts of emphases as do most of my works and in particular this one, the matter of succession of material becomes very important, since how the ideas are formed and how they are related and connected gives expression to the poetry they evoke. Hence to call these four movements by number is somewhat misleading, since the largest statement of each, which comes in the order described, is counter pointed or interrupted by more or less extended fragments of the others. The first movement, which emerged from one of the layers of music heard at the beginning, features the cello section (sometimes divided in to as many as seven different soloists, as are all the strings) piano harp, marimba, xylophone and wooden percussion. It centers around the lower middle register and is in a moderately fast speed throughout the work. The second movement features high strings, high winds and metallic percussion and started very fast and lightly and bit by bit becomes slower over the whole work. The third features the double basses, tuba, horns, timpani and other low-pitched instruments and keeps to its recitative-like character. The forth features the violas, oboes, trumpets, snare drums and other medium high instruments and starts with slow fragments that become faster as the work progresses until it expands into a rapid conclusion. As with all my works, the primary intention is

expressive and the entire musical vocabulary, instrumentation and form have been chosen to further this.

I am told, the line of continuity of my works is very definite, so much so that it would be hard to situate them in relation to the various musical trends that have come and gone during the past 20 years. For instance, the "serialissm" prevalent here and in the 20's and 30's was influenced but the Schoenberg school, Ives, Varese, Ruggles, Crawford, Sciabin, and Roselavetz, all of whom had certain tendencies in that direction. In fact, I was very much interested in the avant-garde in the 20's and 30's with its random, its collages, its fun and games with audiences and its artistic paradoxes and have felt that the cause was won then and did not need to be repeated again. The next step had to be taken and this is what I have tried to do in so far as my works can be said to adopt any aesthetic position, for I have been more concerned with the works than in the aesthetic they represent.

3) *A Celebration of Some 100x150 Notes* (1986) – Carter's *Three Occasions for Orchestra* is comprised of three short orchestral pieces: *A Celebration of Some 100 x 150 Notes* (1986) • *Remembrance* (1988) • *Anniversary* (1989). Each may be performed separately or all three together as a suite. They have outlasted their occasions and become occasions themselves—compact expressions of the brilliance, vivacity and expressive reach of Carter's later music. The *Three Occasions for Orchestra* are a good introduction to Carter's sound world. These are indeed occasional pieces, written for junctures of public celebration, of commemoration and of private joy and gratitude. The pieces are relatively short, so they are less of a strain on the attention span than Carter's bigger pieces that follow.

   A Celebration of Some 100 × 150 Notes is a carnival in sound, written at the behest of the Houston Symphony to mark the 150th anniversary of the state of Texas. It is a fanfare lasting exactly 150 bars that, for has its uncomprising modernism, has some downright charming writing for brass. "*Remembrace*" was written as a memorial for Paul Fromm, its sad expanses foretell the middle movement of his "Symphonia" just like the Violin Concerto does. "*Anniversary*" was written on the occasion of his fiftieth wedding anniversary to his wife Helen Carter, it's an airy piece, though feels somewhat fluffy and insubstantial after a few listens.

4) *Oboe Concerto* (1988) - The oboe was Carter's instrument, so it is not terribly surprising he composed a concerto for it. The work divides the orchestra into two groups, one with the oboe soloist, violas, one percussionist and timpani, and a larger second one with winds, horn, trombone, the remaining strings and a percussionist. Throughout the work, the larger ensemble's outbursts are placated by the soloist. This refers to a favorite movement of Carter's, according to the scholar and composer David Schiff, which is the slow movement of Beethoven's Fourth Piano Concerto. In it, the piano continually plays quiet, lyrical passages that contrast with the orchestra's bombast. Carter's concerto works similarly, although given his musical language, the destruction may seem considerably more violent than his model's. The concerto still ends contemplatively, as the soloist spins out a long melody of wide leaps over a deep orchestral sea.

5) *What Next?* (1999) *What Next?* is the only opera by Elliott Carter. Music critic Paul Griffiths wrote the libretto to the one-act work in 1997/98 on a commission from Staatsoper Unter den Linden in Berlin. Though Carter was an indisputably towering figure in contemporary music, few would have pegged him as a composer with a knack for opera. He attended operas for decades, but selectively. He did not pay heed to "La Bohème" until he was nearly 70 and left the show unimpressed. That was then. Around the age of 90 he turned to opera in his own uncompromising way. What changed in Mr. Carter's career to lead him to opera so late? For one thing, starting in the mid-1970s, he re-embraced vocal music, composing a series of remarkable works. In addition, in the last 15 years or so, he has made his language more lucid and accessible without compromising the multilayered complexity of his music. Multiple overlapping elements still jostle and engage one another, at different tempos and seemingly in different dimensions. But the textures are thinned out; not quite so many things happen at once as in earlier pieces. Also, Mr. Carter has increasingly found ways to compose with bracing economy, as five shorter solo and chamber pieces like *Au Quai* (2002), for bassoon and viola. Just as in those compact works, Mr. Carter gets a lot of music into his brief opera.

The opera that resulted was *What Next?*, a 40-minute, one-act work. It is an existential comedy about six people, survivors (or victims?) of an auto accident, who struggle to make sense of what has happened to them and how they are related to one another, if at all. As the percussionists replicate the sounds of a car crash the characters wake up and discover themselves lost. They are physically unhurt but have lost all memory of who they are and how they came to be together. Many theories arise from all the characters. Mama suggests that they were on their way to Rose and Harry or Larry's wedding, Stella is sure that she was driving to the astronomical institute with Kid, and Rose claims she was in a taxi on her way to her hotel after an extremely well received performance. Harry or Larry, Kid and Zen don't suggest any possible reasons how the situation came to be. An argument arises about whose story is the right one. Zen is overwhelmed by the situation and, when he exits the stage in search of help, Mama accuses him of being a coward and goes to insult him. While Stella sings of the stars and space to Kid, she decides to follow the others. But, Kid is afraid of Mama and Zen so he decides not to follow Stella. When Rose realizes that everyone is gone, she asks Kid where they have all gone and Kid replies by pointing offstage. After the adults are gone, Kid entertains himself. When the other characters return, they are completely disheveled and it is evident that their search for help has turned into another disaster. There are more arguments about a divorce between Mama and Zen that only Mama remembers. When four road workers arrive, they think they are saved but the road workers appear completely oblivious to the six victims. All hell breaks loose after the road workers leave. Mama discovers that Rose is pregnant, Harry or Larry is distressed to realize he can't remember if the baby is his, Stella and Mama both have nervous breakdowns, and only Kid remains sane.

At the end, after a chaotic ensemble, all except the Kid shuffle offstage, bunched in a pack, facing the audience, as in those comic ensembles in Rossini when the action stops and characters

wonder aloud what is going on. Left alone on stage, the Kid says, "What —— ." Just that. What next? That's the big question this little opera grapples with so affectingly.

Samuel Barber II (March 9, 1910 – January 23, 1981) was an American composer of orchestral, opera, choral and piano music. He is one of the most celebrated composers of the 20th century: music critic Donal Henahan stated that "Probably no other American composer has ever enjoyed such early, such persistent and such long-lasting acclaim." His *Adagio for Strings* (1936) has earned a permanent place in the concert repertory of orchestras. He was awarded the Pulitzer Prize for Music twice: for his opera *Vanessa* (1956–57) and for the *Concerto for Piano and Orchestra* (1962). Also widely performed is his *Knoxville: Summer of 1915* (1947), a setting for soprano and orchestra of a prose text by James Agee. At the time of his death, nearly all of his compositions had been recorded.

At a very early age, Barber became profoundly interested in music and it was apparent that he had great musical talent and ability. When he was 14, he entered the Curtis Institute of Music in Philadelphia. At the Curtis Institute, Barber was a triple prodigy in composition, voice and piano. He soon became a favorite of the conservatory's founder, Mary Louise Curtis Bok.

Barber played and studied the music of Johann Sebastian Bach and was an adherent of Johannes Brahms, from whom he learned how to compress profound emotions into small modules of highly charged musical expression (*Cello Sonata*, 1932). In 1933, after reading the poem "Prometheus Unbound" by Percy Bysshe Shelley, Barber composed the tone poem *Music for a Scene from Shelley*, Op. 7. The work's 1935 premiere at Carnegie Hall was the first time the composer heard one of his orchestral works performed publicly. Barber's compositional style has been lauded for its musical logic, sense of architectural design, effortless melodic gift and direct emotional appeal. These elements are evident in the Overture to *The School for Scandal* (1931) and *Music for a Scene from Shelley* (1933), and were characteristics of his music throughout his lifetime. Through the success of his Overture to *The School for Scandal* (1931), *Music for a Scene from Shelley* (1933), *Adagio for Strings* (1938), (First) *Symphony in One Movement* (1936), (First) *Essay for Orchestra* (1937) and *Violin Concerto* (1939), Barber garnered performances by the world's leading conductors.

Among his works are four concertos, one each for *Violin* (1939), *Cello* (1945) and *Piano* (1962), and the neoclassical *Capricorn Concerto* for flute, oboe, trumpet and string orchestra (1944). He also wrote a concertante work for organ and orchestra entitled *Toccata Festiva* (1960). The four piano "bagatelles" *Excursions*, Op. 20 (1942–44), were his first and only venture into Americana music. Its elements of boogie-woogie, blues, theme and variations on a cowboy song, and hoedown are not typical of Barber's generally more classical style. In 1949, Barber wrote his *Piano Sonata*, which has maintained a prominent position in the concert repertory since its premiere.

Barber's life partner Gian Carlo Menotti, whom he had met at Curtis, supplied the libretto for Barber's opera *Vanessa.* In 1956, using his vocal training, Barber played and sang the score to the Metropolitan Opera's General Manager, Rudolf Bing, who accepted the work. It premiered in January 1958. *Vanessa* won the 1958 Pulitzer Prize and gained acclaim as the first American grand opera. Menotti also contributed the libretto for Barber's chamber opera *A Hand of Bridge*. Barber's

Antony and Cleopatra was commissioned to open the new Metropolitan Opera House at Lincoln Center in 1966. The elaborate production designed by Franco Zeffirelli was plagued with technical disasters; it also overwhelmed and obscured Barber's music, which most critics derided as uncharacteristically weak and unoriginal. The critical rejection of music that Barber considered to be among his best sent him into a deep depression. In recent years, a revised version of *Antony and Cleopatra*, for which Menotti provided collaborative assistance, has enjoyed some success. Barber's background, deeply rooted in singing, his love of poetry, and his intimate knowledge and appreciation of the human voice, inspired his vocal writing. Barber's most famous vocal compositions, *Knoxville: Summer of 1915* and *Dover Beach*, were greatly successful. Their critical acclaim has made a powerful case for Barber as one of the twentieth century's most accomplished composers for the voice.

Conlon Nancarrow (October 27, 1912 – August 10, 1997) was an American-born composer who lived and worked in Mexico for most of his life. He became a Mexican citizen in 1955. Nancarrow is best remembered for his studies for player piano, being one of the first composers to use auto-playing musical instruments, realising their potential to play far beyond human performance ability. He lived most of his life in relative isolation and did not become widely known until the 1980s.

Nancarrow was born in Texarkana, Arkansas. He played trumpet in a jazz band in his youth, before studying music first in Cincinnati, Ohio and later in Boston, Massachusetts with Roger Sessions, Walter Piston and Nicolas Slonimsky. He met Arnold Schoenberg during that composer's brief stay in Boston in 1933. In Boston, Nancarrow joined the Communist Party. When the Spanish Civil War broke out, he traveled to Spain to join the Abraham Lincoln Brigade in fighting against Francisco Franco. He was interned by the French at the Gurs internment camp in 1939. Upon his return to the United States in 1939, he learned that his Brigade colleagues were finding it difficult to renew their U.S. passports. After spending some time in New York City, Nancarrow moved in 1940 to Mexico, in order to escape similar harassment.

He visited the United States briefly in 1947 but became a Mexican citizen in 1956. His next appearance in the U.S. was in San Francisco for the New Music America festival in 1981. He traveled regularly in the following years. In 1985, he consulted a lawyer about the possibility of returning to his native country. He was told that he would have to sign a statement swearing that he had been "young and foolish" when he embraced Communism, which he refused to do. Consequently, he continued living in Las Águilas, Mexico City, until his death at age 84. Though he had a few friends among Mexican composers, he was largely ignored by the Mexican musical establishment.

It was in Mexico that Nancarrow did the work he is best known for today. He had already written some music in the United States, but the extreme technical demands his compositions required meant that satisfactory performances were very rare. That situation did not improve in Mexico's musical environment, also with few musicians available who could perform his works, so the need to find an alternative way of having his pieces performed became even more pressing. Taking a suggestion from Henry Cowell's book *New Musical Resources*, which he bought in New York in

1939, Nancarrow found the answer in the player piano, with its ability to produce extremely complex rhythmic patterns at a speed far beyond the abilities of humans. Cowell had suggested that just as there is a scale of pitch frequencies, there might also be a scale of tempi. Nancarrow undertook to create music which would superimpose tempi in cogent pieces and, by his twenty-first composition for player piano, had begun "sliding" (increasing and decreasing) tempi within strata. Nancarrow traveled to New York City in 1947 and bought a custom-built manual punching machine to enable him to punch the piano rolls. The machine was an adaptation of one used in the commercial production of rolls, and using it was very hard work and very slow. He also adapted the player pianos, increasing their dynamic range by tinkering with their mechanism and covering the hammers with leather (in one player piano) and metal (in the other) so as to produce a more percussive sound.

Composer György Ligeti described the music of Conlon Nancarrow as "the greatest discovery since Webern and Ives ... something great and important for all music history! His music is so utterly original, enjoyable, perfectly constructed, but at the same time emotional ... for me it's the best music of any composer living today." Some of Nancarrow's studies for Player Piano have also been arranged for musicians to play.

George Crumb (born October 24, 1929-?) is an American composer of avant-garde music. He is noted as an explorer of unusual timbres, alternative forms of notation and extended instrumental and vocal techniques. Examples include seagull effect for the cello (e.g. *Vox Balaenae*), metallic vibrato for the piano (e.g. *Five Pieces for Piano*) and using a mallet to play the strings of a contrabass (e.g. *Madrigals, Book I*), among numerous others. He is not an electronic music composer; however, many works call for amplification of instruments, such as *Black Angels* (string quartet) or *Ancient Voices of Children* (mixed ensemble). Crumb was born in Charleston, West Virginia, and began to compose at an early age. He studied music first at the Mason College of Music in Charleston where he received his Bachelor's degree in 1950. He obtained his Master's degree at the University of Illinois at Urbana-Champaign and then briefly studied in Berlin before returning to the United States to study at the University of Michigan, from which he received his D.M.A. in 1959.

Crumb has earned his living primarily from teaching. His first teaching job was at a college in Virginia, before he became professor of piano and composition at the University of Colorado in 1958. In 1965 he began a long association with the University of Pennsylvania, becoming Annenberg Professor of the Humanities in 1983. Crumb retired from teaching in 1997, though in early 2002 was appointed with David Burge to a joint residency at Arizona State University. He has continued to compose.

After initially being influenced by Anton Webern, Crumb became interested in exploring unusual timbres. He often asks for instruments to be played in unusual ways and several of his pieces, although written for standard chamber music ensembles, call for electronic amplification. In the 1960s and 1970s, Crumb's music filled a niche for more sophisticated though still conservative concertgoers. His music fell between neoclassicism, which was perceived as outmoded, and the more radical music of the avant garde. Although his music from this period exhibits some novel

features, it owes more to traditional techniques than to the more experimental areas of the avant-garde. In this period, Crumb shared with a number of other young composers regarded as being under the umbrella of "new accessibility" a desire to reach out to alienated audiences. In works like *Ancient Voices of Children* (1970), Crumb employed theatrical ritual, using evocative masks, costumes and sonorities. In several pieces, the music is symbolically laid out in a circular or spiral fashion. Several of Crumb's works, including the *Four Books of Madrigals* he wrote in the late 1960s and *Ancient Voices of Children*, a song cycle of 1970 for two singers and small instrumental ensemble (which includes a toy piano), are settings of texts by Federico García Lorca. *Black Angels* (1970) is another piece which displays Crumb's interest in exploring a wide range of timbres. The piece is written for electric string quartet and its players are required to play various percussion instruments and to bow small goblets as well as to play their instruments in both conventional and unconventional ways. It is one of Crumb's best known pieces, and has been recorded by several groups, including the Kronos Quartet.

Another of Crumb's best known works are the four books of *Makrokosmos*. The first two books (1972, 1973), for solo piano, make extensive use of string piano techniques; the third, known as *Music for a Summer Evening* (1974), is for two pianos and percussion; the fourth, *Celestial Mechanics* (1979), was written for piano four-hands. The title *Makrokosmos* alludes to *Mikrokosmos*, the six books of piano pieces by Béla Bartók; like Bartók's work, *Makrokosmos* is a series of short character pieces. Apart from Bartók, Claude Debussy is another composer Crumb acknowledged as an influence here. On several occasions the pianist is required to sing, shout, whistle, whisper and moan, as well as play the instrument conventionally and unconventionally. During the 1990s Crumb's musical output was less prolific, but since 2000 Crumb has written several works subtitled *American Songbook*. Each of these works is a set of arrangements of American hymns, spirituals and popular tunes: Crumb originally planned to produce four such volumes, but in fact he continued to produce additional sets after the fourth (*The Winds of Destiny*) was written, with the seventh volume of the series (*Voices from the Heartland*) being completed in 2010. Typically these settings preserve the familiar tunes more-or-less intact, but the accompaniments for amplified piano and percussionists use a very wide range of musical techniques and exotic sounds.

Joan Tower (born September 6, 1938-?) is a Grammy-winning contemporary American composer, concert pianist and conductor. Lauded by the New Yorker as "one of the most successful woman composers of all time," her bold and energetic compositions have been performed in concert halls around the world. After gaining recognition for her first orchestral composition, *Sequoia* (1981), a tone poem which structurally depicts a giant tree from trunk to needles, she has gone on to compose a variety of instrumental works including *Fanfare for the Uncommon Woman*, which is something of a response to Aaron Copland's *Fanfare for the Common Man*, the *Island Prelude*, two string quartets, and an assortment of other tone poems. Born in New Rochelle, New York, in 1938, Tower moved to the South American nation of Bolivia when she was nine years old, an experience which she credits for making rhythm an integral part of her work. For the next decade Tower's talent in music, particularly on the piano, grew rapidly due to her father's insistence that she benefit from consistent musical training. Tower's relationship with her mineralogist father is

visible in many aspects of her work, most specifically her "mineral works" including *Black Topaz* (1976) and *Silver Ladders* (1986). She returned to the United States as a young woman to study music, first at Bennington College, in Vermont, and then at Columbia University where she was awarded her doctorate in composition in 1968.

In 1972 Tower accepted a faculty position at Bard College in composition, a post she continues to hold today.

In 1985, Tower accepted a position at the St. Louis Symphony Orchestra in 1988-1991 where she was a composer-in-residence. During this period Tower produced two of her most significant works, *Amazon* and *Sequoia*. Tower's early music seems to reflect the influences of her mentors at Columbia University and is rooted in the serialist tradition, whose sparse texture complimented her interest in chamber music. As she developed as a composer, Tower began to gravitate towards the work of Olivier Messiaen and George Crumb and broke away from the strict serialist model. Her work became more colorful and has often been described as impressionistic.

John Harris Harbison (born December 20, 1938) is an American composer, known for his symphonies, operas and large choral works. He is a former student of Walter Piston and Roger Sessions. His works include several symphonies, string quartets, and concerti for violin, viola and double bass. He was born into a musical family. He studied violin, viola, piano, tuba and voice, while attending Princeton (N.J.) High School. During this time, he also profited from advice from Sessions and developed a facility as a jazz pianist. He pursued his education with Piston at Harvard University (B.A., 1960), Blacher at the Berlin Hochschule für Musik (1961) and Sessions at Princeton University (M.F.A., 1963). Following completion of a junior fellowship at Harvard, Harbison joined the faculty at the Massachusetts Institute of Technology. In 1994; he has also taught at CalArts and Boston University and is currently on the faculty of the Aspen Music Festival.

He is one of America's most prominent composers. Among his principal works are four string quartets, three symphonies, the cantata *The Flight Into Egypt*, which earned him a Pulitzer Prize in 1987, and three operas including *The Great Gatsby,* commissioned by The Metropolitan Opera. Harbison's music is distinguished by its exceptional invention and deeply expressive range. He has written for every conceivable type of concert genre, ranging from the grand opera to the most intimate; pieces that embrace jazz along with the classical forms. His prolific, personal and greatly admired music written for the voice encompasses a catalogue of over 70 works including opera, choral, voice with orchestra and chamber/solo works.

Harbison's first opera, *A Winter's Tale*, with his own libretto based on Shakespeare, was followed by *A Full Moon in March*, for which he drew on W.B. Yeats. His third opera, *The Great Gatsby*, after Scott Fitzgerald, was staged at the Metropolitan Opera in 1999. *Ulysses* is Harbison's score for a ballet on the subject of the legendary Greek hero. He is also a gifted commentator on the art and craft of composition and was recognized in his student years as an outstanding poet (he wrote his own libretto for *Gatsby*.)

Harbison's song cycles are of particular importance among his many vocal works. These include settings of Montale, Hardy, Goethe and Emily Dickinson, with choral works that include settings of liturgical and biblical texts, as well as settings of William Blake and Emerson. His orchestral and chamber music ranges from concertos for violin, for cello, for viola and for piano to string quartets and a number of works that include the violin. Among these last are his *Four Songs of Solitude* for unaccompanied violin. *Twilight Music* is scored for violin, horn and piano, while his *Variations* of 1982 uses clarinet, violin and piano.

- **Art Rock Influence**
  Some composers have emerged since the 1980s that are influenced by art rock, for example, Rhys Chatham. Art rock is a subgenre of rock music that originated in the 1960s with influences from Art (avant-garde and classical) Music. Art rock was a form of music which wanted to "extend the limits of rock & roll" and opted for a more experimental and conceptual outlook on music. Due to its classical influences and experimental nature, art rock has often been used synonymously with progressive rock; nevertheless, there are differences between the genres, with progressive putting a greater emphasis on symphony and melody, whilst the former tends to focus on avant-garde and "novel sonic structure." Art rock, as a term, can also be used to refer to either classically driven rock, or a progressive rock-folk fusion, making it an eclectic genre. Common characteristics of art rock include album-oriented music divided into compositions rather than songs, with usually complicated and long instrumental sections, symphonic orchestration and an experimental style. Art rock music was traditionally used within the context of concept records and its lyrical themes tended to be "imaginative," philosophical and politically oriented. While art rock developed towards the end of the 1960s, it enjoyed its greatest level of popularity in the early 1970s through groups such as Roxy Music, Jethro Tull, Electric Light Orchestra, 10cc, the Moody Blues, Emerson, Lake and Palmer and Procol Harum.

  Rhys Chatham (born September 19, 1952-?) is an American composer, guitarist, trumpet player, multi-instrumentalist (flutes in C, alto and bass, keyboard), primarily active in avant-garde and minimalist music. He is best known for his "guitar orchestra" compositions. He has lived in France since 1987. Chatham began his musical career as a piano tuner for avant-garde pioneer La Monte Young as well as harpsichord tuner for Gustav Leonhardt, Rosalyn Tureck and Glenn Gould. In 1971, while still in his teens, Chatham became the first music director at the experimental art space The Kitchen in lower Manhattan. His early works, such as *Two Gongs* (1971) owed a significant debt to Young and other minimalists. By 1977, Chatham's music was heavily influenced by punk rock, having seen an early Ramones concert. He was particularly intrigued by and influential upon the group of artists music critics would label New Wave in 1978.

  Scott Johnson (born 1952-?) is an American composer known for his pioneering use of recorded speech as musical melody. His 1982 work *John Somebody* for electric guitar and recorded speech is an early example of speech melody framed in tonal harmony. It is named for the prominent tape loop of a single female voice, repeating variations on the phrases

  You know who's in New York?

You remember that guy... J-John somebody?
He was a-- he was sort of a--...

Johnson's early works were created long before the advent of digital music editing. Creating tape loops like this meant actually cutting and splicing long strips of magnetic tape into loops, running them through a player to dub onto a destination tape. Seminal works of the minimalist music by Steve Reich including *It's Gonna Rain* (1965) and *Come Out* (1966) have been of major importance for Johnson's compositions using the speaking language and tape loops to produce music. Johnson is also known for his distinctive crossing of American vernacular and art music traditions, making extensive use of electric guitar in concert works and adapting popular music structures for art music genres such as the string quartet. Johnson has been widely commissioned by artists including the Kronos Quartet and the Saint Paul Chamber Orchestra. He lives in New York City.

Steven ("Steve") Mackey (born February 14, 1956-?) is an American composer, guitarist, and music educator. As a musician growing up listening to and performing vernacular American music as well as classical music, Mackey's compositions are influenced by rock and jazz, though in an avant-garde vein. He favors the electric guitar and frequently performs his own compositions for the instrument, which include a concerto for electric guitar and orchestra (*Tuck and Roll*) and two works for electric guitar and string quartet (*Physical Property* and *Troubadour Songs*). As an electric guitar soloist, he has performed with the Kronos Quartet, the Arditti Quartet, New World Symphony, Dutch Radio Symphony, and London Sinfonietta.

Born in Frankfurt, Germany, 1956 to American parents, Mackey was raised in northern California. He was graduated summa cum laude with a B.A. from the University of California, Davis, followed by an M.A. at the State University of New York at Stony Brook and a Ph.D from Brandeis University. Since 1985 Mackey has served as a professor of music at Princeton University, where he teaches composition, theory, twentieth century music, improvisation and a variety of special topics. He is also a co-director of the Princeton Composers' Ensemble and, in 1991, he was awarded that university's first-ever Distinguished Teaching Award.

- **Atonality and twelve-tone technique**
  Atonal music is a generalizing term used to define music that seems to lack a clear tonal center. Nearly all music in the western classical tradition is considered 'tonal': that is, its harmonic structure is primarily triadic and hierarchically organized around a prominent tonal center. Atonal music works tend to deny or expand this notion by using alternative structural strategies (frequently - but not exclusively - mathematical, the most famous being **Serialism**). As a result, many listeners used to traditional tonality may find atonal music very challenging at first, in particular because the lack of a tonal hierarchy which also means that highly dissonant chords are far more common (and, indeed, early practitioners of the style often deliberately used these chords as to avoid any implied reference to a tonic). Others argue that **Atonality** is simply another musical language which, like all other languages (including traditional tonality), cannot be learned or appreciated until one has been immersed in it.

Composer Arnold Schoenberg is generally seen as the first composer to fully embrace **Atonality**, although a number of other composers (such as Liszt, Bartok and Scriabin) had been moving in that direction for some time. In 1925, after experimenting with **Free Atonality**, he composed his *Suite fur Klavier*, the first piece of music ever written using the **Twelve-tone Method** of composing. Berg and Webern followed in his footsteps by composing numerous twelve-tone pieces; the method was generalized during the 1950s to include other parameters such as rhythm and volume, the resultant system being known as **Total Serialism**.

"Atonal" developed a certain vagueness in meaning as a result of its use to describe a wide variety of compositional approaches that deviated from traditional chords and chord progressions. While music without a tonal center had been written previously, for example Franz Liszt's *Bagatelle sans tonalité* of 1885, it is with the twentieth century that the term *atonality* began to be applied The term "atonality" was coined in 1907 by Joseph Marx, in a scholarly study of tonality, which was later expanded into his doctoral thesis.

Atonal music arose from what was described as the "crisis of tonality" between the late nineteenth century and early twentieth century in classical music. This situation had come about historically through the increasing use over the course of the nineteenth century of ambiguous chords, less probable harmonic inflections and the more unusual melodic and rhythmic inflections possible within the style[s] of tonal music. The distinction between the exceptional and the normal became more and more blurred; and, as a result, there was a concomitant loosening of the syntactical bonds through which tones and harmonies had been related to one another. The connections between harmonies were uncertain even on the lowest—chord-to-chord—level. On higher levels, long-range harmonic relationships and implications became so tenuous that they hardly functioned at all. At best, many composers felt the tonal style system had become obscure; at worst, it was approaching a uniformity which provided few guides for either composition or listening.

The first phase, known as "free atonality" or "free chromaticism," involved a conscious attempt to avoid traditional diatonic harmony and occurred in the perios 1908-1023. Works of this period include *Pierrot Lunaire* (1912) by Schoenberg and the opera *Wozzeck* (1917–1922) by Alban Berg. The twelve-tone technique was preceded by Schoenberg's freely atonal pieces of 1908–1923, which, though free, often have as an "integrative element...a minute intervallic cell" that in addition to expansion may be transformed as with a tone row and in which individual notes may "function as pivotal elements, to permit overlapping statements of a basic cell or the linking of two or more basic cells." The twelve-tone technique was also preceded by nondodecaphonic serial composition used independently in the works of Alexander Scriabin, Igor Stravinsky, Béla Bartók, Carl Ruggles and others.

The second phase, begun after World War I, was exemplified by attempts to create a systematic means of composing without tonality, most famously the method of composing with 12 tones or the twelve-tone technique. This period included Berg's *Lulu* and *Lyric Suite*, Schoenberg's *Piano Concerto*, his oratorio *Die Jakobsleiter* and numerous smaller pieces, as well as his last two string quartets. **Twelve-tone technique**—also known as **dodecaphony**, **twelve-tone serialism** and (in

British usage) **twelve-note composition**—is a method of musical composition devised by Austrian composer Arnold Schoenberg (1874–1951). The technique is a means of ensuring that all 12 notes of the chromatic scale are sounded as often as one another in a piece of music while preventing the emphasis of any one note through the use of tone rows, orderings of the 12 pitch classes. All 12 notes are thus given more or less equal importance and the music avoids being in a key. Schoenberg himself described the system as a "Method of composing with twelve tones which are related only with one another" (i.e., not each tone related to the key).

The third phase occurred when the twelve-tone technique, combined with the parametrization (separate organization of five aspects of music: pitch, attack character, intensity, and duration) of Olivier Messiaen, would be taken as the inspiration for serialism.

All these influences over the last century have meant that it is now very difficult to draw a clear line between atonal and tonal music: for example, the music of Philip Glass has a clearly defined tonal center (and is generally seen as tonal), but it does not use harmony in the traditional way (as a means of giving the music direction), instead using repetition to create something more static; similarly, the music of composers such as Alfred Schnittke or John Adams combines elements of tonal and atonal music freely and undogmatically; this approach can be seen as far back as Berg's *Violin Concerto* of 1936, which sounds almost tonal in many places despite its use of the twelve-tone method.

Arnold Schoenberg (1874 – 1951) was an Austrian composer and painter, associated with the expressionist movement in German poetry and art and leader of the Second Viennese School. With the rise of the Nazi Party, by 1938 Schoenberg's works were labelled as degenerate music because he was Jewish; he moved to the United States in 1934. Schoenberg's approach, both in terms of harmony and development, has been one of the most influential of 20th-century musical thought. Many European and American composers from at least three generations have consciously extended his thinking, whereas others have passionately reacted against it.

Schoenberg was known early in his career for simultaneously extending the traditionally opposed German Romantic styles of Brahms and Wagner. Later, his name would come to personify innovations in atonality (although Schoenberg himself detested that term) that would become the most polemical feature of 20th-century Art Music. In the 1920s, Schoenberg developed the twelve-tone technique, an influential compositional method of manipulating an ordered series of all twelve notes in the chromatic scale. He also coined the term developing variation and was the first modern composer to embrace ways of developing motifs without resorting to the dominance of a centralized melodic idea.

Schoenberg's early works were in a late Romantic style influenced by Wagner (*Verklärte Nacht*, 1899), this evolved into an atonal idiom in the years before the First World War (*Drei Klavierstücke* in 1909 and *Pierrot Lunaire* in 1912). In 1921, after several years of research, he developed the twelve-tone technique of composition, which he first described privately to his associates in 1923. His first large-scale work entirely composed using this technique was the *Wind Quintet*, Op. 26, written in 1923–24. Later examples include the *Variations for Orchestra*, Op. 31 (1926–28), the

Third and Fourth String Quartets (1927 and 1936, respectively), the *Violin Concerto* (1936) and Piano Concerto (1942). In later years, he intermittently returned to a more tonal style (*Kammersymphonie no. 2*, begun in 1906 but completed only in 1939; *Variations on a Recitative* for organ in 1941). He taught Anton Webern (1883-1945) and Alban Berg (1885-1935) and these three composers are often referred to as the principal members of the Second Viennese School (Haydn, Mozart and Beethoven—and sometimes Schubert—being regarded as the First Viennese School).

Schoenberg was also a painter, an important music theorist, and an influential teacher of composition; his students included Alban Berg, Anton Webern, Hanns Eisler, Egon Wellesz, and later John Cage, Lou Harrison, Earl Kim, Leon Kirchner and other prominent musicians. Many of Schoenberg's practices, including the formalization of compositional method and his habit of openly inviting audiences to think analytically, are echoed in avant-garde musical thought throughout the 20th century. His often polemical views of music history and aesthetics were crucial to many significant 20th-century musicologists and critics, including Theodor W. Adorno, Charles Rosen and Carl Dahlhaus, as well as the pianists Artur Schnabel, Rudolf Serkin, Eduard Steuermann and Glenn Gould.

Shoenberg's developments can be broken into three periods:

- **First period: Late Romanticism**
  Beginning with songs and string quartets written around the turn of the century (1899), Schoenberg's concerns as a composer positioned him uniquely among his peers, in that his procedures exhibited characteristics of both Brahms and Wagner, who for most contemporary listeners, were considered polar opposites, representing mutually exclusive directions in the legacy of German music. Schoenberg's *Six Songs*, Op. 3 (1899–1903), for example, exhibit a conservative clarity of tonal organization typical of Brahms and Mahler, reflecting an interest in balanced phrases and an undisturbed hierarchy of key relationships. However, the songs also explore unusually bold incidental chromaticism and seem to aspire to a Wagnerian "representational" approach to motivic identity. The synthesis of these approaches reaches an apex in his *Verklärte Nacht*, Op. 4 (1899), a programmatic work for string sextet that develops several distinctive "leitmotif"-like themes, each one eclipsing and subordinating the last. The only motivic elements that persist throughout the work are those that are perpetually dissolved, varied, and re-combined, in a technique, identified primarily in Brahms's music, that Schoenberg called "developing variation." Schoenberg's procedures in the work are organized in two ways simultaneously; at once suggesting a Wagnerian narrative of motivic ideas, as well as a Brahmsian approach to motivic development and tonal cohesion.

- **Second period: Free atonality**
  Schoenberg's music from 1908 onward experiments in a variety of ways with the absence of traditional keys or tonal centers. His first explicitly atonal piece was the *Second String Quartet*, Op. 10, with soprano. The last movement of this piece has no key signature, marking Schoenberg's formal divorce from diatonic harmonies. Other important works of the era include his song cycle *Das Buch der Hängenden Gärten*, Op. 15 (1908–1909), his Five Orchestral

Pieces, Op. 16 (1909), the influential *Pierrot Lunaire*, Op. 21 (1912), as well as his dramatic *Erwartung*, Op. 17 (1909). The urgency of musical constructions lacking in tonal centers, or traditional dissonance-consonance relationships, however, can be traced as far back as his *Chamber Symphony No. 1*, Op. 9 (1906), a work remarkable for its tonal development of whole-tone and quartal harmony and its initiation of dynamic and unusual ensemble relationships, involving dramatic interruption and unpredictable instrumental allegiances. Many of these features would typify the timbre-oriented chamber music aesthetic of the coming century.

- **Third period: Twelve-tone and tonal works**
  In the early 1920s, Schoenberg worked at evolving a means of order that would make his musical texture simpler and clearer. This resulted in the "method of composing with twelve tones which are related only with one another," in which the twelve pitches of the octave are regarded as equal, and no one note or tonality is given the emphasis it occupied in classical harmony. He regarded it as the equivalent in music of Albert Einstein's discoveries in physics. Schoenberg announced it characteristically, during a walk with his friend Josef Rufer, when he said, "I have made a discovery which will ensure the supremacy of German music for the next hundred years." This period included the *Variations for Orchestra*, Op. 31 (1928); *Piano Pieces*, Opp. 33a & b (1931), and the *Piano Concerto*, Op. 42 (1942). Contrary to his reputation for strictness, Schoenberg's use of the technique varied widely according to the demands of each individual composition. Thus the structure of his unfinished opera *Moses und Aron* is unlike that of his *Fantasy for Violin and Piano*, Op. 47 (1949).

Alexander Scriabin (25 December 1871 – 27 April 1915) was a Russian composer and pianist. Scriabin, who was influenced by Frédéric Chopin, composed early works that are characterised by tonal language. Later in his career, independently of Arnold Schoenberg, Scriabin developed a substantially atonal and much more dissonant musical system, which accorded with his personal brand of mysticism. Scriabin was influenced by synesthesia and associated colors with the various harmonic tones of his atonal scale, while his color-coded circle of fifths was also influenced by theosophy. He is considered by some to be the main Russian Symbolist composer.

Scriabin was small and reportedly frail throughout his life. He spent the last years of his short life (he died after a sore on his lip became septic; the infection killed him at the age of 43 in 1915) obsessed with the idea of a piece he called *Mysterium. Mysterium* was to be performed in a specially built temple in the Himalayas, with every member of the audience a participant, in a total-work-of-art that would involve dance, words, lights, smells and music. It would bring about the end of the world as we know it and usher in a new era for humanity. He thought of most of his mature music as fragments of this mystical vision - as bridges to the beyond; and, while for some, this kind of egocentric philosophising makes Scriabin a wild-eyed eccentric, he's part of an honourable (or dishonourable, if you prefer) tradition of composers who wanted their music to bring about some kind of aesthetic, social, or cosmic apocalypse: Wagner's *Ring Cycle*, Stockhausen's *Licht-Zyklus*. Scriabin was left frustrated at the altar of the impossible, unrealisable *Mysterium* project (sketches for a "Prefatory Act" have been posthumously realised; his text for this portion of the piece survives too). While he may have felt the music he did manage to complete

could only be a provisional upbeat to the mysteries of *Mysterium*, that's not how it sounds now. In his orchestral music, his 10 piano sonatas and his other piano music, Scriabin did actually achieve his dream. Much of his music really is a vision of another world, because of the heightened invention and compression of Scriabin's forms (the late piano sonatas are all cast in astonishingly distilled single movements; the last two symphonic works, the *Poem of Ecstasy* and *Prometheus*, achieve their otherworldly ambitions in 20 minutes each) combined with the intensity of his unique harmonic language. Independently of the Western modernists, Scriabin brought chromatic harmony to a zenith of richness, complexity and emotional expression that he himself found frightening: he couldn't play his *Sixth Sonata* in public, finding it "nightmarish, murky, unclean and mischievous." What gives music such as: the *Black Mass Sonata*, the *9th*, or the *3rd Symphony* ("*The Divine Poem*") its power is that while Scriabin wanted all of his pieces to transport his listeners to another realm, he knew he had to devise a new musical apparatus to do so.

It's easy to identify the wild colouristic abandon of, say, Scraibin's tome poem, *Prometheus*, with its parts for colour-organ (a keyboard that would trigger a light show to accompany the music), mystical chorus, solo piano as well as orchestra. One other way of thinking about *Prometheus* is as an elaboration of Scriabin's "mystic chord," a collection of notes you hear at the start of the piece that floats "between consonance and dissonance," as the pianist Dmitri Alexeev put it, meaning the whole work is suspended in a hyperreal realm of harmonic and expressive ambiguity. That combination of rigorous modernist exploration and tumultuous sensuality makes Scriabin one of the essential voices of the early 20th century.

Scriabin was one of the most innovative and most controversial of early modern composers. The *Great Soviet Encyclopedia* said of Scriabin that: "No composer has had more scorn heaped on him or greater love bestowed." Leo Tolstoy described Scriabin's music as "a sincere expression of genius." Scriabin had a major impact on the music world over time and influenced composers such as Igor Stravinsky, Sergei Prokofiev and Nikolai Roslavets. However Scriabin's importance in the Soviet musical scene, and internationally, drastically declined. According to his biographer: "No one was more famous during their lifetime and few were more quickly ignored after death." Nevertheless, his musical aesthetics have been reevaluated and his ten published sonatas for piano, which arguably provided the most consistent contribution to the genre since the time of Beethoven's set, have been increasingly championed.

Scriabin was born into an aristocratic family in Moscow on Christmas Day 1871. His father and all of his uncles had military careers. When he was only a year old, his mother—herself a concert pianist and former pupil of Theodor Leschetizky—died of tuberculosis. After her death, Scriabin's father completed studies in the Turkish language in St Petersburg, subsequently becoming a diplomat and finally leaving for Turkey, leaving the infant Sasha (as he was known) with his grandmother. As a child, Scriabin was frequently exposed to piano playing and anecdotal references describe him demanding that his aunt play for him. Apparently precocious, Scriabin began building pianos after being fascinated with piano mechanisms. He sometimes gave away pianos he had built to house guests. Lyubov portrays Scriabin as very shy and unsociable with his peers, but appreciative of adult attention. Scriabin studied at the Moscow Conservatory. He

became a noted pianist despite his small hands, which could barely stretch to a ninth. Feeling challenged by Josef Lhévinne, he damaged his right hand while practicing. His doctor said he would never recover and he wrote his first large-scale masterpiece, his *Piano Sonata No. 1 in F minor*, as a "cry against God, against fate." It was his third sonata to be written, but the first to which he gave an opus number (his second was condensed and released as the *Allegro Appassionato*, Op. 4). He eventually regained the use of his hand.

By the winter of 1904, Scriabin had relocated to Switzerland, where he began work on the composition of his *Symphony No. 3*. The work was performed in Paris during 1905. With the financial assistance of a wealthy sponsor, he spent several years traveling in Switzerland, Italy, France, Belgium and the United States, working on more orchestral pieces, including several symphonies. He was also beginning to compose "poems" for the piano, a form with which he is particularly associated. While in New York City in 1907 he became acquainted with the Canadian composer Alfred La Liberté, who went on to become a personal friend and disciple. In 1907 he settled in Paris with his family and was involved with a series of concerts organized by the impresario Sergei Diaghilev, who was actively promoting Russian music in the West at the time. In 1909 he returned to Russia permanently, where he continued to compose, working on increasingly grandiose projects.

Rather than seeking musical versatility, Scriabin was happy to write almost exclusively for solo piano and for orchestra. His earliest piano pieces resemble Frédéric Chopin's and include music in many genres that Chopin himself employed, such as the étude, the prelude, the nocturne and the mazurka. Scriabin's music progressively evolved over the course of his life, although the evolution was very rapid and especially brief when compared to most composers. Aside from his earliest pieces, the mid- and late-period pieces use very unusual harmonies and textures. The development of Scriabin's style can be traced in his ten piano sonatas: the earliest are composed in a fairly conventional late-Romantic manner and reveal the influence of Chopin and sometimes Franz Liszt, but the later ones are very different. The last five (from 1903-1908) being written without a key signature. Many passages in them can be said to be atonal, although, "tonal unity was almost imperceptibly replaced by harmonic unity."

About 1899, Scriabin became absorbed in the music of Richard Wagner and that year wrote his *Symphony Number 1*. Wagner's influence now had become stronger that Chopin. The symphony was harmonically and melodically, a rapturous wave of feeling and terminated with a vocal final movement, the text a tribute in praise of Art. The beautiful *Symphony Number 2*, followed in 1901. After this, Scriabin began to find a new voice, one that was completely unique and this voice was first heard in the *Fourth Piano Sonata* written between 1901 and 1903. New tonalities were explored in this work as root chords contained what musicians call *flatted fifths*. This tonal structure became even more pronounced in the *Fifth Sonata* of 1907 and in all the intervening pieces between these sonatas.

Scriabin was interested in Friedrich Nietzsche's Übermensch theory and later became interested in theosophy. Both would influence his music and musical thought. Scriabin developed his own very personal and abstract mysticism based on the role of the artist in relation to perception and life

affirmation. His ideas on reality seem similar to Platonic and Aristotelian theory though much less coherent. The main sources of his philosophy can be found in his numerous unpublished notebooks, one in which he famously wrote "I am God."

While Scriabin wrote only a small number of orchestral works, they are among his most famous, and some are performed frequently. They include a *Piano Concerto* (1896) and five symphonic works, including three numbered symphonies as well as *The Poem of Ecstasy* (1908) and *Prometheus: The Poem of Fire* (1910), which includes a part for a machine known as a "clavier à lumières", known also as a *Luce* (Italian for "Light"). This was a color organ designed specifically for the performance of Scriabin's tone poem.

Scriabin's music was greatly disparaged in the West during the 1930s. Sir Adrian Boult refused to play the Scriabin selections chosen by the BBC progammer Edward Clark, calling it "evil music," and even issued a ban on Scriabin's music from broadcasts in the 1930s. In 1935, Gerald Abraham described Scriabin as a "sad pathological case, erotic and egotistic to the point of mania." Scriabin's reputation has since undergone a total rehabilitation.

In the history of harmony in Western culture, there has been an ever-expanding movement "up" the harmonic overtone series. During the Renaissance major, minor and dimished triads were used in the music at first, then the 7th was allowed under very specific circumstances. The 7th was liberated at the beginning of the Baroque era and throughout that era chords consisting of 1st, 3rd, 5th and 7th notes of the scale (example: G,B,D,F) were used as a part of the harmony. Composers in Beethoven's era began using 9th chords, adding one more note (G,B,D,F,A), however all five notes were not really used together. It was probably Liszt who began freeing ninth chords as seventh chords had been liberated before and this inspired Wagner, who used them freely. Wagner inspired French composers who began using straight ninth chords. From this base, a number of French composers began experimenting with even higher notes of the harmonic series. Most of these composers are unknown today and only Debussy succeeded in introducing a new music to the Western world using chords of the ninth and beyond. However, there were two composers who developed music harmonically beyond the 9th chord. The other was Scriabin, who went beyond Debussy in his explorations and brought to us the first music from astral dimensions, music based on these higher partials. Which pieces of music? Works from later in his life: The *8th and 10th Piano Sonatas*.

1) *Piano Concerto* (1896) Written in 1896, when he was 24, it was his first work for orchestra and the only concerto he composed. Scriabin completed the concerto in only a few days in the fall of 1896, but did not finish the orchestration until the following May. It premiered on October 23, 1897.

   Allegro (fast tempo)

   The main theme is introduced by the piano and then transferred to the orchestra while the piano accompanies in octaves.

   Andante (walking pace tempo)

   The second movement begins in the key of F-sharp major which was for Scriabin "a 'bright blue' mystic key." It is in the form of theme and variations. The orchestra introduces the theme. The

piano enters with the first variation, accompanying the orchestra's theme with arpeggios (a type of broken chord. Other types of broken chords play chord notes out of sequence or more than one note but less than the full chord simultaneously – they can rise or fall for more than one octave. Students of musical instruments learn how to play scales and arpeggios). The second variation is faster, marked allegro scherzando. The third variation is a slow funeral march. The fourth variation is marked allegretto and features intricate ornamentation; the clarinet introduces the melody and interweaves counterpoint with the soloist. The movement ends with return of the theme to the orchestra, almost identical to the first variation.

Allegro moderato (tempo between andante and moderato -moderate)

This movement also develops material from the first movement. The first theme is condensed into the first two bars followed by a virtuosic arpeggio.

2) *Symphony No. 3* (1905) The four sections of the symphony proceed without pause. In the Introduction (tempo marking: *Lento*), the main theme appears in the basses answered by the trumpets and taken up in the first violins and woodwinds. The first movement begins with this theme in the violins and is taken up in the basses and gradually works up to a climax. As it dies away a hymn-like theme appears in the muted strings. The second melody follows in the woodwinds with violins and bass accompaniment, this in turn followed by a theme reminiscent of the "Dresden Amen" in a long tremolo, the trumpets giving out their original theme, to full accompaniment. After recapitulation the main theme appears in the horns, the violins in agitated accompaniment. The close of the section is vehement, gradually dying away and leading to the second movement without halt. A slow, tender melody appears in the woodwinds and horns and later in the strings, the trumpets repeating their call in the first movement. This melody, growing more and more passionate, is broken by a strong passage in the horns which finally give out in unison a joyous measure, the basses sounding the trumpet call inverted, leading to the Finale. Over a lively movement in the strings, the trumpets sound a variation of their call. A second melody follows in the oboes and cellos against the harmony of woodwinds and horns, which is suddenly interrupted by the return of the first melody. After development, the episode of the unison horns and inverted trumpet call returns. Toward the close there is a return of the main theme of the first movement and the section ends with the legend and the call in unison.

3) *The Poem of Ecstasy* (1908) – Was Scriabin's 4th symphony that lasts a half hour so it is really more a poem than a symphony. With this work, the composer wished to stimulate an experience of divine ecstasy in the listener. He wrote a parallel poetic work to help describe the music. It begins: "Spirit; Winged with thirst for life; Is drawn into flight; On the summits of negation; There under the rays of its dream; Emerges a magical world of heavenly forms and feelings; Spirit playing; Spirit desiring." Scriabin once said to a friend, "When you listen to *Ecstasy* look straight into the eye of the Sun."

4) *Prometheus* (1910) – "The Poem of Fire." This work, with a completely unorthodox harmonic structure, had a part written in the score for a light keyboard, a keyboard that would be

connected to a lighting system that flooded the concert hall with colored lights, the colors defined by the keys pressed on the keyboard and determined by the score.

5) *Piano Sonata No. 6* (1911) - Although named the sixth sonata, the piece was preceded by the Sonata No. 7. As it is one of the late piano sonatas of Scriabin's career, the music consists of a single movement and is almost atonal. Scriabin reportedly never played the sonata in public, because he feared its darkness. The piece consist of a single movement, typically lasting around 11–12 minutes and is marked as follows:

   Modéré: mysterieux, concentré - The mood of the piece is marked "mysterieux" by the composer, but the most striking aspect of the sixth sonata, are the sudden moments of horror which interrupt its dreamlike atmosphere and were explicitly marked "l'épouvante surgit" (surge of terror), by Scriabin. The final passages are colourful and languid, like an elaborate Debussy prelude, but darker forces are released at the end. Richard Strauss' *Elektra* chord is featured in the sonata, lending it a nightmarish quality that Scriabin's mystic chord could not provide alone.

   According to Scriabin's biographer, Faubion Bowers: "The Sixth Sonata is a netherstar. Its dark and evil aspect embraces horror, terror and the omnipresent unknown. 'Only my music expresses the inexpressible,' Scriabin boasted and called the Sixth's sweet and harsh harmonies, "nightmarish… fuliginous… murky… dark and hidden… unclean… mischievous.' When he played excerpts for friends, he would stare off in the distance away from the piano, as if watching effluvium rise from the floor and walls around him. He seemed frightened and sometimes shuddered." It is one of a few pieces Scriabin never played in public, because he felt it was "nightmarish, murky, unclean and mischievous." He often started shuddering after playing a few measures for other people.

6) *Preludes Op. 74* (1914) - entitled *Très lent*, *contemplatif* (very slow, contemplating), is one of five preludes in Op. 74. His second wife considered it his best piece. It was also his last, for Scriabin died soon after. Leonid Sabaneyev cites the composer with the following words: "These quints are really creating a totally new sentiment, [...] These harmonies are less resonant here, but look how highly psychologically difficult it has become. [...] Here reigns a blazing heat like in the [astral] desert. [...] and here again this longing urge [he played the chromatically descending melody line] [...] You know, this Prelude gives the impression as if it would last for centuries, even eternally, millions of years." - "The piece can be played in two ways. Either colored by manifold nuances, or, quite the opposite, completely uniform, without the least shading. [...] in one single piece, there are multiple ones laid out, a multiplicity of the composition." - "Until now I always composed so that the interpretation of a piece was only possible in one way [...] Now I want it to be possible to be played in totally different ways, like a crystal can reflect totally different rays of light." - He said, quietly and hauntingly, "This is death! This is death as this emanation of the female which leads to unification [...] death and love [...] this is the abyss." This is not music", said [Sabaneev] to him, "this is something else..." - "This is the Mysterium," he said softly.

7) *Mysterium* (unfinished, started in 1903, unifinshed at his deathin 1915) - Scriabin planned that the work would be synesthetic, exploiting the senses of smell and touch as well as hearing. He wrote that:

> There will not be a single spectator. All will be participants. The work requires special people, special artists and a completely new culture. The cast of performers includes an orchestra, a large mixed choir, an instrument with visual effects, dancers, a procession, incense and rhythmic textural articulation. The cathedral in which it will take place will not be of one single type of stone but will continually change with the atmosphere and motion of the Mysterium. This will be done with the aid of mists and lights, which will modify the architectural contours.

Scriabin intended the performance to be in the foothills of the Himalayas in India, a week-long event that would be followed by the end of the world and the replacement of the human race with "nobler beings." At the time of his death, Scriabin had sketched 72 pages of a prelude to the *Mysterium*, entitled *Prefatory Action*. Alexander Nemtin spent 28 years reforming this sketch into a three-hour-long work, which was eventually recorded.

Anton Webern (3 December 1883 – 15 September 1945) was an Austrian composer and conductor. He was a member of the Second Viennese School. As a student, significant follower of, and influence on Arnold Schoenberg, he became one of the best-known exponents of the twelve-tone technique. His innovations in schematic organization of pitch, rhythm, register, timbre and dynamics, as well as his inclination toward athematicism, abstraction, and concision, were formative with respect to the musical technique later known as total serialism so much so as to focus the attention of his posthumous reception in a direction away from, if not apparently antithetical to, his affiliations with German Romanticism and Expressionism.

There are different descriptions of Webern's attitude towards Nazism. In broad terms, Webern's attitude seems to have first warmed to a degree of characteristic fervor and perhaps only much later, in conjunction with widespread German disillusionment, cooled to Hitler and the Nazis; but he was no antisemite. On the one hand, Willi Reich notes that Webern attacked Nazi cultural policies in private lectures given in 1933, whose hypothetical publication "would have exposed Webern to serious consequences" later. On the other, some private correspondence attests to his Nazi sympathies, though he denied these to Schoenberg when asked (only once), who heard rumors. As such, Schoenberg's *Violin Concerto* of 1934 (or 1935)–36 continued to bear a dedication to Webern. Webern's patriotism led him to endorse the Nazi regime, for example, in a series of letters to Joseph Hueber, who was serving in the army and himself held such views. Webern described Hitler on May 2, 1940 as "this unique man" who created "the new state" of Germany; thus Alex Ross characterizes him as "an unashamed Hitler enthusiast".

On 15 September 1945, returned home during the Allied occupation of Austria, Webern was shot and killed by an American Army soldier following the arrest of his son-in-law for black market activities. The soldier responsible for his death was U. S. Army cook Pfc. Raymond Norwood Bell of North Carolina, who was overcome by remorse and died of alcoholism in 1955.

For a number of years, Webern wrote pieces which were freely atonal, much in the style of Schoenberg's early atonal works. Indeed, so in lockstep with Schoenberg was Webern for much of his artistic development that Schoenberg in 1951 wrote that he sometimes no longer knew who he was, Webern had followed so well in his footsteps and shadow, occasionally outdoing or stepping ahead of Schoenberg in execution of Schoenberg's own or their shared ideas.

There are, however, important cases where Webern may have even more profoundly influenced Schoenberg. Haimo marks the swift, radical influence in 1909 of Webern's novel and arresting *Five Pieces for String Quartet,* op. 5, on Schoenberg's subsequent piano piece op. 11 no. 3; *Five Pieces for Orchestra*, op. 16; and monodrama *Erwartung*, op. 17. In 1949 Schoenberg still remembered being "intoxicated by the enthusiasm of having freed music from the shackles of tonality" and believing with his pupils "that now music could renounce motivic features and remain coherent and comprehensible nonetheless."

With the *Drei Volkstexte* (1925), op. 17, Webern used Schoenberg's twelve-tone technique for the first time and all his subsequent works used this technique. *The String Trio* (1926–7), op. 20 was both the first purely instrumental work using the twelve tone technique (the other pieces were songs) and the first cast in a traditional musical form.

Webern's music, like that of both Brahms and Schoenberg, is marked by its emphasis on counterpoint and formal considerations; and Webern's commitment to systematic pitch organization in the twelve-tone method is inseparable from this prior commitment. Webern's tone rows are often arranged to take advantage of internal symmetries; for example, a twelve-tone row may be divisible into four groups of three pitches which are variations, such as inversions and retrogrades, of each other, thus creating invariance. This gives Webern's work considerable motivic unity, although this is often obscured by the fragmentation of the melodic lines.

Webern's last pieces seem to indicate another development in style. The two late *Cantatas*, for example, use larger ensembles than earlier pieces, last longer (No. 1 around nine minutes; No. 2 around sixteen), and are texturally somewhat denser. Webern's music started to spark some interest in the 1920s. By the mid-1940s, they were having a decisive effect on John Cage and other modern composers. However, to the general listener, Webern mostly remained the most obscure and arcane composer of the Second Viennese School.

Alban Berg (February 9, 1885 – December 24, 1935) was an Austrian composer and a member of the Second Viennese School with Arnold Schoenberg and Anton Webern. He produced compositions that combined Mahlerian Romanticism with a personal adaptation of Schoenberg's twelve-tone technique.

Berg is remembered as one of the most important composers of the 20th century and to date is the most widely performed opera composer among the Second Viennese School. He is considered to have brought more human values to the twelve-tone system, his works seen as more emotional than Schoenberg's. Critically he is seen to have preserved the Viennese tradition in his music. His popularity has been more easily secured than many other Modernists since he plausibly combined

both Romantic and Expressionist idioms. Though Berg's Romanticism at one time seemed a drawback for some more modernist composers, the Berg scholar Douglas Jarman writes in the New Grove: "As the 20th century closed, the 'backward-looking' Berg suddenly came as [George] Perle remarked, to look like its most forward-looking composer."

Berg's opera *Wozzeck,* which Berg completed in 1922, was first performed on December 14, 1925, when Erich Kleiber directed the first performance in Berlin. Today *Wozzeck* is seen as one of the century's most important works. Berg completed the orchestration of only the first two acts of his later three-act opera *Lulu*, before he died. The first two acts were successfully premièred in Zürich in 1937, but for personal reasons Helene Berg subsequently imposed a ban on any attempt to "complete" the final act, which Berg had in fact completed in particell (short score) format. An orchestration was therefore commissioned in secret from Friedrich Cerha and premièred in Paris (under Pierre Boulez) only in 1979, soon after Helene Berg's own death. The complete opera has rapidly entered the repertoire as one of the landmarks of contemporary music and, like *Wozzeck*, remains a consistent audience draw.

Berg had interrupted the orchestration of *Lulu* because of an unexpected (and financially much-needed) commission from the Russian-American violinist Louis Krasner for a *Violin Concerto* (1935). This profoundly elegiac work, composed at unaccustomed speed and posthumously premièred, has become Berg's best-known and beloved composition. Like much of his mature work, it employs an idiosyncratic adaptation of Schoenberg's twelve-tone technique that enables the composer to produce passages openly evoking tonality, including quotations from historical tonal music, such as a Bach chorale and a Carinthian folk song. The *Violin Concerto* was dedicated "to the memory of an Angel", Manon Gropius, the deceased daughter of architect Walter Gropius and Alma Mahler.

- **Contemporary Classical Music**

Harrison Birtwistle (born 15 July 1934-?) is a British composer and is one of the most challenging, original and controversial musicians of his generation. Though angular and modern, his work neverthelless is indebted to tradition. Birtwistle composes music for a variety of ensembles, but remains best know for his stage operas. His most famous opera is perhaps his massive medieval work *Gawain*.

Harrison Birtwistle was born in Accrington, some 20 miles north of Manchester. His interest in music was encouraged by his mother, who bought him a clarinet when he was seven and arranged for him to have lessons with the local bandmaster. In 1952 he entered the Royal Manchester College of Music on a clarinet scholarship. While there he came in contact with a talented group of contemporaries including: Alexander Goehr, Peter Maxwell Davies, pianist John Ogdon, and trumpeter, conductor and composer Elgar Howarth. The usual story about what this "Manchester school" achieved was that they ripped up the rule book and made British music confront contemporary continental modernisms that previous generations and the establishment had been frightened of. That's true, to the extent that they did engage with and devour everything they could get their hands on by Schoenberg or Webern or Stravinsky and one of the pieces that changed

Birtwistle's life was Boulez's *Le marteau sans maître*. But just as there was a move to the modern, there was an equivalent excavation of the musical and mythical past, as Davies and Birtwistle delved into medieval music, into plainchant and polyphony, to find new-yet-old ways of structuring and thinking about what music could be.

In 1965 a Harkness Fellowship gave him the opportunity to continue his studies at Princeton University, where he completed the opera *Punch and Judy*. This work, together with *Verses for Ensembles* and *The Triumph of Time*, established Birtwistle as an important voice in British music. In 1975 Birtwistle became musical director of the newly established Royal National Theatre in London, a post he held until 1983. He has been honoured with a knighthood (1988). From 1994 to 2001 he was Henry Purcell Professor of Composition at King's College London.

It is not easy to link Birtwistle's music to any particular school or movement. For a time, he was described as belonging to the Manchester School, a phrase invented as a parallel to the Second Viennese School to refer to Birtwistle, Goehr and Davies. The phrase has since somewhat fallen out of use, since the three composers were united only by their early studies in Manchester, not by a common musical style. Birtwistle's music is complex, written in a modernistic manner with a clear, distinctive voice. His early work is sometimes evocative of Igor Stravinsky and Olivier Messiaen (composers he has acknowledged as influences) and his technique of juxtaposing blocks of sound is sometimes compared to that of Edgard Varèse. His early pieces made frequent use of ostinati and often had a ritualistic feel. These have been toned down in recent decades as he has adapted and transformed the techniques into more subtle methods. With its strong emphasis on rhythm, the music is often described as brutal or violent, but this analysis mistakes the strong sound world for an attempt to evoke violent actions.

Birtwistle's favourite image for explaining how his pieces work is to compare them to taking a walk through a town—especially the sort of small town more common in continental Europe than Britain. Such a walk might start in the town square. Having explored its main features, we would set off down one of the side streets. As the walk continues, we might glimpse the town square down different streets, sometime a long way off, other times quite close. We may never return to the square in the rest of the walk or we may visit a new part of it that was not explored initially. Birtwistle suggests that this experience is akin to what he does in the music. His image conveys the way that a core musical idea is altered, varied and distorted as the piece of music progresses. The core music forms a reference point to which everything else is directed, even when we are walking in a completely different direction. Sometimes we will be less aware that it is the same musical material we are hearing; sometimes we may have been listening for a while before realising that we have heard this music before (just as one might have been looking up the street before realising that it is the town square that can be glimpsed through the traffic). He is *not*, therefore, suggesting that we imagine this walk through the town as a literal explanation of what is happening in the music; he does not 'recreate' the effect in the music (as Charles Ives does in some of his orchestral pieces).

Birtwistle's method of working is also reflected in the events of the first Act of his opera *Gawain*. Up to the point where the Green Knight is kneeling in front of Gawain, awaiting the axe blow that

will cut off his head, the action has proceeded mainly in chronological order. With Gawain holding the axe aloft, the stage is suddenly blacked out and, within a minute, the action has been rewound to the point preceding the Green Knight's entry to the Court of Arthur. Events are played through again, though compressed and with various small alterations, through the beheading and into the subsequent events. The events on stage are not randomly ordered, but the one event is portrayed from more than one perspective. For the opera *The Mask of Orpheus*, this entailed two sets of singer/actors performing contradictory versions of the one event from the Orpheus myths. This non-linear portrayal of events on stage gives the listener a means of approach to the abstract compositions, with the same musical ideas being repeated but with extensive variation. The result is music that is often very episodic in structure. A clear example occurs in *Silbury Air* in which a readily identifiable musical motif – a blow from the tom-toms followed by scurrying figures from the strings and woodwind – is elaborated in a number of different ways as the piece progresses. As a result, even when he is not writing a visual piece involving stage action, Birtwistle's music is frequently theatrical in conception. The music does not follow the logic and rules of classical forms such as sonata form, but is structured more like a drama. Furthermore, different musical instruments can almost be seen to take the part of different characters in the drama. This is especially apparent in a performance of *Secret Theatre* (1984). For various portions of the piece, a number of the instrumentalists perform in a 'soloist' capacity. For this, they leave their seat in the ensemble and stand separately, to one side of the ensemble, returning to the group when they are no longer given that role. Though not normally signaled by a change of position, this sort of changing role is constantly seen in his music. Related to this is the use of geological imagery to explain the structure of his 1986 orchestral piece *Earth Dances*. A number of different layers of musical material are present. At any one time, a layer might be to the fore, while at other times it might be buried deep beneath the other layers and no longer as apparent.

His music also has an astonishing way of suggesting things that are simultaneously ancient and modern. That's not just because he has always been attracted to mythological subjects for his operas or his instrumental works, in pieces such as the gargantuan operatic labyrinth of *The Mask of Orpheus* or *Theseus Game* for large ensemble and two conductors. There's something else: if you hear music like *Earth Dances*, his monumental orchestral masterwork of the mid-1980s, it makes sounds that you feel Birtwistle must have summoned up from the guts of the world, primordial churnings and explosions that turn the orchestra into an assemblage of sonic elements rather than sophisticated products of cultural evolution. As the title says, it's as if the Earth were Dancing.

1) *Secret Theatre* (1984) – is a work for chamber ensemble. Everything in a Birtwistle work, whether staged or not, is conceived as at least latent theatre. In *Secret Theatre* itself, some of the players move about between different points on the concert platform to emphasise their fluctuating solo roles within the ensemble.

2) *Earth Dances* (1986) - is an orchestral work. Its title is part of a geological metaphor that is also found in the piece's structure: Birtwistle has divided the orchestra into six 'strata', whose changing relationships reflect those of the earth's geological layers. It was originally composed for the BBC Symphony Orchestra and was dedicated to Pierre Boulez. Almost thirty years after

it was composed, *Earth Dances* seems quite romantic; it is one of the most imposing works in the composer's oeuvre and, indeed, all of postwar British music. Enormous masses of sound move slowly and menacingly, long sustained pitches are interrupted by lightning-like strokes – a procession, as so often with Birtwistle, or the inexorable rotation of an object – the earth? The sonic image is made up of six layers, each with its own characteristic intervals.

3) *Gawain* (1991) - is an opera to a libretto by David Harsent. The story is based on the Middle English romance *Sir Gawain and the Green Knight*. The opera was a commission from the Royal Opera House, London, where it was first performed on 30 May 1991. Birtwistle revised it in 1994 and the premiere of the revised version was given at the Royal Opera House on 20 April 1994. The plot of *Gawain* is ideally suited to Birtwistle's approach to musical structure. The repetitious structure of events can be paralleled with a repetitious musical structure. Thus the three hunts in Act 2 use the same musical material, as do the three seductions. The synopsis also indicates many points where recurring motifs are heard: trios of door knocks; the return to the Arthurian court at the end of the opera with the same mood of boredom seen at the beginning; the members of the court gradually recovering from Gawain the items they gave him at the end of act 1. Thus, though the opera is not written with many explicit numbers (i.e. the arias and ensemble pieces characteristic of Classical opera), nor with strongly defined leitmotif in the style of Wagner, there is an overall unity of musical material. There are many occasions when one character will simply repeat one line of text always set it to the same melodic phrase, but this is not the same as using a leitmotif. It does, however, fit well with Birtwistle's standard style of continual variation in the midst of repetition.

4) *Harrison's Clocks* (1998) - is one of the most important piano works to have appeared towards the end of the 20th century. These five difficult pieces will take their place in the 2000 piano repertoire alongside the Ligeti studies, which seemed so impossible at first and are now standard repertoire. The pieces were inspired by the Sobel book *Longitude*, about the painfully prolonged gestation of John Harrison's sea clocks, now preserved at Greenwich; and the link with Harrison Birtwistle's shared name. There are five substantial pieces, each starting with a rush of notes down to the bottom of the keyboard. In *Clock I* irregular contrary motion and staccato figures are deliberately out of phase. Next a mechanical fantasy with an alarm bell. *Clock III* variously combines six figures in pairs. *Clock IV* introduces each of its four sections by repeating the opening signal of the whole work. The last is a toccata with reversed delays between the hands, ending, as each piece does, because the clock-spring has broken down. Heard without worrying about all that, they are fascinating and exhilarating virtuoso display pieces.

5) *The Minotaur* (2008) - is an opera in two acts, with 13 scenes to a libretto by poet David Harsent, commissioned by the Royal Opera House in London. The work, a retelling of the Greek myth of the Minotaur, premiered at the Royal Opera House on 15 April 2008 and was shown on BBC2 television on 7 June 2008. The score is modernistic and the scenes fall into three types: bullfights; scenes between Ariadne and Theseus; and dream sequences for the Minotaur, in which the creature has the gift of speech. The Minotaur does not fully comprehend the duality

of his physical nature as half-bull, half-man; only in sleep and, ultimately, in death does his human side become evident. Ariadne hopes that, with the help of the Oracle, she will enable Theseus to find a way out of the labyrinth should he survive his encounter with the Minotaur. She believes she can persuade Theseus to take her back with him to Athens. Both see the Minotaur as scapegoat and deliverance. The last scene of *The Minotaur* echoes the death scene of Mussorgsky's *Boris Godunov*.

6) *Concerto for Violin and Orchestra* (2010) - this concerto nails one of the conventions of the genre with absolute assurance: the violin line is always audible against the orchestra. But in every other way, this is a concerto like no other. The experience of the piece is like taking a journey through a labyrinth of musical ideas that may lead you somewhere new or only back to where you started. At the end, there is a weird, shimmering combination of sounds: a rattle of castanets, a static chord in the violas and the melancholy song of Tetzlaff's solo line. It is a moment that is surreal, strange and moving. Birtwistle describes the concerto as a "dialogue" between the protagonists, with the orchestra as a Greek chorus made up of individual voices.

Judith Weir (born 11 May 1954-?) is a British composer and Master of the Queen's Music. The post has been in existence since 1625, when Charles I made Nicholas Lanier head of the private band that accompanied the monarch on journeys. Since 1893, the job has been given to a composer; Edward Elgar and Arnold Bax are perhaps the best-known names. In 2007, she was the first (and remains the only) composer to be awarded the Queen's medal for music.

Weir was born in Cambridge, England, to Scottish parents. She studied with Sir John Tavener while at school and subsequently at King's College, Cambridge, graduating in 1976. Her music often draws on sources from medieval history, as well as the traditional stories and music of her parents' homeland, Scotland. Although she has achieved international recognition for her orchestral and chamber works, Weir is best known for her operas and theatrical works.

Talk to musicians, colleagues and friends about Weir and the same words come up time and time again. Integrity. Thoughtfulness. Generosity. Radiance. Clarity. Wit. And privacy. Weir is a composer who, despite a huge body of work that ranges from grand operas to piano concertos to songs for children, has never sought the limelight.

Weir's musical sources audibly include Britten, Bartok, Janacek and Stravinsky, but she transforms it all into music that is uniquely and distinctly her own. Her music is full of tunes and charm but it also has something about it where you feel you never get to the bottom of it. It has a deftness of touch, but there's something out of the corner of your eye you can't quite catch so you always want to listen again and explore it more deeply. Whatever she writes and whoever she writes for it's always completely recognisably her - there's a distinctive Judith quality, and individuality - that marks her out as a great composer.

Weir's musical language is fairly conservative in its mechanic, with a "knack of making simple musical ideas appear freshly mysterious." Her operatic musical writing is sometimes compared to Britten's and has been described as alternating "twee rhyming couplets and inert blank verse." Her

first stage work, *The Black Spider*, was a one act opera which premiered in Canterbury in 1985 loosely based on the short novel of the same name by Jeremias Gotthelf. She has subsequently written one more "micro-opera," three full length operas and an opera for television. In 1987, her first half length opera, *A Night at the Chinese Opera*, premiered at Kent Opera. This was followed by her other two full length operas *The Vanishing Bridegroom* (1990) and *Blond Eckbert* (1994), the latter commissioned by the English National Opera. In 2005 her opera *Armida*, an opera for television, premiered on Channel Four in the United Kingdom. Weir's commissioned works most notably include *woman.life.song* (2000) for Jessye Norman and *We are Shadows* (1999) for Simon Rattle. In January 2008, Weir was the focus of the BBC's annual composer weekend at the Barbican Centre in London. The four days of programmes ended with a first performance of her new commission, *CONCRETE*, a choral motet. The subject of this piece was inspired by the Barbican building itself – she describes it as "an imaginary excavation of the Barbican Centre, burrowing through 2,500 years of historical rubble."

Weir once composed an epic historical opera in three acts called *King Harald's Saga*. It dramatized a cast of thousands, including the Norwegian army, and the story of King Harald Hadradi's failed invasion of England in 1066. It's a work that you'd have thought requires the armoury of a full-scale opera house to put on, with full-on Cecil B DeMille extravagance. But in fact, *King Harald's Saga* is written for solo soprano, who sings all the parts and the whole things lasts around 10 minutes. As Weir says, in writing the piece, "a certain amount of compression has been necessary." That's typical of Weir's personal and artistic understatement. But King Harald's Saga, written when she was in her mid-20s in 1979, embodies the qualities that still define Weir's musical thinking: her concern to tell stories, her ability to distill musical and dramatic ideas to their essences and her creation of an idiom that's full of expressive subtlety but is never anything less than richly communicative.

Her career is framed by *King Harald* and *Miss Fortune*, the large-scale opera (ironically, based on a simple Sardinian folk tale rather than a major historical epic) she recently wrote for the Bregenz festival and which Covent Garden staged in 2012 and her operas are the centrepieces of her musical life. There's the ebullient and exotic play-within-a-play of *A Night at the Chinese Opera*, there are dark fairytales, such as the Ludwig Tieck-inspired *Blond Eckbert*, the Scottish folk stories and supernatural yarns of *The Vanishing Bridegroom* and an opera she composed for television in 2005, *Armida*, about conflict in the Middle East.

All of those pieces manage a trick that Weir's music consistently pulls off, which is to lead you into a world of enchantment with an apparent simplicity of language. As you'll hear in virtually every bar of *Blond Eckbert*, whose ending is an ecstasy of eerie melody, or the shimmering opening of *A Night at the Chinese Opera*, Weir has an innate gift for line – for writing tunes, which makes her a distinctively compelling voice. Hers is addictive, scintillating music. But that very simplicity and immediacy is just what many critics found cause to complain about in *Miss Fortune*. *Miss Fortune* is a new opera (2012) that tells a story clearly, it's music is consistently imaginative and sometimes, as in the duet at the start of the opera's second half, genuinely ravishing and anybody coming to the

opera house for the first time would remember as a well-made drama and a luminous, transparent score.

But it's not just her vocal music. Weir has a knack of making the instrumental ensembles she writes for shine and shimmer in a way that's completely her own. The opening of her *Piano Concerto* is a pocket-sized compression of a big classical form into just 15 minutes, scored for piano and string ensemble. Weir somehow manages to create music that sounds completely new from the utterly familiar elements of a held chord in the strings and a melody high up in the piano. She is again brilliantly illuminating writing about her own music: "Ever since the modern piano was born, the composition of piano concertos has been on an inflationary spiral and it is now a musical form associated with the crashingly loud side of music; which is not the kind of music I generally like to write." Her orchestral piece, *The Welcome Arrival of Rain*, does something similar, a transcendence of the base-metals of scales, string melodies and fanfares into something rich and strange, music that's also inspired by her long-standing love for Indian music, culture and storytelling.

A couple of Weir pieces to be recommended:

- *Natural History*, setting four Taoist texts from Chuang-tzu for soprano and orchestra. Weir says that she was attracted to these poems, about a Horse, Singer, Swimmer, and Fish/Bird, because they "are typical of the qualities I most enjoy amongst this literature; concision, clarity, lightness and (hidden) wisdom." She is too modest to say it herself, but those are exactly the qualities that make her music some of the most precious around.
- And the opening of *Moon and Star* for chorus and orchestra, a setting of Emily Dickinson she wrote for the Proms in 1995, is another example of the spine-tingling power of her music, achieved through lightness, wisdom – and sheer imagination.

1) *King Harald's Saga* (1979) – the world's most compressed historic epic – Harald's defeat at the hands of the English with one soprano, in 12 minutes. The story of the Norwegian invasion of England in 1066 led by King Harald 'Hardradi,' which ended in defeat at the battle of Stamford Bridge, nineteen days before the successful Norman invasion at the Battle of Hastings. King Harald's Saga is a 3-act opera based, as is a good deal of 19th century opera, on an actual historical event; in this case, the Norwegian invasion of England. The soprano sings 8 solo roles, as well as the part of the Norwegian army; and none of the work's musical items lasts over a minute. Furthermore, since it would be difficult to stage a work which progresses so quickly, the soprano gives a short spoken introduction to each act to establish the staging, as might happen in a radio broadcast of a staged opera. The musical items are as follows: Act 1 - Harald (aria), Fanfare, Tostig (aria); Act 2 - St Olaf (aria), Harald (aria), Harald's wives (duet); Act 3 - the Norwegian Army (chorus), Messenger (recit), Soldier (aria); Epilogue - the Icelandic sage (recit). Much of the detail in the libretto has been taken from the account of the invasion in the 13th century Icelandic saga Heimskringla by Snorri Sturluson (1179-1241).

2) *A Night at the Chinese Opera* (1987) - an opera in three acts by Judith Weir, who also wrote the libretto. Aside from an earlier opera for children, this was Weir's first full-scale opera, written on

commission from the BBC. Weir incorporated an early Chinese play of the Yuan dynasty, *The Orphan of Zhao*, as the centrepiece of Act 2 of her opera. The Opera magazine critic noted that: "few new operas have recently made so diverting a first impression as *A Night at the Chinese Opera*, partly on its intrinsic musico-dramatic merits, partly through the style of production."

Weir's reputation was dented by her opera, *Miss Fortune*, deemed unsuccessful at its UK premiere. Hearing this earlier piece, however, is a forceful reminder of just how fine an opera composer she can be. Set in 13th-century China shortly after the Mongolian invasion, the piece is essentially a fable about the power of art to change lives. Chao Lin, orphaned in early childhood, serves the invaders as a canal builder, unaware of the moral ambiguities of collaboration and the regime's responsibility for his parents' deaths. It is only when he watches a play, the narrative of which closely mirrors his own life, that he realises who he is and what he has become. But his decision to emulate his theatrical alter ego and avenge his family leads to catastrophic consequences, far removed from those in the play itself. Weir's subtle, exquisite fusion of eastern and western styles is clear. The opening – in which the Nightwatchman (Samuel Smith) sleeps by a model of the Great Wall of China as the invaders emerge from the shadows of the auditorium – is particularly beautiful.

Place: China; Time: 13th-century; Chao Sun is an explorer and mapmaker who is exiled from the city of Loyan. His son Chao Lin becomes the supervisor of the building of a canal. His workers include a group of actors. One evening, the actors/workers perform the old Chinese opera *The Chao Family Orphan*. The older drama tells of the evil General Tuan-Ku, who causes his servant Chao and his wife to commit suicide by forging a seemingly official letter from the Emperor instructing Chao to take his own life. Their young son is left behind as an orphan. Unwittingly, the General later adopts and raises the child as his own son. Twenty years later, there is a conspiracy to overthrow the emperor. The orphan gradually learns his true birth identity and the fate of his parents and joins the plot for revenge. An earthquake, however, interrupts the conspiracy and the actors are arrested. Chao Lin's work on the canal is praised. At one point, when he is surveying the canal, Chao meets an old woman who tells him of what happened to his father. In parallel to the *Chao Family Orphan* story, Chao Lin plans vengeance on his father's enemies. However, Chao Lin is captured and executed for his conspiracy. The actors who were performing *The Chao Family Orphan* then return to complete the play, where the son does succeed in avenging his father against General Tuan-Ku.

3) *Blond Ackbert* (1994) – an opera by Scottish composer Judith Weir. The composer wrote the English-language libretto herself, basing it on the cryptic supernatural short story *Der blonde Eckbert* by the German Romantic writer Ludwig Tieck. Weir completed the original two act version of the opera in 1993, making *Blond Eckbert* her third full-length work in the genre. Like its predecessors, it was received well by the critics. She later produced a one act "pocket" version of the work. This uses chamber forces rather than the full orchestra of the two act version and omits the chorus. The pocket version receives frequent performances, especially in Germany and Austria.

Ludwig Tieck wrote *Der blonde Eckbert* in 1796 and had it published in 1797 as part of his *Peter Lebrechts Märchen* (*Peter Lebrecht's Fairy-tales*). The story was the earliest example of the genre of *Kunstmärchen*, or German Romantic literary fairy tales. In the story, both the landscape and the variations in the song sung by the magic bird mirror the changing moods of the characters. A constant motif in the song is the concept of forest solitude or *Waldeinsamkeit* a word Tieck coined in the story to stand for Romantic joy at being alone in nature. But not everything is joyful, for the story breaks with the fairy-tale tradition of a happy ending. The ruin of the protagonist involves the breaking down of the barriers between the world of the supernatural and that of everyday life, leaving the reader unable to tell where one end and the other begins. Weir replaces the voice of Tieck's narrator with that of the bird. The text consists of a series of nested narratives. The bird tells the story of Eckbert and Berthe to the dog. And in that story, Bertha narrates events in her past and Eckbert reads her letter. *New York Times* critic Anthony Tomassini, describes the opera as "balancing between whimsy and terror." Tommasini recognises Weir's musical voice as individual but he considers her to be more interested in consolidating the musical past than innovation or contemporary schools of music. Her music is, in Bernard Holland's words (another critic from the NYT), "neither terribly old nor terribly new." While its language is modernist, it does not go far into the realms of dissonance. Tommasini lists Berg, Messaien, big band jazz and German romanticism as among the influences on her. When interviewed for the program notes to the first production, Weir placed herself musically more in a Stravinskian tradition than one based on Britten. Much of the vocal writing consists of short phrases of speech song, written more to support the text than to be musically interesting in itself. It is accompanied by chordal progressions or brief bursts of melody in the orchestra.

Act 1

The bird describes how Eckbert peacefully lives alone with his wife. They have few visitors apart from Walther. The scene becomes clear revealing Eckbert and Berthe. Eckbert sees a light in the distance which he correctly takes to be Walther who has been out collecting natural history specimens. Eckbert thinks about how it is good to be able to tell friends secrets. When Walther arrives, Eckbert decides to get Berthe to tell Walther the story of her youth. Berthe describes how she grew up in a poor shepherd's home and how she ran away because she was a burden on her parents who were often angry. She met an old woman in black who led her to her house where there was a little dog, whose name Berthe has forgotten, and a bird that lays gems for eggs. Eventually Berthe ran away with the gems and the bird which she let free when it began to sing. She returned to her home village to find her parents dead. She bought a home and married Eckbert. Walther thanks Berthe for telling the tale and says how he can really imagine the bird and the little dog, Strohmian. Both Eckbert and Berthe are amazed at Walther's naming the dog correctly and are terrified at his motives. When Walther goes out the next day, Eckbert follows him with a crossbow.

Act 2

The prelude describes Eckbert's killing of Walther. Eckbert then reads a letter which Berthe wrote as she was dying from the stress of thinking about how Walther knew the dog's name. In a town, Eckbert meets Hugo, a man who looks like Walther. Hugo comforts Eckbert but then the crowd

start accusing Eckbert of murder. Eckbert runs away and comes to the place described by Berthe as where she met the old woman. He sees another man who reminds him of Walther. The bird flies over head and he approaches the old woman's house. She asks if Eckbert is bringing back her bird and her gems. When Eckbert in turn asks the old woman why she is asking this, she replies "I was Walther, I was Hugo." She tells him that Berthe was his half-sister raised by the shepherd, because his parents would not keep her. Her time of trials was almost over when she stole the bird and gems. Eckbert goes insane and dies.

4) *Piano Concerto* (1997) – According to Weir:

I have written numerous pieces for the pianist William Howard. Among the many further ideas he and I discussed over a long period was that of my writing him a piano concerto. But it always seemed as if our idea of a piano concerto was not the same as everybody else's. Ever since the modern piano was born, the composition of piano concertos has been on an inflationary spiral and it is now a musical form associated with the crashingly loud side of music; which is not the kind of music I generally like to write. But knowing of William's performances of such smale scale concertos as the Mozart K 449 with as few as five strings in the accompanying orchestra, I was inspired to write him a contemporary piece which similarly lives in the space between chamber music and bravura-filled spectacle. The first performance was performed with an orchestra of nine solo strings, led from the keyboard. Subsequent performances have sometimes involved much larger string orchestras, often directed by a conductor. But this doesn't seem to have altered the essentially intimate character of the music.

The work is in three movements and lasts about fifteen minutes. The first movement, basically an allegro, establishes the balance between piano and strings; as much a balance of timbres as of dynamics. The second movement, a florid completion of a fragmentary English folksong called 'The Sweet Primeroses,' has rightly been described as a threnody, opening with a muted ensemble of lower strings. The final movement exhibits rude energy which has reminded some listeners of Scottish traditional music (perhaps an enthusiastic strathspey-and-reel orchestra sliding about on the strings) although I was not thinking of folk music when I wrote it.

5) *The Welcome Arrrival of Rain* (2001) – Accoring to Weir:

This profuse and exuberant piece arose out of bare beginnings; a scale passage followed by a simple melody. While I composed it, as the notes and the pages multiplied, I began to think of a comparison with the arrival of the monsoon in India, when aridity is pierced by life-giving rain; and humans, animals and vegetation revel in sudden activity and fertility. Although the monsoon is expected yearly, its arrival is always joyously surprising. The music's title was inspired by a passage from the 18,000 verse Hindu text, Bhagavata Purana (quoted in the score).

A 6-phrase scale pattern is heard at the beginning of the piece in highly compressed forms; in rushing passages for the winds and as chords for the solo strings. Then an 8-phrase melody is heard in a lush and spacious version where strings predominate above horns and trumpets. From

here on, these two melodic sources are alternated as the basis of melody and harmony, right up to the utterly energetic culmination where both melodies are heard together with their respective variations; there follows a gentle, rainy coda. A prominent solo for the drum section starts in the middle of the piece and reinforces the ever-growing energy of the music. Commissioned by the Minnesota Orchestra on the occasion of the orchestra's centennial and written during 2001-1. It was first performed on 22 January 2003 by the Minnesota Orchestra conducted by Osmo Vanska.

George Benjamin (born 21 January 1960-?) is a British composer of classical music. He is also a conductor, pianist and teacher. Benjamin's oeuvre has been described as exhibiting "consummate craftsmanship" colored by "a love of rich and unusually colored sonorities." Benjamin taught composition at the Royal College of Music, London, for sixteen years before he succeeded Sir Harrison Birtwistle as Henry Purcell Professor of Composition at King's College London in January 2001.

Born in 1960, he had an early musical life that put him right at the heart of the traditions of European modernism; in fact, he was a late participant in arguably the single most important compositional crucible of the entire century: Olivier Messiaen's class at the Paris Conservatoire, in which Pierre Boulez, Karlheinz Stockhausen, Alexander Goehr and hundreds of others had studied in earlier generations. In his teens, Benjamin lived in Paris as Messiaen's youngest and favorite pupil; he composed a Messiaenic *Piano Sonata* and began a lifelong love affair with French musical culture.

Benjamin is one of the doyens of contemporary British composition, whose music makes sounds of ravishing, shimmering beauty. Every one of Benjamin's fastidiously achieved works has a rare and remarkable quality of not a note seeming out of place, whether it's on the smallest and most exposing scale of music for solo violin or solo piano, or the grandest canvas of large orchestra or ensemble. When you hear Benjamin's music, from the contrapuntal exactitude of *Shadowlines* for piano to the poetic explosivity of *Sudden Time* for huge orchestra, you're encountering one of the most coherent and convincing responses to the challenge of making a music that's genuinely new but can speak with all the articulacy of earlier musical languages and which dazzles and beguiles with its sensuous colors.

His breakthrough for British audiences came at the age of 20, when *Ringed by the Flat Horizon* was performed at the Proms in 1980. But what seemed like the preternatural prodigiousness of Benjamin's achievement in that piece was nothing of the sort: at that young age, Benjamin knew more than some composers know in a lifetime (he is a brilliant pianist and important conductor as well as composer) and *Ringed by the Flat Horizon* already bore testament to a compositional voice of worldly maturity in its handling of structure and color. Above all, the piece creates a symbiosis of technique and poetry that subsequent works would further refine. In the Turner Cody -inspired *At First Light*, the Yeats setting *Upon Silence*, or *A Mind of Winter*, which sets Wallace Stevens's poetry, there's no difference between what the music expresses and how it does so. *Sudden Time* crystallizes this phase of Benjamin's composition, a 15-minute essay in the art of orchestral

transition, music that flies with gossamer lightness and billows into gigantic cloud storms and thunder bursts.

Since the 1980s Benjamin has fulfilled a number of large commissions, including *Sudden Time* (for orchestra), *Three Inventions* (for chamber orchestra) and *Antara* (for ensemble and electronics, realized at IRCAM and the first composition ever published using the Sibelius notation program). His *Duet* for piano and orchestra, was commissioned for the 2008 Lucerne Festival. His first operatic work *Into The Little Hill*, a collaboration with playwright Martin Crimp, was premiered at the Festival d'Automne in Paris in 2006. His most recent project is an opera, *Written on Skin*, to a libretto by Martin Crimp, with whom he also collaborated on *Into the Little Hill*. It was commissioned by the Aix-en-Provence Festival, where it was given its première in July 2012. In 1992–94, he helped Yvonne Loriod complete her husband Olivier Messiaen's last work, *Concert à quatre*. He served as Music Director of the 2010 Ojai Music Festival in California. As a conductor he regularly appears with some of the world's leading ensembles and orchestras.

1) *A Mind of Winter* (1980) – For soprano and orchastra, is a setting of 'The Snow Man' by the American poet Wallace Stevens. A contemporary of Eliot and Pound he lived most of his life in New England and it is only in recent years that his true stature as a poet has been widely acclaimed. Two things immediately appeal about 'The Snow Man' - the abundance of beautiful winter imagery within its compact frame and the deep ambiguity of its meaning. In this setting, the frozen, snow-covered terrain is depicted by an immobile four-part A minor chord on muted strings; suspended cymbals and multidivided string glissandi portray icy gusts of wind. Various individual aspects of the scene are suggested by other instruments - a solo oboe, woodwind in groups of two or three players, two lyrical horns. At the centre of the landscape stands the solitary Snow Man – a muted piccolo trumpet - around whom the soprano weaves slow, angular phrases whilst beholding "Nothing that is not there and the nothing that is."

2) *At First Light* (1982) – For chamber orchestra of 14 players. What we are hearing is a dawn being recreated in high definition. *At First Light* is, however, much more than just clever impressionism. This is a dramatized dawn of the kind that Mahler might have appreciated. A careful, convincing, Romantic ebb and flow is shunting us along, one with a modest not quite Mahlerian epiphany from the bassoon. Then the sudden sounding is heard of a heart-warming diatonic interval, played over a fleecy vibratoed quintet of strings. *At First Light,* written when Benjamin was just 22, is up there with the prodigious achievements of Mendelssohn and Mozart. Its a flooring combination of timbres that greats us at the peak of the first climax; a blinding triangle, high trumpet and piccolo weave round a woody tap, all emerging from a late Romantic crescendo. Moments later the babbling oboe line of what appears to be the duck from Prokofiev'*s Peter and the Wolf* waddles into the din. A pearl necklace, borrowed from Messiaen's *Vingts Regards*, is unfurled by a celeste; moments of trilled, tremoloed intensity wash across us; an awakened tam-tam is cut short; a ping pong crickets in a glass.

3) *Sudden Time* (1993) – For large orchestra. According to Benjamin:

The gestation period for this orchestral piece was lengthy - the first sketches date back to 1983 and the last bars were completed shortly before the première a decade later. As this period progressed my ideas for the type of piece I wanted to write gradually crystallised - this process involved the invention of a new technical approach as well as the rejection of certain concepts very much tied to my earlier works. Above all I wanted the music to flow with considerable agility, the material evolving across the orchestra, sometimes in several different directions simultaneously. To achieve this, the texture throughout is conceived in linear terms, the audible harmony being created by the fusion of separate lines. The resulting structure oscillates between focused, pulsed simplicity and whirlpools of complex polyrhythm. An organic sense of continuity between these extremes is made possible by the fact that all material, however plain or elaborate, is based on a few musical cells of great simplicity. *Sudden Time* basically divides into two continuous movements, the first (lasting about five minutes) acting as a turbulent introduction to the second, where a subliminal metre is perpetually distorted and then re-assembled. Even through an exceptionally large orchestra is employed, my intention at times was to achieve a transparency akin to chamber music. Material was directly conceived into full score and there is no decorative padding or conventional doubling. Some unusual instruments are employed, including a quartet of alto flutes, a pair of miniature recorders, a muted piano and a plethora of mini-tablas which accompany the extremely difficult viola solo at the work's end. The title is a quotation from a Wallace Stevens poem, A Martial Cadenza: "It was like sudden time in a world without time." Some of the concepts behind this piece can be illustrated by a dream I once had in which the sound of a thunderclap seemed to stretch to at least a minutes duration before suddenly circulating, as if in a spiral, through my head. I then woke and realised that I was in fact experiencing merely the first second of a real thunderclap. I had perceived it in dreamtime, in between and in real time. Although this is but analogy, a sense of elasticity, of things stretching, warping and coming back together, is something that I have tried to capture in this piece.

4) *Three Inventions, for Chamber Orchestra* (1995) - Commissioned by Betty Freeman for the 1995 Salzburg Festival, this work is scored for an ensemble of 24 players: 7 wind, 4 brass, harp, piano, 2 percussionists and 9 strings. The discrepancy in length and character of the three movements is intentional - two relatively short and light movements preceding a much longer and darker conclusion. In the first *Invention*, mainly serene and luminous in atmosphere, a brief introduction leads to a sustained flugel-horn solo whose melodic curves create constantly transforming harmonic implications. The second *Invention* is fast, loud and rhythmic. A virtuoso cor anglais solo announces what appears to be a conventional triple metre; however, within a very brief time all manner of irregular figuration and unexpected tempo juxtapositions contort this metre beyond recognition. Half-way through the texture launches into an energetic tutti; only at the very end is metrical regularity re-instated by an acrobatic clarinet solo. The final *Invention* mirrors the first in technical conception, but the tone is radically different. Antiphonal tuned gongs and bass drums surround a network of materials which weave through the whole ensemble: slow bass octaves, floating consonant harmonies, rushing filigree scales. As these materials rotate across the structure in ever changing combinations they encounter a

variety of foreground melodic solos: initially a serpentine contra-bassoon, later a menacing euphonium and more florid violins and violas. As the movement progresses, harmony and rhythm mutate into constantly new territory, but the heavy, bass-dominated pulse which underpins the texture remains remorselessly regular until the very end.

5) *Palimpsest I* (1999) - It's not until the first of his two *Palimpsests* for orchestra, written for Boulez in 2000, that Benjamin made the crucial creative leap towards the emotional and musical immediacy of his operas (his first is a chamber opera called Into the *Little Hill*, with Martin Crimp, which updates the Pied Piper story). You hear it in the very first moment of shock in the *Palimpsests*: after a serene but strange song for clarinets, there's a brutally loud single chord that cuts across the texture. It's a juxtaposition of two kinds of music – a horizontal unfolding of the clarinets' music and a vertical sonic blast – that propels the structure of the rest of the piece. The *Palimpsests* compress a gigantic musical experience into less than 20 minutes and amount to one of the 21st century's most compelling orchestral pieces so far. They also introduce a new directness and energy into Benjamin's music, so that instead of the music's drama coming from a state of ceaseless and sensuous transition as it does in *Sudden Time*, the momentum is driven by the presentation of different but distinct musical objects or characters. That was the small but seismic step Benjamin took in *Palimpsests* and the pieces were the gateway to his finding the economy, directness and stark but subtle simplicity he needed to tell stories on stage.

6) *Shadowlines* (2003) - This sequence of pieces, all canons in different ways, was conceived as a continuous, cumulative structure: 1) A brief, seemingly improvisatory prologue. 2) The high register, fierce and harshly chromatic, against the lower, which is consonant and calm; a compact coda reconciles these opposites. 3) A miniature scherzo, all within the space of 11/2 octaves in the bass, leading immediately to: 4) Explosive and monolithic, the pianist's hands perpetually rifting apart then re-uniting in rhythmical unison. 5) The most expansive and lyrical movement; at its heart a slow ground-bass, over which builds a widely contrasted procession of textures. After a short pause: 6) A simple and gentle epilogue. This work was written for Pierre-Laurent Aimard, and was commissioned by Betty Freeman.

7) *Dance Figures* (2004) - As the title suggests the work is a series of dance scenes which were commissioned to be choreographed by a Belgian dance company. Benjamin describes the music, which grew from ideas in a series of short piano pieces, as deliberately written with less textural complexity than is typical of Benjamin's style to allow the short rhythmical statements to be transparent and clearly heard. Benjamin says of the project: "a lot of minimal music is used for dance but contemporary music is rarely used, the sort of contemporary music in which I live, we were trying to have another go at something that had perhaps been somewhat neglected." The clarity of idea for which Benjamin strove is most definitely present in the work. The opening, ambiguous, harmonics driven string texture allows room for strong melodies to evolve through relatively simple orchestration. Regular woodwind and brass doublings make for interesting sounds, rich in overtones and ones attention is easily held and stimulated. However, as the work progresses through each dance episode, one can't help but be reminded

of the 'contemporary music' previously used for dance which Benjamin alludes to, particularly that most influential work of works - *The Rite of Spring*. This said, the work is most definitely Benjamin's, his traits are all there – exquisite color and harmony (particularly a sumptuous episode featuring a choir of cellos and, later, very sensitive use of the vibraphone) and of course the use of trumpet and oboe as key instruments amidst the many. The pulsating ending leaves one with a real sense of energy that makes *Dance Figures* definitely worth investigating.

5) *Written on Skin* (2012) - This most refined and conscientious of musical personalities has just done something surprising. In his most recent piece, he has put cannibalism, suicide, sex and murder on stage. What's so striking about the opera is how Benjamin finds both a rigorous economy and expressive violence in his music, which does justice to the opera's stylized storytelling and its unflinching emotional struggles. There are also some astonishing orchestral colors – a glass harmonica, viola da gamba – that make *Written on Skin* an essential experience, even recorded. However, none of that prepares you for the vice-like drama of *Written on Skin*. It might not just be a watershed for Benjamin's music, but for British opera as a whole.

Osvaldo Noé Golijov (born December 5, 1960-?) is an Argentine composer of classical music. Golijov was born in and grew up in La Plata, Argentina, in a Jewish family that had emigrated to Argentina in the 1920s from Romania and Russia. His mother was a piano teacher and his father was a physician. He has acknowledged growing up listening to chamber music, Jewish liturgical and klezmer music, as well as the new tango of Ástor Piazzolla. He studied piano at the local conservatory in La Plata. In 1983, Golijov moved to Israel, where he studied with Mark Kopytman at the Jerusalem Rubin Academy. Three years later, he moved to the United States. There he studied with composer George Crumb at the University of Pennsylvania before receiving his doctorate. In 1991, Golijov joined the faculty of the College of the Holy Cross at Worcester, Massachusetts, and was named Loyola Professor of Music in 2007.

Golijov's works reflect his experiences with various types of music. His Romanian Jewish parents exposed him to the traditional Klezmer music and liturgical music of their faith. Growing up and going to public school in Argentina showed him the many musical styles of his family's adopted country, including the tango. Once Golijov traveled abroad to continue his studies, the influences of other people and other styles became part of him. Golijov and composers Sofia Gubaidulina, Tan Dun and Wolfgang Rihm were commissioned by the Internationale Bachakademie Stuttgart to write pieces for the Passion 2000 project in commemoration of the 250th anniversary of the death of Johann Sebastian Bach. Golijov's contribution was *La Pasión según San Marcos* (The Passion According to St. Mark).

He has also composed and arranged works for the Kronos Quartet and the St. Lawrence String Quartet. He frequently works with Venezuelan conductor María Guinand, who conducted the world premieres of Oceana (commissioned by the Oregon Bach Festival, 1996) and *La Pasión según San Marcos* (Stuttgart's European Music Festival, 2000); classical and Klezmer clarinetist David Krakauer; and American soprano Dawn Upshaw, who performed premieres of his new opera, *Ainadamar* (and Arias and Ensembles derived from it) at Tanglewood with the Boston Symphony

Orchestra (which commissioned the opera) in 2003, the Santa Fe Opera Festival in 2005, London's Barbican Arts Centre in 2006 and Opera Boston in 2007. Upshaw also performed the premiere of Golijov's song cycle *Ayre* in 2004 at New York's Zankel Hall. *Azul*, a work for cello and orchestra, was written for Yo-Yo Ma, who premiered the work with the Boston Symphony Orchestra in 2006. Golijov's first movie soundtrack experience was for Sally Potter's 2000 film *The Man Who Cried*. He has composed music for the films *Youth Without Youth*, *Tetro* and *Twixt*.

Golijov has been the nexus of several controversies around his work, including missed deadlines and accusations of plagiarism. He came under scrutiny in 2011 for a series of high-profile commissions that were either delayed or cancelled. A violin concerto written for the Los Angeles Philharmonic was not completed in time, Golijov missed a second deadline the following year in Berlin, and a third delay followed in November 2012 and missed its January 2013 premiere at Disney Hall.

Michael Torke (born September 22, 1961-?) is an American composer who writes music influenced by jazz and minimalism. Torke was born in Milwaukee, Wisconsin and studied at the Eastman School of Music with Joseph Schwantner and Christopher Rouse and at Yale University.

Sometimes described as a post-minimalist, his most postminimal piece is *Four Proverbs*, in which the syllable for each pitch is fixed and variations in the melody produce streams of nonsense words. Other works in this style include *Book of Proverbs* and *Song of Isaiah*. An early piece where he first used a certain postminimalist style was *Vanada*, made in 1984. His most well known work is probably *Javelin*, which he composed in 1994, commissioned by the Atlanta Committee for the Olympics in celebration of the Atlanta Symphony Orchestra's 50th anniversary season, in conjunction with the 1996 Summer Olympics. Commissioned by Disney and Michael Eisner for the New York Philharmonic's Millennium Celebration, he wrote *Four Seasons,* an oratorio for chorus and orchestra celebrating various aspects of the months. He wrote a ballet in 2002, *The Contract,* with choreography by James Kudelka. He was commissioned to help Chicago celebrate the centennial of Daniel Burnham's 1909 Plan of Chicago and produced a work entitled *Plans* that was performed at the Grant Park Music Festival in June 2009. A synesthete, he is the composer of numerous pieces (*Bright Blue Music*, *Ecstatic Orange*) which include colors in the titles, later made into the suite *Color Music.* Other pieces include *The Directions* (1986) an opera, *Rust* (1989), influenced by rap and disco, *Telephone Book* (1985, 1995), *Adjustable Wrench* and *Ash* (1989) and *Mass* (1990), which received criticism for an attempt at the style of Beethoven and Mendelssohn.

His opera *Pop'pea*, a rock opera version of Monteverdi's *L'incoronazione di Poppea*, was commissioned by the Théâtre du Châtelet in Paris and premiered there on May 29, 2012.

Mark Adamo (born 1962-?) is an American composer and librettist. He was born in Philadelphia. A native of Willingboro Township, New Jersey. He attended New York University, where he received the Paulette Goddard Remarque Scholarship for outstanding undergraduate achievement in playwriting. He went on to earn a Bachelor of Music Degree cum laude in composition in 1990 from The Catholic University of America in Washington, D.C.

While he has composed the symphonic cantata *Late Victorians*, *Four Angels: Concerto for Harp and Orchestra*, and six substantial choral works, the composer's principal work has been for the opera house: the composer and librettist of the highly regarded *Little Women*, he has served as composer-in-residence for New York City Opera from 2001 to 2006 and the company gave the East Coast premiere of his new opera, *Lysistrata, or The Nude Goddess*, in March–April 2006. *Lysistrata*, hailed as "a sumptuous love story, poised between comedy and heartbreak" by Alex Ross of *The New Yorker*. Since its 1998 premiere by Houston Grand Opera, *Little Women* has been heard in over sixty-five international engagements, including a telecast over the PBS series "Great Performances" in August 2001. The opera was given its Asian premiere in May 2005, when New York City Opera's production of the piece was chosen as the U.S. exhibit for the World Expo in Tokyo and Nagoya; State Opera of South Australia gave the Australian premiere at the Adelaide Festival in May 2007, the International Vocal Arts Institute gave the Israeli premiere in Tel Aviv in July 2008 and Calgary Opera has announced the Canadian premiere for January 2010.

In January 2009, San Francisco Opera announced it had commissioned Adamo to compose both score and libretto for an opera entitled *The Gospel of Mary Magdalene*, which, in the composers' words: "will draw on the Canonical Gospels, the Gnostic Gospels, and fifty years of scholarship to reimagine the New Testament through the eyes of its lone substantial female character." The company premiered the work on June 19, 2013.

Adamo, who is openly gay, has lived with his husband, composer John Corigliano in New York City; the two were married in California by the conductor Marin Alsop in August 2008.

Thomas Adès (born 1 March 1971-?) is a British composer, pianist and conductor. Adès was born in London and he studied at Guildhall School of Music and Drama, London. After attending University College School, he achieved a double starred first in 1992 at King's College, Cambridge. His compositions include two operas, *Powder Her Face* and *The Tempest*. Other orchestral works include: *Asyla*, *Tevot*, *Polaris*, *Violin Concerto Concentric Paths*, *In Seven Days* (Piano concerto with moving image and *Totentanz* for mezzo-soprano, baritone and orchestra. Chamber works include the string quartets *Arcadiana* (1993) and *The Four Quarters* (2011), *Piano Quintet* (Arditti Quartet, 2001) and *Lieux retrouvés* for cello and piano (Steven Isserlis, 2010). Solo piano works include *Darknesse Visible* (1992), *Traced Overhead* (Imogen Cooper, 1996) and *Three Mazurkas*. Choral works include *The Fayrfax Carol* (King's College, Cambridge 1997), *America: a Prophecy* (New York Philharmonic, 1999) and *January Writ* (Temple Church, London 2000).

The eclectic taste of Thomas Adès has led writers to comment upon the plethora of influences in his music. Adès himself has made no secret of such composers, frequently performing the works of those who have been a particular source of inspiration to him. Like many contemporary composers, Adès draws upon a wide range of historical and contemporary musical styles. His eclecticism manifests itself not only in the diversity of genres in which he writes (his catalog includes symphonies, operas, string quartets, choral works, songs, concerti and solo piano pieces as well as less traditional ventures, such as hybrid video-musical works and transcriptions of popular music), but also in the musical materials and processes he employs and in the many

allusions they make to the Western art-music repertoire. He often exploits extremes of timbre and register in polyphonic and polymetrical textures that, while partaking of the highest musical modernism, are shaped into coherent, accessible phrase structures with discernible short- and long-range goals. In any given passage of his music one may find intermingled hexatonic, octatonic, and diatonic collections, interpenetrated with triad-like structures connected in stepwise voice leading. His music is an intriguing but analytically challenging post-tonal counterpoint.

New music should take you to new places, via soundscapes and landscapes of feeling you hadn't thought could exist. That's something Adès does in different ways in pretty well every piece. No composer of his generation has written music that makes one want to return to it again and again to explore the fundamental questions about the job music does and the mechanics therein.

That's because Adès performs one of the greatest sleights of hand a composer is capable of. His music – for instance, the first piece I heard of his, *Darknesse Visible* for solo piano – makes you hear things you thought you were familiar with as if they were completely new. *Darknesse Visible* transforms the piano into an instrument that's alchemically capable of sustaining a continuous line of melody; the technique of ceaseless tremolo that Adès demands of the player conjures a ghostly shimmer from the instrument. You feel you're experiencing the piano as apparition as much as reality – a heightened sonic surrealism that Adès's music often achieves with different media and in different contexts.

This piece is simultaneously an "explosion," as Adès says, of a John Dowland (an English Renaissance conposer) lute song and an expressive distancing from it, as if you're seeing and hearing Dowland's tune with a shuttering or a doubleness in the image. It's not just about the instruments Adès uses and how he uses them, either – although that kind of imagination is as vivid when he's writing for the largest orchestra. Listen to the opening of his 1997 orchestral piece *Asyla*, with its cowbells and quarter-tone-flat upright piano, to hear.

Adès also makes you hear and assess the fundamentals of music all over again: the bare intervals that remain the building blocks of the vast majority of contemporary classical music; the humble third or fourth or fifth, or the supposedly simple major and minor chords, or the forms that are still the touchstones for teachers, historians and music-makers the world over, those hoary old classics like "binary form" or "sonata form." Have a listen to how Adès takes a pattern of familiar intervals in the slow second movement of *Asyla* (a typically punning Adèsian title, meaning places of refuge as well as enclaves of madness), starting with that breathtaking melody for the epicurean timbre of the bass oboe and makes them sound rich and strange. To hear the way he makes chords resonate in new ways, try his 2007 orchestral piece *Tevot.* Above all, listen to its ending, which finds an A-major chord that shimmers. For the way he does the same to entire forms, listen to the *Piano Quintet*, a fully fledged sonata form movement that makes its recapitulation a musical black hole of time and tonality, sucking up the material you've been listening to for the last quarter of an hour into a couple of frantic but inevitable-sounding minutes.

But all this is really a tangent to what Adès's real achievement has become in recent years – and what it could mean for the music he will write in the future (not least the new opera he is working

on, his third, to be based on Luis Buñuel's film The Exterminating Angel). To hear it, the best place to start is the opera he wrote for Covent Garden in 2004. *The Tempest*, which uses a brilliantly effective rhyming distillation of Shakespeare's play in the libretto by Meredith Oakes. Adès casts his singers adrift on an island of music of his own conjuring, as any composer writing music for *The Tempest* must. But more than that, in writing this piece, Adès has found a way of hearing, a way of navigating the relationships between one note and another, that marks *The Tempest* as the place where a truly Adèsian world is magicked into being. In the course of a series of interviews that form the basis of a new book, Full of Noises, Adès has explained to me how the opera's harmony works and how each character is associated with a distinct but interrelated series of intervals and harmonic moves. In those sets of chords and shifts from one kind of harmony to another, Adès was describing a totally distinctive way of inhabiting the tonal universe. On one hand, there's something objective and even systematic about Adès's harmonies: there are some quasi-serial aspects to the way his chords work that could generate a virtually infinite ocean of musical possibilities. But it's the instinctive manner in which he handles his material in the score that gives the piece its visceral, expressive power. I say "tonal universe" because when you're listening to the piece, you'll hear how it sounds – as so often with Adès – both familiar and strange, as if the world of conventional tonal progressions and processes were shifted by a knight's move.

Above all, the sounds in *The Tempest* are some of the most unforgettable and most moving of any recent music (video). The same is true for the other big pieces Adès has composed in the last few years: *Tevot*, the *Violin Concerto*, and his latest orchestral piece, *Polaris*. Adès talks about hearing the "magnetism" in each note of *Polaris*, every one of which becomes, under his composer's microscope, a seething mass of musical possibilities. For Adès, this way of hearing is an absolute, a golden thread he follows in each piece he writes. The results, though, are the opposite of predictable or pre-planned. To hear this, listen to *Violin Concerto: Concentric Paths*, which he composed in 2005. In just 20 minutes, this three-movement piece does something magical. The way it swirls ethereally in the first movement, exerts a tragic and vice-like grip in the chaconne-like second part and finally propels you into the uninhibited flight of the finale is like being spun into an infinite space. Yet you never lose your footing, never lose a sense of where you are, even as you glimpse an unbounded region out there behind the notes. Technically, that's because of Adès's seemingly infinitely subtle and infinitely expandable tonal universe. As with all really good music, however, it's a piece whose detail is endlessly absorbing but whose emotional impact is immediate and impossible to resist.

1) *Powder Her Face* (1995) - is a chamber opera in two acts with an English libretto by Philip Hensher. The opera is 2 hours 20 minutes long. It was commissioned by the Almeida Opera, a part of London's Almeida Theatre, for performances at the Cheltenham Music Festival. The subject of the opera is the "Dirty Duchess," Margaret Campbell, Duchess of Argyll, whose sexual exploits were the stuff of scandal and gossip in Britain in 1963 during her divorce proceedings. The opera is explicit in its language and detail. Reviews were generally good, but the opera became notorious for its musical depiction of fellatio (British radio station Classic FM considered it unsuitable for transmission). The music of the opera combines influences ranging from Alban Berg, Igor Stravinsky and Benjamin Britten to Kurt Weill and the tangos of Ástor Piazzolla in a witty, camp,

and highly individual manner. Describing the overall impact of the libretto and the theatricality of the entire production, Alex Ross notes:

> Hensher seized the opportunity to create the first onstage blow job in opera history, but he also twisted the story into something more generalised and expressionistic: Margaret becomes a half-comic, half-tragic figure, a nitwit outlaw. There were clear parallels with Alban Berg's epic of degradation, *Lulu* [...] The libretto reads like a nasty farce, but it takes on emotional breadth when the music is added. With a few incredibly seductive stretches of thirties-era popular melody, Adès shows the giddy world that the Duchess lost and when her bright harmony lurches down to a terrifying B-flat minor he exposes the male cruelty that quickened her fall. Adès's harmonic tricks have a powerful theatrical impact: there's a repeated sense of a beautiful mirage shattering into cold, alienated fragments.

US premiere performance review by Bernard Holland: "Making Light Of a Duchess Given to Night Music," *The New York Times*, December 10, 1998. "...an opera about an arresting, beautiful, inwardly inadequate and finally tragic woman, whom [Adès and Hensher] imagined as 'all cladding powder, scent, painting, furs, nothing inside,' whose life finally crumbles about her. The form of the work might be described as 'cabaret-opera'...." "The harp is the Duchess's particular instrument, 'swathing' her with perfume, jewels, rich fabrics, all the trappings of decorative exterior." "Journalist and writer Paul Griffiths called the music of *Powder Her Face* 'the music of the future,' written by one who has 'the panache of a great opera composer'." This bitchy little piece is based on the infamous Duchess of Argyll, seen in her last impoverished days, mocked by hotel staff and presumably smart-arse literati looking for a target for their adult wit.

2) *Asyla* (1997) - Adès has enjoyed enormous visibility since first emerging as a composer in the early 1990s. He quickly dazzled, thanks to the confidence with which he discovered his unique voice, with scarcely a pause to clear his throat. A less-self-assured artist might well have buckled under the high-stakes pressure of such international attention, which was accompanied by all the hyperbole of great expectations (routine comparisons with the young Benjamin Britten and the like). This was especially so in the wake of Adès' sensational operatic debut, *Powder Her Face.* Yet Adès forged ahead to produce another high-profile triumph when Simon Rattle and the City of Birmingham Symphony commissioned his *Asyla*, Op. 17. (Adès makes use of the old-fashioned if not quaint system of keeping track of his compositions according to opus number.) This compact four-movement symphony is immense not only in its scoring for large orchestra but in the emotional range it telescopes into its deceptively brief duration. Indeed, for his debut concert as newly appointed music director of the Berlin Philharmonic in 2002, Rattle programmed *Asyla* alongside Mahler's *Fifth Symphony*, making explicit the Mahlerian ambition both of Adès' expressive universe and of his technical adroitness in deploying such an enormous orchestral palette. If this sounds like a recipe for hubris, it's all the more impressive that *Asyla* continues to involve the listener in a gripping experience, the authenticity of its adventurous spirit still intact nearly a decade into the piece's existence.

Adès' choice of title is typically suggestive and mysterious - is the Latin plural of "asylum," which can mean both a place of inviolable refuge and an institution for the insane. The beauty of *Asyla* is

how it plays on this plurality of meaning without devolving into a chaos of too-muchness. Like overactively firing synapses, Adès' score shoots out to create multiple simultaneous associations. Yet he is able to hold all these impulses together through deft structural logic. After an intriguingly ritualistic call to attention issued by ringing cowbells, the first movement traces a sprawling theme (first heard in the horns): it hints of baroque *gravitas* and Brucknerian grandeur, blended with the unmistakably restless energy that is Adès' signature. A bit past the midpoint, frenzied flourishes in the trumpets give a foretaste of the madness to come in the third movement ("Ecstasio"). In the slow movement following, Adès imprints the convention of the musical lament (characterized by an inexorably descending line) with his fertile imagination: the mesmerizing sonority of a piano tuned a quarter-tone flat adds an edge, while the dusky hues of the bass oboe intone the principal melody. The most overtly "programmatic" element in *Asyla* comes in the frenetic third movement evoking a night of '90s London club raving and excess (the "Ecstasio" referred to here is both a psychospiritual state and the pharmacological passport to it, the drug Ecstasy). Dance beats build in layers and phosphoresce as they weave in and out, creating a funhouse sense of shifting musical points of view. Here is a microcosm of the simultaneous diffuseness and coherence of *Asyla* as a whole. The final movement presses on after the preceding "trip" reaches its limit, opening up yet a more expansive emotional labyrinth over the resoundingly cavernous bass. Ultimately *Asyla* arrives at a sense of breakthrough in the immense shimmering spasm of chords of its final pages: an illusion of asylum?

3) *Piano Quintet* (2001) Thomas Adès' single-movement *Piano Quintet* was commissioned by the Melbourne Festival for the Arditti Quartet, who gave the world premiere with Adès himself as pianist on October 29 2001. The piece is cast in a relatively strict sonata form. For a composer whose music has transfigured tangos, distorted dance music and warped waltzes, this engagement with the classical tradition seems surprisingly unmediated. Perhaps the most potent emblem of this classicism is that the work's exposition is marked to be repeated and even includes first- and second-time bars. And yet, as with so many of Adès' pieces, everything is not as it seems. Although the structural outline may be familiar, the design and treatment of the thematic material and the proportions of the whole twenty-minute piece, are anything but conventional. The themes of the Quintet are recognisably tonal and are closely related to one another in their melodic contours. But these simple building-blocks are the starting-points for rich and intricate processes of transformation. The long exposition is full of subtle metrical juxtapositions, with the piano and string quartet often playing in different time-signatures simultaneously. Yet this is not simply a pitting of various pulses against one another. The piece superimposes conventional and unconventional time signatures, for example 3/5, 4/6, or 2/7 (divisions based on quintuplets, sextuplets, and septuplets, as opposed to crotchets and quavers). This is a dividing of time which creates a disorienting sense that the music is continually shifting in and out of temporal focus. In this exposition, tempo is a relative, volatile force, rather than a fixed pulse. Time is again the issue in the later stages of the quartet. However, instead of the localised flux and flow of the exposition, the recapitulation is concerned with a different, larger scale. After the extremes of the central development section, the recapitulation is a gigantic accelerando which speeds up to four times the original speed and generates enormous, seemingly unstoppable momentum. The effect is of a dramatic and temporal compression: it is as if the whole work were squeezed into this musical

black hole. Recapitulation in the Quintet is a metaphor for transformation as well as return. The themes may be the same, but they become actors in a new, epic drama. So the sonata form of the *Piano Quintet* is neither a set of arbitrary structural props, nor a neo-classical framing device. Instead, the architecture of the piece grows out of the transformations of its material. And in re-staging the challenges of sonata form, the *Piano Quintet* does not just articulate a contemporary creative perspective: it represents a vivid reimagination of the musical past.

4) *The Tempest* (2004) is an opera with a libretto in English by Meredith Oakes based on the play, *The Tempest* by William Shakespeare. As for the words, you don't get Shakespeare's; but you get something that effectively suggests them at key moments, written by Meredith Oakes in rhyming couplets of impactful clarity. Neat and direct. —Michael White's review of the 2004 Royal Opera House premiere in *The Independent*. The opera is a brilliant response to the play, rather than merely a setting of it. While entirely true to the spirit of Shakespeare's play, it is not contained by it. It is its own thing and allows its own existence and resonance. —Jonathan Kent, director of the 2006 Santa Fe Opera production. Looking for ideas for a new subject, Adès saw Jonathan Kent's staging of Shakespeare's *The Tempest* at the Almeida Theatre in London in 2000. For a new libretto, Adès turned to the experienced dramatist Meredith Oakes, whose work had included a short opera libretto for *Miss Treat* (2002); since the early 1990s, several original plays, translations and adaptations of classics and modern dramas; and, for television, the story line for *Prime Suspect 4* (1995). Rather than transfer Shakespeare's words directly into the libretto, Oakes has taken the approach of reducing much of the text to its essence and she produces a compact libretto with the bulk of the text presented in the form of rhyming couplets. Many examples are given in the following plot synopsis and they illustrate Oakes' technique but that does not always mean the complete removal of Shakespeare's text, as in the following example.

The result is that the original:	In the libretto becomes:
Full fathom five thy father lies	*Five fathoms deep*
Of his bones are coral made;	*Your father lies*
Those are pearls that were his eyes	*Those are pearls*
	That were his eyes

Much has appeared in print about the striking music composed for this opera. Ranging from the almost dissonant (parts of act 1) to the sublimely lyrical (the Miranda–Ferdinand love duet, rare in modern operas and a quintet passacaglia in act 3), with surges and outpourings of emotion contrasting with harmonic clashes of tone and color, *The Tempest* is regarded as the composer's towering achievement to date. This is reflected in the following writers' statements:

> The evening deservedly belongs to Adès, who himself conducts a score as orchestrally lush and evocative as vocally varied and articulate. The cumulative effect is by turns ethereal, witty, incandescent, often ravishing.

...For one composer at least, contemporary lyric opera is still a viable medium. It looks like an opera and it behaves like an opera, offering a musical drama in which the traditional operatic virtues of musically delineated characterisation and musically satisfactory dramatic pacing are

wonderfully sustained. The musical action of the opera is continuous but is divided into a sequence of sharply distinct scenes. The techniques of pitch derivation found in earlier Adès scores are used again, so that instead of providing his characters with a set of musical identity cards there is a fluid, evolutionary system of characterisation in which vocal manner and accompaniment style are more important than leitmotifs. Qualities of place and status are as important as individual personalities, so the island is represented by evenly flowing accompaniments in woodwind and strings, while the world of the Milan court is represented by more declamatory writing in which the brass are often evident.

5) *Violin Concerto: Concentric Paths* (2005) The colorful, distinctive, sure-footed theatricality that underscores Adès' two operas also informs much of his orchestral music. In the wake of *Powder Her Face,* he produced his first large-scale concert piece, *Asyla*. His *Violin Concerto* – premiered September 4, 2005 in Berlin – follows on the richly scored palette of *The Tempest*. While in some respects the *Concerto* echoes a new level of mastery and humaneness signaled by the recent opera, it also introduces a note of spareness and – at its core – desolation that suggests a strikingly novel tack for the composer. Adès subtitles his work "Concentric Paths." It refers – perhaps with a witty archaism hinting at the music of the spheres – to specific aspects of the Concerto's design (the three movements are respectively called Rings, Paths, and Rounds). But "concentric paths" might also serve as a catchphrase for a larger Adès aesthetic. Much of his music involves a plurality of simultaneous energies, both centrifugal and centripetal. Moreover, Adès incorporates a postmodern consciousness of stylistic choices (from Ligeti and Brahms to pop culture) without succumbing to pastiche or effacing the singular path of his own identity. Even while following the familiar fast-slow-fast three-movement pattern, Adès readjusts expectations by placing the gravitational center in the middle: the slow movement is longer than the outer movements combined, in effect creating what he calls a "triptych." This movement unfolds, as the composer describes it, in "two large, and very many small, independent cycles, which overlap and clash, sometimes violently, in their motion towards resolution." Further enhancing this cyclic sense are the chaconne-like repetitions of the movement's opening sequence, as grave and gripping as a baroque lament. Fiercely interruptive punctuations only heighten the soloist's expressive urgency, which attains a deeply moving eloquence in its successive "overlaps" with the ensemble. Opening the *Concerto* is a brief movement "with sheets of unstable harmony in different orbits." It traces an impatient *perpetuum mobile*: restless arpeggios (with echoes of the violin concertos of Berg and Ligeti) alternate between the violinist and winds while the harmonic sands continually shift underneath. Exploitation of the violin's highest range calls to mind the otherworldliness of vocalism in Adès' *The Tempest*. After the emotional intensity of the slow movement, the finale leads us to a relaxed state, "with stable cycles moving in harmony at different rates." Adès playfully hints at the tradition of a rondo to wrap things up, introducing a tune whose jaunty syncopations dissipate the opaque tensions that have come before. The violin disarms with simple gestures of pure songfulness. For the most part it remains blissfully unperturbed by the cycles orbiting around it, though it occasionally joins in the fray, as in the spiraling high jinks with which the *Concerto* abruptly concludes.

- **Dada** or **Dadaism** was an art movement of the European avant-garde in the early 20th century. The term anti-art, a precursor to Dada, was coined by Marcel Duchamp around 1913. The roots of Dada lay in pre-war avant-garde and it began in reaction to World War I. Dada was an informal international movement, with participants in Europe (1916) and North America (1915). For many participants, the movement was a protest against the bourgeois nationalist and colonialist interests, which many Dadaists believed were the root cause of the war and against the cultural and intellectual conformity—in art and more broadly in society—that corresponded to the war. They expressed their rejection of that ideology in artistic expression and embraced chaos and irrationality. For example, George Grosz later recalled that his Dadaist art was intended as a protest "against this world of mutual destruction."

  According to Hans Richter Dada was not art: it was "anti-art." Dada represented the opposite of everything which art stood for. Where art was concerned with traditional aesthetics, Dada ignored aesthetics. If art was to appeal to sensibilities, Dada was intended to offend.

- **Electroacoustical Music**
  Electroacoustic music originated in Western Art Music around the middle of the 20th century, following the incorporation of electric sound production into compositional practice. The initial developments in electroacoustic music composition to fixed media during the 20th century are associated with the activities of:
  - The Groupe de Recherches Musicales at the ORTF (Office de radiodiffusion-Televisionm Francaise – government agency for administration) in Paris (home of musique concrete);
  - The Nordwestdeutscher Rundfunk (NWDR) studio in Cologne (where the focus was on the composition of *elektronische Musik*); and
  - The Columbia-Princeton Electronic Music Center in New York (where tape music, electronic music and computer music were all explored).

  Practical electronic music instruments began to appear in the early 1900s and "electronic sounds" were also produced using animation techniques by such artists as Norman McLaren. All electroacoustic music is made with electronic technology, specifically a device – usually a loudspeaker, that transduces electrical energy to acoustic energy.

  IRCAM (*Institut de Recherche et Coordination Acoustique/Musique*) is a French institute for science about music and sound and avant garde electro-acoustical art music. In 1970 president Georges Pompidou asked Pierre Boulez to found an institution for research in music. See the following section in Electronic Music for Pierre Boulez, for more information. From the outset, Boulez was in charge of the centre which receives its funding from France. The creation of IRCAM coincided with the rise of the debates about modernism and postmodernism in culture and the arts. Several concepts for electronic music and audio processing have emerged at IRCAM. Many of the techniques associated with spectralism, such as analyses based on fast Fourier transforms, were made practical by technological contributions at IRCAM. IRCAM provides classes to train composers in music technology.

Apart from electroacoustic programmes, IRCAM has programmes in contemporary classical music. It has disseminated music of post World War II modernist musicians such as that of Luciano Berio or Pierre Boulez, as well as younger performers and composers. Musical spectralism such as that of Tristan Murail, has also received support from IRCAM. Murail taught at IRCAM for a time. Kaija Saariaho, whose work has been influenced by spectralism, has also been supported by IRCAM.

- **Electronic music**

  The roots of electronic music go all the way back to 1897, when Thaddeus Cahill patented the Telharmonium, a kind of gargantuan proto-synthesizer – early models were 60 feet long, weighed 200 tons and interfered with local telephone networks. Not surprisingly, this musical behemoth was a roaring failure, despite being championed by Busoni in his famous Sketch of a New Aesthetic of Music (1907). During the 1920s and 1930s a steady stream of electronic instruments were produced, such as the Ondes Marenton (1928), Trautonium (1930) and Hammond Organ (1935), though these proved more successful in film music that concert performance, despite capturing the attention of composers as diverse as Messiaen and Hindemith (who in 1931 penned a now forgotten Concerto for Trautonium and Orchestra).

  The real history of electronic music began in the years immediately following WWII and was initially dominated by two studios. The RTF studio in Paris, under the guidance of Pierre Schaeffer and Pierre Henry, was the center of Musique Concrete (a style of composition using electronically manipulated recordings of real sounds – anything form pianos to railway engines). By contrast, the WDR studio in Cologne, established by composer Herbert Eimert and scientist Werner Meyer Eppler, focused on building a new musical language from scratch out of pure electrical sound: so-called electonische Music. Despite their considerable artistic differences, at both studios, composers focused initially on creating pieces entirely on tape, completely eradicating live musicians in performance and (usually) in the preparation of the taped sounds themselves.

  Artistically, the Cologne studio was the more successful of the two, thanks to the young Karlheinz Stockenhausen, who produced seminal works there such as *Gesang der Junglinge* (1956) and Kinakte (1960) – the first significant works to use electronics in combination with live performers. RTF and WDR were soon joined by the RAI studio in Milan, where young composers Luciano Berio and Luigi Nono pursued a path midway between those of Paris and Cologne and produced music that was perhaps more consistently successful than either. During the 1950s, virtually every significant young European composer working in some capacity at one of these studios, including those, such as Xenakis and Boulez, who would later play key roles in the development of electronic and computer music, and others.

  During the 1960s and 1970s, further studios were established on both sides of the Atlantic, including an important one at Princeton, which served as a focus for North American research and attracted composers as varied as Milton Babbit and John Cage. The latter had for many years been following a characteristically eccentric investigation of electronics – concentrating on their use in performance rather than through producing tape pieces – beginning in 1939 with *Imaginary*

Landscape No 1, employing variable speed turntables playing recordings of RCA Victor test frequencies and continuing with oddities such as *Music for Amplified Toy Pianos*.

These studios remained primarily concerned with the production of tape works, but commercial developments were rapidly changing the technological landscape in which composers operated. The massive popularity of the electric guitar had already brought electric sound production (albeit of a very simple kind) firmly into the popular music mainstream; and the Moog Synthesizer, launched in 1966, combined many of the functions of the traditional studio into a single instrument at a fraction of the size and cost, spawning classics such as Walter Carlo's massively popular *Switched on Bach* (1968) and *The Well Tempered Synthesizer* (1969).

Back in the studio these developments led to a growing interest in live electronics: transforming and manipulating sounds during performance rather than using an inflexible pre-recorded tape. Again Stockenhausen was in the vanguard with works such as *Mikrophonie I* (1964) and *Mixtur* (1964), while later in the decade he produced, in *Telemusik* (1966) and *Hymen* (1967), both classics of electronic music that summed up developments this far. These were to be two of the last such works, however, with the emergence of digital sound-processing and so-called "computer music" in the early 1970s, the old analogue studio techniques became obsolete.

In reality, the two postwar decades of studio research produced little of lasting musical value – even the finest works of the period now sound dated and clumsy. But in ushering into the technological age they opened up a momentous new phase in its history, on whose effects are now with us everywhere – from pop music and film scores to computer games and mobile ringtones.

Edgard Varèse (also spelled **Edgar Varèse**; December 22, 1883 – November 6, 1965) was a French-born (of Franco-Italian parentage) composer who spent the greater part of his career in the United States. Varèse's music emphasizes timbre and rhythm and he coined the term "organized sound" in reference to his own musical aesthetic. He extended the trends of modernism into abstraction. He wrote a small number of highly dissonant and difficult works, in which most of the familiar aspects of music were abandoned in favor of an aesthetic more akin to abstract art. He was unconcerned with expressing specific moods, yet his music is composed in a more subjective manner than more intellectually controlled composers such as Elliot Carter. Varese used sound as a sculptural element; his electronic works are the progenitors of modern soundscapes. He was equally fascinated with mathematics and science, applying stochastic (random and chance) processes to his music, especially his later works. He composed very slowly and with great precision, yet every piece he wrote is still in the repertoire. Although he never received a positive review from a critic in his time, he is now considered one of the seminal geniuses of the 20th century. His influence on later composers has been enormous, especially in the period after WWII. Varèse's conception of music reflected his vision of "sound as living matter" and of "musical space as open rather than bounded." He conceived the elements of his music in terms of "sound-masses," likening their organization to the natural phenomenon of crystalization. Varèse thought that "to stubbornly conditioned ears, anything new in music has always been called noise," and he posed the question, "what is music but organized noises?" Although his complete surviving works only

last about three hours, he has been recognised as an influence by several major composers of the late 20th century. Varèse saw potential in using electronic mediums for sound production and his use of new instruments and electronic resources led to his being known as the "Father of Electronic Music."

Varèse was born in Paris in 1883 and in 1893, relocated to Turin, Italy, in part, to live among his paternal relatives (his father was of Italian descent). It was here that he had his first real musical lessons, with the long-time director of Turin's conservatory, Giovanni Bolzoni. While living with his father, an engineer, Edgard was pushed to further his scientific understanding at the Institute Technique, a high school in Italy that specialized in teaching mathematics and science. It was through Edgard's love of science that he began to study sound. Influenced by his father, Varèse enrolled at the Polytechnic of Turin and started studying engineering, as his father disapproved of his interest in music. This conflict grew, especially after the death of his mother in 1900, until in 1903 Varèse left home for Paris. From 1904 he was a student at the Schola Cantorum and afterward he went to study composition at the Paris Conservatoire. At the Schola Cantorum, Varese studied composition and conducting with Vincent D'Indy, counterpoint and fugue with Albert Roussel, and medieval and Renaissance music with Charles Bordes. In 1907, Varèse became dissatisfied with musical life in Paris and moved to Berlin. There he sought out composer Ferruccio Busoni, whose *Sketch for the Aesthetic of a New Music* (1907) Varèse greatly admired for its daring predictions of future musical styles that would abandon the traditional tonal system and rely on music-making "machines."

During these years, Varèse became acquainted with Erik Satie and Richard Strauss, as well as with Claude Debussy and Ferruccio Busoni, who particularly influenced him at the time. On 5 January 1911, the first performance of his symphonic poem *Bourgogne* was held in Berlin; the only one of his early orchestral works to be properly performed in his lifetime, it caused a scandal. In May of 1913, Varese attended the premier of Stravinsky's *Rite of Spring*, a work with which he felt an immediate sympathy. Varèse's career as an orchestral conductor began to gain momentum in 1914 with a successful appearance in Prague. But the war made it impossible for Varèse to successfully pursue conducting opportunities in Europe, so in 1915 he moved to New York City. After being discharged through illness from the French Army during World War I, he moved to the United States in December 1915, at he age of 33. He spent the first few US years in New York's Greenwich Village, meeting important contributors to American music, promoting his vision of new electronic art music instruments, conducting orchestras, and founding the short-lived New Symphony Orchestra.

Virtually all the works he had written in Europe were either lost or destroyed in a Berlin warehouse fire, so in the U.S. he was starting again from scratch. The only surviving work from his early period appears to be the song *Un grand sommeil* noir (Song for Voice and Orchastra) (1906), a setting of Paul Verlaine. Although his career as a conductor developed slowly, he was sought out by the press for his innovative ideas about music. He called for a new style based on the "liberation of sound" (while at the same time disassociating his ideas from those of the futurists). In 1917 Varèse made his American conducting debut and founded the short-lived New Symphony

Orchestra, a cooperative society dedicated primarily to performing the works of modern composers. In New York he met Léon Theremin and other composers exploring the boundaries of electronic music. It was also about this time that Varèse began work on his first composition in the United States, *Amériques*, which was finished in 1921 but would remain unperformed until 1926, when it was premiered by the Philadelphia Orchestra. In America he found a musical frontier as yet undeveloped, "American music must speak its own language and not be the result of a certain mummified European music." It was at the completion of this work that Varèse, along with Carlos Salzedo, founded the International Composers' Guild, dedicated to the performances of new compositions of both American and European composers. Varèse's reputation as one of America's foremost avant-garde composers was becoming increasingly well established. Varèse took American citizenship in October 1927. After arriving in the USA, Varèse commonly used the form 'Edgar' for his first name but reverted to 'Edgard', not entirely consistently, from the 1940s.

In 1928, Varèse returned to Paris to alter one of the parts in *Amériques* to include the recently constructed *ondes Martenot* (an early electronic instrument). Around 1930, he composed his most famous non-electronic piece entitled *Ionisation*, the first to feature solely percussion instruments. Although it was composed with pre-existing instruments, *Ionisation* was an exploration of new sounds and methods to create them. In 1928 when he was asked about jazz, he said it was not representative of America but instead was, "a negro product, exploited by the Jews; all of its composers here are Jews," meaning American composers such as Aaron Copland and Marc Blitzstein (students of Nadia Boulanger). In 1933, while in Paris, he wrote to the Guggenheim Foundation and Bell Laboratories in an attempt to receive a grant to develop an electronic music studio. Anticipating the successful receipt of one of his grants, Varèse eagerly returned to the United States to realize his electronic music. Varèse soon left New York City for a brief residency in Santa Fe, New Mexico and also traveled to San Francisco and Los Angeles. His next composition, *Ecuatorial*, was completed in 1934, and contained parts for two fingerboard Theremin cellos, along with winds, percussion, and a bass singer. In 1936 he wrote *Density 21.5*. He also promoted the theremin (an early electronic musical instrument) in his Western travels and demonstrated one at a lecture at the University of New Mexico in Albuquerque on November 12, 1936. In 1940 he resettled in New York City, founding a choral society and acting as its conductor for various benefit concerts, thereby earning a reputation as a skilled interpreter of early music. In 1948 Varèse was invited to give a series of lectures at Columbia University describing his musical aesthetic and noted critic Virgil Thomson began to publicly acknowledge the value of his works. In the early 1950s Varèse began composing the instrumental part of his composition *Déserts*.

By the early 1950s, Varèse was in dialogue with a new generation of composers, such as Pierre Boulez and Luigi Dallapiccola. In 1953 he began to use a tape recorder to realize his lifelong dream of transforming conventional sounds by means of an electronic instrument, experimenting with taped collages of "organized sound" made mostly from industrial sources. In 1954 Pierre Schaeffer, whose experiments with what he referred to as "Musique Concrète" had paralleled Varèse's experiments with sound since 1952, invited the composer to complete his work on the taped portions of *Déserts* in Schaeffer's studio. Varèse articulated the theme of his composition as "Déserts of the earth, Déserts of the sea, Déserts of outer space, and Déserts in the mind of men."

Commissioned by Philips to present a pavilion at the 1958 World Fair (in Bressels), Varèse, developed his *Poème électronique* (1958) for the venue, where it was heard by an estimated two million people. Using 400 speakers separated throughout the interior, Varèse created a sound and space installation geared towards experiencing sound as it moves through space. Received with mixed reviews, this piece challenged audience expectations and traditional means of composing, breathing life into electronic synthesis and presentation.

As early as 1917, Varese spoke of instruments which could offer a "whole new world of unsuspecting sounds," foreshadowing the use of synthesizers and computers in contemporary music. He devoted his life to new ideas, new instruments and new music and, though his output was fairly meager, he was to be a prime influence on the postwar avant-garde, rejecting melody in favor of rhythmically propelled aural abstraction.

In his formative years, Varèse was greatly impressed by Medieval and Renaissance Music and the music of Alexander Scriabin, Erik Satie, Claude Debussy, Hector Berlioz and Richard Strauss. There are also clear influences or reminiscences of Stravinsky's early works, specifically *Petrushka* and *The Rite of Spring*, on *Arcana* (1927, revised 1960). He claimed to have been inspired by the writings on music of Józef Maria Hoene-Wroński and especially the Polish savant's statement that the object of music is "the corporealization of the intelligence that is in sound." Composers who have claimed, or can be demonstrated to have been influenced by Varèse, include Milton Babbitt, Harrison Birtwistle, Pierre Boulez, John Cage, Morton Feldman, Olivier Messiaen, Luigi Nono, Wolfgang Rihm, Alfred Schnittke, Karlheinz Stockhausen (whose work did most to realize Varese's vision of an ecectronics future) and Iannis Xenakis. Varèse's emphasis on timbre, rhythm, and new technologies inspired a generation of musicians who came of age during the 1960s and 1970s. One of Varèse's biggest fans was the American guitarist and composer Frank Zappa, who, upon hearing a copy of *The Complete Works of Edgard Varèse, Vol. 1*, which included *Intégrales*, *Density 21.5*, *Ionisation*, and *Octandre*, became obsessed with the composer's music.

Varése's music falls into four periods:

1) His work before 1914 consisted of an unfinished opera and some pieces for orchestra, none of which have survived (except for his Song for Voice and Orchestra).

2) Between 1918 and 1936, Varése began working on music that broke from European influences. In 1923, his work *Hyperprism*, caused a riot in the audience. In all he completed nine works for orchestra or chamber groups. In his search for new sounds he incorporated new musical instruments. *Hyperprism* made the use of sleigh bells, cymbals, crash cymbals, rattles, triangle, anvil, Chinese blocks, tam-tam, Indian drums, snare drum, bass drum, tambourine, and a lion's roar (a tub with a hole in the bottom through which the player pulled a rope). The piece contained two percussion solos. The most popular work by Varése at this time was *Ionisation (1929-31*) which introduced the siren as a musical instrument. With 37 percussion instruments and two sirens, it was likened to "a sock in the Jaw." It was during this time that Varése longed for new sounds, "…in music we composers are forced to use instruments that have not changed for two centuries." His profound frustration in the sounds available to him eventually led to the

death of his composition muse. He felt he could no longer 'make do' with the instruments available. He was crying for the technologies that we take for granted today. After receiving some recognition, at least in the avant-garde circles, Varése began to fade. He became moody and despondent and actually thought about committing suicide. For twelve years he stopped composing and thought of getting out of music all together. Nobody would even hire him as a researcher in acoustics. Fernand Ouellette wrote: "He could not free himself from the sounds that were inflaming his soul and there was no way of producing those sounds." In 1927, Varése contacted Harvey Fletcher, the director of acoustical research of Bell Telephone Laboratories, in an attempt to acquire a studio with which he could research electronic music. He was turned down with the reason that funds were not available. The music world turned its back on Varése.

3) After W.W.II, composers in France and Germany began exploring the use of new technologies, many invented during the war, in the making of music. Suddenly Varése was remembered and he became a celebrity. Suddenly, at 71 years of age, Varése came back to life like a seed that had been in hibernation touched by water. Technology finally caught up with Varése, and he thrived in the new environment. Many did not even realize that he was still alive. He composed *Deserts*, a collage of taped sounds, which was a unique, frightening masterpiece of the atomic age. At the premiere, once again the audience was hostile. Still, *Deserts* was the first important work of electronic music and Varése was recognized as a significant force in music. It was described as, "the opening gun in the battle for the liberation of sound."

4) Then came the highest point of his life. Le Corbusier, a famous architect, was asked by Philips to design and create the Philips pavilion at the Brussels world fair to be held in 1958. 'Corbu' decided to make the pavilion a multimedia event. He remembered Varése whom he had met 25 years earlier and insisted on him composing the music. Cordu basically said: "no Varése – no Cordu!" So Philips gave in. Philips offered Varése the use of their laboratory in Eindhoven as well as technicians and engineers. Money was no problem. Poem was commissioned to be 480 seconds of music and accompany a poem. The music was to sound from 425 speakers placed everywhere in the pavilion. Philips asked to hear what he had composed and after playing them they were aghast. With standing room only crowds, the lights were dimmed and eerie sounds emerged from every direction. Washes of colored lights swept and changed over the surfaces. The sounds of rattles, whistles, thunder, and murmurs float about. Human sounds, modified emitted from the walls. The exhibition was a complete success. Millions of people heard Varése for the first time. A whole generation of composers had there heads jerked towards the sounds of Varése. Varése had arrived. *Poem Electronique* was to become Varses's swan song. Soon after the Brussels triumph, he became afflicted with bronchitis and died.

On several occasions, Varèse speculated on the specific ways in which technology would change music in the future. In 1936, he predicted musical machines that would be able to perform music as soon as a composer inputs his score. In 1939, he expanded on this concept, declaring that with this machine: "anyone will be able to press a button to release music exactly as the composer wrote

it—exactly like opening up a book." Varèse would not realize these predictions until his tape experiments in the 1950s and 60s.

1) *Amériques* (1922) - Varèse's main symphonic work, is an immense hymn of life, pregnant with joy and light, progressing with sonorous masses, as progress elemental forces, contemptuous of men, cruel in their very superabundance of life. It brings us a step further than Stravinsky. However, Varèse's works are more optimistic than Stravinsky's because he simply forgets man altogether, and identifies himself with the warmth and radiation of the sun.

2) *Offrandes* (1922) - For small orchestra.

3) *Hyperprism* (1923) - For winds and percussion. This smaller work is the product of a more sombre and tragic conception. Its right title would be something like "Funerary Rite," as it evoked powerfully the vision of the old American Indian ceremonies. Unconsciously to himself, Varèse appears in this work, more than in any other, as an heir to the ancient native spirit of the continent. The use of the percussion is fully Indian and the shrieking of the brass so full of the intensity displayed in the spring rites of the warrior tribes. If Stravinsky evokes for us the vision of pagan Russia, Varèse resurrects for us the dying race of America. This fact is fully significant. It shows that a man who, after having reached the stage of true Europeanism, comes to America and identifies himself with the life of the continent, becomes necessarily linked with the spirit of the American soil and therefore an heir to the only real American culture, which men of Europe, who were nationalists but hardly human beings, have wantonly destroyed. What does this Indian music, of which little remains, want to express? The life of the elements, the fire of natural, seasonal growth, the rhythm of the organs of man as well as of the earth. The spiritual side of such a music was buried with the old sanctuaries and is lost. Varèse brings to life again its physical aspect.

4) *Octandre* (1924) - Composed for an ensemble of seven winds and double bass.

5) *Intégrales* (1925) - For eleven winds and four percussion, represented a stylistic advance for the composer. The work was described by him as his first attempt at composing "spatial music" in which blocks of sound were projected through space.

6) *Arcana* (1927, revised 1960) – Uses the "idée fixe," a fixed theme, repeated certain times in a work. It was most famously used by Hectar Berlioz in his Symphonie fantastique; it is generally not transposed, differentiating it from the leitmotiv, used by Wagner.

7) *Ionisation* (1931) - This is one of his most influential works and a classic of the percussion literature. Varese dispensed with all conventional instruments in favor of percussion. The title comes from physics and refers to the process by which an atom liberates an electron and assumes a positive electrical charge. The 37 percussion instruments include bells, piano, glockenspiel, Chinese blocks, anvils, bongos, tam-tams, all manner of drums and two sirens. Its highly concentrated six minutes contrast an astonishing range of sonorities with great

virtuosity: a particular tension is set up between sounds that have a hard, abrasive quality and those of a more mellow and softer character. The result suggests an often terrifying dreamscape where images of primeval jungle, of modern unban bustle and even warfare; jostle for dominance in the listener's imagination. Ionisation was greeted with horror and alarm at it furs performance at Carnegie Hall in 1933.

8) *Ecuatorial* (1934) - Written for bass voice and an ensemble of winds and percussion, the composer made use of two *ondes martenot*, an instrument invented in the 1920s, in which simple tones are produced electronically.

9) *Density 21.5* (1936) – Composition for solo flute (its title was derived from the density of platinum, from which the premiering performer's flute was made), after which Varèse composed little for several years.

10) *Déserts* (1954) – Was the first important work of electronic music. For 14 winds (brass and woodwinds), 5 percussion players, 1 piano, and electronic tape. Percussion instruments are exploited for their resonant potential, rather than used solely as accompaniment. According to Varèse the title of the piece regards, "not only physical deserts of sand, sea, mountains and snow, outer space, deserted city streets... but also distant inner space... where man is alone in a world of mystery and essential solitude."

All those that people traverse or may traverse: *physical* deserts, on the earth, in the sea, in the sky, of sand, of snow, of interstellar spaces or of great cities, but also those of the human *spirit*, of that distant *inner* space no telescope can reach, where one is alone. —Varèse (1950).

The piece was created as a soundtrack to a modernist film. According to "Blue" Gene Tyranny, "It is now recognized as an exceptional example of truly humanistic music." It "has been described... as atonal, athematic,... amotivic" and its orchestration has "been labeled subtle." As Paul Griffiths describes:

> The plan of Déserts, unprecedented, was that electronic and orchestral music should be brought face to face: three sequences of 'organized sound' on tape are interpolated into a composition for an orchestra of wind, piano and percussion. Babbitt has drawn attention to the subtlety with which Varèse assembles timbres from his ensemble and indeed much of the scoring suggests an almost Webernian care for timbre-melody—something quite new in Varèse's music, the instruments being used for example, to vary the color of the sustained pitches that are stations of polarity in the musical progress.

With electronic sections based upon factory sounds and percussion instruments, Varèse began composition in 1953 (or 1952) upon the anonymous gift of an Ampex tape recorder, worked further on the piece at Pierre Schaeffer's studio at Radiodiffusion-Télévision Française and revised it at the Columbia-Princeton Electronic Music Center. The electronic sections were composed later and the piece may be performed without them, reducing its length by seven

minutes. The first performance of the combined orchestral and tape sound composition was given at the Théâtre des Champs-Élysées in Paris on December 2, 1954, with Hermann Scherchen conducting and Pierre Henry in charge of the tape part. This performance was part of an ORTF broadcast concert, in front of a totally unprepared and mainly conservative audience, with *Déserts* wedged between pieces by Mozart and Tchaikovsky. It received a vitriolic reaction from both the audience and the press.

10) *Poème électronique* (1958) – Perhaps Varese's most famous work, established purely electronic composing as a new art form (along with Iannis Xenakis). This work was commissioned as a soundscape for Phillips Pavilion at the Brussels International Exposition 1958. Multiple speakers positioned throughout the pavilion move the sounds about in 3D space. The music was synchronized to a film by Le Courbusier, now lost. The piece was composed music pre-recorded and manipulated electronic sound, technique called Musique Concrete, or music of the real.

11) Varèse continued to revise *Déserts* and struggled to complete his final compositions, including *Nocturnal*, composed for soprano, chorus, instrumental ensemble and the *ondes martenot*.

Iannis Xenakis (pronounced YAHN-nis zen-NAHK-ess) (29 May 1922 – 4 February 2001) was a Greek-French composer, music theorist and architect-engineer and is commonly recognized as one of the most important post-war avant-garde composers. Xenakis pioneered the use of mathematical models in music such as applications of set theory, stochastic processes and game theory, and was also an important influence on the development of electronic and computer music. He integrated music with architecture, designing music for pre-existing spaces and designing spaces to be integrated with specific music compositions and performances.

Xenakis was born into a prosperous family of Greek origin on May 29, 1922, in the Romanian town of Brăila, Romania. He was the eldest son of a Greek businessman. His parents were both interested in music and his mother introduced the young Xenakis to music. Her early death, when Xenakis was five years old, was a traumatic experience that, in his own words, "deeply scarred" the future composer.

In 1938, after graduating from primary school, Xenakis moved to Athens to prepare for entrance exams at the National Technical University of Athens. Although he intended to study architecture and engineering, he also took lessons in harmony and counterpoint. In 1940 he successfully passed the exams, but his studies were cut short by the Greco-Italian War, which began with the Italian invasion in 1940. Although Greece eventually won the war, it was not long before the German army joined the Italians in 1941 leading to the Axis occupation of Greece during World War II. This lasted until late 1944, when the Allies began their drive across Europe, forcing the Axis forces to withdraw. Xenakis joined the National Liberation Front (Communist resistance) early during the war, participating in mass protests and demonstrations and later becoming part of armed resistance—this last step was a painful experience Xenakis refused to discuss until much later in life. After the Axis forces left, Churchill ordered that British forces step in to help restore

the Greek monarchy, plunging the country into a civil war. In December 1944, Xenakis became involved in street fighting against British tanks. He was gravely wounded when a shell hit his face and was seriously scarred and lost his left eye.

Xenakis graduated from the National Technical University of Athens in 1947, with a degree in civil engineering but was then conscripted into the national armed forces. Around 1947 the Greek government began arresting former resistance members that were left-wing oriented and were sent to prison. Xenakis, fearing for his life, went into hiding and fled Greece. On 11 November 1947 he arrived in Paris.

> For years I was tormented by guilt at having left the country for which I'd fought. I left my friends—some were in prison, others were dead, some managed to escape. I felt I was in debt to them and that I had to repay that debt. And I felt I had a mission. I had to do something important to regain the right to live. It wasn't just a question of music—it was something much more significant.

Although he was an illegal immigrant in Paris, Xenakis was able to get a job at Le Corbusier's architectural studio. While working for Le Corbusier, Xenakis studied harmony and counterpoint and composing. His mentor and boss, Le Corbusier, was an intellectual whose physical and mathematical understanding of the way individual particles interact with each other (and create a larger mass - atoms, birds, people, and musical notes) would produce one of the most fertile and prophetic aesthetic explorations in musical history. Xenakis also attended Messiaen's classes regularly in 1951–53. Xenakis's compositions from 1949–52 were mostly inspired by Greek folk melodies, as well as Bartók, Ravel and others. After studying with Messiaen, he discovered serialism and gained a deep understanding of contemporary music (Messiaen's other pupils at the time included Karlheinz Stockhausen and Jean Barraqué). In late 1954, with Messiaen's support, Xenakis was accepted into the Groupe de Recherches de Musique Concrète, an organization established by Pierre Schaeffer and Pierre Henry.

After leaving Le Corbusier's studio in 1959, Xenakis supported himself by composition and teaching and quickly became recognized as one of the most important European composers of his time. He became especially known for his musical research in the field of computer-assisted composition. He taught at Indiana University in 1967–72 (and established a studio similar to EMAMu there) and worked as visiting professor at the Sorbonne in 1973–89.

Xenakis was an atheist. According to Zbigniew Skowron: "In accordance with his atheist views, Xenakis emphasizes the finality of death as the ultimate event of human life and this is probably why wild shrieks and moans punctuate his score." Xenakis wrote: "Man is one, indivisible and total. He thinks with his belly and feels with his mind. I would like to propose what, to my mind, covers the term "music": ... it is a mystical (but atheistic) asceticism ...".

His health had been getting progressively worse over the years and, by 1997, he was no longer able to work. After several years of serious illness, on 1 February 2001 the composer lapsed into a coma. He died in his Paris home four days later, on 4 February, aged 78.

Xenakis' training as an engineer and the fact that his musical education came late, enabled him largely to ignore conventional techniques of composition. He rejected the idea of intuitive or unreasoning randomness in composition, for example, by constructing his works on laws and formulas of the physical sciences, he sought to control his music at every instant. He once said, ''This is my definition of an artist, or of a man: to control.''

At first, he depended on the use of mathematical models of disorder. By using calculations derived from the numbers of different-sized pebbles on a shore, Xenakis could determine the pitches of notes or their placements in time. In this way he could create music with chaotic inner detail but a decisive shape or impulse. Once computers became available to him in the early 1960's, Xenakis was able to work much faster. However far removed he was from the tradition of Western classical music, he inevitably began to create a tradition of his own in composing so abundantly.

When you hear Xenakis's music, you're confronted with an aesthetic that seems unprecedented according to any of the frames of reference that musical works usually relate. You won't hear vestiges of things like familiar forms, or shapes, or languages. Even the furthest-out reaches of early 1950s Serialism sound resolutely conventional next to Xenakis's works of the same period. It's music whose sheer, scintillating physicality creates its own territory in every piece, whether it's for solo cello or huge orchestra.

Incorporation of math into his music is both one explanation of his music's shocking otherness (it was heard as "alien" even by the hipsters of the early 1950s; the 1955 premiere of *Metastasis* at the Donaueschingen Festival was one of the scandals of postwar music) and a revelation of this music's deep, primal rootedness in richer and older phenomena even than musical history: the physics and patterning of the natural world, of the stars, of gas molecules and the proliferating possibilities of mathematical principles. Xenakis resisted the label of being a mere mathematician in music just as surely as he refused the idea of his music's political or social message and it was of course how he used those scientific principles to create pieces of shattering visceral power.

The math underlying construction of *Metastasis* and the shapes it makes, has a direct correlation in the way Xenakis uses the instruments of the orchestra, organising the entries of the instruments and the pitches they play, according to the working-out of mathematical and statistical formulae, translating the space of architectural planes into musical time. More than a decade before Boulez founded IRCAM, Xenakis had set up his own institute for music-technological research in Paris called EMAMu, which now exists as CCMIX.

Those are some clues to the elemental concerns of his music. But what happens when you hear his music goes beyond even the sensation of teeming natural phenomena or landscapes transmuted into music. In his piece: *Synaphaï*, for piano and orchestra, has a piano part of mind-bending complexity, which has the unique distinction of having a separate stave for each finger. You can hear clouds of minutely detailed orchestral sonority wrap around the solo part, like flocks of small birds mobbing an avaricious raptor; and hear a near-continuous rhythmic intensity and textural violence that takes your breath away. Hearing this piece is as awesome an experience as watching

some life-changing natural spectacle. *Synaphaï* has all the teeming unpredictable power of a glacier, the thrilling complexity of shape and movement of a mass animal migration.

But there's something else as well. This music is expressive: not in a conventionally emotional way, perhaps, but it has an ecstatic, cathartic power. Xenakis's music – allows listeners to witness seismic events close at hand, to be at the middle of a musical happening of cosmic intensity. Xenakis has said that his war-time experience informed his desire to create his new kind of sound-experience. He described the play of sirens, gunfire, and spotlights in Athens in the 1940s as like a "large-scale spectacle."

1) *Metastaseis* (1954) for orchestra, introduces independent parts for every musician of the orchestra. Largely built on glissandi of rising volume that could recall an airplane rising during takeoff, it caused a sensation at its premier. Many young composers were impressed by Xenakis's sense of music as pure sound, but other musicians, notably Pierre Boulez, detected a lack of craftsmanship. Boulez was eventually persuaded to commission a score from Xenakis for his Domaine Musical concerts in 1963. He was rewarded by one of Xenakis's strongest pieces, *Eonta* for brass quintet and piano. But the antipathy between the two remained.

2) *Terratektorh* (1966) - After the initial impact of his first orchestral scores (*Metastaseis* and *Pithoprakta*), which turned the modern music world on its ear in the mid-1950s, Xenakis turned to other concerns. He worked on developing a theoretical basis for his mathematical approach to composition, worked in the electroacoustic studio at Radio-France and wrote some chamber and stage works. In 1966, however, his attention was drawn back to the orchestra and he penned a second set of pretty remarkable scores. *Terretektorh*, the first of these, was commissioned for the new contemporary music festival in Royan, a picturesque French town on the Atlantic just north of Bordeaux. Those were heady days, when festival organizers were not shy of allowing a composer like Xenakis take the orchestra and scatter all the players around and throughout the audience. In his words, he wanted to create a "Sonotron: an accelerator of sonorous particles." Indeed, the opening three minutes of the piece centers on a single note, passing it around the musicians to create a swirling effect that is impossible to achieve electronically. It's concentration is decidedly on texture and movement, with narrow lines being bundled with a number of others in the same register, to create a rawer sonic intensity that still has some basis in melody. Xenakis concentrates on the high and low registers, as did Varèse before him, and adds some unusual sound effects into the mix as well. Each player of the orchestra, in addition to his or her own instrument, is required at various times to play from an arsenal of percussion instruments, including woodblocks, whips, maracas, and siren-whistles. These sounds are spread around the orchestra, creating "flames" of sound (sirens), or "clouds" of noise-like textures. For perhaps the first time, members of the audience could hear the orchestra from the "inside;" it may not always have been comfortable (imagine being seated directly in front of a trombone!), but it certainly would have been exhilarating!

3) *Synaphai* (1969) is a composition for piano and orchestra *Synaphaï* consists of only one movement and takes approximately 10–12 minutes to perform. It has largely been categorized

as a piano concerto, because of the solo piano's prominent part and its cadenza. It is scored for a solo piano and a large orchestra of 86 musicians, consisting of three flutes, three oboes, three clarinets, three bassoons, four French horns, four trumpets, four trombones, one tuba, a percussion section and a large string section. The orchestra is set vertically on stage towards the audience. The instruments are put into four groups: alpha, beta, gamma and delta. That way, the instruments are separated into almost even groups, as expressed in the score. The composition style rejects the idea of a dialogue between the solo piano and the orchestra, but rather promotes a conjunction between these two elements, hence the title of the piece. The piano part is of extreme difficulty and is written on ten staves, one of each of the pianist's fingers. The piece was highly successful in the première and immediately encored. Jacques Lonchampt, from Le Monde, wrote that *Synaphaï* has "a torrential score, tossing in a kind of perpetual tremolo on top of which break through frenzied rhythmic sequences, but also a whole agitation, shuddering and truly musical." Henry-Louis de La Grange, from Music and Musicians, said of the piece: "Set against a flamboyant orchestral tapestry, occasionally pierced by harsh cries from the brass, the highly elaborate piano part (the score uses one stave for each finger!) stands out in high relief, with a tremendous, rhythmic drive."

4) *Jonchaies* (1977) for orchestra, composed in 1977 is quite simply one of the most exciting experiences you can have in music. Listen to it as loud as you can and convert all your neighbours to Xenakis too. *Jonchaies* embodies the elemental truth about all of Xenakis's music. Beethoven described nature in the *Pastoral Symphony*, Sibelius was terrified by it in *Tapiola*, but it took Xenakis for music to become nature. On holiday in Corsica, Xenakis would pilot his canoe into the teeth of the biggest storm he and his paddle could manage. When you're listening to his music, you also go out there into the eye of a musical storm that will invigorate, inspire, and awe.

5) *Tetras* (1983) - stands as one of Xenakis' finest chamber compositions. It is also one of the most original, profoundly challenging contributions to the string quartet genre. "Tetras" means "four" in ancient Greek and the composer treats the four players as a single entity throughout most of the sixteen minutes of the piece. This multi-bodied, many-stringed organism vibrates with intense energy, the strings oscillating at lightning speed as glissando contours take shape across the registral continuum. It is no coincidence that *Tetras* was written for the Arditti String Quartet, a group that sealed its reputation as the leading proponent of challenging new repertoire with its exhilarating, awe-inspiring performances of such demanding works. While the glissando is the primary compositional element of this piece, others are important as well. After the opening section, in which the texture of the initial violin solo is gradually filled in, there is a long passage made up of a shifting timbral kaleidoscope: short grinding noises, bowing behind the bridge, knocking on the body of the instrument, extremely high harmonics, and the like. These strange sounds interrupt the texture at various other points in the piece, creating moments of surprise and theatricality. A later passage is built from scales; while the avant-garde aesthetic often avoids such banal material, Xenakis offers a new approach by creating intervallic patterns that do not repeat at the octave as expected. Instead, the configuration is unique from bottom to top, producing tension and new harmonic color. As the

scale passages begin racing up and down at high speed, Xenakis shifts back to glissandi, drawing attention to the relationship between the two (one tracing contours by sliding, the other by running stepwise). It is this multi-dimensionality that makes *Tetras* so fascinating a work of musical architecture. The interplay among different elements that occur throughout the piece build up a network of connections that establish structural depth. Beyond the individual and collective virtuosity that Xenakis demands of the players, this formal complexity, balanced by clear, concentrated musical expression, makes *Tetras* an intriguing and worthy addition to the literature of the string quartet.

6) *Keqrops* (1986) is a composition for piano. The composition was commissioned by Phynea Paroufakis and Peter Paroufakis from Australia for the pianist Roger Woodward, the New York Philharmonic and the Indian conductor Zubin Mehta, who gave it a first performance on 13 November 1986 at the Lincoln Center in New York. According to the composer, the title of the composition, as most of his other works, is a compound from other Greek words and roots: *krekoo* and *opsis*, which comes from *opoopa*. Xenakis translated the title as *weaving*. However, Xenakis gave the title a second meaning. He also refers to the legend from the Mycenaean era of Cecrops I, originally from Sais in Egypt, who, in a reign of 50 years, introduced civilization into Attica, fortified the Acropolis of Athens and divided the people into four tribes. The composition is in one movement and takes approximately 16 minutes to perform. It is scored for a solo piano and a large orchestra consisting of four flutes, four oboes, four clarinets in B-flat, four bassoons, four French horns in F, four trumpets in C, four trombones, one tuba, one harp, timpani, a percussion section consisting of two bongos, three tom-toms and one bass drum and a large string section. The instruments are not allowed to play vibrato along the whole composition. In this piece, the piano and the three families of the orchestra (that is, strings, woodwind and brass) are equal strands of the whole composition. Unlike a typical piano concerto, the structure of the composition does not have ritornello segments or dialogue between the orchestra and the solo piano. Xenakis used large tone clusters. In some instances, entire melodic phrases are played as "cluster lines," with players taking the same the same melody one semi-tone apart from their neighbour.

Pierre Boulez (1925 - 2016) was a French composer, conductor, writer and pianist. See a detailed biography under his name in the section of Serialism. After the 1960s, during which he had produced little, Boulez began to turn back to the electronic medium and to large extended works. Although unsatisfied with the products of his work with tape in the 1950s (*Two Studies*, *Poésie pour pouvoir*), he began to explore the possibilities of live electronic sound manipulation. His first attempt was the 1973 version of *...explosante-fixe...*. However, at around this time president Georges Pompidou began to discuss with Boulez the possibility of creating an institute for the exploration and development of modern music where there would be a chance to explore the medium seriously. This was to become IRCAM.

At IRCAM, Boulez created an environment where composers would have at hand the best performers available and where the most advanced technology and computer scientists would be at their service. Boulez now began to explore the use of electronic sound transformation in real

time. Previously, electronic music had to be recorded to tape, which thus 'fixed' it. The temporal aspect of any live music-making in which it played a part had to be coordinated with the tape exactly. Boulez found this impossibly restrictive. Now at IRCAM, he composed *Répons*, for six soloists, chamber orchestra and live electronics. With the assistance of Andrew Gerzso, Boulez fashioned a work in which the computer captured the resonance and spatialization of sounds created by the ensemble and processed them in real time.

1) *...explosante-fixe...* (French: *...exploding-fixed...*) (Boulez composed several different versions of the work between 1972 and 1993) - is a piece of music initially conceived in 1971 as a memorial for Igor Stravinsky, who died in April of that year, culminating in a piece for solo MIDI-flute and chamber orchestra. The title of the work is taken from the concluding line of the first chapter of André Breton's *L'amour fou* (1937): "La beauté convulsive sera érotique-voilée, explosante-fixe, magique-circonstancielle, ou ne sera pas" (Convulsive beauty will be erotic-veiled, exploding-fixed, magical-circumstantial, or it will not be at all). The first version of *...explosante-fixe...* (1971–1972) was a one-page aleatoric work. In the two subsequent years, Boulez developed *...explosante-fixe...* into a work for solo flute, accompanied by clarinet, trumpet, harp, vibraphone, violin, viola, cello and electronics. Performances of this version made use of a recently created device known as the Halaphone. According to inventor Hans-Peter Haller, the Halaphone is capable of "projecting sounds in various directions and at various speeds at will, projecting sound from point to point, making it move in circles around a hall, or making it move diagonally across a hall." Boulez, however, was ultimately unsatisfied with the electronics. There were actually two main variants, a "preliminary" version based on the bare bones of the outline score and scored for a trio of violin, clarinet, and trumpet, first performed by the London Sinfonietta in St John's, Smith Square in June 1972, and a longer, more sophisticated and seemingly definitive form for septet, premiered in New York on 5 January 1973 and subsequently revised several times. These revisions involved changes in the order of sections and rewriting six of the eight instrumental parts. Boulez withdrew the materials for both versions, primarily because of his dissatisfaction with the all-too-audible failure of the electronics and in particular the computer tape that was intended to direct the conductorless 1973 Proms version, but also as an acknowledgement that the scoring really required a symphony orchestra. The next version of *...explosante-fixe...*, for vibraphone and electronics, was not composed until 1986. In the intervening years, parts of the original material appeared in other works by Boulez, specifically *Rituel* (1975) and *Mémoriale* (1985). Between 1991 and 1993, while at IRCAM, Boulez composed a new version of *...explosante-fixe...*, for solo MIDI-flute with live electronics, two 'shadow' flutes and a chamber orchestra.

2) ***Répons*** (1981) is a composition for a large chamber orchestra with six soloists and live electronics. *Répons* was the first significant work to come out of Boulez's endeavors at IRCAM. The piece's title, *Répons*, is derived from the fact that the composition is built from a number of responses. The contrast between acoustic sounds and electronic responses to them and also the medieval idea of responsorial mirroring between players and speakers in different parts of the concert hall, both play important roles in Répons. This was perhaps Boulez's greatest achievement and happily marries his natural gifts with his constant desire to balance new

musical trails. Its opening section (for live performers only) is gradually transformed into a surreal and marvelously textured landscape of ringing electronic sounds. Sadly, the work's formidable demands have meant that it has rarely been heard in performance.

Luciano Berio (October 24, 1925 – May 27, 2003) was an Italian composer, noted for his experimental work (in particular his 1968 composition *Sinfonia* and his series of virtuosic solo pieces titled *Sequenza*) and also for his pioneering work in electronic music. Berio was born in Oneglia (now part of Imperia on the coast of Italy between Genoa and Nice). He was taught the piano by his father and grandfather who were both organists. During World War II he was conscripted into the army, but on his first day he injured his hand while learning how a gun worked and spent time in a military hospital. Following the war, Berio studied at the Milan Conservatory. He was unable to continue studying the piano because of his injured hand, so instead concentrated on composition. In 1947 came the first public performance of one of his works, a suite for piano. In 1952, Berio went to the United States to study with Luigi Dallapiccola at Tanglewood, from whom he gained an interest in Serialism. He later attended the Internationale Ferienkurse für Neue Musik at Darmstadt, where he met Pierre Boulez, Karlheinz Stockhausen and György Ligeti. He became interested in electronic music, co-founding the Studio di Fonologia, an electronic music studio in Milan, with Bruno Maderna in 1955. He invited a number of significant composers to work there, among them Henri Pousseur and John Cage. He also produced an electronic music periodical, *Incontri Musicali*. In 1960, Berio returned to Tanglewood, this time as Composer in Residence and, in 1962, on an invitation from Darius Milhaud, took a teaching post at Mills College in Oakland, California. From 1960 to 1962 Berio also taught at the Dartington International Summer School. In 1965 he began to teach at the Juilliard School and there he founded the Juilliard Ensemble, a group dedicated to performances of contemporary music.

All this time Berio had been steadily composing and building a reputation, winning the Prix Italia in 1966 for *Laborintus II*. His reputation was cemented when his *Sinfonia* was premiered in 1968. In 1972, Berio returned to Italy. From 1974–80 he acted as director of the electro-acoustic division of IRCAM in Paris. In 1994, he became Distinguished Composer in Residence at Harvard University, remaining there until 2000. In 1993/94 he gave the Charles Eliot Norton lectures at Harvard, later published as *Remembering the Future*. He was active as a conductor and continued to compose to the end of his life. Berio died in 2003 in a hospital in Rome. He was an atheist.

Perhaps Berio's most notable contribution to the world of post-WWII non-serial experimental music, running throughout most of his works, is his engagement with the broader world of critical theory (epitomized by his lifelong friendship with linguist and critical theorist Umberto Eco) through his compositions. Berio's works are often analytic acts: deliberately analyzing myths, stories, the components of words themselves, his own compositions, or preexisting musical works. In other words, it is not only the composition of the "collage" that conveys meaning; it is the particular composition of the component "sound-image" that conveys meaning, even extra-musical meaning. The technique of the "collage," that he is associated with, is, then, less a neutral process than a conscious, Joycean process of analysis-by-composition, a form of analytic transcription of which *Sinfonia* and *The Chemins* are the most prominent examples. Berio often offers his

compositions as forms of academic or cultural discourse themselves rather than as "mere" fodder for them.

Berio's "central instrumental focus," is probably with the voice, the piano, the flute and the strings. He wrote many remarkable pieces for piano which vary from solo pieces to essentially concerto pieces. He is known for adapting and transforming the music of others, but he also adapted his own compositions: the series of *Sequenze* gave rise to a series of works called *Chemins* each based on one of the *Sequenze*. *Chemins II* (1967), for instance, takes the original *Sequenza VI* (1967) for viola and adapts it for solo viola and nine other instruments. *Chemins II* was itself transformed into *Chemins III* (1968) by the addition of an orchestra and there also exists *Chemins IIb*, a version of *Chemins II* without the solo viola but with a larger ensemble and *Chemins IIc*, which is *Chemins IIb* with an added solo bass clarinet. The *Sequenze* were also shaped into new works under titles other than *Chemins*; *Corale* (1981), for example, is based on *Sequenza VIII*.

Berio's electronic work dates for the most part from his time at Milan's Studio di Fonologia. One of the most influential works he produced there was *Thema (Omaggio a Joyce)* (1958), based on a Cathy Berberian reading from James Joyce's *Ulysses*, which can be considered as the first electro-acoustic composition in the history of western music made with voice and elaboration of it by technological means. A later work, *Visage* (1961) sees Berio creating a wordless emotional language by cutting up and rearranging a recording of Cathy Berberian's voice; therefore the composition is based on the symbolic and representative charge of gestures and voice inflections, “from inarticulate sounds to syllables, from laughter to tears and singing, from aphasia to inflection patterns from specific languages: English and Italian, Hebrew and the Neapolitan dialect."

In 1968, Berio completed *O King*, a work which exists in two versions: one for voice, flute, clarinet, violin, cello and piano, the other for eight voices and orchestra. The piece is in memory of Martin Luther King, who had been assassinated shortly before its composition. In it, the voice(s) intones first the vowels and then the consonants which make up his name, only stringing them together to give his name in full in the final bars. The orchestral version of *O King* was, shortly after its completion, integrated into what is perhaps Berio's most famous work, *Sinfonia* (1967–69), for orchestra and eight amplified voices. The voices are not used in a traditional classical way; they frequently do not sing at all, but speak, whisper and shout. The third movement is a collage of literary and musical quotations. *A-Ronne* (1974) is similarly collaged, but with the focus more squarely on the voice.

Berio composed a series of virtuoso works for solo instruments under the name *Sequenza*. The first, *Sequenza I* came in 1958 and is for flute; the last, *Sequenza XIV* (2002) is for cello. These works explore the full possibilities of each instrument, often calling for extended techniques. The various *Sequenze* are as follows:

- *Sequenza I* for flute (1958);
- *Sequenza II* for harp (1963);
- *Sequenza III* for woman's voice (1965);
- *Sequenza IV* for piano (1966);

- *Sequenza V* for trombone (1965);
- *Sequenza VI* for viola (1967);
- *Sequenza VII* for oboe (1969) (rev. by Jacqueline Leclair and renamed *Sequenza VIIa* in 2000);
- *Sequenza VIIb* for soprano saxophone (adaptation by Claude Delangle in 1993);
- *Sequenza VIII* for violin (1976);
- *Sequenza IXa* for clarinet (1980);
- *Sequenza IXb* for alto saxophone (1981);
- *Sequenza IXc* for bass clarinet (adaptation by Rocco Parisi in 1998);
- *Sequenza X* for trumpet in C and piano resonance (1984);
- *Sequenza XI* for guitar (1987–88);
- *Sequenza XII* for bassoon (1995);
- *Sequenza XIII* for accordion "Chanson" (1995);
- *Sequenza XIVa* for violoncello (2002);
- *Sequenza XIVb* for double bass (adaptation by Stefano Scodanibbio in 2004).

Berio's operas do to the stage and to storytelling what the rest of his music does to other kinds of repertoire; among them are the genre-expanding *Opera*, then there's *La vera storia*, a collaboration with Italo Calvino, the *Tempest-haunted Un re in ascolto* and his final stage work or "azione musicale," as Berio described it, *Cronaca del luogo*. Berio's last work, *Stanze*, is a luminous song-cycle on themes of God and death, for baritone, male voices and orchestra, music as moving as any he wrote.

- *Opera* (1970, revised 1977)
- *La vera storia* (1981)
- *Un re in ascolto* (1984)
- *Vor, während, nach Zaide* (1995; Prelude, interlude and ending for an opera fragment by Mozart)
- *Outis* (1996)
- *Cronaca del luogo* (1999)
- *Turandot* (2001; Ending for the Puccini opera)

1) *Thema* (*Omaggio a Joyce*) (1958) - is an electroacoustic composition, for voice and tape. It is based on the interpretative reading of the poem "Sirens" from chapter 11 of the novel *Ulysses* by James Joyce, read by Cathy Berberian and on the elaboration of her recorded voice by technological means. The work resumes the linguistic studies the composer has been carried on for some years in collaboration with Eco during the first stages of the Studio di fonologia in Milan; these studies were focused on one hand on the sonorous relationships between many different European languages; on the other hand, on the pure vocalism from several points of view: linguistic, phonetic, anthropological and musical. In particular, the construction of a new musical form based on the oscillation between music, literature and multimedia languages can be seen as the result of the interdisciplinary studies. Berio aimed to the synthesis of different fields to break down the borders of the artistic and scientific specializations between music, poetry and technology. So first of all, the main feature of the composition is the oscillation between oblivion and construction directly to the poetic writing form. The work is based on

the idea of the electroacoustic montage of sounds as well. This is the first time in history of music a recorded intelligible text was literally "broke into pieces." In particular, the composer had classified the recorded words included in "Sirens" according to their resonance colors, in relation to the resonance point of the vocal apparatus. The colors are chosen in considerations of the phonetic and their sonorous matter and then elaborated and mixed. The compositional category of the contemporary musical art, using words and vocals as a primary source and playing with tension between semantic and musical characteristics (through technology) was begun. The tension/relationship between construction of the words and a new elaboration of them and meaning of sounds, which is a peculiar element of the Joyce's writings, is transposed from the silent written form to a new musical, electroacoustic form. In particular, as Berio said, the sound object transformation must take into account the near-musical attributes that are contained in the sound object itself.

2) *Visage* (1961) - On the subject of faces (or "visages"), there's a fascinating moment in a Berio interview where he speaks of: "an expressivity which is like that of a human face which can at times be happy, sad, joyful, tired and in the end lifeless." At first, the notion that the human face can express certain emotional states seems necessarily distinct from the state of "lifelessness." But in fact that distinction might be the most spinal tension in all of Berio's music -- the tension between a material which is essentially inanimate and infinitely flexible, and the burning, glowing humanity that can at any moment be breathed into it. Voice -- in this case Cathy Berberian's voice -- is often the life-breath, with what Berio calls its "excess of connotations." But often Berio chooses to deal with voice the way Flaubert was said to deal with words -- surgically and works like *Visage* radiate from friction between the intimacy of vox humana and the elastic. Berberian's prerecorded voice -- performing all manner of vocal and expressive gestures, almost entirely without actual words -- becomes a kind of Shakespearean soliloquist in gibberish-land and she's surrounded by a vast soundscape of electronic sounds which provide her a proscenium. The kind of wordless vocal theater which unfolds is as equally Berberian's accomplishment as Berio's. At moments, Berberian's performance suggests some kind of onomatopoeic Ur-language, its cries, sighs, grunts and burbles. Orgasms and postcoital murmurings violently cut into wailing laments and fearful shouts, then into smug small talk. But at almost all moments, this vocality is tinged with a great strangeness, even danger. The sublime coda to *Visage* is one of twentieth century music's holy moments: the gibberish of Berberian, inflected by a kind of enlightenment, gradually cedes to an electronic hive of sound, swirling with the buzz of cybernetic bees; the body seems to have entirely passed into an automated ether, aerates into nothing via studio technology. It is indeed a moment of death, acoustically distinct from but expressively identical to those later moments of mortal darkening in Berio's music. It is perhaps in this moment, most of all that the life in the face, becomes most moving -- as it leaves.

3) *Folk Songs* (1964) **-** is a song cycle consisting of arrangements of folk music from various countries, forming "a tribute to the extraordinary artistry" of the American singer Cathy Berberian, a specialist in Berio's music. It is scored for voice, flute (doubling on piccolo), clarinet, harp, viola, cello and percussion (two players). The composer arranged it for a large

orchestra in 1973. The first two of the *Folk Songs* are not actual folk songs. "Black Is the Colour (Of My True Love's Hair)" and "I Wonder as I Wander" were both written by the Kentucky folk singer and composer John Jacob Niles. There is a traditional tune for "Black is the Color ..." but, because his father thought it was "downright terrible," Niles recalled, "I wrote myself a new tune, ending it in a nice modal manner." Berio's suite opens with the viola instructed to play "like a wistful country dance fiddler," free of bar lines and rhythmically independent of the voice. "I Wonder as I Wander" was developed by Niles out of the mere three lines he was able to extract from a revivalist preacher's daughter, "a tousled, unwashed blond and very lovely." Harmonics from the viola, cello and harp contribute toward the "hurdy-gurdy sound" Berio wanted to accompany this second song. The extended bird-song postlude for flute and clarinet in Berio's version seems to have been suggested by the passing reference to the "bird on the wing." Armenia, the country of Berberian's ancestors, provided the third song, "Loosin yelav," which describes the rising of the moon. In the French song "Rossignolet du bois," accompanied only by the clarinet at first but later by the harp and crotales, a nightingale advises an inquiring lover to sing his serenades two hours after midnight and identifies the "apples" in his garden as the moon and the sun. A sustained chord colored by the striking of automobile spring coils bridges this song to the next one, the old Sicilian song "A la femminisca," sung by fishermen's wives as they wait at the docks. Like the first two songs, the sixth, "La Donna Ideale" and the seventh, "Ballo," come not from anonymous folk bards but from Berio himself. The old Genoese dialect folk poem "The Ideal Woman" says that if you find a woman at once well-born, well-mannered, well-formed and with a good dowry, for God's sake don't let her get away. "The Ball," another old Italian poem, says that the wisest of men, lose their heads over love but love resists the sun and ice and all else. "Motettu de tristura" comes from Sardinia and apostrophizes the nightingale: "How you resemble me as I weep for my lover... When they bury me, sing me this song." The next two songs are also found in Joseph Canteloube's *Chants d'Auvergne* and are in the Occitan language. "Malurous qu'o uno fenno" poses the eternal marital paradox: he with no spouse seeks one and he with one wishes he had none. A cello echoing the improvisation at the opening of the suite introduces "Lo Fïolairé," in which a girl at her spinning wheel sings of exchanging kisses with a shepherd. Berberian discovered the last song, known in the suite as "Azerbaijan Love Song," on a 78 RPM record from the Azerbaijan Soviet Socialist Republic, sung in the Azerbaijani language except for one verse in Russian, which a Russian-speaking friend told her compared love to a stove. Berberian sang, purely by rote, the sounds she transcribed as best she could from that scratchy old record. She knew not one word of Azerbaijani.

4) *Sinfonia* (1967-69) ("symphony", but never, oddly, given in translation) is the ultimate pre-postmodernist musical palimpsest – which alliterative concatenation points to what happens in the work's central third movement. Composed for large orchestra and eight amplified vocalists, *Sinfonia's* middle movement is one of the essential experiences of post-war music. The connective tissue of the piece is provided by the scherzo third movement from Mahler's Second Symphony, but that's the just the base material of the musical resources Berio uses. That's because every bar is crammed full of quotations of repertoire from Debussy to Stockhausen, from Stravinsky to Ravel – and dozens of others - so that the Mahler, which is always running in

the background, appears through the cracks of this kaleidoscopic tumult. The vocalists simultaneously provide a commentary on what is happening in the performance ("where now?", "well, so there is an audience", "it's a fantastic public performance") and provide their own mash-up of literary material, from Beckett to Claude Lévi-Strauss. (Even if you've heard it only once, I guarantee that the vocalists's gnomic words will stick in your brain; for some reason, the phrase I can never get out of my head is "the name of Mayakovsky hangs in the clean air," as well as the Beckettian "keep going, going on ..."). It's vertiginous, witty, moving and profound. What this teeming complexity is all about is simple to describe: it's proof of the etymology of the word symphony, which means "sounding together" - Berio simply makes all of these musics sound together. But it's also a piece about listening. The third movement of *Sinfonia* writes out how Berio listens to the equivalent movement from Mahler's symphony and the piece reveals how every time we listen to music, we're plugging into an always-changing network of memory, allusion and cross-reference. Within the framework of the whole five-movement piece, *Sinfonia* listens to itself, so that it's final movement does to the piece what the third movement does to Mahler. The effect of Berio's labyrinths of listening is nearly always immediate, pleasurable and sensual. His music admits as much of the world as he can cram into it, an openness embodied by one of Berio's most popular and approachable pieces, *Folk Songs*.

5) *Sequenza VI* (1967) - is a composition for solo viola, part of a series of fourteen *Sequenze*. *Sequenza VI* was written in 1967 for Serge Collot, to whom the score is dedicated. It also forms the core of two other Berio compositions, *Chemins II* for viola and nine instruments (1968) and *Chemins III* (1969), which adds an orchestra to the forces of *Chemins II*. The relationship of the three works is described by Berio as being: "something like the layers of an onion: distinct, separate, yet intimately contoured on each other; each new layer creates a new, though related surface and each older layer assumes a new function as soon as it is covered." *Sequenza VI* exploits the harmonic possibilities of a fundamentally melodic instrument. It does this in two ways: first, by implying harmonies with melodic lines circling continuously through a small number of fixed pitches and, second, by presenting long series of three- and four-part chords in which the pitches are kept sounding by means of across-the-stings tremolo. The work alternates these two gestural ideas (melodic and chordal), producing a sectional form based on changes in texture, gestural predominance and shaping processes.

6) *A-Ronne* (1974) - is a composition for unaccompanied vocal ensemble. The work is partly a setting of words by the Italian avant-garde poet Edoardo Sanguineti. Berio elaborates Sanguineti's work with extracts from and allusions to a host of other texts, including various translations of The Bible (St. John's Gospel), works by Dante (*The Divine Comedy*), Goethe (*Faust*), Karl Marx and Friedrich Engels (*The Communist Manifesto*), T.S. Eliot ("East Coker" from *Four Quartets*), James Joyce (*Finnegan's Wake*), Samuel Beckett (*Endgame*), Roland Barthes (an essay on Georges Bataille) and also correspondence between Sanguineti and the composer. The title of the piece is an extension of the term "from A to Z": in the old Italian alphabet the three signs *ette*, *conne*, *ronne* came after *z*. Berio employs a wide range of vocalisations, from sung phrases to direct speech at various pitches and wordless intonations and inflexions. Although Sanguineti's poem is repeated several times throughout, it is usually

indiscernible amongst the variety of textures. As such, Berio described the work as a "documentary on a poem by Edoardo Sanguineti, as one would say a documentary on a painting or an exotic country." He also described it as a "theatre of the ear" in the style of late sixteenth-century Italian madrigal singing. The work is divided into six untitled sections and lasts around half an hour.

7) *Coro* (1976/77) - Berio's masterpiece, *Coro* (Chorus), is an hour-long coming together of a 40-piece choir and orchestra (each singer has an instrumental partner, so that the singers and players are intermingled with each other on stage). Coro makes a kind of meta-world music by turning a poem by Pablo Neruda into a gigantic, dissonant lament, but it also uses folk texts from all over the world, from Polynesia to Peru, to create what Berio himself described as "the plan for an imaginary city which is realised on different levels, which produces, assembles and unifies different things and persons, revealing their collective and individual characters, their distance, their relationships and conflicts within real and ideal borders."

8) *Sequenza XII* (1995) - is a composition for solo bassoon and part of a series of fourteen *Sequenze* composed between 1958 and 2002. The work was written for and, dedicated to, the French bassoonist Pascal Gallois, who gave the world première on 15 June 1995. *Sequenza XII* is the longest of all the *Sequenze*, at nineteen minutes. As with the other works in the series, it reflects Berio's fascination with virtuosity: "understood not merely as technical dexterity, but as a manifestation of an agile musical intelligence that relishes the challenge of complexity." In *Sequenza XII* Berio makes deliberate use of the different registers and explores the physical limits of performance through extended techniques, for example, through different uses of the tongue to modify airflow, by writing notes and phrases that are so long they require the performer to use circular breathing, the use of *glissando* and multiple sounds producing by singing through the instrument while playing.

Karlheinz Stockhausen (1928 – 2007) was a German composer, widely acknowledged by critics as one of the most important but also controversial composers of the 20th and early 21st centuries. One critic called him: one of the great visionaries of 20th-century music. He is known for his groundbreaking work in electronic music, aleatory in serial composition, and musical spatialization. See the detailed biography in the section on Serial Music.

This section will focus on some of Stockhausen's work in electronic music, music in "Vairable Form" (Stockhausen's term for: Chance music; Indeterminat music; and Aleatronic music) and spatial music.

In December 1952, Stockhausen composed a *Konkrete Etüde*, in Pierre Schaeffer's Paris musique concrète studio. In March 1953, he moved to the NWDR studio in Cologne and turned to electronic music with two *Electronic Studies* (1953 and 1954), and then introducing spatial placements of sound sources with his mixed concrète and electronic work *Gesang der Jünglinge* (1955–56).

His work with electronic music led him to explore modes of instrumental and vocal music in which performers' individual capabilities and the circumstances of a particular performance (e.g., hall

acoustics) may determine certain aspects of a composition. He called this "variable form." In other cases, a work may be presented from a number of different perspectives. In *Zyklus* (1959), for example, he began using graphic notation for instrumental music. The score is written so that the performance can start on any page, and it may be read upside down, or from right to left, as the performer chooses.

In 1960, Stockhausen returned to the composition of vocal music (for the first time since 1955) with *Carré* for four orchestras and four choirs. Two years later, he began an expansive cantata titled *Momente* (1962–64/69), for solo soprano, four choir groups and thirteen instrumentalists. In 1963, Stockhausen created *Plus-Minus*, "2 × 7 pages for realisation" containing basic note materials and a complex system of transformations to which those materials are to be subjected in order to produce an unlimited number of different compositions. Through the rest of the 1960s, he continued to explore such possibilities of "process composition" in works for live performance, such as *Prozession* (1967), *Kurzwellen*, and *Spiral* (both 1968), culminating in the verbally described "intuitive music" compositions of *Aus den sieben Tagen* (1968) and *Für kommende Zeiten* (1968–70).

Since the mid-1950s, Stockhausen had been developing concepts of spatialization in his works, not only in electronic music, such as the 5-channel *Gesang der Jünglinge* (1955–56) and *Telemusik* (1966), 4-channel *Kontakte* (1958–60) and *Hymnen* (1966–67) but also for instrumental/vocal works like *Gruppen* for three orchestras (1955–57) and *Carré* (1959-1960) for four orchestras and four choirs also exhibit this trait. In lectures such as "Music in Space" from 1958, he called for new kinds of concert halls to be built, "suited to the requirements of spatial music."

In 1968, the West German government invited Stockhausen to collaborate on the German Pavilion at the 1970 World Fair in Osaka, Japan to create a joint multimedia project for it with artist Otto Piene. Other collaborators on the project included the pavilion's architect, Fritz Bornemann. Although Stockhausen and Piene's planned multimedia project, titled *Hinab-Hinauf*, was developed in detail, the World Fair committee rejected their concept as too extravagant and instead asked Stockhausen to present daily five-hour programs of his music. Stockhausen's works were performed for 5½ hours every day over a period of 183 days to a total audience of about a million listeners. This work was titled: "*Expo*," for three Performers with shortwave receivers and a sound projectionist.

1) *Gesang der Junglinge* (Song of the Youths) (1955/56) The work is routinely described as "the first masterpiece of electronic music" and is significant in that it seamlessly integrates electronic sounds with the human voice by means of matching voice resonances with pitch and creating sounds of phonemes electronically. This also successfully brought together the two opposing worlds of the purely electronically generated German *elektronische Musik* and the French *Musique Concrète*. *Gesang der Jünglinge* is also noted for its early use of spatiality. It was conceived as a mass for electric sounds and voice.

2) *Kontakte* (Contacts) (1960) is a celebrated electronic music work produced at the *Westdeutscher Rundfunk* (WDR) electronic-music studio in Cologne. The title of the work refers

both to contacts between instrumental and electronic sound groups and to contacts between self-sufficient, strongly characterized moments. The composition exists in two forms: (1) for electronic sounds alone (2) for electronic sounds, piano, and percussion. According to the composer, "In the preparatory work, I found, for the first time, ways to bring all properties [i.e., timbre, pitch, intensity, and duration] under a single control," thereby realizing a longstanding goal of total serialism. The most famous moment, at the very center of the work, is a potent illustration of these connections: a high, bright, slowly wavering pitch descends in several waves, becoming louder as it gradually acquires a snarling timbre and finally passes below the point where it can be heard any longer as a pitch. As it crosses this threshold, it becomes evident that the sound consists of a succession of pulses, which continue to slow until they become a steady beat. With increasing reverberation, the individual pulses become transformed into tones once again.

3) *Hymnen* (National Anthyms) (1967/69) - Is an electronic and concrete work, with optional live performers and was produced at the WDR in Cologne. In 1969, in Madison, Connecticut, Stockhausen created a new version of the Third Region of *Hymnen* by adding a part for orchestra. This was to fulfill a commission from Leonard Bernstein and the New York Philharmonic, which was originally to have been for a never-completed work titled *Projektion*. The world premiere of the "Third Region with Orchestra" was given by the New York Philharmonic conducted by Stockhausen in Philharmonic Hall, New York, in 1971. The program, which started fifteen minutes late due to an unprecedented demand for tickets, lasted for three hours (with two intervals) and was "the longest Philharmonic concert of the last generation, and, for all we know, in Philharmonic history." The German title means "(national) anthems" and the substance of the work consists of recordings of national anthems from around the world. There are four movements, called "regions" by the composer, with a combined duration of two hours. The composition exists in three versions: (1) electronic and concrete music alone (2) electronic and concrete music with soloists, and (3) the Third Region (only) with orchestra (1969).
Each region uses certain anthems as centres:
<u>Region I</u> (dedicated to Pierre Boulez) has two: "The Internationale" and "La Marseillaise"
<u>Region II</u> (dedicated to Henri Pousseur) has four: (1) the German anthem, (2) a group of African anthems, (3) the opening of the Russian anthem, and (4) a "subjective centre", consisting of the recording of a moment during the studio work.
<u>Region III</u> (dedicated to John Cage) has three: (1) the continuation of the Russian anthem (the only one made entirely from electronic sounds), (2) the American anthem and (3) the Spanish anthem.
<u>Region IV</u> (dedicated to Luciano Berio) has just one, but it is a "double centre": the Swiss anthem, whose final chord turns into an imaginary anthem of the utopian realm of "Hymunion in Harmondie under Pluramon."

Stockhausen originally planned to compose "many more" regions, creating a much longer work. He had collected 137 anthems, of which only 40 are used in the four extant parts and had organised materials for two further regions.

3) *Momente* (1969) – Is scored for solo soprano, four mixed choirs, and thirteen instrumentalists (four trumpets, four trombones, three percussionists, and two electric keyboards). A "cantata with radiophonic and theatrical overtones," it was described by the composer as "practically an opera of Mother Earth surrounded by her chicks." It was Stockhausen's first piece composed on principles of modular transposability and his first musical form to be determined from categories of sensation or perception rather than by numerical units of musical terminology, which marks a significant change in the composer's musical approach from the abstract forms of the 1950s. *Momente* seeks to employ the greatest possible number of vocal phenomena—not just conventional singing but also the communication functions of spoken and whispered language, crying, and laughter. In addition to singing, the choir members clap their hands, snap their fingers, stamp and shuffle their feet, and slap their thighs.

   Momente exemplifies what Stockhausen calls moment form, in which the listener's attention is on the "now", on the "eternity that does not begin at the end of time but is attainable in every moment." At the same time, it constitutes a "polyvalent form," in that its 30 sections (also called "moments") can be arranged in many different sequences. There are three main groups of moments, designated by letters: eight *M*, seven *K*, and eleven *D* moments. The letters stand for *Melodie* (melody), *Klang* (sound, or chord), and *Dauer* (duration) and also have an autobiographical significance, with *K* for "Karlheinz" and the other two letters for Stockhausen's first and second wives, "Doris" and "Mary."

4) *Mantra* (1970) - Is scored for two ring-modulated pianos; each player is also equipped with a chromatic set of crotales (antique cymbals) and a wood block and one player is equipped with a short-wave radio producing morse code or a magnetic tape recording of morse code. The precise comprehensibility of what you're hearing – in how it was made, what's happening in the textures and lines and form of the music – often lies outside the bounds of what you can properly digest, but the actual experience of the music is indelible, irrefutable and real.

   The piece is the first determinate work (that is, the score is completely written down, though there are some passages involving a modest degree of improvisation) that Stockhausen composed after a long phase of indeterminate compositions. This work involves the expansion and contraction of a counterpointed pair of melodies. In this work, Stockhausen chose the term "mantra" in order "to avoid the words *theme*, *row* or *subject*, as in a fugue. According to the composer, the mantra "has thirteen notes and each cymbal sound occurring once in the piece indicates the large sections—you hear the cymbal whenever a new central sound announces the next section of the work." Though this mantra recurs constantly, the structure of the composition is not a theme and variations as found in classical composers such as Beethoven and Bach, because the material is never varied, only expanded and contracted.

5) *Cosmic Pulses* (1970) his last electronic piece. The piece has been described as "a sonic roller coaster". *Cosmic Pulses* is the Thirteenth Hour of the unfinished *Klang* (Sound) cycle (see the discussion under the Serialim section on Stockhausen). In the *Klang* cycle, *Cosmic Pulses*

represents a turning point. It is the beginning of the second half of the cycle, and all of the music after the thirteenth hour is electroacoustic, employing partial mixdowns of *Cosmic Pulses* as the tape accompaniment. The number 24 is central to the construction of *Cosmic Pulses*. There are 24 layers of sound. There are 24 "melodic loops", spaced throughout 24 different registers (spanning 7 octaves). There are 24 different tempi. The fastest tempo is 240 beats per minute. The source timbre for the piece is a synthesizer. During his lectures surrounding the German premiere, Stockhausen admitted that the piece might be regarded as "not music, just sound" and it might be better to "just take it as a natural phenomena and not think of composition."

6) *Für kommende Zeiten* (For Times To Come) (1968–70) - is a collection of seventeen text compositions, similar to the collection titled *Aus den sieben Tagen*, written in 1968. These compositions are characterized as "Intuitive music"—music produced primarily from the intuition rather than the intellect of the performer(s). It is work number 33 in Stockhausen's catalog of works, and the collection is dedicated to the composer's son Markus..

7) *Expo* (1969-1970) is the penultimate in a series of works dating from the late 1960s which Stockhausen designated as "process" compositions. These works in effect separate the "form" from the "content" by presenting the performers with a series of transformation signs which are to be applied to material that may vary considerably from one performance to the next. In *Expo* and three companion works (*Kurzwellen* for six performers, *Spiral* for a soloist, and *Pole* for two), the material is to be drawn spontaneously during the performance from short-wave radio broadcasts. Despite the unpredictability of the materials, these processes can be heard from one performance to another as being "the same."

Kaija Saariaho (born 14 October 1952) is a Finnish composer who studied composition in Helsinki, Freiburg and Paris, where she has lived since 1982. Her studies and research at IRCAM have had a major influence on her music and her characteristically luxuriant and mysterious textures are often created by combining live music and electronics. Although much of her catalogue comprises chamber works, from the mid-nineties she has turned increasingly to larger forces and broader structures, such as the opera *L'amour de loin*, premiered at the 2000 Salzburg Festival (with a US premiere at the Santa Fe Opera in 2002) and *Oltra mar* for chorus and orchestra, commissioned by the New York Philharmonic. Her second opera, *Adriana Mater*, was commissioned for the Opéra National de Paris' 2006 season. Her second string quartet, *Terra Memoria*, was commissioned for the Emerson Quartet by Carnegie Hall for a June 2007 premiere. The third opera, *Émilie*, has the life and death of Émilie du Châtelet as its topic. The librettist of all of the three operas is Amin Maalouf.

Kaija Saariaho was born in Helsinki, where she attended the Helsinki Rudolf Steiner School, a school with a strong arts and music curriculum, for thirteen years and studied violin and piano at the Sibelius Academy. She later studied in Freiburg (under Brian Ferneyhough and Klaus Huber) and at IRCAM in Paris. Most critics, however, cite spectral music composers Gérard Grisey and Tristan Murail as her largest influences. Her work in the 1980s and 1990s is marked by its

emphasis on timbre and use of electronics alongside traditional instruments; *Nymphéa (Jardin secret III)* (1987), for example, is for string quartet and live electronics. It contains an additional vocal element: the musicians whispering the words to a poem by Tarkovsky. In the late 1990s Saariaho began to expand beyond electronics, often writing strictly acoustic pieces, focusing increasingly on melody. Saariaho was influenced by post-serialism, but she grew to find it too restrictive: "You were not allowed to have pulse, or tonally oriented harmonies, or melodies. I don't want to write music through negations. Everything is permissible as long as it's done in good taste."

Saariaho, who's 60 this year, has spoken of growing up in Finland in a family "without any kind of cultural background." Her father worked in the metal industry, her mother looked after the three children and yet this unpromising ground would be catalysed by the spark of music. "I was very sensitive," she says. "There was some music that frightened me and some that I liked. We had an old-fashioned radio at home, so I listened to music on that. But I also heard music when I was a girl that didn't come from a radio." Saariaho then reveals something that shows how her sensitivity to music was already tied up with the idea of a heightened reality and with her own invention. This music that "didn't come from a radio" was music "that was in my mind. I imagined that it came from my pillow. My mother remembered me asking her to turn the pillow off at night when I couldn't sleep; to turn off the music that I imagined inside my head."

Studying at the Sibelius Academy in Helsinki was the fulfilment of the young Saariaho's ambition, but it only came about because of her self-belief and stubbornness. She remembers meeting her future teacher and that even though there was no room in his composition course, "I had decided that I would not leave the room until he had taken me. I was crazy, but I knew I could not leave the room. He tried to say many times there was no room for me – but finally he had no choice. I became his pupil." The academy also confronted her with the realities of life as a composer. And especially as a composer who was not male. In the early 1970s, Saariaho was the only woman in the class. "There were some teachers who actually would not teach me, because they thought it was a waste of time. 'You're a pretty girl, what are you doing here?' That sort of thing ... My feminity was so apparent, so unavoidable."

But Saariaho was a composer, from the start, who knew what she wanted to do, to fee, and to make in her music. And she knew what her music would not be as well. There was pressure from the academy to conform to more conventional archetypes of modernism, and subsequently, when she studied with Brian Ferneyhough in Freiburg she experienced the aridity of what she thought of as the over-systemisation of some species of contemporary composition – "all of that complexity, and for what aural result?", she says. Yet she had found one possible escape from those modernist diktats in the work of Gérard Grisey and Tristan Murail, the French spectralists who were investigating the harmonic potential of the overtone series, creating a more intuitive musical space that chimed with Saariaho's compositional instincts.

And it was a French institution that finally sealed Saariaho's flight from her homeland in the early 1980s: IRCAM. There she discovered the computer technology that would allow her to realise the sonic phenomena she heard in her personal musical universe. The pieces that resulted, like

Verblendungen and especially *Lichtbogen* ("a piece I can approve", as this most self-critical composer describes it, "it's breathing music") opened up new possibilities for the way acoustic instruments and the computer technology of the mid 1980s might work together. Saariaho's stroke of brilliance and imagination in these pieces is to make the connections between the live musicians and the other world of the tape and electronic sounds as seamless as possible. The "breathing" of Lichtbogen applies just as much to the electronics as it does to the ensemble's music, and above all to the immediate, sensual impact of the whole work.

All composers are dreamers. But very few have dared to dream sonic images of such magnetic power as Kaija Saariaho has conjured in her music for ensembles, orchestra, opera houses, electronics and soloists. That's true for pretty much every piece Saariaho has written, whether it's one of her luminous but inescapably dramatic operas, such as *L'Amour de loin* or *Adriana Mater*, or her orchestral sound- and cosmos-scapes such as *Orion*, or her chamber and ensemble works such as *Nymphéa* and *Lichtbogen*. To journey into Saariaho's music is to be confronted with the darkest and most dazzling dimensions of your subconscious and glimpses of the existential journeys she has made to find these pieces. The brilliance of her works that fuse electronics with instruments is the way they melt the divisions between both worlds. The electronics become a halo around the instruments, amplifying their sonic palette yet indivisible from them. Your ears are seamlessly taken into another realm, a place that's both ethereal in its sheer, rarefied beauty yet grounded in the real world of instruments and voices.

Having immersed herself in the possibilities of electronics, Saariaho can now create the same uncanny effect of distance and transcendence using only an un-adulterated acoustic orchestra, as in her recent *Orion*; imagining and realising sounds you didn't think the orchestra could make.

Saariaho's music since then has not compromised the techniques it uses, whether electronically or acoustically, in order to serve the private yet grand passions her work describes. Her operas especially explore the big themes of war, of love, of existence and each has created a new sonic universe to do so. But for all the change in her life and her career and the largest possible scale of orchestral and operatic music that she now often works in, there's something in Saariaho that remains of that sensitive and dreaming child, the fundamental desire to realise her ever-mysterious musical visions. But that's a process that involves making the private, public; that necessitates revealing to the world the most delicate areas of experience and contemplation. Talking about her most recent opera, *Emilie*, composed for the solo voice and solo persona of Karita Mattila, who is alone on stage for all 90 minutes of the piece, she says: "It's always the inner space that interests me." She adds: "It's very private: everything is happening in this woman's mind during one night when she's working. Like all of my operas, it should have the effect of being fundamentally private music, music that I want to communicate with the inner world of my listeners, just as it expresses my inner imagination." In so doing, Saariaho has given her audiences – and given late 20th and early 21st century music as a whole – some of the most luminous, beguiling and sheerly sensual experiences they can hope to have.

1) *Verblendungen* (1984) - Her first professional work is a dassling blend of acoustic and electronics. The basic material for the tape consists of two violin sounds, a sforzato stroke and

a pizzicato. From these two sounds I have built a quasi-string orchestra with a very wide pitch range. The timbres on the tape are very homogeneous because of this single reference spectrum. The total plan for the use of timbre in the piece is based on the idea that the orchestra and the tape are moving in opposite directions with respect to the tone-noise axis. The piece starts with a thick orchestral tutti, which is first hidden and than shaded by the noise on the tape. During the piece the orchestral colouring is transformed into instrumental noises, which, before withering away, shade the quasi-string orchestra on the tape. The orchestra is built to have a heterogeneous nature to contrast with the even colours on the tape. In spite of their different, sometimes opposite materials, the orchestra and the tape should build a common, inseparable sound world. When composing the piece an important factor has been the relation of the surface structure and deeper musical and formal structures. In my network of connections between different parameters I am searching for intersections not only vertically and horizontally on the time axis, but also in the direction of depth, as if the sounds were organised in think layers in three dimensional perspective, starting from dry, grainy sounds in front and moving towards smooth, more resonant ones.

2) *Du Cristal…a la funnee* (1989) (From Crystal … into smoke) – an orchestral diptych based on the transformation of timbres and colors ("form crystal…into smoke"). In 1989 Kaija Saariaho found herself in the unusual position of receiving two commissions for large orchestral pieces to fulfil within as many years, without having written a large-scale orchestral work before (her Verblendungen of 1982 had been scored for large chamber orchestra). Not daunted by such a task, she decided to link the two works together so that they would form an orchestral diptych totalling some thirty-eight minutes of music. Thus the last sound of Du Cristal – a cello trill played sul ponticello – becomes retrospectively the first sound of its successor, … à la fumée, which features solo parts for cello and amplified alto flute in addition to large orchestra. Saariaho has commented that 'to my way of thinking, Du Cristal … à la fumée is a single work, two facets of the same image, but both fully drawn in, living and independent'; so the pieces may either be played together or on their own. Saariaho took her title from a book by the French writer Henri Atlan, "Entre le cristal et la fumée" and for her it signifies the way the same acoustic material is developed in sharply different ways in the two pieces, the turbulent energy and almost expressionist outbursts of Du Cristal subsiding into the capricious, playful double concerto of … à la fume.

   Du Cristal was commissioned jointly by the Los Angeles Philharmonic Orchestra and the Helsinki Festival. It is scored for a standard large symphony orchestra with the assition of an important part for synthesizer and featuring a highly prominent percussion section. None of Saariaho's major works to date is without some kind of electronic element and the presence of the synthesizer is significant in the light of Saariaho's remark that she tends to the orchestra itself 'as if it was a huge synthesizer'. The standard form of electronic synthesis is 'additive' - that is, each sound is created by piling innumerable pure tones upon each other. Transferred to the medium of the orchestra, this means that it is as if each individual instrument were analogous to a pure tone in a synthesizer, merely a tiny part of a large, slowly evolving mass of sound. Thus there is no polyphony, nor any melody in the conventional sense, although the

music is frequently lyrical in its gestures and the activity within the textures may momentarily suggest polyphony; the important thing to follow is the overall drift of the orchestral mass and to relate the individual details to that. It's an approach which owes something to the dense, multi-layered orchestral works of György Ligeti, such as "Atmosphères and Lontano", as well as to the so-called 'spectral-music' of French composers Tristan Murail and Gérard Grisey. Her own style is nevertheless thoroughly personal and has distinctly brooding, 'Northern' character.

3) *L'Amour de loin* (2000) (Love from Afar) – is Saariaho's first opera and was premiered in Salzburg in August 2000 and the same production was given at the Théâtre du Châtelet, Paris in November/December 2001, and in Santa Fe, summer 2002. The libretto has been written by French-Lebanese author Amin Maalouf. In 1983, he began to be known as an author, with the success of novels such as Léon l'Africain and Samarkand. His book Le Rocher de Tanios from 1993 was awarded the Prix Goncourt.

   The story of the opera L'amour de loin is based on "La Vida breve" of Jaufre Rudel, Prince of Blaye, one of the first great troubadours of the 12th century. His glowing passion for a woman from the East of whom he has only heard is the central theme of the libretto. Tired of the superficiality of life enjoyed by young men of his rank, Jaufré dreams of an idealised and distant love. Contrary to his expectations, a Pilgrim arrives from the Christian Kingdom of Outre-Mer, claims that he knows of such a woman – Clémence, Countess of Tripoli. Jaufré becomes obsessed with her and decides to travel to meet her. Meanwhile, Clémence has heard of the devotion of this Prince from a faraway land. Initially suspicious, she soon is haunted by dreams of her distant lover. However Jaufré's voyage is hard and by the time he arrives in Tripoli, he is gravely ill. The lovers meet and declare their passion just before Jaufré dies.

4) *Orion* (2002) - Conjures a cosmos for the orchestra. Images of the night, dreams, myths and distant mysteries have always loomed large in Saariaho's work. Orion, the mysterious and adventurous hunter of Greek mythology, was the mortal son of Neptune (Poseidon), the god of seas. After his death, Orion was placed by Zeus in the sky as a radiant constellation. He is, thus, at once an active (even hyper-active) human being and an immobile heavenly object. Saariaho has fully exploited that contrast in this work in three movements. Orion begins its musical journey in a kind of amorphous 'interstellar space.' The first movement, titled 'Memento mori' ('Remember that you must die'), evolves from a mysterious introduction towards a powerful orchestral outburst marked by the entrance of the organ. This moment also brings an expansive string melody and an insistent and rhythmic idea in equal eighth-notes, played fortissimo by the woodwinds. The music then becomes more animated, with a new, exited figure all in rapid sixteenth-notes gradually taking hold of almost the entire orchestra, repeated furioso and con violenza until it is abruptly cut off. The second movement, 'Winter Sky', opens with a haunting piccolo solo, continued by solo violin, clarinet, oboe, and muted trumpet. As the orchestral soloists pass the melody around, the other instruments provide a colourful and atmospheric accompaniment. The orchestral texture later fills out with multi-layered polyphony, yet the movement remains calm and contemplative. For the ending, the already

slow tempo becomes even slower as the piano emerges from the background with a 'sky-high' melody repeating a few notes in changing permutations, over expressive string glissandos and the sound of chimes, bowed vibraphone and crotales. We come back to earth with the energetic final movement, titled 'Hunter'. It is a study in perpetual motion - or almost, since the fast motion is repeatedly interrupted by short mysterious episodes in a slow tempo. The third such interruption, more extended than the first two, momentarily recalls the second movement, before the music returns to its former dynamic and joyful self. The excitement grows apace, but as the tempo increases, the volume decreases. More and more instruments drop out and by the end, Orion has once again assumed his position on the night firmament.

5) *Latgerna Magica* (2008) (The Magic Lantern) - alludes to the autobiography of the same name by film director Ingmar Bergman. The book caught my eye after many years whilst I was tidying my bookcases in autumn 2007. In time, as I read the book, the variation of musical motifs at different tempos emerged as one of the basic ideas behind the orchestral piece on which I was beginning to work. Symbolising this was the Laterna Magica, the first machine to create the illusion of a moving image: as the handle turns faster and faster, the individual images disappear and instead the eye sees continuous movement. Musically speaking, different tempos underline different parameters: the rhythmic continuity is accentuated at relatively fast tempos, whereas delicate shades require more time and space for the ear to interpret and appreciate them. While I was working with tempos, rhythms with different characters became a major part of the piece's identity: a fiery dance-rhythm inspired by flamenco, a shifting, asymmetrical rhythm provided by speech and an accelerating ostinato that ultimately loses its rhythmic character and becomes a texture. In contrast to this, there emerged music without a clear rhythm or pulse. This material is dominated by strongly-sensed colourful planes and airy textures, such as the unified colour of six horns, which divides the orchestral phrases. This use of horns points to Bergman's film Cries and Whispers, in which the scenes are often changing through sequences of plain red color.

   When reading the autobiography I was also touched by the way Bergman described the different lights which his favourite photographer, Sven Nykvist, was able to capture with his camera. Part of the text found its way into the piece in German – for the work was commissioned by the Berlin Philharmonic. The extract, in English, goes as follows:

   > Gentle, dangerous, dream-like, lively, dead, clear, hazy, hot, strong, naked, sudden, dark, spring-like, penetrating, pressing, direct, oblique, sensuous, overpowering, restricting, poisonous, pacifying, bright light. Light.

Magnus Lindberg (born 27 June 1958) is a Finnish composer and pianist. Lindberg was born in Helsinki, where he studied at the Sibelius Academy. He attended summer courses in Siena (with Franco Donatoni) and Darmstadt (with Brian Ferneyhough). After graduating in 1981, he travelled widely in Europe, attending private studies in Paris and observing Japanese drumming and punk rock in Berlin. A prodigiously gifted teenager who was writing gigantic orchestral scores before he

turned 20, Lindberg was also the 1980 founder of the Toimii Ensemble (along with Salonen, Kriikku and Karttunen) and he was and remains a virtuoso pianist.

Lindberg has put himself in an excellent position to assimilate a stimulating range of influences: vestiges of the once-dominant postwar serialism (based on a radical extension of Schoenberg's twelve-tone theory), state-of-the-art electronic music (as it was being researched at Pierre Boulez's IRCAM studios in Paris) recent developments in computer modeling of sound and how it works (his father worked for IBM, triggering an early fascination with technology) and even Berlin's punk rock scene. Inspirations from other artistic disciplines also played a role in Lindberg's developing style. He has mentioned an attraction to the great Italian fresco painters of the early Renaissance (an influence that can be sensed in his finesse as a colorist and orchestrator), the fiction of Bulgakov and the films of Buster Keaton. It's a rather extreme spectrum of impulses, representing the composer's "omnivoraciousness" (to borrow a term associated with yet another key influence, Luciano Berio). But if all this sounds like the recipe for a messy, cluttered eclecticism, Lindberg began at an early stage to forge a persuasively personal style characterized by flowing energy and vibrant, swirling patterns of color.

Lindberg's juvenilia include the large orchestral work *Donor*, composed at age 16. *Quintetto dell'Estate* (1979) is generally held to be Lindberg's first opus. His first piece performed by a professional orchestra was *Sculpture II* in 1982. His first great success came with *Action-Situation-Signification* (1982), the first work in which he explored *musique concrète*. This piece was written for and premiered by his new-music ensemble Toimii ("It Works" in the Finnish language). Another piece written for Toimii, *Kraft* (1983–85), is Lindberg's largest work to date. It uses traditional instrumentation as well as percussion on scrap metal and spoken word. After finishing, Lindberg found it hard to compose and with the exception of 1986's *Ur*, which he called "*Kraft* in chamber form," he entered a creative hiatus that was to last for over two years. During this time he was not only rethinking his style but also recovering from a tropical disease contracted during travel in Indonesia.

Kraft made use of a chaconne-type structure where the progression of the piece is based on a repeated chain of chords. It was this idea that served as the basis for Lindberg's next style. He returned with an orchestral trilogy consisting of *Kinetics* (1988), *Marea* (1989–90) and *Joy* (1990). Though Lindberg became less interested in electronic manipulation of sound, he continued to explore the possibilities of compositional software and *Engine* displays complex computer-generated counterpoint. Since *Joy*, Lindberg has shown a gradual refining of his style, orchestrations and harmonies. This showed itself first in the work for chamber ensemble, *Corrente* (1992) and *Duo Concertante* (1992). In these works, Lindberg showed influences ranging from Pierre Boulez and Tristan Murail to Igor Stravinsky and Minimalism. His symphonic work *Aura* (1994) reflects a newer, more eclectic style.

Since then, Lindberg has built upon these developments, further refining his style, which now leans toward a type of new tonality hinted at in works such as *Joy* and *Aura*. This development has

culminated in one of his most popular scores to date, his *Clarinet Concerto* (2002), which has a folk-like melody and rich orchestration.

There's an irony, though, about Lindberg's developing harmonic sophistication. Lindberg's goal is the creation of a self-sustaining harmonic world that's capable of similar kinds of large-scale structure and patterns of tension and release to what old-school tonal music could do, but which breathes new life into those ideas and forms. Increasingly, his music has found a way with melody and orchestral colour that is not just reminiscent but positively redolent of references to the music of the past and late-Romantic repertoires especially. Lindberg has described himself as a Romantic, since he's an unashamed expresser of emotion and of doing things on a large-orchestral scale. But if you listen to *Graffiti*, for choir and orchestra – one of his rare pieces for voices – or *Seht die Sonne*, composed for the Berlin Philharmonic, you'll hear sounds of Wagnerian opulence, Stravinskian rhythmic drive and Sibelian textural richness. Lindberg's most recent works open up a Pandora's box in which so many styles and references are available that it's difficult to know where his own voice lies, unless it's in a grand hyper-Romantic fusion of the totality of orchestral techniques. That's the reason he's so popular with orchestras around the world: his most recent pieces are well-written, sumptuously colourful and approachable showpieces that work, efficiently and effectively, for players and listeners.

Lindberg became the new composer-in-residence at the New York Philharmonic with the 2009-2010 season, at the invitation of the incoming music director Alan Gilbert. The September 2009 opening night gala of the Philharmonic, which was Gilbert's debut as music director, featured a well-received new work by Lindberg, *EXPO*. Lindberg's has come to be one of the definitive sounds of the 21st century orchestra, as ensembles from the New York Philharmonic to the Finnish Radio Symphony and the BBC Symphony champion his music, making him one of the most-performed composers of new orchestral music.

1) *Kraft (Power)* (1985) is a work that one commentator called Lindberg's *Rite of Spring*, scored for huge orchestra, a group of perambulatory soloists, an assemblage of junkyard percussion and live electronics; music that's one of the great sonic brouhahas of the late 20th century. *Kraft* is the aural result of what happens when German metal-merchants Einstürzende Neubauten meets Xenakis (two of Lindberg's most important inspirations at the time) filtered through an iconoclastic twentysomething Finnish composer's imagination. But that's only part of what makes *Kraft* work. Its dynamism really comes from the way all this surface sound and fury is underpinned by Lindberg's harmonic thinking. For all its in-your-face energy, *Kraft's* language was developed, in part, by Lindberg's use of computer software to create sophisticated matrices of pitch material. Kraft's power comes from the way it juxtaposes – smashes together is a better of putting it – the soloists of Toimii with the orchestra. The energy released by these explosions of personnel and of musical material define the piece's chaotic but unstoppable momentum and it's one of the jaw-dropping feats of contemporary orchestral gigantism if you're lucky enough to hear it live.

2) *Ur* (1986) for small ensemble (five instruments and electronics) - was the last piece in Lindberg's early period, written just before an extensive hiatus. Scored for an ensemble of clarinet/bass clarinet, piano/synthesizer, violin, cello, double bass, it compresses into chamber form Lindberg's *Kraft*. Rhythm was Lindberg's chief concern in these days, giving bluntness something like Elliott Carter and harmonically we find total chromaticism. It's a work that, from descriptions, should sound ugly, but it's not like that at all. The clarinet part keeps things whimsical, the electronics provides a lovely shimmery backdrop and the virtuoso writing highlighted by solos lets the listener marvel at the performers' talent.

3) *Aura* (1994) for orchestra - a four-movement symphony-in-all-but-name. *Aura* has all the variety and richness of his later music, but it's combined with an unfailing sense of momentum that compels, surprises and, above all, sustains you over its almost 40 minutes. *Aura* is a genuine realisation of Simon Rattle's assessment of Lindberg: that he is a "one-man living proof that the orchestra is not dead."

4) *Engine* (1996) for chamber orchestra - The title of this piece is inspired by the computing language associated with using the Patchwork1 programme in accordance with constraint procedures: *engine* is a sort of generator of musical material, which operates according to the rules pre-established by the composer. The texture is composed by the machine, on which the composer imposes dozens of constraints. The computer then produces suggestions, which the composer treats like any other musical material. The rules are melodic and harmonic and the resulting textures are closer to the brutal sonorities of *Kraft* and *UR* than the harmonic surfaces of *Corrente* (1991-2), *Aura* (1993-94) or *Arena* (1995). *Engine* is also a farewell to the "stravinskyian" neo-classicism of *Coyote Blues* (1993). *Engine* fits into the logic of Lindberg's production. At the beginning of the 80s the young composer was in search of timbres and was influenced by Pierre Schaeffer's classifications (Traité des objets musicaux); in other words he began to make "musique concrète" with instruments. Then, with *Kraft*, Lindberg began to be interested in rhythm and attempted to organise its formal principles. With the orchestral trilogy *Kinetics* (1988-89), *Marea* (1989-90) and *Joy* (1989-90), a new type of harmonic thinking appears, influenced by the spectral analysis of sound. At the beginning of the 90s, with *Corrente*, *Arena* and *Aura* - a synthesis of the development of the 80s - the composer has recovered his skill in creating textures which "sound good," while including an idea of continuums. *Engine* brings counterpoint back up to date in Lindberg's musical vocabulary, a counterpoint which allows the music to live in symbiosis with the rules and constraints imposed by the composer. The reason he uses constraint machines is that he wants to find solutions enabling him to avoid the mannerisms of his own style. For the composer, establishing constraints also means analysing and decomposing his style into rules, in order to master it better.

5) *Clarinet Concerto* (2002) a piece which sounds completely, utterly, totally different. The concerto sounds more like what happens when Gershwin meets Sibelius and Stravinsky, perhaps on some convenient Icelandic ice-floe in the mid-Atlantic, in a voluptuously melodic crossing of cultures. Even if the *Clarinet Concerto* sounds as if it could have come from a

different musical universe to *Kraft*, there is a creative connection across the whole of Lindberg's output. His music – so much of it written for his favourite instrument, the orchestra – is always searching for the greatest possible structural energy, propelling his listeners through the whole of his pieces. Sounds simple? It's anything but in practice. Yet the effect that Lindberg wants to have on his listeners is immediate, direct and accessible in the best sense. He wants the music to grab your ears and your body and not let go until you've been variously pulverised, pummelled or pleasured into submission.

6) *Graffiti* (2009) for chamber chorus and orchestra - Lindberg has composed several concertos and solo instrumental works, but he says "the orchestra is my favorite instrument." Lindberg has not written much vocal music and has been thinking about writing an opera for nearly 20 years. In the course of that process he began considering texts that do not have a plot but might still lend themselves to a dramatic structure. Eventually he turned to Latin texts and was astonished to discover the vast body of inscriptions that have been collected. He decided to focus on inscriptions found in Pompeii, "as they offered such a unique and intact glimpse into a 2000 year-old society that suddenly ceased to exist," he said. "Pompeii also offered the variety I needed for a large-scale work, with so many aspects of life described on so many levels, from the banal to the philosophical, from domestic activities to political and civic life." That gave him the subject matter for *Graffiti*. Lindberg organized the inscriptions into groups based on subject matter and the intersection of these groups generated the structure of this big single movement. For his first large-scale choral work, Lindberg tried to develop the writing for the chorus from his orchestral techniques. "Sometimes the choir sings in homophonic blocks, sometimes solo and duet lines emerge and at other times there are 'chamber music-like' choral divisi up to 16 voice parts," Lindberg said. "I wanted to match the harmonic style to the texts, so the vocal soundworld could be martial and gladiatorial, bawdy and licentious, or sinuously erotic. I have found few works where atonal choral writing truly succeeds (Ligeti is a rare example), so my harmonies here are more modal and tonal than in many of my pieces and this lends a distinct flavor which helps project the immediacy of the everyday life stories in the graffiti." The world premiere of *Graffiti* took place May 20, 2009 in Helsinki, with Sakari Oramo conducting the Finnish Radio Symphony Orchestra and the Helsinki Chamber Choir. "All Roman life seems to be contained within these brief Latin texts and Lindberg's selection of around 60 of them – official proclamations and announcements, adverts and slogans of every kind – creates a kind of verbal patchwork quilt that builds into a rather touching snapshot of the doomed city," Andrew Clements wrote in *The Guardian* after the U.K. premiere. "What is going on behind the voices is often just as fascinating as the vocal writing itself and the orchestral writing comes to the fore in the dark, uneasy introduction and an interlude of woodwinds two-thirds of the way through. It is such a beautiful, satisfyingly shaped choral work that you wonder why Lindberg took so long to get around to writing it."

- **Experimentalism**

  Experimental music is a compositional tradition that arose in the mid-20th century, particularly in North America, of music composed in such a way that its outcome is unforeseeable. The American composer John Cage is seen as one of the more notable composers associated with this music. In

France, as early as 1953, Pierre Schaeffer had begun using the term "musique expérimentale" to describe compositional activities that incorporated tape music, musique concrète, and elektronische Musik. Also, in America, a quite distinct sense of the term was used in the late 1950s to describe computer-controlled composition associated with composers such as Lejaren Hiller and Milton Babbitt.

The Groupe de Recherches de Musique Concrète (GRMC), under the leadership of Pierre Schaeffer, organized the First International Decade of Experimental Music between 8 and 18 June 1953. John Cage was also using the term as early as 1955. Composer and critic Michael Nyman starts from Cage's definition and develops the term "**Experimental**" also to describe the work of other American composers: Christian Wolff, Earle Brown, Meredith Monk, Malcolm Goldstein, Morton Feldman, Terry Riley, La Monte Young, Philip Glass, John Cale, Steve Reich.

Harry Partch as well as Ivor Darreg worked with other tuning scales based on the physical laws for harmonic music. For this music they both developed a group of experimental musical instruments. Free improvisation or free music is improvised music without any rules beyond the taste or inclination of the musician(s) involved; in many cases the musicians make an active effort to avoid overt references to recognizable musical genres. Elements of experimental music include indeterminate music in which the composer introduces the elements of chance or unpredictability with regard to either the composition or its performance. Elements include "Prepared" instruments—ordinary instruments modified in their tuning or sound-producing characteristics; using instruments, tunings, rhythms or scales from non-Western musical traditions; using sound sources other than conventional musical instruments, such as trash cans, telephone ringers, or doors slamming; creating experimental musical instruments for enhancing the timbre of compositions and exploring new techniques or possibilities; using a tape loop to create a tape phase; and removing perceived barriers of traditional concert settings by putting performers scattered among the audience.

- **Expressionism**

  Expressionism was a prominent artistic trend associated especially with Austria and Germany before, during, and immediately after World War I. In some measure, a reaction against the perceived passive nature of impressionism, it emphasized an eruptive immediacy of expressive feeling, often based on the psychology of the unconscious. **Expressionism** is primarily identified with Arnold Schoenberg's "**free atonal period**" (1908–21), in particular the monodrama *Erwartung*, the *Klavierstück*, op. 11, no. 3, and the first and last of his Five Orchestral Pieces, op. 16. Certain works from this same period by his pupils Alban Berg and Anton Webern are also usually included.

  Although this music sets out from Wagner's chromatic harmony, it tends to avoid cadence, repetition, sequence, balanced phrases, and any reference to traditional forms or procedures, for which reason it came to be associated with a rejection of tradition. Other composers active in approximately this period such as Gustav Mahler, Alexander Scriabin, Igor Stravinsky, Leoš Janáček, Karol Szymanowski, Béla Bartók, Paul Hindemith, Charles Ives, and Ernst Krenek also

exhibit expressionist traits, while important stage works of the 1920s by Kurt Weill, Hindemith, and Krenek retain expressionistic textual and visual aspects.

By the late 1920s, though many composers continued to write in a vaguely expressionist manner, it was being supplanted by the more impersonal style of the German **New Objectivism** and **Neoclassicism**. Because **Expressionism**, like any movement that had been stigmatized by the Nazis, gained a sympathetic reconsideration following World War II, Expressionist music resurfaced in works by composers such as Hans Werner Henze, Pierre Boulez, Peter Maxwell Davies, Wolfgang Rihm, and Bernd Alois Zimmermann.

The devastation – both physical and spiritual – that afflicted Europe as a result of World War I not only shattered political certainties but aesthetic ones as well. It is true that some major artists, Richard Strauss for instance, carried on as if nothing had happened, but for more radical figures it was time to change direction to formulate a new musical language for ne, leaner times. The first this to be rejected was Romanticism and its final, most extreme, manifestation, expressionism. Expressinoism was an artistic movement which attempted to exteriorize the (usually troubled) inner life of the artist, which in musical terms meant using fractured forms and atonality to create a nightmare worked of instability and anxiety. Expressionism was primarily associated with the avant-gardes of Germany and Austria – but works like Schoenberg's Ewartung (1909) and Hindemith's Morder, Hoffnung der Frauen (1919) – but it is arguable that an expressionistic impulse also lay behind the raw energy of Stravinsky's Sacre de Printemps (1913). See the discussion on Neoclassicism.

- **Folk Influenced Classical Music**
  In the 18th century folk music started to have an influence on classical music (or "art music"). People from the higher classes started to be interested in folk music because they were conscious of being part of a tradition. Composers such as Mozart and Schubert wrote folk dances for orchestras or small groups of instruments. Folk music was used by many composers in the Romantic period. Gustav Mahler used folk song in a lot of his music. In the early twentieth century some composers travelled around collecting folk music which was being played or sung by people in the country. They often used some of these ideas in their music. Bartok did this in Hungary as well as in Bulgaria and people such as Cecil Sharp and the composer Ralph Vaughan Williams collected folk music in England. In the United States, Charles Ives included folk music in his compositona and the influence of jazz on classical music is all part of the story of folk music.

  Folk music is music that is played or sung by ordinary people (not professional musicians). It is traditional music that people learn by listening to other people playing it and then copying them. We say that the tradition is "orally transmitted" or "handed down orally", meaning that the music is not written down but taught by speaking ("oral" means "belonging to the mouth"). Every country has its own traditional music. In the 1960s a new type of music was started by Bob Dylan who mixed traditional folk song with rock and roll. This music is sometimes called "folk rock." Folk music is music for everybody to play and listen to. In this way it is different from classical music which is mainly developed by professional musicians for a smaller group of people. Folk music is

part of a popular culture, although the term “popular music” or “pop music” today refers to a kind of music which people can hear through television, radio and other means of recording. In many parts of the world nearly all music is folk music. The term “folk music” is usually used for European and American music which is part of an oral tradition. Folk music as an oral tradition, is much less important than it used to be, in part, because of new technology (radio, television etc, and recordings of music).

Marie-Joseph Canteloube de Malaret (21 October 1879 – 4 November 1957) was a French composer, musicologist, and author best known for his collections of orchestrated folksongs from the Auvergne region, *Chants d'Auvergne*.

Canteloube was born in Annonay, Ardèche, into a family with deep roots in the Auvergne region of France. He studied piano from the age of six with Amélie Doetzer, a friend of Frédéric Chopin. After earning his *baccalauréat*, he worked at a bank in Bordeaux. He returned to his family home in Malaret (Annonay) upon his father's death in 1896, remaining there until his mother's death in 1899 and then beyond as sole owner of the estate. He began studying with Vincent d'Indy via correspondence in 1901, reluctant to leave Malaret. Upon d'Indy's constant urging, he finally entered the Schola Cantorum in 1907 in Paris, were he remained until the beginning of WWI in 1914. In 1907, he wrote a suite entitled *Dans la montagne* for piano and violin in four movements that was played at the Société Nationale. Other significant works followed, including *Colloque sentimental* for voice and string quartet (1908); *Eglogue d'Automne* for orchestra (1910); *Vers la Princesse lointaine*, a symphonic poem (1912); *Aù printemps* for voice and orchestra; and *L'Arada* (*The Earth*), a song cycle of six *mélodies* (1922).

Canteloube composed his first opera, *Le mas* ("The Farmstead" in Occitan language), to his own libretto from 1910 to 1925 (its composition delayed during war years). The three act work won the Prix Heugel in 1925, and was awarded the prize of 100,000 Francs. However, the reaction to this composition by the leaders of the Opéra-Comique in Paris was far less enthusiastic than the jury. After pressure from the publisher, it finally premiered on 3 April 1929, but it was never revived. *Vercingétorix*, his second opera, in four acts, was inspired by a libretto by Étienne Clémentel, mayor of Riom (Puy-de-Dôme) and Hervé Louwyck on the Gauls' defeat by Julius Caesar. The Paris Opéra gave the first performance on 22 June 1933, but it was accused of lacking theatricality.

In 1925, Canteloube founded a group called La Bourrée with several young Auvergnats in Paris who were eager to publicize the folklore and the beauty of their home region. Canteloube himself believed that "peasant songs often rise to the level of purest art in terms of feeling and expression, if not in form." He composed several song collections, which include *Chants de Haute-Auvergne*, albums of songs of Rouergue, Limousin, and Quercy, regional religious songs (*Chants religieux d'Auvergne*), and *L'Hymne des Gaules* based on a poem by Philius Lebesque.

In 1941, he joined the government in Vichy France during the Nazi occupation. He participated in numerous radio broadcasts of French folklore with his "Songs of France" with the tenor Christian Selva. The radio was an ideal vehicle for disseminating regional popular music. Alongside his

career as a composer, Canteloube worked as a musicologist, collecting traditional French folksongs. He also wrote biographies of Vincent d'Indy (1949) and of his friend Déodat de Séverac (1950). Canteloube took more than thirty years (1924 to 1955) to complete the compilation of his most admired and famous collection of songs, *Chants d'Auvergne*. Passionate, sometimes to excess, the songs reflect the landscapes of the Auvergne in lush orchestral colors and have enabled French folklore and rustic melodies to become better known. He died in Grigny, Essonne, in 1957, aged 78.

- **Futurism**

The futurist movement began in the early 20th century and extended across many art forms. Its starting point in music is considered to be *Manifesto of Futurism* written by Filippo Tommaso Marinetti in 1909, quickly followed by several manifestos written by Francesco Balilla Pratella, beginning in 1910. Futurism is largely a product of Italian and Russian composers. Futurism can be characterized by a radical and militant attitude, rejection of Western Classical Music forms and traditional criteria of musical craft, search for non-conformity and most importantly a fascination with machines. Painter, sculptor and self-taught musician Luigi Russolo, also with his brother Antonio, pushed this fascination to the extreme by inventing specific noise instruments called *intonarumori*, for which they composed several pieces. The first intonarumori concert was held in 1914 (and a similar approach to noise was exercised a few years later by Nikolai Foregger and his *Orchestra of Noises*). Russolo's developments are today seen as crucial in the evolution of Noise and Electronic music.

At first the art of music sought purity, limpidity and sweetness of sound. Then different sounds were amalgamated to caress the ear with gentle harmonies. Some forms of modern music strove to amalgamate dissonant, strange and harsh sounds, thereby coming closer to *noise-sound.* Antonio Russolo (Luigi's brother), produced a recording of two works featuring the original Intonarumori. The phonograph recording, made in 1921, included works entitled *Corale* and *Serenata*, which combined conventional orchestral music set against the sound of the noise machines. It is the only surviving contemporaneous sound recording of Luigi Russolo's noise music. Russolo and Filippo Tommaso Marinetti gave the first concert of Futurist music, complete with *intonarumori*, in April 1914, causing a riot. The program comprised four "networks of noises" with the following titles:

- *Awakening of a City*
- *Meeting of cars and aeroplanes*
- *Dining on the terrace of the Casino*
- *Skirmish in the oasis.*

The *Art of Noises* classified "noise-sound" into six groups:

1. Roars, Thunderings, Explosions, Hissing roars, Bangs, Booms
2. Whistling, Hissing, Puffing
3. Whispers, Murmurs, Mumbling, Muttering, Gurgling
4. Noises obtained by beating on metals, woods, skins, stones, pottery, etc.
5. Voices of animals and people, Shouts, Screams, Shrieks, Wails, Hoots, Howls, Death rattles, Sobs

6. Screeching, Creaking, Rustling, Buzzing, Crackling, Scraping

Though few of the futurist works of these composers are performed today, the influence of **Futurism** on the later development of 20th-century music was enormous. Sergei Prokofiev, Maurice Ravel, Igor Stravinsky, Arthur Honegger, George Antheil, Leo Ornstein, and Edgard Varèse are among the notable composers in the first half of the century who were influenced by futurism. Characteristic features of later 20th-century music with origins in futurism include the prepared piano, integral serialism, extended vocal techniques, graphic notation, improvisation, and minimalism.

Filippo Tommaso Emilio Marinetti (December 1876 – December 1944) was an Italian poet and the founder of the Futurist movement. Marinetti is known best as the author of the *Futurist Manifesto*, which he wrote in 1909. In *The Founding and Manifesto of Futurism*, Marinetti declared that "Art, in fact, can be nothing but violence, cruelty, and injustice." Futurism had both anarchist and Fascist elements; Marinetti later became an active supporter of Benito Mussolini.

The Futurist Manifesto was read and debated all across Europe, but Marinetti's first 'Futurist' works were not as successful. In April, the opening night of his drama *Le Roi bombance* (The Feasting King), written in 1905, was interrupted by loud, derisive whistling by the audience... and by Marinetti himself, who thus introduced another element of Futurism, "the desire to be heckled." Marinetti did, however, fight a duel with a critic he considered too harsh.

Luigi Russolo (April 1885 – February 1947) was an Italian Futurist painter, composer, builder of experimental musical instruments, and the author of the manifesto *The Art of Noises* (1913). He is often regarded as one of the first noise music experimental composers with his performances of **noise music concerts** in 1913–14 and in Paris in 1921. He designed and constructed a number of noise-generating devices called Intonarumori. Luigi Russolo was perhaps the first noise artist. His 1913 manifesto, *L'Arte dei Rumori*, translated as *The Art of Noises*, stated that the industrial revolution had given modern men a greater capacity to appreciate more complex sounds. Russolo found traditional melodic music confining, and he envisioned noise music as its future replacement.

Russolo designed and constructed a number of noise-generating devices called Intonarumori, and assembled a noise orchestra to perform with them. A performance of his *Gran Concerto Futuristico* (1917) was met with strong disapproval and violence from the audience, as Russolo himself had predicted. None of his intoning devices have survived, though recently some have been reconstructed and used in performances. Although Russolo's works bear little resemblance to modern noise music, his pioneering creations cannot be overlooked as an essential stage in the evolution of the several genres in this category.

- **Historicism**

  Musical **Historicism**—the use of historical materials, structures, styles, techniques, media, conceptual content, etc., whether by a single composer or those associated with a particular school, movement, or period—is evident to varying degrees in minimalism, post-minimalism, world-music, and other genres in which tonal traditions have been sustained or have undergone a significant revival in recent dec. Some post-minimalist works employ medieval and other genres associated with early music, such as the "Oi me lasso" and other laude of Gavin Bryars.

  The **Historicist** movement is closely related to the emergence of musicology and the early music revival. A number of historicist composers have been influenced by their intimate familiarity with the instrumental practices of earlier periods (Hendrik Bouman, Grant Colburn, Michael Talbot, Alexandre Danilevsky, Paulo Galvão, Roman Turovsky-Savchuk). The musical **Historicism** movement has also been stimulated by the formation of such international organizations as the Delian Society and Vox Saeculorum.

  Max Reger (19 March 1873 – 11 May 1916) was a German composer, conductor, pianist, organist, and academic teacher. He was the central figure of the "Back to Bach" movement, and dvoted much of his life to the promotion and re-interpretation of Bach and his Baroque contemporaries. Reger may have dismissed the work of Wagner as rubbish, but he grew up in his shadow and remained essentially a romantic, albeit a Romantic who drew his strength form the great tradition of Bach, Beethoven and Brahms.

  Born in Brand, Bavaria, Reger studied music in Munich and Wiesbaden with Hugo Riemann. From September 1901 he settled in Munich, where he obtained concert offers and where his rapid rise to fame began. From 1907 he worked in Leipzig, where he was music director of the university until 1908 and professor of composition at the conservatory until his death. In 1911 he moved to Meiningen where he got the position of Hofkapellmeister at the court of Georg II, Duke of Saxe-Meiningen. In 1915 he moved to Jena, commuting once a week to teach in Leipzig. He died in May 1916 on one of these trips of a heart attack at age 43.

  Reger produced an enormous output over little more than 25 years, nearly always in abstract forms. Few of his compositions are well known in the 21st century. Many of his works are fugues or in variation form, including what is probably his best known orchestral work, the *Variations and Fugue on a Theme by Mozart* based on the opening theme of Mozart's Piano Sonata in A major, K. 331. He also wrote a large amount of music for organ, the most famous being his *Toccata and Fugue in D Minor* and the *Fantasy and Fugue on BACH*. While a student under Hugo Riemann in Wiesbaden, Reger met and became friends with the famous German organist, Karl Straube who premiered many of Reger's works for that instrument. Reger was particularly attracted to the fugal form and created music in almost every genre, save for opera and the symphony. A similarly firm supporter of absolute music, he saw himself as being part of the tradition of Beethoven and Brahms. His work often combines the classical structures of these composers with the extended harmonies of Liszt and Wagner, to which he added the complex counterpoint of Bach. His organ music, though also influenced by Liszt, was provoked by that tradition.

His solo piano and two-piano music places him as a successor to Brahms in the central German tradition. He pursued intensively, and to its limits, Brahms's continuous development and free modulation, often also invoking, like Brahms, the aid of Bach-influenced polyphony. Reger was a prolific writer of vocal works, Lieder, works for mixed chorus, men's chorus and female chorus, and extended choral works with orchestra such as *Psalm 100* and the *Requiem*. He composed music to texts by poets such as Otto Julius Bierbaum, Adelbert von Chamisso, Joseph von Eichendorff, Emanuel Geibel, Friedrich Hebbel, Nikolaus Lenau, Friedrich Rückert and Ludwig Uhland. His works could be considered retrospective as they followed classical and baroque compositional techniques such as fugue and continuo. The influence of the latter can be heard in his chamber works which are deeply reflective and unconventional.

Fritz Kreisler (February 2, 1875 – January 29, 1962) was an Austrian-born violinist and composer. One of the most famous violin masters of his or any other day and regarded as one of the greatest violinists of all time, he was known for his sweet tone and expressive phrasing. Like many great violinists of his generation, he produced a characteristic sound which was immediately recognizable as his own. Although he derived in many respects from the Franco-Belgian school, his style is nonetheless reminiscent of the *gemütlich* (cozy) lifestyle of pre-war Vienna. Kreisler was born in Vienna, of Jewish heritage, he was baptised at age twelve. He studied at the Vienna Conservatory and in Paris, where his teachers included Anton Bruckner, Léo Delibes, Jakob Dont, Joseph Hellmesberger, Jr., Joseph Massart, and Jules Massenet. While there, he won the "Premier Grand Prix de Rome" gold medal, competing against 40 other players, all of whom were at least 20 years of age.

He made his United States debut at Steinway Hall in New York City on November 10, 1888, and his first tour of the United States in 1888–1889, then returned to Austria and applied for a position in the Vienna Philharmonic. He was turned down by the concertmaster Arnold Rosé. As a result, he left music to study medicine. He spent a brief time in the army before returning to the violin in 1899, giving a concert with the Berlin Philharmonic conducted by Arthur Nikisch. It was this concert and a series of American tours from 1901 to 1903 that brought him real acclaim. In 1910, Kreisler gave the premiere of Sir Edward Elgar's Violin Concerto, a work commissioned by and dedicated to him. He served briefly in the Austrian Army in World War I before being honourably discharged after he was wounded. He arrived in New York on November 24, 1914 and spent the remainder of the war in America. He returned to Europe in 1924, living first in Berlin, then moving to France in 1938. Shortly thereafter, at the outbreak of World War II, he settled once again in the United States, becoming a naturalized citizen in 1943. He lived there for the rest of his life, giving his last public concert in 1947 and broadcast performances for a few years after that. On April 26, 1941, he was involved in a serious traffic accident. Struck by a truck while crossing a street in New York, he suffered a fractured skull and was in a coma for over a week. In his later years, he suffered from not only some hearing loss but also sight deterioration due to cataracts. Kreisler died of a heart condition aggravated by old age in New York City in 1962.

He wrote some of the most popular violin pieces in the world, among them "Caprice viennois," "Tambourin chinois," "Schön Rosmarin," and "Liebesfreud." He also published a number of pieces

in the classical vein, which he ascribed to various composers (Vivaldi, Pugnani, Couperin, Padre Martini, Dittersdorf, Francoeur, Stamitz, and others). In 1935 he reluctantly admitted that these pieces were his own, with the exception of the first 8 bars from the "Couperin" "Chanson Louis XIII," taken from a traditional melody; he explained his motive in doing so as the necessity of building up well-rounded programs for his concerts that would contain virtuoso pieces by established composers, rather than a series of compositions under his own, as yet unknown name.

He also wrote the operettas "Apple Blossoms" and "Sissy," published numerous arrangements of early and modern music (Corelli's "La Folia," Tartini's "The Devil's Trill," Dvorák's "Slavonic Dances," Granados's "Spanish Dance," Albéniz's "Tango" et al.), and prepared cadenzas for the Beethoven and Brahms violin concertos. His cadenzas for the Beethoven concerto are the ones most often employed by violinists today. He performed and recorded his own version of the first movement of the Paganini D major violin concerto. This version is rescored and in some places reharmonised. The orchestral introduction is completely rewritten in some places. The overall effect is of a late-nineteenth-century work. He published a book of reminiscences of World War I, FOUR WEEKS IN THE TRENCHES: THE WAR STORY OF A VIOLINIST.

Hendrik "Henk" Bouman (born 29 September 1951, Dordrecht) is a Dutch harpsichordist, fortepianist, conductor and composer of music written in the baroque and classical idioms of the 17th & 18th Century. In the late '70s, Hendrik Bouman studied at the Amsterdam Conservatory with several of the pioneers of the baroque revival, notably Ton Koopman and Lucie van Dael. He was principal harpsichordist of the baroque ensemble Musica Antiqua Köln from 1976 to 1983, with whom he toured worldwide under the auspices of the Goethe Institute and recorded extensively for DGG Archiv and numerous European radio stations. Formerly professor of harpsichord and fortepiano at Concordia University and the Université Laval in Quebec, he also taught historically informed performance practice and chamber ensemble. He has given masterclasses in Europe, Canada, United States of America, South America, Mexico and India.

He has made 16 transcriptions of works by François Couperin, Jean-Philippe Rameau, Georg Philipp Telemann, and J. S. Bach, including two Brandenburg Concerti in a version for two harpsichords and an orchestration of Bach's *Italian Concerto* as well as several adaptations in baroque style of Christmas Carols commissioned and recorded by the Canadian Broadcasting Corporation in 1994.

In 1993, with over 18 years as performer, researcher and professor in early music, Bouman embarked on the composition of new music in baroque and classical idioms according to the standards of the 17th & 18th century. This was for him a natural development of the ongoing revival of baroque music. In creating his new period style compositions, he employs various European national idioms and their many typical forms such as the sonata, concerto, ouverture and fugue. He first played his contemporary 'baroque' music in South Africa in January 1994 and his harpsichord solos were first recorded by the Canadian Broadcasting Corporation in December that year.

He has composed over 100 works in 17th and 18th Century style for harpsichord; piano; clavichord; organ; violin solo; viola solo; flute solo; recorder solo cello solo; as well as quartets; trios; duets; sonatas; ouvertures; concerto grossos; harpsichord concertos; violin concerto; recorder concerto; flute concerto; oboe concerto; cello concerto; music for baroque theatre and a classical symphony.

In August 2011 Hendrik Bouman directed members of the Orchestra of the Eighteenth Century in the premiere of his Concerto Grosso in G major - "La Festa di Lucia" which was commissioned to honour the Dutch violinist, Lucy van Dael, co-founder and formerly, leader of the Orchestra of the Eighteenth Century and Professor at the Amsterdam Conservatory and the Royal Conservatory of The Hague. Bouman is the first renowned composer/performer of baroque music in two centuries to design and build the harpsichords on which he plays in concerts and recordings.

- **Impressionism**
  Impressionism started in France and was led by Claude Debussy, in reaction against the emotional exuberance and epic themes of German **Romanticism** exemplified by Wagner. In Debussy's view, art was a sensuous experience, rather than an intellectual or ethical one. He urged his countrymen to rediscover the French masters of the 18th century, for whom music was meant to charm, to entertain, and to serve as a "fantasy of the senses."

  Other composers associated with **Impressionism** include Maurice Ravel, Albert Roussel, Isaac Albéniz, Paul Dukas, Manuel de Falla, Charles Martin Loeffler, Charles Griffes, Frederick Delius, Ottorino Respighi, Cyril Scott and Karol Szymanowski. Many French composers continued **Impressionism's** language through the 1920s and later, including Albert Roussel, Charles Koechlin, André Caplet, and, later, Olivier Messiaen. Composers from non-Western cultures, such as Tōru Takemitsu, and jazz musicians such as Duke Ellington, Gil Evans, Art Tatum, and Cecil Taylor, also have been strongly influenced by the **Impressionist** musical language.

  Paul Dukas (1 October 1865 – 17 May 1935) was a French composer, critic, scholar and teacher. A studious man, of retiring personality, he was intensely self-critical, and he abandoned and destroyed many of his compositions. His best known work is the orchestral piece *The Sorcerer's Apprentice* (*L'apprenti sorcier*), the fame of which has eclipsed that of his other surviving works. Among these are the opera *Ariane et Barbe-bleue*, a symphony, two substantial works for solo piano, and a ballet, *La Péri*.

  At a time when French musicians were divided into conservative and progressive factions, Dukas adhered to neither but retained the admiration of both. His compositions were influenced by composers including Beethoven, Berlioz, Franck, d'Indy and Debussy. In tandem with his composing career, Dukas worked as a music critic, contributing regular reviews to at least five French journals. Later in his life he was appointed professor of composition at the Conservatoire de Paris and the École Normale de Musique; his pupils included Maurice Duruflé, Olivier Messiaen, Manuel Ponce, and Joaquín Rodrigo.

Dukas was born in Paris, the second son in a Jewish family. His father, Jules Dukas, was a banker, and his mother, Eugénie, was a capable pianist. He entered the Conservatoire de Paris at the end of 1881, aged 16. Among his fellow students was Claude Debussy, with whom Dukas formed a close friendship. Dukas won several prizes, including the second place in the Conservatoire's most prestigious award, the Prix de Rome, for his cantata *Velléda* in 1888. Disappointed at his failure to win the top prize, he left the Conservatoire in 1889.

Although Dukas wrote a fair amount of music, he was a perfectionist and destroyed many of his pieces out of dissatisfaction with them. Only a few of his compositions remain. After *Polyeucte*, he began writing an opera in 1892. He wrote his own libretto, *Horn et Riemenhild*, but he composed only one act, "realising too late that the work's developments were more literary than musical". The Symphony in C major was composed in 1895–96, when Dukas was in his early 30s.

The symphony was followed by another orchestral work, by far the best known of Dukas's compositions, his scherzo for orchestra, *L'apprenti sorcier* (*The Sorcerer's Apprentice*) (1897), a short piece (lasting for between 10 and 12 minutes in performance) based on Goethe's poem "Der Zauberlehrling". During Dukas's lifetime *The Musical Quarterly* commented that the world fame of the work not only overshadowed all other compositions by Dukas, but also eclipsed Goethe's original poem. The popularity of the piece became a matter of irritation to Dukas. In 2011, the *Grove Dictionary of Music and Musicians* observed, "The popularity of *L'apprenti sorcier* and the exhilarating film version of it in Disney's *Fantasia* possibly hindered a fuller understanding of Dukas, as that single work is far better known than its composer."

In the decade after *L'apprenti sorcier*, Dukas completed two complex and technically demanding large-scale works for solo piano: the Piano Sonata (1901), dedicated to Saint-Saëns, and *Variations, Interlude and Finale on a Theme by Rameau* (1902). In Dukas's piano works critics have discerned the influence of Beethoven, or, "Beethoven as he was interpreted to the French mind by César Franck". There are also two smaller works for piano solo.

In 1899 Dukas turned once again to operatic composition. His second attempt, *L'arbre de science*, was abandoned, incomplete, but in the same year he began work on his one completed opera, *Ariane et Barbe-bleue* (*Ariadne and Bluebeard*). The work is a setting of a libretto by Maurice Maeterlinck. The author had intended the libretto to be set by Grieg but in 1899 he offered it to Dukas. Dukas worked on it for seven years and it was produced at the Opéra-Comique in 1907. The opera has often been compared to Debussy's *Pelléas et Mélisande* which was first performed while Dukas was writing *Ariane et Barbe-bleue*. Not only are both works settings of Maeterlinck, but there are musical similarities; Dukas even quotes from the Debussy work in his score. Although it won considerable praise, its success was overshadowed by the Paris premiere of Richard Strauss's sensational opera *Salome* at much the same time. None the less, within a short time of its premiere, Dukas's opera was produced in Vienna, where it aroused much interest in Schoenberg's circle, and in Frankfurt, Milan and New York. It did not maintain a regular place in the repertory, despite the advocacy of Arturo Toscanini, who conducted it in New York three years

in succession, and Sir Thomas Beecham, who pronounced it "one of the finest lyrical dramas of our time," and staged it at Covent Garden in 1937.

Dukas's last major work was the sumptuous oriental ballet *La Péri* (1912). Described by the composer as a "poème dansé" it depicts a young Persian prince who travels to the ends of the Earth in a quest to find the lotus flower of immortality, coming across its guardian, the Péri (fairy). Because of the very quiet opening pages of the ballet score, the composer added a brief "Fanfare pour précéder *La Peri*" which gave the typically noisy audiences of the day time to settle in their seats before the work proper began. *La Péri* was written for the Russian-French dancer Natalia Trouhanova, who starred in the first performance at the Châtelet in 1912. Diaghilev planned a production with his Ballets Russes but the production did not take place; the company's choreographer Fokine staged *L'apprenti sorcier* as a ballet in 1916.

In the last years of his life, Dukas became well known as a teacher of composition. When Charles-Marie Widor retired as professor of composition at the Paris Conservatoire in 1927, Dukas was appointed in his place. He also taught at the École Normale de Musique in Paris. His many students included Jehan Alain, Elsa Barraine, Yvonne Desportes, Francis Chagrin, Carlos Chávez, Maurice Duruflé, Georges Hugon, Jean Langlais, Olivier Messiaen, Manuel Ponce, Joaquín Rodrigo, David Van Vactor and Xian Xinghai. As a teacher he was conservative but always encouraging of talent, telling one student, "It's obvious that you really love music. Always remember that it should be written from the heart and not with the head."

Dukas died in Paris in 1935, aged 69. He was cremated and his ashes were placed in the columbarium at Père Lachaise Cemetery in Paris.

Joseph-Maurice Ravel (7 March 1875 – 28 December 1937) was a French composer, pianist and conductor. He is often associated with impressionism along with his elder contemporary Claude Debussy, although both composers rejected the term. In the 1920s and '30s Ravel was internationally regarded as France's greatest living composer. Born to a music-loving family, Ravel attended France's premier music college, the Paris Conservatoire; he was not well regarded by its conservative establishment, whose biased treatment of him caused a scandal. After leaving the conservatoire Ravel found his own way as a composer, developing a style of great clarity, incorporating elements of baroque, neoclassicism and, in his later works, jazz. He liked to experiment with musical form, as in his best-known work, *Boléro* (1928), in which repetition takes the place of development.

As a slow and painstaking worker, Ravel composed fewer pieces than many of his contemporaries. Among his works to enter the repertoire are pieces for piano, chamber music, two piano concertos, ballet music, two operas, and eight song cycles; he wrote no symphonies or religious works. Many of his works exist in two versions: a first, piano score and a later orchestration. Some of his piano music, such as *Gaspard de la nuit* (1908), is exceptionally difficult to play, and his complex orchestral works such as *Daphnis et Chloé* (1912) require skilful balance in performance.

Ravel was born in the Basque town of Ciboure, France, 18 kilometres (11 mi) from the Spanish border. His father, Pierre-Joseph Ravel,Ravel, was an educated and successful engineer, inventor and manufacturer. His mother, Marie, *née* Delouart, was Basque but had grown up in Madrid. Both Ravel's parents were Roman Catholics; Marie was also something of a free-thinker, a trait inherited by her elder son, who was always politically and socially progressive in outlook in adult life. The family moved to Paris three months later, and there a younger son, Édouard, was born. Maurice was particularly devoted to their mother; her Basque-Spanish heritage was a strong influence on his life and music. Among his earliest memories were folk songs she sang to him.

In 1888 Ravel met the young pianist Ricardo Viñes, who became not only a lifelong friend, but also one of the foremost interpreters of his works, and an important link between Ravel and Spanish music. The two shared an appreciation of Wagner, Russian music, and the writings of Poe, Baudelaire, and Mallarmé. At the Exposition Universelle in Paris in 1889, Ravel was much struck by the new Russian works conducted by Nikolai Rimsky-Korsakov. This music had a lasting effect on both Ravel and his older contemporary Claude Debussy, as did the exotic sound of the Javanese gamelan, also heard during the Exposition.

The catalogue of Ravel's complete works lists eighty-five works, including many incomplete or abandoned. Though that total is small in comparison with the output of his major contemporaries, it is nevertheless inflated by Ravel's frequent practice of writing works for piano and later rewriting them as independent pieces for orchestra. The performable body of works numbers about sixty; slightly more than half are instrumental. Ravel's music includes pieces for piano, chamber music, two piano concerti, ballet music, opera, and song cycles. He wrote no symphonies or religious works. Ravel drew on many generations of French composers from Couperin and Rameau to Fauré and the more recent innovations of Satie and Debussy. Foreign influences include Mozart, Schubert, Liszt and Chopin. He considered himself in many ways a classicist, often using traditional structures and forms, such as the ternary, to present his new melodic and rhythmic content and innovative harmonies. The influence of jazz on his later music is heard within conventional classical structures in the Piano Concerto and the Violin Sonata.

Ravel placed high importance on melody, telling Vaughan Williams that there is "an implied melodic outline in all vital music". His themes are frequently modal instead of using the familiar major or minor scales. As a result, there are few leading notes in his output. Chords of the ninth and eleventh and unresolved appoggiaturas, such as those in the *Valses nobles et sentimentales*, are characteristic of Ravel's harmonic language. Dance forms appealed to Ravel, most famously the bolero and pavane, but also the minuet, forlane, rigaudon, waltz, czardas, habanera and passacaglia. National and regional consciousness was important to him, and although a planned concerto on Basque themes never materialised, his works include allusions to Hebraic, Greek, Hungarian and gypsy themes. He wrote several short pieces paying tribute to composers he admired – Borodin, Chabrier, Fauré and Haydn, interpreting their characteristics in a Ravellian style.

Ravel completed two operas, and worked on three others. The unrealised three were *Olympia*, *La cloche engloutie* and *Jeanne d'Arc*. Ravel's first completed opera was *L'heure espagnole* (premiered

in 1911), described as a "comédie musicale". It is among the works set in or illustrating Spain that Ravel wrote throughout his career. Nichols comments that the essential Spanish colouring gave Ravel a reason for virtuoso use of the modern orchestra, which the composer considered "perfectly designed for underlining and exaggerating comic effects". Edward Burlingame Hill found Ravel's vocal writing particularly skilful in the work, "giving the singers something besides recitative without hampering the action", and "commenting orchestrally upon the dramatic situations and the sentiments of the actors without diverting attention from the stage." The second opera, also in one act, is *L'enfant et les sortilèges* (1926), a "fantaisie lyrique" to a libretto by Colette. She and Ravel had planned the story as a ballet, but at the composer's suggestion Colette turned it into an opera libretto. It is more uncompromisingly modern in its musical style than *L'heure espagnole*, and the jazz elements and bitonality of much of the work upset many Parisian opera-goers. Ravel was once again accused of artificiality and lack of human emotion, but Nichols finds "profoundly serious feeling at the heart of this vivid and entertaining work".

A substantial proportion of Ravel's output was vocal. His early works in that sphere include cantatas written for his unsuccessful attempts at the Prix de Rome. His other vocal music from that period shows Debussy's influence, in what Kelly describes as "a static, recitative-like vocal style", prominent piano parts and rhythmic flexibility. By 1906 Ravel was taking even further than Debussy the natural, sometimes colloquial, setting of the French language in *Histoires naturelles*. The same technique is highlighted in *Trois poèmes de Stéphane Mallarmé* (1913); Debussy set two of the three poems at the same time as Ravel, and the former's word-setting is noticeably more formal than the latter's, in which syllables are often elided. In the cycles *Shéhérazade* and *Chansons madécasses* Ravel gives vent to his taste for the exotic, even the sensual, in both the vocal line and the accompaniment. Ravel's songs often draw on vernacular styles, using elements of many folk traditions in such works as *Cinq mélodies populaires grecques*, *Deux mélodies hébraïques* and *Chants populaires*. Among the poets on whose lyrics he drew were Marot, Léon-Paul Fargue, Leconte de Lisle and Verlaine. Although Ravel wrote for mixed choirs and male solo voices, he is chiefly associated, in his songs, with the soprano and mezzo-soprano voices. Even when setting lyrics clearly narrated by a man, he often favoured a female voice, and he seems to have preferred his best-known cycle, *Shéhérazade*, to be sung by a woman, although a tenor voice is a permitted alternative in the score.

During his lifetime it was above all as a master of orchestration that Ravel was famous. He minutely studied the ability of each orchestral instrument to determine its potential, putting its individual colour and timbre to maximum use. The critic Alexis Roland-Manuel wrote, "In reality he is, with Stravinsky, the one man in the world who best knows the weight of a trombone-note, the harmonics of a 'cello or a *pp* tam-tam in the relationships of one orchestral group to another." For all Ravel's orchestral mastery, only four of his works were conceived as concert works for symphony orchestra: *Rapsodie espagnole*, *La valse* and the two concertos. All the other orchestral works were written either for the stage, as in *Daphnis et Chloé*, or as a reworking of piano pieces, *Alborada del gracioso* and *Une barque sur l'ocean*, (*Miroirs*), *Valses nobles et sentimentales, Ma mère l'Oye*, *Tzigane* (originally for violin and piano) and *Le tombeau de Couperin.* In the orchestral versions, the instrumentation generally clarifies the harmonic language of the score and brings

sharpness to classical dance rhythms. Occasionally, as in the *Alborada del gracioso*, critics have found the later orchestral version less persuasive than the sharp-edged piano original. In some of his scores from the 1920s, including *Daphnis et Chloé*, Ravel frequently divides his upper strings, having them play in six or even eight parts while the woodwind are required to play with extreme agility. His writing for the brass ranges from softly muted to triple-forte outbursts at climactic points. In the 1930s he tended to simplify his orchestral textures. The lighter tone of the G major Piano Concerto follows the models of Mozart and Saint-Saëns, alongside use of jazz-like themes. The most popular of Ravel's orchestral works, *Boléro* (1928), was conceived several years before its completion; in 1924 he said that he was contemplating "a symphonic poem without a subject, where the whole interest will be in the rhythm".

Ravel wrote fewer than thirty works for the piano, they exemplify his range; Orenstein remarks that the composer keeps his personal touch "from the striking simplicity of *Ma mère l'Oye* to the transcendental virtuosity of *Gaspard de la nuit*." Ravel's earliest major work for piano, *Jeux d'eau* (1901), is frequently cited as evidence that he evolved his style independently of Debussy, whose major works for piano all came later. When writing for solo piano Ravel rarely aimed at the intimate chamber effect characteristic of Debussy, but sought a Lisztian virtuosity. Most of Ravel's piano music is extremely difficult to play, and presents pianists with a balance of technical and artistic challenges. Ravel's regard for his predecessors is heard in several of his piano works; *Menuet sur le nom de Haydn* (1909), *À la manière de Borodine* (1912), *À la manière de Chabrier* (1913) and *Le tombeau de Couperin* all incorporate elements of the named composers interpreted in a characteristically Ravellian manner.

Apart from a one-movement sonata for violin and piano dating from 1899, unpublished in the composer's lifetime, Ravel wrote seven chamber works. The earliest is the String Quartet (1902–03), dedicated to Fauré, and showing the influence of Debussy's quartet of ten years earlier. Like the Debussy it differs from the more monumental quartets of the established French school of Franck and his followers, with more succinct melodies, fluently interchanged, in flexible tempos and varieties of instrumental colour. The Introduction and Allegro for harp, flute, clarinet, and string quartet (1905) was composed very quickly by Ravel's standards. It is an ethereal piece in the vein of the *Pavane pour une infante défunte*. Ravel also worked at unusual speed on the Piano Trio (1914) to complete it before joining the French army. It contains Basque, Baroque and far Eastern influences, and shows Ravel's growing technical skill, dealing with the difficulties of balancing the percussive piano with the sustained sound of the violin and cello, "blending the two disparate elements in a musical language that is unmistakably his own," in the words of the commentator Keith Anderson. Ravel's four chamber works composed after the First World War are the Sonata for Violin and Cello (1920–22), the "Berceuse sur le nom de Gabriel Fauré" for violin and piano (1922), the chamber original of *Tzigane* for violin and piano (1924) and finally the Violin Sonata (1923–27). The Violin and Cello Sonata is a departure from the rich textures and harmonies of the pre-war Piano Trio: the composer said that it marked a turning point in his career, with thinness of texture pushed to the extreme and harmonic charm renounced in favour of pure melody. His last chamber work, the Violin Sonata (sometimes called the Second after the posthumous publication of his student sonata), is a frequently dissonant work.

- **Indeterminism**

  Indeterminacy in music, which began early in the 20th century in the music of Charles Ives, and was continued in the 1930s by Henry Cowell and carried on by his student, the experimental music composer John Cage beginning in 1951, came to refer to the (mostly American) movement which grew up around Cage. This group included the other members of the so-called New York School: Earle Brown, Morton Feldman and Christian Wolff. John Cage originally defined indeterminacy as "the ability of a piece to be performed in substantially different ways." Bryan Simms thus conflates indeterminacy with what Cage called chance composition when he claims that "Any part of a musical work is indeterminate if it is chosen by chance, or if its performance is not precisely specified. The former case is called 'indeterminacy of composition'; the latter is called "indeterminacy of performance."

  In 1958 Cage gave two lectures in Europe, the first at Darmstadt, titled simply "Indeterminacy,"the second in Brussels called "Indeterminacy: New Aspect of Form in Instrumental and Electronic Music." This second lecture consisted of a number of short stories (originally 30, expanded to ninety in the second version), each story read by Cage in exactly one minute; because of this time limit the speed of Cage's delivery varied enormously.

  Indeterminate music can be divided into three groups.

  - The first group includes scores in which the chance element is involved only in the process of composition, so that every parameter is fixed before their performance. In John Cage's *Music of Changes* (1951), for example, the composer selected duration, tempo, and dynamics by using the I-Ching, an ancient Chinese book which prescribes methods for arriving at random numbers. Cage himself, however, regarded *Music of Changes* as a determinate work, because it is completely fixed from one performance to another.
  - In the second type of indeterminate music (the only type of indeterminate music according to Cage's definition), chance elements involve the performance. Notated events are provided by the composer, but their arrangement is left to the determination of the performer. Karlheinz Stockhausen's *Klavierstück XI* (1956) presents nineteen events which are composed and notated in a traditional way, but the arrangement of these events is determined by the performer spontaneously during the performance. According to Cage, other examples include Johann Sebastian Bach's *Art of Fugue*, Morton Feldman's *Intersection 3*, Earle Brown's *Four Systems*, and Christian Wolff's *Duo for Pianists II*. In this second type of music, control and chance merged in some composers' works in the late 1950s. One type of music in which this might occur is called in sound-mass composition or textural composition, where individual pitches and lines are integrated into complexes of sound ("sound masses").

  - The greatest degree of indeterminacy is reached by the third type of indeterminate music, where traditional musical notation is replaced by visual or verbal signs suggesting how a work can be performed, for example in graphic score pieces. Earle Brown's *December 1952* (1952) shows lines and rectangles of various lengths and thicknesses that can read as loudness, duration, or pitch. The performer chooses how to read them. Another example is Morton Feldman's *Intersection No. 2* (1951) for piano solo, written on coordinate paper. Time unit are

represented by the squares viewed horizontally, while relative pitch levels high, middle and low are indicated by three vertical squares in each row. The performer determines what particular pitches and rhythms to play.

John Cage (September 5, 1912 – August 12, 1992) was an American composer, music theorist, writer and artist. A pioneer of indeterminacy in music, electroacoustic music and non-standard use of musical instruments, Cage was one of the leading figures of the post-war avant-garde. Critics have lauded him as one of the most influential American composers of the 20th century. He was also instrumental in the development of modern dance, mostly through his association with choreographer Merce Cunningham, who was also Cage's romantic partner for most of their lives. Cage is perhaps best known for his 1952 composition *4′33″*, which is performed in the absence of deliberate sound; musicians who present the work do nothing aside from being present for the duration specified by the title. The content of the composition is not "four minutes and 33 seconds of silence," as is sometimes assumed, but rather the sounds of the environment heard by the audience during performance. The work's challenge to assumed definitions about musicianship and musical experience made it a popular and controversial topic both in musicology and the broader aesthetics of art and performance. Cage was also a pioneer of the prepared piano (a piano with its sound altered by objects placed between or on its strings or hammers – nails, buts of rubber, etc.), for which he wrote numerous dance-related works and a few concert pieces. The best known of these is *Sonatas and Interludes* (1946–48).

His teachers included Henry Cowell (1933) and Arnold Schoenberg (1933–35), both known for their radical innovations in music, but Cage's major influences lay in various East and South Asian cultures. Through his studies of Indian philosophy and Zen Buddhism in the late 1940s, Cage came to the idea of aleatoric or chance-controlled music, which he started composing in 1951. The *I Ching*, an ancient Chinese classic text of Changes, became Cage's standard composition tool for the rest of his life. In a 1957 lecture, *Experimental Music*, he described music as "a purposeless play" which is "an affirmation of life – not an attempt to bring order out of chaos nor to suggest improvements in creation, but simply a way of waking up to the very life we're living".

Cage was born September 5, 1912, in Los Angeles. His father, John Cage, Sr. (1886–1964), was an inventor, and his mother, Lucretia ("Crete") Harvey (1885–1969), worked intermittently as a journalist for the *Los Angeles Times*. Cage enrolled at Pomona College in Claremont as a theology major in 1928. Often crossing disciplines again, though, he encountered at Pomona the work of artist Marcel Duchamp, of writer James Joyce, of philosopher Ananda Coomaraswamy and of Cowell. In 1930 he dropped out, having come to believe that "college was of no use to a writer" after an incident described in the 1991 autobiographical statement:

> I was shocked at college to see one hundred of my classmates in the library all reading copies of the same book. Instead of doing as they did, I went into the stacks and read the first book written by an author whose name began with Z. I received the highest grade in the class. That convinced me that the institution was not being run correctly. I left.

By 1933 Cage decided to concentrate on music rather than painting. "The people who heard my music had better things to say about it than the people who looked at my paintings had to say about my paintings," Cage later explained. In 1933 he sent some of his compositions to Henry Cowell; the reply was a "rather vague letter," in which Cowell suggested that Cage study with Arnold Schoenberg—Cage's musical ideas at the time included composition based on a 25-tone row, somewhat similar to Schoenberg's twelve-tone technique. Cowell also advised that, before approaching Schoenberg, Cage should take some preliminary lessons and recommended Adolph Weiss, a former Schoenberg pupil. Following Cowell's advice, Cage travelled to New York City in 1933 and started studying with Weiss as well as taking lessons from Cowell himself at The New School. Cage could not afford Schoenberg's price and, when he mentioned it, the older composer asked whether Cage would devote his life to music. After Cage replied that he would, Schoenberg offered to tutor him free of charge. Cage studied with Schoenberg in California: first at USC and then at UCLA, as well as privately. Schoenberg's methods and their huge influence on Cage are well documented. Cage studied with Schoenberg for two years, but although he admired his teacher, he decided to leave. Schoenberg was not impressed with Cage's compositional abilities during these two years. In a later interview, Schoenberg said: "of course he's not a composer, but he's an inventor—of genius." Schoenberg had intended this not as a compliment but as means to differentiate, disparagingly, between composers and inventors. Cage would later adopt the "inventor" moniker and deny that he was in fact a composer.

In late 1940s, Cage started developing methods of breaking away from traditional harmony. For instance, in *String Quartet in Four Parts* (1950) Cage first composed a number of *gamuts*: chords with fixed instrumentation. The piece progresses from one *gamut* to another. In each instance the *gamut* was selected only based on whether it contains the note necessary for the melody and so the rest of the notes do not form any directional harmony. *Concerto for prepared piano* (1950–51) used a system of charts of durations, dynamics, melodies, etc., from which Cage would choose using simple geometric patterns. The last movement of the concerto was a step towards using chance procedures, which Cage adopted soon afterwards. He also used a chart system for the large piano work *Music of Changes* (1951); material was selected from the *I Ching* charts. All of Cage's music since 1951 was composed using chance procedures, most commonly using the *I Ching*. For example, works from *Music for Piano* were based on paper imperfections: the imperfections themselves provided pitches, coin tosses and *I Ching* hexagram numbers were used to determine the accidentals, clefs, and playing techniques. Cage created a whole series of works by applying chance operations, i.e. the *I Ching*, to star charts: *Atlas Eclipticalis* (1961–62), and a series of etudes: *Etudes Australes* (1974–75), *Freeman Etudes* (1977–90) and *Etudes Boreales* (1978). Cage's etudes are all extremely difficult to perform, a characteristic dictated by Cage's social and political views: the difficulty would ensure that "a performance would show that the impossible is not impossible" —this being Cage's answer to the notion that solving the world's political and social problems is impossible. Cage described himself as an anarchist, and was influenced by Henry David Thoreau.

In another series of works, Cage applied chance procedures to per-existing music by other composers: *Cheap Imitation* (1969; based on Erik Satie), *Some of "The Harmony of Maine"* (1978;

based on Belcher) and *Hymns and Variations* (1979). In these works, Cage borrowed the rhythmic structure of the originals and fill it with pitches determined through chance procedures.

Finally, some of Cage's works, particularly those completed during the 1960s, feature instructions to the performer, rather than fully notated music. The score of *Variations I* (1958) presents the performer with six transparent squares, one with points of various sizes, five with five intersecting lines. The performer combines the squares and uses lines and points as a coordinate system, in which the lines are axes of various characteristics of the sounds, such as lowest frequency, simplest overtone structure, etc.

Musicircus (1967) simply invites the performers to assemble and play together. The first *Musicircus* featured multiple performers and groups in a large space who were all to commence and stop playing at two particular time periods, with instructions on when to play individually or in groups within these two periods. The result was a mass superimposition of many different musics on top of one another as determined by chance distribution, producing an event with a specifically theatric feel.

The chance procedures were supposed to eliminate the composer's and the performer's likes and dislikes from music, Cage disliked the concept of improvisation, which is inevitably linked to the performer's preferences. In a number of works beginning in the 1970s, he found ways to incorporate improvisation. In *Child of Tree* (1975) and *Branches* (1976) the performers are asked to use certain species of plants as instruments, for example the cactus. The structure of the pieces is determined through the chance of their choices, as is the musical output; the performers had no knowledge of the instruments. In *Inlets* (1977) the performers play large water-filled conch shells – by carefully tipping the shell several times, it is possible to achieve a bubble forming inside, which produced sound. Yet, as it is impossible to predict when this would happen, the performers had to continue tipping the shells – as a result the performance was dictated by pure chance.

Cage's pre-chance works, particularly pieces from the late 1940s such as *Sonatas and Interludes*, earned critical acclaim: the *Sonatas* were performed at Carnegie Hall in 1949. Cage's adoption of chance operations in 1951 cost him a number of friendships and led to numerous criticisms from fellow composers. Adherents of serialism such as Pierre Boulez and Karlheinz Stockhausen dismissed indeterminate music; Boulez, who was once on friendly terms with Cage, criticized him for "adoption of a philosophy tinged with Orientalism that masks a basic weakness in compositional technique." Prominent critics of serialism, such as the Greek composer Iannis Xenakis, were similarly hostile towards Cage.

While much of Cage's work remains controversial, his influence on countless composers, artists, and writers is notable. After Cage introduced chance, Boulez, Stockhausen, and Xenakis remained critical, yet all adopted chance procedures in some of their works (although in a much more restricted manner); and Stockhausen's piano writing in his later *Klavierstücke* was influenced by Cage's *Music of Changes*. Music in which some of the composition and/or performance is left to chance was labelled *aleatoric music*—a term popularized by Pierre Boulez.

Cage's rhythmic structure experiments and his interest in sound influenced a number of composers, starting at first with his close American associates Earle Brown, Morton Feldman and Christian Wolff (and other American composers, such as La Monte Young, Terry Riley, Steve Reich and Philip Glass), and then spreading to Europe. The development of electronic music was also influenced by Cage: in the mid-1970s Brian Eno's label Obscure Records released works by Cage. Prepared piano, which Cage popularized, is featured heavily on Aphex Twin's 2001 album *Drukqs*. Cage's work as musicologist helped popularize Erik Satie's music and his friendship with Abstract expressionist artists such as Robert Rauschenberg helped introduce his ideas into visual art.

Cage experimented with many new concepts in music but if a composers music are not pieces that performers want to play and audiences want to hear, you're going to have a narrow influence as a composer. Cage was also a bona fide, proper, real, composer. Here's Woody Guthrie's reaction to hearing a record of the prepared piano solos from Cage's *Amores* in 1947:

> I've been around at several dance gatherings and musical houseparties here in New York city where I heard John Cage overhaul the family piano in his own way and play some of his choked down off and unusual kinds of things. I've hear him work with [a] roomful of tomtommers and drummers on first one stage and then the other one and not only did I feel that this sort of piano music was really a keen fresh breeze, but a welcome thing in the way of a healthy change from the old ways you hear the average piano played… I think that John Cage and Alan Hovaness [sic; Hovhaness's music was also on the same disc] have caught and handed over to us a whole forest and desert mountain full of these fine things that would be looked down on or looked over in bashful weakness by ninety nine out of a hundred raters in every window.

Guthrie caught the thrill of the newness that Cage's prepared piano music still makes you feel and the new musical terrain it opens up. The structural rigour but sonic richness of the Sonatas and Interludes are some of the most immediately attractive music of this last century; as is Cage's magical, austere *String Quartet in Four Parts*.

Just before 4'33,'' Cage completed the four volumes of his *Music of Changes* (Boulez's Structures 1A was composed at roughly the same time). Produced painstakingly through the chance operations of the I Ching, Cage laboured hard to find a way to erase his control as much as possible in the compositional process: what could be less egotistic, less about the whole composer-as-hero idea, than not determining a single sound in a piece you supposedly "write"? And yet the result is similar, in its relentless virtuosity, its employment of the extremes of the keyboard, its unpredictable changes of speed and dynamic, creating some of the most systematised music ever conceived. *Music of Changes* is heroically difficult to perform and gives the pianist no leeway in its realisation. Nothing, in other words, is really left to chance at all in a performance of *Music of Changes*. Forward-wind a quarter of a century and Cage again wrote a sequence of some of the most coruscatingly complex music of his career, the *Etudes Australes* for solo piano.

In fact, Cage's music is some of the most severe and exacting to play you can imagine. The discipline required to perform the subtly shifting soundworlds of the later pieces that are titled after the number of performers involved (from 1 to 108 – see *Two*, below) isn't just about following

a stopwatch and making sure you're playing your notes at the correct temporal point, but submitting yourself to a kind of listening, a sensitivity of musical interaction between you and the other performers that requires you to give up your sense of individual identity to Cage's music.

In other words: the piece is still paramount in Cage's music. For all the existential freedoms he opened up for generations of musicians who came after him, that central idea of the work being more important than the composer, the performer, or even the audience, is one he never completely turned over. Even worse, from his own theoretically ego-less position, the veneration of the canon of his pieces is something of a philosophical problem: people still talk about Cage's *4'33''*, when in reality, the lesson of that piece is that it's ours, that simply by turning our aural attention completely to any sonic phenomenon, we all create our own continual loop of 4'33''s.

1) *Sonatas and Interludes* (1948) is a collection of twenty pieces for prepared piano. It was composed in 1946–1948, shortly after Cage's introduction to Indian philosophy and the teachings of art historian Ananda K. Coomaraswamy. Significantly more complex than his other works for prepared piano, *Sonatas and Interludes* is generally recognized as one of Cage's finest achievements. The cycle consists of sixteen sonatas and four more freely structured interludes. The aim of the pieces is to express the eight permanent emotions of the rasa Indian tradition. In *Sonatas and Interludes*, Cage elevated his technique of rhythmic proportions to a new level of complexity. In each sonata a short sequence of natural numbers and fractions defines the structure of the work and that of its parts, informing structures as localized as individual melodic lines. Cage underwent an artistic crisis in the early 1940s. His compositions were rarely accepted by the public and he grew more and more disillusioned with the idea of art as communication. He later gave an account of the reasons: "Frequently I misunderstood what another composer was saying simply because I had little understanding of his language. And I found other people misunderstanding what I myself was saying when I was saying something pointed and direct." Among the ideas that influenced Cage was the description of the rasa aesthetic and of its eight "permanent emotions." These emotions are divided into two groups: four white (humor, wonder, erotic, and heroic—"accepting one's experience", in Cage's words) and four black (anger, fear, disgust, and sorrow). They are the first eight of the *navarasas* or *navrasas* ("nine emotions") and they have a common tendency towards the ninth of the *navarasas*: tranquility. Cage never specified which of the pieces relate to which emotions, or whether there even exists such direct correspondence between them. He mentioned, though, that the "pieces with bell-like sounds suggest Europe and others with a drum-like resonance suggest the East." Cage also stated that Sonata XVI, the last of the cycle, is "clearly European. It was the signature of a composer from the West." Cage started working on the cycle in February 1946, while living in New York City. Critical reaction was uneven, but mostly positive, and the success of *Sonatas and Interludes* led to a grant from the Guggenheim Foundation, which Cage received in 1949, allowing him to make a six-month trip to Europe. There he met Olivier Messiaen, who helped organize a performance of the work for his students in Paris on June 7, 1949; and he befriended Pierre Boulez, who became an early admirer of the work and wrote a lecture about it for the June 17, 1949 performance at the salon of Suzanne Tézenas in Paris. The cycle comprises sixteen sonatas and four interludes, arranged symmetrically. Cage refers

to his pieces as sonata in the sense that these works are cast in the form that early classical keyboard sonatas (such as those of Scarlatti) were: AABB. The works are not cast in the later sonata form which is far more elaborate.

2) *Music of Changes* (1951) - is a ground-breaking piece of indeterminate music. The process of composition involved applying decisions made using the *I Ching.* The *I Ching* was applied to large charts of sounds, durations, dynamics, tempo and densities. *Music of Changes* was the second work Cage composed to be fully indeterminate in some sense (the first is *Imaginary Landscape No. 4*, completed in April 1951 and the third movement of *Concerto for prepared piano* also used chance) and the first instrumental work that uses chance throughout. He was still using magic square-like charts to introduce chance into composition, when, in early 1951, Christian Wolff presented Cage with a copy of the *I Ching.* This Chinese classic text is a symbol system used to identify order in chance events. For Cage it became a perfect tool to create chance-controlled compositions: he would "ask" the book questions about various aspects of the composition at hand and use the answers to compose. In effect, the vast majority of pieces Cage completed after 1951 were created using the *I Ching*. The title of *Music of Changes* is derived from the title sometimes given to the *I Ching*, "Book of Changes." Cage set to work on the piece almost immediately after receiving the book. Cage's former mentor Henry Cowell remarked that Cage had not freed himself from his tastes in the new work and so for a short while Cage worked simultaneously on *Music of Changes* and *Imaginary Landscape No. 4*, which was to do what Cowell suggested.

3) *4'33"* (1952) composed for any instrument or combination of instruments and the score instructs the performer(s) not to play their instrument(s) during the entire duration of the piece throughout the three movements. The piece purports to consist of the sounds of the environment that the listeners hear while it is performed, although it is commonly perceived as "four minutes thirty-three seconds of silence." The title of the piece refers to the total length in minutes and seconds of a given performance, *4'33"* being the total length of the first public performance. Conceived around 1947–1948, while the composer was working on *Sonatas and Interludes*, *4'33"* became, for Cage, the epitome of his idea that any sounds may constitute music. It was also a reflection of the influence of Zen Buddhism, which Cage studied since the late 1940s. In a 1982 interview and, on numerous other occasions, Cage stated that *4'33"* was, in his opinion, his most important work. The New Grove Dictionary of Music and Musicians describes *4'33"* as Cage's "most famous and controversial creation."

4) *Water Walk*: 1960 TV show, I've Got a Secret (1960) - this unlikely happening occurred on *I've Got a Secret*, the long-running occupation-guessing game show. For this particular episode, the TV show offered Cage something of a teachable moment, a chance to introduce the broader public to his brand of avant-garde music. For *Water Walk*, Cage rounded up a variety of "instruments" all having something to do with liquid water — a bathtub, a pitcher, ice cubes in a mixer — and the unconventional symphony they produce culminates in the mixing of a drink and the sipping of the drink which the composition dictates occurs about two and a half minutes in. Naturally, Cage being Cage, the piece incorporates audience reaction noises; when

host Gary Moore warns him that certain members of the studio audience will laugh, Cage responds, "I consider laughter better than tears."

5) *Etudes Australes* (1975) – Cage found the notes through a combination of star charts and the I Ching and are fixed, but the piece's rhythm and volume is left to the performer. What Cage wanted was that whoever plays the piece creates their own system to interpret the notation. This is a prime example of his creation of indeterminism, not improvisation. Consisten with his views on Bhudism, Cage sought to eliminate all aspects of ego, both that of the composer and of the musicians. Toward the end of his life, Cage composed a series of studies that renewed his interest not only in conventional instrumental resources and performing techniques, but also in conventional musical notation. The *Etudes Australes* from 1974 were the first of those – 32 pieces for piano, for which Cage derived music from star maps of the southern hemisphere and laid it out across four staves, two for each hand, constantly crossing over the full length of the keyboard. The technical and interpretative problems for the performer, who essentially has to treat each hand independently, are immense. The pieces are rarely heard.

6) *Two* (1987) - The term "Number Pieces" refers to a body of Cage's late compositions. Each piece is named after the number of performers involved: for instance, *Seven* is a piece for seven performers, *One*[9] (read "One Nine") is the ninth work for one performer and *101* is a piece for an orchestra of 101 musicians. The vast majority of these works were composed using Cage's time bracket technique: the score consists of short fragments (frequently just one note, with or without dynamics) and indications, in minutes and seconds, of when the fragment should start and when it should end. Time brackets can be fixed (e.g. from 1.15 to 2.00) or flexible (e.g. from anywhere between 1.15 and 1.45 and to anywhere from 2.00 to 2.30). All of the Number Pieces were composed during the last six years of Cage's life, 1987–1992. Most are for traditional instruments, with six exceptions that range from works for the Japanese aerophone shō and conch shells to an electronically amplified version of *4'33."* *Two* was the first Number Piece. Both parts contain 9 flexible time brackets and one fixed. The flute part has only three different pitches and is quiet throughout. The piano part is notated on two staves, with the content of one played in any relation to that of the other.

Pierre Boulez (1925 -) is a French composer, conductor, writer, and pianist. See a detailed biography under his name in the section on serialism.

From the 1950s, beginning with the Third Piano Sonata (1955–57/63), Boulez experimented with what he called "controlled chance" and he developed his views on aleatoric music in the articles "Aléa" and "Sonate, que me veux-tu?" His use of chance, which he would later employ in compositions like *Éclat* (1965), *Domaines* (1961–68) and *Rituel in memoriam Bruno Maderna* (1974–75), is very different from that in the works of, for example, John Cage. While in Cage's music the performers are often given freedom to create completely unforeseen sounds, with the object of removing the composer's intention from the music, in works by Boulez they only get to choose between possibilities that have been written out in detail by the composer—a method that is often described as "mobile form."

1) *Third Piano Sonata* (1957, 1963) - Boulez composed three piano sonatas. The **First Piano Sonata** in 1946, a **Second Piano Sonata** in 1948, and a **Third Piano Sonata** was composed in 1955–57 with further elaborations up to at least 1963, though only two of its movements (and a fragment of another) have been published. The Third Piano Sonata was first performed by the composer in Cologne and at the Darmstädter Ferienkurse in 1958, in a "preliminary version" of its five-movement form. One motivating force for its composition was Boulez's desire to explore aleatoric music. He published several writings, both criticizing the practice and suggesting its reformation, leading up to the composition of this sonata in 1955–57/63. It exists in five movements, called "formants" in French, "blobs" in English, of which Boulez has completed only two; the other three remain "in progress." The work is further subdivided into 12 little sections that the player has some freedom to arrange in different ways. These in turn are graced with very important-sounding titles (Texte, Parenthèse, Blocs 1, Points 3, Giants 10, Colts 21, etc). There's no doubt whatsoever that this sonata represents a huge advance, indeed an epiphany, in Boulez's development as a composer in that it reveals an awareness of the fact that it doesn't matter whether his music is played frontwards, backwards, sideways, upside down, or under water. Here, for example, we might find in any given performance, on any given day, the thrilling juxtaposition of "LezMuDe'SToServesSicBouTenGotBeFor" with "To'SBouDeSicGotLezServesForBeTenMu", and other enticing possibilities. As you can plainly see, any way you arrange it, you still get nonsense. Of course nonsense can be fun: look at Lewis Carroll, for example. Then again, he never said that his nonsense was anything but that, in stark contrast to Mr. Boulez and his crew.

2) *Éclat* (1965)/Multiples (1970) is a seven-minute chanber work. In 1970 he added a continuationtion called Multipes. It contains some of his most thirllin music, as the stasis of Eclat is gradually transformed into the propulsive energy of Multiples.

3) *Domaines* (1961–68) - Is one of Boulez's most extensive examples of what is best described as mobile form. The six ensembles, each a unique instrumental combination -- trombone quartet, string sextet, marimba/double bass, mixed quintet, oboe/horn/guitar, bass clarinet -- are placed onstage at the apexes of a hexagon. The clarinet soloist moves from one to another, the spatial trajectory being determined by the ordering of the six sections, which the performer is free to choose. If the clarinetist chooses to begin with section A, he or she would move over to Ensemble A (the trombone quartet) and play the music associated with that section. The ensemble responds by performing its corresponding music while the soloist traverses the stage to the next ensemble.

4) *Rituel in memoriam Bruno Maderna* (1974–75) – is a composition for large chamber ensemble in eight groups. The work was written after the death of Boulez's fellow composer Bruno Maderna, and Boulez describes it as "A ceremony of memory, in which there are numerous repetitions of the same formulas, in constantly changing profiles and perspectives". The work makes use of multiple groups of musicians (each with different instruments), widely separated across the performance space, as in many of Maderna's works (e.g. *Quadrivium*, 1969). There are eight groups, each one featuring different instruments, with every group but brass

conducted by a percussionist keeping the individual tempo of the group; thus the groups have a rhythmic independence of each other, though there is a larger scale organization directed by a primary conductor. Boulez based the tonal structure of *Rituel* largely on a set of seven tones, corresponding to the number of the letters in the name "Maderna".

Morton Feldman (January 12, 1926 – September 3, 1987) was an American composer, born in New York City. A major figure in 20th-century music, Feldman was a pioneer of indeterminate music, a development associated with the experimental New York School of composers also including John Cage, Christian Wolff and Earle Brown. Feldman's works are characterized by notational innovations that he developed to create his characteristic sound: rhythms that seem to be free and floating; pitch shadings that seem softly unfocused; a generally quiet and slowly evolving music; recurring asymmetric patterns. His later works, after 1977, also begin to explore extremes of duration. Feldman was born in Woodside, Queens into a family of Russian-Jewish immigrants from Kiev.

In early 1950 Feldman went to hear the New York Philharmonic give a performance of Anton Webern's *Symphony*, op. 21. After this work, the orchestra was going to perform a piece by Sergei Rachmaninoff and Feldman left immediately before that, disturbed by the audience's disrespectful reaction to Webern's work. In the lobby he met John Cage, who was at the concert and had also decided to step out. The two composers quickly became good friends, with Feldman moving into the apartment on the second floor of the building Cage lived in. Through Cage, Feldman met composers such as Henry Cowell, Virgil Thomson and George Antheil. With encouragement from Cage, Feldman began to write pieces that had no relation to compositional systems of the past, such as the constraints of traditional harmony or the serial technique. He experimented with non-standard systems of musical notation, often using grids in his scores and specifying how many notes should be played at a certain time, but not which ones. Feldman's experiments with the use of chance in his composition, in turn, inspired Cage to write pieces like the *Music of Changes*, where the notes played are determined by consulting the I Ching.

Feldman's music changed radically in 1970: moving away from his interest in graphic notation and arhythmic notation systems and toward a more rhythmically precise method of composition. The first piece of this new period was a short, fifty-five measure work entitled "*Madame Press Died Last Week at Ninety*," dedicated to his childhood piano teacher, Vera Maurina Press. Feldman had earned his living as a full-time employee at the family textile business in New York's garment district when, in 1973, at the age of 47, Feldman became the Edgard Varèse Professor (a title of his own devising) at the University at Buffalo. In addition to teaching at SUNY Buffalo, Feldman also held residences during the mid-1980s at the University of California, San Diego. Later, he began to produce his very long works, often in one continuous movement, rarely shorter than half an hour in length and often much longer. These works include *Violin and String Quartet* (1985, around 2 hours), *For Philip Guston* (1984, around four hours) and, most extreme, the *String Quartet II* (1983, which is over six hours long without a break.) Typically, these pieces maintain a very slow developmental pace (if not static) and tend to be made up of mostly very quiet sounds. Feldman said himself that quiet sounds had begun to be the only ones that interested him.

Something strange starts to happen when you listen to Feldman's long and late chamber pieces. By the end of these works, composed a few years before Feldman's death in 1987, one feels left wanting more, not less. Sense of time is altered, with intent focus on the way the music changes from note to note and chord to chord. It creates a living, breathing network of relationships that extended across its length. You don't really listen to these pieces, you live through them and with them. By the end of Feldman's *Second String Quartet*, it feels as if it is living inside you. Feldman put it thus:

> My whole generation was hung up on the 20- to 25-minute piece. It was our clock. We all got to know it and how to handle it. As soon as you leave the 20- to 25-minute piece behind, in a one-movement work, different problems arise. Up to one hour you think about form, but after an hour and a half it's scale. Form is easy: just the division of things into parts. But scale is another matter.

This might suggest there is something epic in Feldman's music, in its rhetoric or ambition. The reality is just the opposite. His music is intimate, quiet, small and often slow. For *Philip Guston* is scored for piano, flute and percussion; its gently dissonant chiming never reaches beyond a softly reverberant shimmer. It is music written on the same scale as our ears, composed to fit our brains and bodies.

Feldman's compositions don't impose themselves on you and they refuse to shout about their meaning or importance – even their length. They also resist your attempts to predict what might happen next. His music is full of repetition and yet nothing ever repeats. Whiile individual chords, textures and rhythmic ideas reoccur, they are never (or very rarely) the same. Patterns don't progress in a predictable way, which makes Feldman's aesthetic radically different from the minimalists. You'll search in vain for an underlying system or structure to explain what's happening in, say, *Crippled Symmetry*, another huge piece for flute, percussion and piano. Instead, you should give yourself over to absolute concentration. Notice the surface of the music, the way it changes subtly and slowly as if reacting to your attention. That's the point about Feldman's long pieces: they don't hypnotise or immerse you in a comforting sonic bath, they call for your attention and, through that, change you. Again, Feldman's words are enlightening; he says that his: "patterns are 'complete' in themselves and in no need of development – only of extension. My concern is:

> what is its scale when prolonged and what is the best method to arrive at it? My past experience was not to 'meddle' with the material, but use my concentration as a guide to what might transpire. I mentioned this to Stockhausen once when he had asked me what my secret was. 'I don't push the sounds around.' Stockhausen mulled this over and asked: 'Not even a little bit?'

During his formative years in New York, Feldman's creative pole-stars were John Cage, Earle Brown and Christian Wolff and a galaxy of painters including Jackson Pollock, Jasper Johns, Robert Rauschenberg and above all his close friend Philip Guston (even though they fell out when Guston's style changed from abstract to figurative; a perceived slight by Feldman at an exhibition of Guston's work meant they never spoke again). In the 50s and 60s, Feldman developed a kind of

graphic notation, allowing the performers to choose the pitches and rhythms in pieces called Projections and Intersections. But Feldman never wanted to release an improvisational creativity from his musicians or to come up with scores-as-art as Cage did. Instead, he wanted to fix an idea as completely as possible. "The new structure," he wrote, "required a concentration more demanding than if the technique were that of still photography, which for me is what precise notation has come to imply." That concern for precision was one of the reasons Feldman could not go along with Cage's dictum that "everything is music" and it was also one of the reasons he returned to conventional notation in the 60s.

Luciano Berio once said that the quietness of Feldman's music expressed a kind of existential terror of going off the map lest he encounter those regions where there be monsters – as if Feldman were frightened of loud music (despite the fact that one of his most important influences was the genius noise-artist Edgard Varèse). It's a mis-hearing of Feldman's music. You can only really understand this by living through a piece like the 80-minute For *Bunita Marcus* for solo piano. What happens is the opposite of quietness, of not much happening: it's as if your ears extend outwards to meet the sound. Of course it's an illusion, but you feel you're touching the sound with your ears. Far from the disengagement with experience that Berio suggests, Feldman's music is a more direct encounter with the substance of sound than most composers have achieved. There's a searching compositional reason for Feldman's quietness. As he says:

> In my music I am … involved with the decay of each sound and try to make its attack sourceless. The attack of a sound is not its character. Actually, what we hear is the attack and not the sound. Decay, however, this departing landscape, this expresses where the sound exists in our hearing – leaving us rather than coming towards us.

Another side of Feldman's boldness is his polemic against the dominant system of composing in 50s and 60s Europe and musical academia in America. "If the pedant wants to understand me, he must understand my past. I'll take on all comers … There will be no embarrassment as to my intellectual abilities. In fact, there will be surprises! Pierre [Boulez] … Karlheinz [Stockhausen] … Milton [Babbitt] … are you ready?"

Other things to prepare for, for Feldman and his music: the massive physicality of the man, his thick glasses and unquenchable appetite for life's sensuality; his fascination with the crippled symmetries of central Asian rugs; the fact that there is loud music in his output, as in parts of the 1979 *String Quartet* and the sheer blinding dazzle of his last orchestral piece, *Coptic Light*, a vision of "what aspects of music since Monteverdi might determine its atmosphere if heard 2,000 years from now" – and, at about half an hour long, it's a good place to start your Feldman journey.

1) *Second String Quartet* (1983) - has an almost legendary reputation among Feldman's late works. Played without cuts and with all of Feldman's repeats, the work can last anywhere from five to six hours. The Kronos Quartet played excerpts of the work in concert, but balked at doing the entire score as written, feeling that it was more effort than they could sustain in performance. So the work has remained unheard but not untalked about since it was composed in the 80's. The *String Quartet* is a monumental work. The score is only 127 pages

long and layed out in Feldman's "gride style." Measures are laid out in nine sections on each page, regardless of time signature or number of notes in the measure. And yet, with repeats and at the speed Feldman requires the piece extends out almost infinitely. The language is one of minimalist repetition, but never simple minded repetition. The first hour functions as an exposition, with a great variety of events in succession - events appear and disappear without fanfare. Some fade without ever reappearing and others come back hours into the piece, like ghost of themselves. In this way, Feldman explores the nature of memory as fully as Proust. Gradually, as the work progresses the dynamic range narrows to the very soft and the latent tension of the opening unravels over the last two hours until the whole piece comes to a lovely conclusion.

2) *For Philip Guston* (1984) - Feldman and Philip Guston were best friends until 1970, when the painter's sudden switch back from abstract expressionism to representational painting appalled the composer so much that the two men remained estranged until Guston's death 10 years later. In 1984, Feldman composed this memorial work, one of the longest of his serenely expansive late scores. This immaculately committed performance lasts almost four and a half hours and shows how *For Philip Guston*, a trio for flutes, tuned percussion, and piano and celesta, defines the whole essence of what Feldman's late music was about. Listening to it is to become immersed in a unique musical world, one built from the simplest of four-note motifs (C, G, A flat, E flat, an anagram of Cage, the composer who introduced Guston and Feldman in 1950), in which the smallest detail or change of emphasis assumes huge, expressive significance. Every so often the original motif returns, but each time its significance has shifted, because of a new context and the experience of what has happened since it was last heard. In that way Feldman maps his way around this unique, fragile musical space. It's the most extraordinary journey.

3) *Piano and String Quartet* (1985) - Reviewing recordings of Feldman's late works is never easy. With works that are often more than an hour long – some four, even six hours – it's hard to judge the overall character of a performance or recording and especially hard to compare recordings by different artists. This is the first of Feldman's long works and, as such, bears the characteristics that he would develop in later works, notably those for keyboard (For *Bunita Marcus*, *Triadic Memories*), ensemble (*For Philip Guston*, *Crippled Symmetry*), or for other groups of instruments. These works generally feature short melodic motives that breathe; they come and go, they repeat in different ways as they vary; they return at various points of the work, in different rhythms, different tonalities. Much of this music is dissonant, but a relaxing dissonance; it comes as intervals and chords, in brief passages, rather than in an Ivesian onslaught. This string quartet fascinates, in part because it is perpetually asking questions. Rather than following a path that leads to a clear musical discourse, it constantly suggests potential music, sometimes following up on those suggestions, sometimes quickly aborting after a brief phrase and moving on to something new. The work begins with a few brief chords that sound like breaths, one slightly dissonant, the next with an added layer of dissonance and the following chords moving away from and back toward that dissonance; and the work ends with some sustained notes that suggest that the questions haven't been answered, but that it's

the journey that counts, not the result. Listening to *String Quartet No 1*– and to other pieces by Feldman – raises one problem: that of volume. It seems that this score is marked ppp and ppppp, but how does a listener know what volume this should be? If you're listening to, say, a Haydn or Schubert string quartet, you can adjust the volume to an approximate level, based on your listening comfort. But with Feldman's quiet works, there's no way to know exactly how to listen. If you're listening on headphones, you can turn the volume down a great deal, but on speakers it's a bit more difficult to find the correct level. This makes me think of recordings of the clavichord; this quiet instrument can be heard easily by a performer, but if you're more than a few feet away, it's hard to hear the notes. Should one set the volume to hear everything, or should the listener allow some of the music to stay in the background?

4) *For Bunita Marcus* (1985) - This bespoke piece was written towards the end of Feldman's life and its quiet, contemplative mood certainly feels autumnal. There is a sense of "What if?" about it; I imagine Feldman thinking about possibilities and might have beens as this piece unfolds. Each strike of the keys is a variant of previous motifs in the piece, like a musical multiverse being played out on a piano. The sustain pedal on the piano is kept firmly down during this piece and this prevents the piece from becoming totally silent between attacks, allowing these alternate universes to bleed into each other (and also adding wonderful dissonances to emerge beneath the surface of the music). As the piece progresses, permutations and variations explore the different paths that the music could take. More often than not, the music is sombre but from time to time there are bursts of energy which stand out like fireworks in the dark. The subtle variations bring to mind the works of Erik Satie. *For Bunita Marcus* echoes Satie's idea of furniture music; music that functions both as music and as audio wallpaper. As so much of Feldman's piece is so similar, it is easy to switch off and then start paying attention again sometime later without feeling like much was missed. This is not to say that the music is ignorable but more that it blends in seamlessly with the environment.

5) *Coptic Light* (1986) - Listening to Feldman's *Coptic Light* is a powerful undertaking; it's a composition fraught with tension, where wafts of orchestral sound fade in and out with a glacial pace (and power). *Piano and Orchestra* and *Cello and Orchestra* are similar works from the contemporary music master--atmospheric (but with plenty of turbulence) and quiet numbers--that are too complex to be considered ambient, yet too minimalist ever to be mistaken as traditional. Truth be told, Feldman was far more interested in sonic verticality and the perfect cluster of instrument sounds than harmony or rhythm. It's no wonder his music is more often compared to the work of his modern visual-art friends (Mark Rothko, Philip Guston) than his musical ones (Cage, Christian Wolff). Whatever the case, these three shorter pieces (some of Feldman's works can stretch into hours) are glorious sonic landscapes of mystery and light.

- **Jazz-influenced classical composition**

  Composers have been using elements of vernacular music for centuries; composers such as Bach, Mozart, Haydn and Beethoven often used the popular tunes of their day. In the early 20th century, a number of prominene European and American composers became intensely interested in Jazz and

Ragtime and wrote works attempting a fusion between Jazz and classical. Maurice Ravel, Igor Stravinsky, Darius Milhaud and Ernst Krenek are among the most notable and America's own George Gershwin, Aaron Copland, Leonard Bernstein, and Gunther Schuller also came under the influence of the Jazz tradition.

Stravinsky wrote a kind of Ragtime piece before he had even visited America and Ravel and Milhaud spent time in Harlem Jazz clubs soaking in and absorbing the influence of Jazz. You can hear Jazz inflections in Ravels's "Piano concerto in G" and Milhaud's ballet score "La Creation Du Monde," for clarinet and instrumental ensemble. And of course, Gershwin's "Rhapsody in Blue" is world famous and was premiered by the once famous Jazz musician Paul Whiteman and his band. Aaron Copeland's piano concerto is also Jazz-influenced and Leonard Bernstein wrote a work with the curious title "Prelude Fugue and Riffs," a title which sounds like a Bach work combined with Jazz as in the famous preludes and fugues of the "Well Tempered Clavier." The Austrian composer Ernst Krenek (1900-1991), although he later adapted the austere 12 tone idiom, as a young man in his 20's wrote a once popular Jazz-influenced opera called "Jonny Spielt Auf" (Jonny Strikes Up) about an African-American Jazz musician living and working in Europe called Jonny who gets involved with the theft of a precious violin and all manner of intrigues. It ends with Jonny, on top of a globe on stage, celebrating the triumph of Jazz taking over Europe. This Jazz opera was all the rage in Europe in the 20s until the Nazis took over and banned it as "degenerate music." It was even performed at the Metropolitan Opera. But it fell out of favor until recent revivals and was recorded in the 90s as part of Decca record's fascinating project to record the "degenerate music" banned by the Nazis.

Many prominent Jazz musicians have also been interested in the tradition of European classical music such as Miles Davis, Bill Evans and others. Duke Ellington was very interested in classical music and knew a great deal about it.

- **Late/ Post-Romantic style**
  The expressions "**Late-Romantic**" and "**Post-Romantic**" are relatively recent constructs used to delineate the later and/or "declining" phases of the Romantic period (after 1850). By the mid-19th century, the **Romantic** impulses of subjective expression and organic unity had become fully internalized by most composers, leading to more pronounced applications of both. The ultimate personification of these **Late-Romantic** trends is surely Richard Wagner, whose operas and "Music Dramas" are largely defined by intense emotional expression, elaborate structural unity, and vast artistic scope - embodied in his term, *Gesamskunstwerk* (total or integrated artwork). As in earlier decades of the century, the realm of harmony formed a principal means of expanding expressive power; in the works of Wagner, Brahms, Anton Bruckner, Pyotr Tchaikovsky, Giuseppe Verdi, and others, the diatonic (simple) harmony of the Classical era was increasingly replaced by a chromatic (sophisticated) approach, eventually undermining the very integrity of Tonality - the harmonic language that had reigned since the late Baroque. Another dynamic trend of the period was the rise of musical **Nationalism**, where composers from countries outside the central nexus of Western music (Germany, Austria, France, Italy, and England) strove to explore and celebrate the folk traditions of their native lands within an art context - such as Edvard Grieg (Norway), Antonín

Dvorák and Bedrich Smetana (Czechoslovakia), Jean Sibelius (Finland), Mikhail Glinka, Nicolay Rimsky-Korsakov, and Alexander Borodin (Russia), etc. - which in turned help to expand the overall musical language of the time, harmonically as well as rhythmically and in orchestration. By the closing decades of the 19th century, the developments noted above began to stretch to an extreme or "mannered" extend, as heard in the lengthy symphonies and orchestral works (tone poems, etc.) of Wagner's "successors," Gustav Mahler and Richard Strauss, as well as in vocal and instrumental works of other so-called "**Post-Romantics**," such as Alexander Scriabin, Sergey Rachmaninov, Giacomo Puccini, and Modest Mussorgsky - leading in many ways to a crisis of sorts, and thus to the kinds of experiments that defined the coming **Impressionist** and **Modern** eras.

An example of the development of the late Remanitic/Nationalism is the music of Spain. Spanish music is a melting pot of styles and genres. Nostalgic, intoxicating, with jagged chords and lightning-fast gypsy rhythms, it's not hard to see how the traditional songs and dances of Spain inspired the composers. Spain was also ruled by Moors for 7 centuries, and this injected a deep Arabic influence in Spanish culture and art that lasts even today. It's worth noting that Spanish classical music is dominated by chamber instruments. Apart from the piano, the most prominent chamber instrument for these composers is of course the acoustic nylon-stringed guitar. Capable of quiet, sweet songs, rowdy dances, and everything in between, the "Spanish" classical guitar repertoire is infused with the rhythms, dust, and sweat of all Spain's regions.

Here are some of the greatest spanish composers, those who defined and refined their country's musical style. They all come from the late Romantic period, when nationalist music was growing in popularity.

Francisco Tarrega (1852 - 1909). The legend goes that Tarrega's father was a flamenco performer, and young Francisco would unsuccessfully attempt to imitate the beautiful sounds on his father's guitar. The guitar at the time was seen as more of an accompaniment for singers rather than a proper instrument. Tarrega's father forced him to study piano as well since that was the popular instrument of the era. The young musician ran away from home 3 times growing up, each time trying to make it on his own as a musician. But his father always caught up with him and dragged him home. At one point Tarrega even joined a band of gypsies.

He studied guitar in Madrid, and ended up teaching the instrument. Before long he was touring Spain performing on the guitar, his repertory including a few pieces he composed himself. He even transcribed the works of past master composers such as Beethoven and Chopin into guitar versions. Tarrega continued touring across Spain and composing right up his death.

A guitar super-virtuoso, he generated more interest in the guitar in general, as well as developing new sounds and playing techniques. Like Albeniz, he tried to blend Romantic-era musical ideals with Spanish folk melodies and rhythms. This Spanish composer's most famous works are *Lagrima* and *Recuerdos de la Alhambra*, a fascinatingly complex guitar piece which paints a picture of the magical Alhambra palace.

Isaac Albeniz (1860 - 1909). The great nationalist spanish composer, one of Spain's musical treasures. A famous and respected concert performer, his compositions shaped the future of Spanish music. Isaac Albeniz learned piano at a very early age and performed in public as a child prodigy. He toured Spain with his father at the age of 9. The composer studied in Leipzig and Brussels in his later teen years.

Albeniz flourished after he moved to Madrid, gaining a reputation as a virtuoso pianist and teacher of the highest calibre. His performances were so dazzling that he was ranked with the most extraordinary pianists of the century. In the early 1890s he toured Europe, but at the close of the century he began to suffer from a kidney disease. He stopped performing and began composing again, completing his last masterwork (Iberia) the year before he died.

Isaac Albeniz's work was inspired by Spanish folk music, especially from Andalusia in the south. The composer himself thought that his music was straightforward and vivacious, but lacked depth. But his pieces capture the spirit of Spain: sun, life, and joy. He injected exotic chords and gypsy rhythms into his pieces, and was so prominent that he inspired other Spanish composers to take up the pen. His most famous works are the *Spanish Suite*, 8 piano works imbued with the character and flavor of various Spanish cities which have found great popularity as transcribed guitar pieces. He is also known for *Iberia*, a suite of 12 piano pieces.

Enrique Granados (1867 - 1916). Was the son of an army officer. Granados began studying piano at a very early age. He was taught by a teacher of the Paris Conservatoire, and eventually moved to Paris at the age of 20. In the two years he spent in Paris he befriended the what would become France's greatest musical minds: Ravel, Debussy, Faure, Saint-Saens, and many others. He was the first person to perform Grieg's piano concerto in Spain, and in 1901 set up his own music academy.

His piano playing was so distinctive, that his school was dedicated to teaching pupils to play piano in the delicate, richly-toned style Granados himself was famed for. He was even one of Isaac Albeniz's teachers. Granados died tragically when the ship he and his wife were on was torpedoed whilst crossing the English Channel during World War I. He saw his wife drowning and jumped in the sea to save her, despite having a phobia of water.

His compositions are mostly poetical piano works, full of life and emotion. This Spanish composer's most famous pieces are his set of 6 piano pieces, the *Goyescas*, which were inspired by the Spanish painter Goya's art. Other popular pieces Granados composed include the *12 Spanish Dances* and 7 *Poetic Waltzes*.

Manuel De Falla (1876 - 1946). Was the quintessential Andalusian. He ranks as one of the most important Spanish composers of all time. He was inspired during his teen years by a performance of Edvard Grieg's music. He later recalled that it was at this moment that he felt his path in life was music. He studied piano in Madrid, and won first prize in the piano competition at his school in 1899. He had already begun composing small works for chamber instruments and voices, and even a one-act opera.

He moved to Paris in 1907 and met Ravel, Debussy, and Paul Dukas. The King of Spain gave him a grant which allowed him to stay and compose in Paris until the outbreak of WWI, when he moved back to Madrid. Later, de Falla moved to the Andalusian city of Granada and remained there for a good chunk of his life. The city was filled with other Spanish artists and poets of the day, as well as the magic of the Alhambra palace. This environment surely helped the great Spanish composer's music. His most famous pieces are *Nights in the Gardens of Spain*, a piano/orchestral night painting, the ballet *El amor brujo* ("Love the Magician"), and the *Ritual Fire Dance*.

Joaquin Rodrigo (1901 - 1999). The 20th Century Spanish maestro Joaquin Rodrigo lost most of his vision at a very young age, but this only allowed his hearing to flourish. He began studying piano and violin at aged 8, and eventually studied in Valencia and later under Paul Dukas in Paris.

His music was first published in 1940, when he was relatively old. But this was just the beginning of a fabulous, highly successful career. After WWII, Rodrigo became a professor of music history in Madrid. But the success of his first major work, Concierto de Aranjuez, lead to him being flooded with requests from famous soloists.

He was showered with awards from Spain, and even raised to the Spanish nobility. His greatest legacy is raising the Spanish guitar to the status of concert instrument, making it respected enough to be allowed to perform with full orchestra. Rodrigo's most famous work is the *Concierto de Aranjuez*, a popular concerto for guitar and orchestra. Other famous pieces include *Fantasia para un Gentilhombre* and the cello concerto *Concierto como un divertimento*.

- **Les Six**
  Les Six (pronounced: [le sis]) is a name given to a group of six French composers who worked on the left bank ov the Seine in Paris. The name, inspired by Mily Balakirev's *The Five*, originates in critic Henri Collet's 1920 article "Les cinq Russes, les six Français et M. Satie." Their music is often seen as a reaction against both the musical style of Richard Wagner and the impressionist music of Claude Debussy and Maurice Ravel.

  The members were:
  - Louis Durey (1888–1979)
  - Arthur Honegger (1892–1955)
  - Darius Milhaud (1892–1974)
  - Germaine Tailleferre (1892–1983)
  - Francis Poulenc (1899–1963)
  - Georges Auric (1899–1983)

  An antipathy towards Romanticism was very much a badge of honor among progressive European artists at the end of World War I. In Paris, it found one of its most articulate champions in the artistic and brilliant self-publicizer, Jean Cocteau (a French writer and playwright), who in 1917 achieved a certain notoriety when he devised the scenario for Parade, a bizarre ballet performed by the Ballet Russe with music by Erik Satie and Cubist costumes by Picasso. The next year Cocteau followed this up with a pamphlet on new music, Le coq et l'arlequin, which rejected both

the influence of German music and the impressionisms of Debussy and Ravel, and advocated instead a French music that took its inspiration from the circus, the music hall and jazz band. Satie – the exemplary figure for Cocteau – was already a mentor for a group of young musician who sometimes gave concerts with him as "Les nouveaux jeunes." In 1920 they were dubbed "Les Six" in an article by critic and composer Henri Collet.

The Six functioned only briefly as anything like a coherent group, and worked on only two collective projects. The first, L'Album des Six (1920), was a collection of piano miniatures lasting just over ten minutes; the second was a light –hearted dance work, Les Maries de la Tour Eiffel (The Eiffel Tower Newlyweds). Premiered in June 1921 at the Theatre des Champs-Elyse's, Les Maries caused a critical uproar. But thereafter, Les Six went their separate ways. In truth they were united mostly by friendship and their musical differences had always been as marked as their similarities. Cocteau continued to work with several of the group, writing libretti for Milhaud's chamber opera Le pauvre matelot and Honegger's one act opera Antigone, both of which were premiered in December 1927. Arguably, Coctueu's most fruitful collaboration was with Stravinsky (not a big fan of Les Six – for whom he provided a text (in French but then translated into Latin) for the opera-oratorio Oedipus Rex (1927), one of the great masterpieces of early 20th century music.

Although the group did not exist in order to work on compositions collaboratively, there were five occasions spread over 32 years on which at least some members of the group did work together on a piece. On only one of these occasions was the entire Groupe des Six involved; in some others, composers from outside the group also participated. Auric and Poulenc were involved in all five of these collaborations, Milhaud in four, Honegger and Tailleferre in three, but Durey in only one.

- *L'Album des Six*

  In 1920 the group published an album of piano pieces together, known as *L'Album des Six*. This was the only work in which all six composers collaborated.

  1. *Prélude* (1919) – Auric
  2. *Romance sans paroles*, Op. 21 (1919) – Durey
  3. *Sarabande*, H 26 (1920) – Honegger
  4. *Mazurka* (1914) – Milhaud
  5. *Valse in C*, FP 17 (1919) – Poulenc
  6. *Pastorale, Enjoué* (1919) – Tailleferre

- *Les mariés de la tour Eiffel*

  In 1921, five of the members jointly composed the music for Cocteau's ballet *Les mariés de la tour Eiffel*, which was produced by the Ballets suédois, the rival to the Ballet Russes. Cocteau had originally proposed the project to Auric, but as Auric did not finish rapidly enough to fit into the rehearsal schedule, he then divided the work up among the other members of Les Six. Durey, who was not in Paris at the time, chose not to participate. The première was the occasion of a public scandal rivaling that of *Le sacre du printemps* in 1913. In spite of this, *Les mariés de la tour Eiffel* was in the repertoire of the Ballets suédois throughout the 1920s.

- *L'éventail de Jeanne*

In 1927, Auric, Milhaud and Poulenc, along with seven other composers who were not part of Les Six, jointly composed the children's ballet *L'éventail de Jeanne*.

- *Mouvements du coeur*
  In 1949, Auric, Milhaud and Poulenc, along with three other composers, jointly wrote *Mouvements du coeur: Un hommage à la mémoire de Frédéric Chopin, 1849–1949*, a suite of songs for baritone or bass and piano on words of Louise Lévêque de Vilmorin in commemoration of the centenary of the death of Frédéric Chopin. The other composers who contributed to the suite were Jean Françaix, Léo Preger and Henri Sauguet.
- *La guirlande de Campra*
  In 1952, Auric, Honegger, Poulenc, Tailleferre and three other composers collaborated on an orchestral work called *La guirlande de Campra*.

Éric Satie (17 May 1866 – 1 July 1925) – was a French composer and pianist. Satie was a colourful figure in the early 20th century Parisian avant-garde. His work was a precursor to later artistic movements such as minimalism, repetitive music, and the Theatre of the Absurd. Satie was largely unstinting in his support of young musicians, most notabley the group known as Les Six, two of whom – Poulenc and Milhaud – saw in his independence of traditional musical models a position to emulate. An eccentric, Satie was introduced as a "gymnopedist" in 1887, shortly before writing his most famous compositions, the Gymnopédies. Later, he also referred to himself as a "phonometrician" (meaning "someone who measures sounds") preferring this designation to that of a "musician," after having been called "a clumsy but subtle technician" in a book on contemporary French composers published in 1911. In addition to his body of music, Satie also left a remarkable set of writings, having contributed work for a range of publications, from the dadaist 391 to the American culture chronicle Vanity Fair. Although in later life he prided himself on always publishing his work under his own name, in the late 19th century he appears to have used pseudonyms such as Virginie Lebeau and François de Paule in some of his published writings.

Satie was the son of Alfred Satie and his wife Jane Leslie (née Anton), who was born in London to Scottish parents. Erik was born at Honfleur in Normandy; his home there is open to the public. When Satie was four years old, his family moved to Paris, his father having been offered a translator's job in the capital. In 1879 Satie entered the Paris Conservatoire, where he was soon labelled untalented by his teachers and, as a result, resolved to take up military service a year later.

Though Satie is dismissed in some quarters as an eccentric lightweight, he was one of the most influential figures in 20th century music. Ravel never tired of paying tribute to a man he called simply “ther precursor” and the young Debussy was encouraged by Satie to bake a final break form Wagnerism. Essentially a solidary figure, eking out a living as a pianist in the cafes of Paris, Satie became famed among the cognoscenti of Paris chiefly for his querky piano pieces. Compositioms such as *Pieces to Make You Run Away*, *True Flabby Preludes* and *Bureaucratic Sonata*, make Satie a forrunner of Dada and Surrealism. From the mid-1910s, Satie was championed as the supreme anti-Romantic by the arch trend-setter Jean Cocteau with whom he collaborated on a ballet. Sadly, just as his star was really on the rise his health began to fail him, due on no small part to his strong drinking. Satie’s legacy was profound. The timeless, directionless quality of his music was an

important influence on John Cage; his idea of musique d'ameublemetn (furniture music) anticipated Muzak by som fifty years; while simplicity and repetition of much of his work provided miminmalism with an inspiriong historical precedent.

From 1919, Satie was in contact with Tristan Tzara, the initiator of the Dada movement. He became acquainted with other artists involved in the movement, such as Francis Picabia (later to become a Surrealist), André Derain, Marcel Duchamp, Jean Hugo and Man Ray, among others. Satie contributed writing to the Dadaist publication *391*.

1) Throis Gymnopedies (1888)

2) Gnossiennes (1890)

Arthur Honegger (10 March 1892 – 27 November 1955) was a Swiss composer, who was born in France and lived a large part of his life in Paris. His most frequently performed work is probably the orchestral work *Pacific 231*, which was inspired by the sound of a steam locomotive. After studying for two years at the Zurich Conservatory, he enrolled in the Paris Conservatoire from 1911 to 1918. Honegger had always remained in touch with Switzerland, his parents' country of origin, but with the outbreak of the war and the invasion of the Nazis, he found himself unable to leave Paris. He joined the French Resistance and was generally unaffected by the Nazis themselves, who allowed him to continue his work without too much interference. However, he was greatly depressed by the war. Between its outbreak and his death, he wrote his last four symphonies (numbers two to five) which are among the most powerful symphonic works of the 20th century. Of these, the second, for strings, featuring a solo trumpet which plays a chorale tune by Johann Sebastian Bach in the final movement, and the third, subtitled *Symphonie Liturgique* with its three movements evoking the Requiem Mass (*Dies Irae*, *De profundis clamavi* and *Dona nobis pacem*), are probably the best known. Written in 1946 just after the end of the war, it has parallels with Benjamin Britten's *Sinfonia da Requiem* of 1940. In complete contrast with this work is the lyrical, nostalgic Symphony No. 4, subtitled "Deliciae Basilienses" ("The Delights of Basel") and written as a tribute to days of relaxation spent in that Swiss city during the war. Honegger was widely known as a train enthusiast, and once notably said: "I have always loved locomotives passionately. For me they are living creatures and I love them as others love women or horses." His "mouvement symphonique" *Pacific 231* (a depiction of a steam locomotive) gained him early notoriety in 1923.

The principal elements of Honegger's style are: Bachian counterpoint, driving rhythms, melodic amplitude, highly coloristic harmonies, an impressionistic use of orchestral sonorities, and a concern for formal architecture. His style is weightier and more solemn than that of his colleagues in Les Six. Far from reacting against German romanticism as the other members of Les Six did, Honegger's mature works show evidence of a distinct influence by it. Despite the differences in their styles, he and fellow Les Six member Darius Milhaud were close friends, having studied together at the Paris Conservatoire. Milhaud dedicated his fourth string quintet to Honegger's memory, while Francis Poulenc similarly dedicated his Clarinet Sonata.

Darius Milhaud (4 September 1892 – 22 June 1974) was a French composer and teacher. He was one of the most prolific composers of the 20th century. His compositions are influenced by jazz and make use of polytonality. Darius Milhaud is to be counted among the modernist composers. Born in Marseilles to a Jewish family from Aix-en-Provence, Milhaud began as a violinist, later turning to composition instead. Milhaud studied in Paris at the Paris Conservatory where he met his fellow group members Arthur Honegger and Germaine Tailleferre. Milhaud composed works influenced by the Brazilian popular music he had heard, including compositions of Brazilian pianist and composer Ernesto Nazareth. *Le bœuf sur le toit* includes melodies by Nazareth and other popular Brazilian composers of the time, and evokes the sounds of Carnaval. The recurring theme is, in fact, a Carnaval tune by the name of "The Bull on the Roof" (in Portuguese which he translated to French 'Le boeuf sur le toit', known in English as 'The Ox on the Roof'). He also produced Saudades do Brasil, a suite of twelve dances evoking twelve neighborhoods in Rio. Shortly after the original piano version appeared, he orchestrated the suite. On a trip to the United States in 1922, Darius Milhaud heard "authentic" jazz for the first time, on the streets of Harlem, which left a great impact on his musical outlook. The following year, he completed his composition *La création du monde* (The Creation of the World), using ideas and idioms from jazz, cast as a ballet in six continuous dance scenes.

The rise of Nazism forced the Milhauds to leave France in 1940 and emigrate to the United States (his Jewish background made it impossible for Milhaud to return to his native country until after its liberation). He secured a teaching post at Mills College in Oakland, California, where he composed the opera *Bolivar* (1943) and collaborated with Henri Temianka and the *Paganini Quartet*. Jazz pianist Dave Brubeck became one of Milhaud's most famous students when Brubeck furthered his music studies at Mills College in the late 1940s. In a February 2010 interview with Jazzwax, Brubeck said he attended Mills, a women's college (men were allowed in graduate programs), specifically to study with Milhaud, saying, "Milhaud was an enormously gifted classical composer and teacher who loved jazz and incorporated it into his work. Brubeck named his first son Darius. Milhaud's former students also include popular songwriter Burt Bacharach. Milhaud told Bacharach, "Don't be afraid of writing something people can remember and whistle. Don't ever feel discomfited by a melody".

Milhaud (like his contemporaries Hindemith, Malipiero, Hovhaness, Martinů and Villa-Lobos) was an extremely rapid creator, for whom the art of writing music seemed almost as natural as breathing. His most popular works include *Le bœuf sur le toit* (a ballet which lent its name to the legendary cabaret frequented by Milhaud and other members of Les Six), *La création du monde* (a ballet for small orchestra with solo saxophone, influenced by jazz), *Scaramouche* (for saxophone and piano, also for two pianos), and *Saudades do Brasil* (dance suite).

Francis Poulenc (7 January 1899 – 30 January 1963) was a French composer and pianist. His compositions include *mélodies*, solo piano works, chamber music, choral pieces, operas, ballets, and orchestral concert music. Among the best-known are the piano suite *Trois mouvements perpétuels* (1919), the ballet *Les biches* (1923), the *Concert champêtre* (1928) for harpsichord and orchestra, the opera *Dialogues des Carmélites* (1957), and the *Gloria* (1959) for soprano, choir and orchestra.

His wealthy family intended Poulenc for a business career and did not allow him to enrol at a music college. Largely self-educated musically, Poulenc came under the influence of Erik Satie, under whose tutelage he became one of *Les Six*. In his early works Poulenc became known for his high spirits and irreverence. During the 1930s a much more serious side to his nature emerged, particularly in the religious music he composed from 1936 onwards, which he alternated with his more light-hearted works. In addition to composing, Poulenc was an accomplished pianist.

In 1917 Poulenc got to know Ravel well enough to have serious discussions with him about music. He was dismayed by Ravel's judgments, which exalted composers whom Poulenc thought little of above those he greatly admired. He told Satie of this unhappy encounter; Satie replied with a dismissive epithet for Ravel who, he said, talked "a load of rubbish". For many years Poulenc was equivocal about Ravel's music, though always respecting him as a man. Ravel's modesty about his own music particularly appealed to Poulenc, who sought throughout his life to follow Ravel's example.

From January 1918 to January 1921 Poulenc was a conscript in the French army in the last months of the First World War and the immediate post-war period. Between July and October 1918 he served at the Franco-German front, after which he was given a series of auxiliary posts, ending as a typist at the Ministry of Aviation. His duties allowed him time for composition; the *Trois mouvements perpétuels* for piano and the Sonata for Piano Duet were written at the piano of the local elementary school at Saint-Martin-sur-le-Pré, and he completed his first song cycle, *Le bestiaire*, setting poems by Apollinaire. The sonata did not create a deep public impression, but the song cycle made the composer's name known in France, and the *Trois mouvements perpétuels* rapidly became an international success. The exigencies of music-making in wartime taught Poulenc much about writing for whatever instruments were available; then, and later, some of his works were for unusual combinations of players.

Cocteau, though similar in age to *Les Six*, was something of a father-figure to the group. His literary style, "paradoxical and lapidary" in Henri Hell's phrase, was anti-romantic, concise and irreverent. It greatly appealed to Poulenc, who made his first setting of Cocteau's words in 1919 and his last in 1961.

For most of the war, Poulenc was in Paris, giving recitals with Bernac, concentrating on French songs. Under Nazi rule he was in a vulnerable position, as a known homosexual (Destouches narrowly avoided arrest and deportation), but in his music he made many gestures of defiance of the Germans. He set to music verses by poets prominent in the French resistance, including Aragon and Éluard. In *Les Animaux modèles*, premiered at the Opéra in 1942, he included the tune, repeated several times, of the anti-German song "Vous n'aurez pas l'Alsace et la Lorraine". He was a founder-member of the Front National (pour musique) which the Nazi authorities viewed with suspicion for its association with banned musicians such as Milhaud and Paul Hindemith.

Poulenc's music is essentially diatonic. In Henri Hell's view, this is because the main feature of Poulenc's musical art is his melodic gift. In the words of Roger Nichols in the *Grove* dictionary, "For [Poulenc] the most important element of all was melody and he found his way to a vast treasury of

undiscovered tunes within an area that had, according to the most up-to-date musical maps, been surveyed, worked and exhausted."

Poulenc said that he was not inventive in his harmonic language. The composer Lennox Berkeley wrote of him, "All through his life, he was content to use conventional harmony, but his use of it was so individual, so immediately recognizable as his own, that it gave his music freshness and validity."

Poulenc's principal works for large orchestra comprise two ballets, a *Sinfonietta* and four keyboard concertos. The first of the ballets, *Les biches*, was first performed in 1924 and remains one of his best-known works. Nichols writes in *Grove* that the clear and tuneful score has no deep, or even shallow, symbolism, a fact "accentuated by a tiny passage of mock-Wagnerian brass, complete with emotive minor 9ths". The first two of the four concertos are in Poulenc's light-hearted vein. The *Concert champêtre* for harpsichord and orchestra (1927–28), evokes the countryside seen from a Parisian point of view: Nichols comments that the fanfares in the last movement bring to mind the bugles in the barracks of Vincennes in the Paris suburbs. The Concerto for two pianos and orchestra (1932) is similarly a work intended purely to entertain. It draws on a variety of stylistic sources: the first movement ends in a manner reminiscent of Balinese gamelan, and the slow movement begins in a Mozartian style, which Poulenc gradually fills out with his own characteristic personal touches. The Organ Concerto (1938) is in a much more serious vein. Poulenc said that it was "on the outskirts" of his religious music, and there are passages that draw on the church music of Bach, though there are also interludes in breezy popular style. The second ballet score, *Les Animaux modèles* (1941), has never equalled the popularity of *Les biches*, though both Auric and Honegger praised the composer's harmonic flair and resourceful orchestration. Honegger wrote, "The influences that have worked on him, Chabrier, Satie, Stravinsky, are now completely assimilated. Listening to his music you think – it's Poulenc." The *Sinfonietta* (1947) is a reversion to Poulenc's pre-war frivolity. He came to feel, "I dressed too young for my age ... [it] is a new version of *Les biches* but young girls [*biches*] that are forty-eight years old – that's horrible!" The Concerto for piano and orchestra (1949) initially caused some disappointment: many felt that it was not an advance on Poulenc's pre-war music, a view he came to share. The piece has been revalued in more recent years, and in 1996 the writer Claire Delamarche rated it as the composer's finest concertante work.

Poulenc, a highly accomplished pianist, usually composed at the piano and wrote many pieces for the instrument throughout his career. In Henri Hell's view, Poulenc's piano writing can be divided into the percussive and the gentler style reminiscent of the harpsichord. Hell considers that the finest of Poulenc's music for piano is in the accompaniments to the songs, a view shared by Poulenc himself. The vast majority of the piano works are, in the view of the writer Keith W Daniel, "what might be called 'miniatures'". Looking back at his piano music in the 1950s, the composer viewed it critically: "I tolerate the *Mouvements perpétuels*, my old *Suite en ut* [in C], and the *Trois pieces*. I like very much my two collections of Improvisations, an Intermezzo in A flat, and certain Nocturnes. I condemn *Napoli* and the *Soirées de Nazelles* without reprieve."

The pieces Poulenc found merely tolerable were all early works: *Trois mouvements perpétuels* dates from 1919, the Suite in C from 1920 and the Trois pièces from 1928. All consist of short sections, the longest being the "Hymne", the second of the three 1928 pieces, which lasts about four minutes. Of the two works their composer singled out for censure, *Napoli* (1925) is a three-movement portrait of Italy, and *Les Soirées de Nazelles* is described by the composer Geoffrey Bush as "the French equivalent of Elgar's *Enigma Variations*" – miniature character sketches of his friends. Despite Poulenc's scorn for the work, Bush judges it ingenious and witty. Among the piano music not mentioned, favourably or harshly, by Poulenc, the best known pieces include the two Novelettes (1927–28), the set of six miniatures for children, *Villageoises* (1933), a piano version of the seven-movement *Suite française* (1935), and *L'embarquement pour Cythère* for two pianos (1953).

In *Grove*, Nichols divides the chamber works into three clearly differentiated periods. The first four sonatas come from the early group, all written before Poulenc was twenty-two. They are for two clarinets (1918), piano duo (1918), clarinet and bassoon (1922) and horn, trumpet and trombone (1922). They are early examples of Poulenc's many and varied influences, with echoes of rococo *divertissements* alongside unconventional harmonies, some influenced by jazz. All four are characterised by their brevity – less than ten minutes each – their mischievousness and their wit, which Nichols describes as acid. Other chamber works from this period are the *Rapsodie nègre* from 1917 (mainly instrumental, with brief vocal episodes) and the Trio for Oboe, Bassoon and Piano (1926).

The chamber works of Poulenc's middle period were written in the 1930s and 40s. The best known is the Sextet for Piano and Wind (1932), in Poulenc's light-hearted vein, consisting of two lively outer movements and a central *divertimento*; this was one of several chamber works that the composer became dissatisfied with and revised extensively some years after their first performance (in this case in 1939–40). The sonatas in this group are for violin and piano (1942–43) and for cello and piano (1948). Writing for strings did not come easily to Poulenc; these sonatas were completed after two unsuccessful earlier attempts, and in 1947 he destroyed the draft of a string quartet. Both sonatas are predominantly grave in character; that for violin is dedicated to the memory of Federico García Lorca. Commentators including Hell, Schmidt and Poulenc himself have regarded it, and to some extent the cello sonata, as less effective than those for wind. The *Aubade*, "Concerto choréographique" for piano and 18 instruments (1930) achieves an almost orchestral effect, despite its modest number of players. The other chamber works from this period are arrangements for small ensembles of two works in Poulenc's lightest vein, the *Suite française* (1935) and the *Trois mouvements perpétuels* (1946).

The final three sonatas are for woodwind and piano: for flute (1956–57), clarinet (1962), and oboe (1962). They have, according to *Grove*, become fixtures in their repertoires because of "their technical expertise and of their profound beauty". The *Elégie* for horn and piano (1957) was composed in memory of the horn player Dennis Brain. It contains one of Poulenc's rare excursions into dodecaphony, with the brief employment of a twelve-note tone row.

Poulenc composed songs throughout his career, and his output in the genre is extensive. In Johnson's view, most of the finest were written in the 1930s and 40s. Though widely varied in character, the songs are dominated by Poulenc's preference for certain poets. From the outset of his career he favoured verses by Guillaume Apollinaire, and from the mid-1930s the writer whose work he set most often was Paul Éluard.

In an overview of the songs in 1973, the musical scholar Yvonne Gouverné said, "With Poulenc, the melodic line matches the text so well that it seems in some way to complete it, thanks to the gift which the music has for penetrating the very essence of a given poem; nobody has better crafted a phrase than Poulenc, highlighting the colour of the words." Among the lighter pieces, one of the composer's most popular songs is a setting of Jean Anouilh's "Les Chemins de l'Amour" (1940) as a Parisian waltz; by contrast his "monologue" "La Dame de Monte Carlo", (1961) a depiction of an elderly woman addicted to gambling, shows the composer's painful understanding of the horrors of depression.

Apart from a single early work for unaccompanied choir ("Chanson à boire", 1922), Poulenc began writing choral music in 1936. In that year he produced three works for choir: *Sept chansons* (settings of verses by Éluard and others), *Petites voix* (for children's voices), and his religious work *Litanies à la vierge noire*, for female or children's voices and organ. The Mass in G major (1937) for unaccompanied choir is described by Gouverné as having something of a baroque style, with "vitality and joyful clamour on which his faith is writ large". Poulenc's new-found religious theme continued with *Quatre motets pour un temps de pénitence* (1938–39), but among his most important choral works is the secular cantata *Figure humaine* (1943). Like the Mass, it is unaccompanied, and to succeed in performance it requires singers of the highest quality.

Poulenc's major works for choir and orchestra are the *Stabat Mater* (1950), the *Gloria* (1959–60), and *Sept répons des ténébres* (1961–62). All these works are based on liturgical texts, originally set to Gregorian chant. In the *Gloria*, Poulenc's faith expresses itself in an exuberant, joyful way, with intervals of prayerful calm and mystic feeling, and an ending of serene tranquillity. Poulenc wrote to Bernac in 1962, "I have finished Les Ténèbres. I think it is beautiful. With the Gloria and the Stabat Mater, I think I have three good religious works. May they spare me a few days in Purgatory, if I narrowly avoid going to hell." *Sept répons des ténèbres*, which Poulenc did not live to hear performed, uses a large orchestra, but, in Nichols's view, it displays a new concentration of thought. To the critic Ralph Thibodeau, the work may be considered as Poulenc's own requiem and is "the most avant-garde of his sacred compositions, the most emotionally demanding, and the most interesting musically, comparable only with his *magnum opus sacrum*, the opera, *Dialogues des Carmélites*."

Poulenc turned to opera only in the latter half of his career. Having achieved fame by his early twenties, he was in his forties before attempting his first opera. He attributed this to the need for maturity before tackling the subjects he chose to set. In 1958 he told an interviewer, "When I was 24 I was able to write *Les biches* [but] it is obvious that unless a composer of 30 has the genius of a Mozart or the precociousness of Schubert he couldn't write *The Carmelites* – the problems are too profound." In Sams's view, all three of Poulenc's operas display a depth of feeling far distant from

"the cynical stylist of the 1920s": *Les mamelles de Tirésias* (1947), despite the riotous plot, is full of nostalgia and a sense of loss. In the two avowedly serious operas, *Dialogues des Carmélites* (1957) and *La Voix humaine* (1959), in which Poulenc depicts deep human suffering, Sams sees a reflection of the composer's own struggles with depression.

In terms of musical technique the operas show how far Poulenc had come from his naïve and insecure beginnings. In all three operas Poulenc drew on earlier composers, while blending their influence into music unmistakably his own. In the printed score of *Dialogues des Carmélites* he acknowledged his debt to Mussorgsky, Monteverdi, Debussy and Verdi. The critic Renaud Machart writes that *Dialogues des Carmélites* is, with Britten's *Peter Grimes*, one of the extremely rare operas written since the Second World War to appear on opera programmes all over the world.

Even when he wrote for a large orchestra, Poulenc used the full forces sparingly in his operas, often scoring for woodwinds or brass or strings alone. With the invaluable input of Bernac he showed great skill in writing for the human voice, fitting the music to the tessitura of each character. By the time of the last of the operas, *La Voix humaine*, Poulenc felt able to give the soprano stretches of music with no orchestral accompaniment at all, though when the orchestra plays, Poulenc calls for the music to be "bathed in sensuality".

The two sides to Poulenc's musical nature caused misunderstanding during his life and have continued to do so. The composer Ned Rorem observed, "He was deeply devout and uncontrollably sensual"; this still leads some critics to underrate his seriousness. His uncompromising adherence to melody, both in his lighter and serious works, has similarly caused some to regard him as unprogressive.

- **Micropolyphony (or Polypolyphony)**
  Micropolyphony is a kind of polyphonic musical texture developed by György Ligeti and then imitated by some other twentieth-century composers, which consists of many lines of dense canons moving at different tempos or rhythms, thus resulting in tone clusters vertically. According to David Cope, "micropolyphony resembles cluster chords, but differs in its use of moving rather than static lines"; it is "a simultaneity of different lines, rhythms, and timbres". Differences between micropolyphonic texture and conventional polyphonic texture can be explained by Ligeti's own description:

  > Technically speaking I have always approached musical texture through part-writing. Both *Atmosphères* and *Lontano* have a dense canonic structure. But you cannot actually hear the polyphony, the canon. You hear a kind of impenetrable texture, something like a very densely woven cobweb. I have retained melodic lines in the process of composition, they are governed by rules as strict as Palestrina's or those of the Flemish school, but the rules of this polyphony are worked out by me. The polyphonic structure does not come through, you cannot hear it; it remains hidden in a microscopic, underwater world, to us inaudible. I call it micropolyphony (such a beautiful word!).

The earliest example of micropolyphony in Ligeti's work occurs in the second movement (mm 25–37) of his orchestral composition *Apparitions* (Steinitz 2003, 103). His next work, *Atmosphères* for orchestra, the first movement of his later *Requiem*, for soprano, mezzo-soprano, mixed choir, and orchestra, the uncompanied choral work *Lux aeterna*, and *Lontano* for orchestra, also use the technique.

György Ligeti (28 May 1923 – 12 June 2006) was a composer of contemporary classical music. He has been described as: one of the most important avant-garde composers in the latter half of the twentieth century and as: one of the most innovative and influential among progressive figures of his time. Born in Transylvania, Romania to a Hungarian Jewish family and lived in Hungary before emigrating and becoming an Austrian citizen. Ligeti rejected the serial complexities favored by contemporaries such as Stockhausen and Boulez in favor of a "micro-polyphony" (or polypolyphony) which suspends pulse and harmony. Clusters of adjacent sounds were used to achieve slow, seamless change.

His creative outlook was formed by his experiences under two dictatorships – Hitler and Stalin. Ligeti remarked of the traumatic experiences that shaped his life and artistic outlook: "I am permanently scarred; I will be overcome by revenge fantasies to the end of my days." And yet, despite his work's penchant for surreal and the grotesque, he is one of the most approachable as well as one of the most fascinating and compelling of postwar composers.

In 1940, Northern Transylvania was occupied by Hungary following the Second Vienna Award (territorial dispute between Nazi Germany and Fascist Italy). In 1944, Ligeti's education was interrupted when he was sent to a forced labor brigade by the Horthy regime (Nicholas Horthy served as Regent from WWI through WWII, during which he was allied with the Nazis). His brother, age 16, was deported to the Mauthausen concentration camp and both of his parents were sent to Auschwitz. His mother was the only other survivor of his immediate family. Following WWII, Ligeti returned to his studies in Budapest, graduating in 1949 from the Franz Liszt Academy of Music. In December 1956, two months after the Hungarian revolution was violently suppressed by the Soviet Army, Ligeti fled to Vienna and eventually took Austrian citizenship in 1968. He would not see Hungary again until he was invited to judge a competition in Budapest fourteen years later. A few weeks after arriving in Vienna, he moved to Cologne and associated with Stockhausen and the WDR electronic music studio.

Many of his very earliest works were written for chorus and included settings of folk songs. One of his earliest pieces now in the repertoire is his *Cello Sonata*, a work in two contrasting movements that were written in 1948 and 1953 respectively. It was initially banned by the Soviet-run Composer's Union and had to wait a quarter of a century before its first public performance. Upon arriving in Cologne he began to write electronic music alongside Karlheinz Stockhausen and Gottfried Michael Koenig at the electronic studio of West German Radio (WDR). He completed only two works in this medium, however—the pieces *Glissandi* (1957) and *Artikulation* (1958)—before returning to instrumental music. In the 1960s, when he composed his *Requiem* (1965), he emerged as a leading member of the international avent-guard. In 1977, Ligeti completed his only opera, *Le Grand Macabre*, thirteen years after its initial commission. Loosely based on Michel de

Ghelderode's 1934 play, *La balade du grand macabre*, it is a work of Absurd theatre—Ligeti called it an "anti-anti-opera"—in which Death (Nekrotzar) arrives in the fictional city of Breughelland and announces that the end of the world will occur at midnight. After *Le Grand Macabre*, Ligeti struggled for some time to find a new style. Besides two short pieces for harpsichord, he did not complete another major work until the *Trio for Horn, Violin and Piano* in 1982, over four years after the opera. His music of the 1980s and 1990s continued to emphasize complex mechanical rhythms, often in a less densely chromatic idiom. During this time, Ligeti also began to explore alternate tuning systems through the use of natural harmonics for horns (as in the Horn Trio and Piano Concerto of 1988) and scordatura (tuning different from standard) for strings (as in the Violin Concerto of 1990).

Ligeti's pieces are often short, even miniature, but it's as if the smallness of scale makes you aware of some gigantic vacuum around them. The whole of his opera Le grand Macabre is both a witty satire on death and a chilling apocalyptic vision. In other words, you hear reflection of the horrors that Ligeti knew and saw during his lifetime, and you also hear his coming to terms with art's essential futility in the face of all that tragedy. It is the existential tension that gives Ligeti's music its humanity.

Ligeti's principled resistance of system-for-system sake – whether Boulez's version of serialism, Cages chance, or Xenakis's stochasticism – meant that he had to find new forms, new kinds of expression. His searches and influences spread far beyond the conventional confides of western culture: the music of the Aka pygmies was one of the catalysts that unlocked the last couple of decades of his creativity, above all the rhythmic invention of the *Piano Concerto* (1988) and the Piano etudes; he was impressed by the sounds and processes of American minimalism in a way that no other avant-garde composers in Europe were; and his mind was open to the furthest reaches of contemporary mathematics. He became fascinated by the new ideas of chaos theory that Heinz-Otto Peitgen developed in the 1980s and he extrapolated some of those idea into music such as the 4th movement of the Piano Concerto a chaotic ride to the abyss of continually disrupting, self-annihilating rhythmic patterns. Ligeti's world of imagination was simultaneously an asylum, a place of refuge, and a place to process the horror of the 20th century's great geo-political nightmares though which he lived.

Ligeti's music from the last two decades of his life is unmistakable for its rhythmic complexity which the composer claimed stemed from two vastly different sources of inspiration: the Romantic-era piano music of Chopin and Schumann and the indigenous music of sub-Saharan Africa. The difference between the earlier and later pieces lies in a new conception of pulse. In the earlier works, the pulse is divided into two, three and so on. His later music—and a few earlier pieces such as *Continuum* (1968) — conceive of the pulse as a basic unit which cannot be divided. Different rhythms appear through multiplications of the basic pulse, rather than divisions: this is the principle of African music seized on by Ligeti. This treatment of pulse also appears in the music of Philip Glass, Steve Reich and other minimalists; and (significantly) it shares much in common with the additive rhythms of Balkan folk music (the music of Ligeti's youth).

Legeti's idea was to make texture as much of a driving force in musical architecture as pitch and rhythm, developing what he called a "micro-polyphony" of incredibly dense pile-ups of musical lines so that you are more aware of an ever-changing amorphous cloud of sound than the movement of individual instruments or voices. The cloudy sound-masses of his early works are typically created out of microscopic tangles of intertwining instrumental lines – a kind of musical spider's web described by the composer as "micro-polyphony." In his works of the 1960s and early 70s, the lines gradually become clearer, reintroducing a sense – albeit rather peculiar one – of melody, counterpoint and harmony, while rhythm also resurfaces.

Of the entire post-war generation who were at the forefront of the avant-garde in the 1950s and 60s, it is Legeti who is played the most. He is the 20th century composer with the most cosmic connotations in popular consciousness. Stanley Kubrick used Ligeti's music in his movies starting with 2001: A Space Odyssey and in The Shining. Ligeti's music is the sound of the alien, supernatural (passages from the Requiem) that dramatize 2001's monolith with its teeming, horrifying vastness and unearthly intensity. It also becomes the sound of Jack Nicholson's psychological dissemblage in The Shining.

1) Musica Ricercata (1953) piano cycle, is a set of eleven pieces. Although the ricercata (or ricercar) is an established contrapuntal style, Ligeti's title should probably be interpreted literally as "researched music" or "sought music." This work captures the essence of Ligeti's search to construct his own compositional style *ex nihilo* (Latin – "out of nothing"), and as such, presages many of the more radical directions Ligeti would take in the future. An important global structural feature of *Musica ricercata* is that Ligeti confines himself to only certain pitch classes in each movement, with each subsequent movement having exactly one more pitch class than the last.

2) Atmospheres (1961) is a piece for full orchestra. It is noted for eschewing conventional melody and metre in favor of dense sound textures. After *Apparitions* (1959), it was the second piece Ligeti wrote to exploit what he called a "micropolyphonic" texture. It gained further exposure after being used in Stanley Kubrick's film *2001: A Space Odyssey*. *Atmosphères* eschews conventional melody, harmony, and rhythm, in favor of "sound masses" with sliding and merging orchestral clusters that suggest timbre is the central focus of the piece. It exemplifies Ligeti's notion of "static, self-contained music without either development or traditional rhythmic configurations." Harold Kaufman has written that Ligeti's music collapses foreground and background elements of musical structure into a "magma of evolving sound". The piece heavily utilizes tone clusters of notes (meaning several consecutive notes on a scale are played) in which generally no two instruments ever play the same note. The popular music edition *All Music Guide* describes the piece as featuring "shimmering rapid vibrato, multiple high glissandi, waves of string harmonics in different meters, [and] notes moving along the same path but at different speeds". Program notes provided by Ensemble Sospeso describe *Atmosphères* as the "first major alternative to European serialism: static masses of orchestral sound that give the simultaneous sense of immobility and motion." On the other hand, a close investigation of Ligeti's relationship to the Darmstadt avant-garde concludes that *Atmosphères* should "be seen

as part of an evolution within the serial tradition and a response to problems articulated within it, rather than as a break from that tradition altogether". The sound masses in *Atmosphères* are seen particularly to conform to the serial precepts of Karlheinz Stockhausen's "statistical form", as exemplified in *Gesang der Jünglinge* (1955–56) and *Gruppen* (1955–57). The piece evokes a sense of timelessness in which the listener is lost in a web of texture and tonality. Harald Kaufmann has described it as "acoustically standing still", a stationary sound which has movement within it that is similar to breathing. The classical music edition of *All Music Guide* says the music "scarcely hints at forward movement. Rather the listener hears an all but motionless series of sound evolutions unfolding at various moments." The composer later noted that he had been preceded in the writing of "static" music by Wagner (Prelude to Das Rheingold and the Prelude to Act I of Lohengrin), Bartók (opening of The Wooden Prince), and Schoenberg ("Farben," the third in Five Pieces for Orchestra, Op. 16). But neither Bartók nor Wagner or Schoenberg ever achieved stasis through its exact opposite, as Ligeti did in Atmosphères. Large portions of the piece consist of extremely dense counterpoint, with up to 56 voices (each string instrument has his or her own individual part to play). But the imitative entrances are so close to one another that it is impossible to perceive them separately, with apparent immobility as the result. To paraphrase the composer himself, the micropolyphonic textures tend to hang like a mighty oriental tapestry, suspended outside time." Likewise, Thomas May states that in his breakthrough orchestral pieces *Apparitions* and *Atmosphères* Ligeti's "new musical point of view... looked beyond the traditional basic elements of melody, harmony, and rhythm, immobilizing these in favor of the mass and texture of sound itself. Gigantic clusters of chords hover in a stasis that negates familiar signposts of harmony and pulse. This dense sound-fog became known as the signature Ligeti style".

3) Requiem (1965) for female soloists, two choirs, and orchestra, may be the most familiar and recognizable avant-garde music the broad general public has ever heard, thanks to the 1968 film, 2001: A Space Odyssey. There are ways in which Ligeti's is one of the most traditional requiems of the 20th century, even since the last few decades of the 19th century. That might sound far-fetched for a work in which there is virtually no discernible melody or rhythmic pulse or traditional harmony. Most post-Romantic and Modern requiems have avoided the text's themes of judgment, concentrating on consolatory, redemptive sections, and are usually intended to offer comfort to the living. Ligeti, like most composers up to Brahms, delivers the traditional requiem's juxtaposition of terrifying judgment and the comforting hope of redemption. The third of his four movements sets a text by the Venerable Bede that's essentially a paraphrase of the Dies Irae; the composer describes it as "hysterical, hyperdramatic, and unrestrained." Throughout the Requiem, Ligeti uses clouds of sound created by what he describes as micro-polyphony: a densely packed overlay of closely spaced lines whose purpose is to create a variety of textures, the basic building blocks of the composer's music of this period.

4) Chamber Concerto (1970). Is perhaps the finest of the rich sequence of concerto like works he composed during the late 1960s and early 1970s. The work is scored for a small ensemble of

thirteen virtuoso performers. It explores the Ligetian fashion of the contrast between dream-like stasis and frantic activity.

5) Le Grand Macabre (1977). Depicts the end of the world and is a two hour musical helter skelter, as raucously enjoyable as anything written since the war. Musically it shows Ligeti at his most diverse.

6) Horn Trio (1982). Demonstrates a profound change in style, tonality and traditional metre reappear for the first time in two decades. It is marked as an homage to Johannes Brahms who wrote one of the few other examples of this genre. The composition explores the use of major and minor harmonies without the syntax of common practice tonality. In addition, it explores the out of tune upper partials available on the horn, asymmetric Bulgarian rhythms in the second movement, and the Ligeti *lamento* motif in the fourth movement. The first three movements are each in a ternary form (A, B, A)– a notable look back towards traditional forms. The final movement is an example of a passacaglia using as its ground bass a similar theme as that of the opening movement. It has been pointed out that the opening theme of the first movement is reminiscent of the opening theme of Beethoven's Piano Sonata No. 26, "Les Adieux."

7) Piano Concerto (1988). It was in this work that his style reached its destination. Overt references to traditional classical music, often with a decidedly Eastern European flavor. The driving force is essentially rhythmic. The concerto is a prime example of the composer's exploration of polyrhythms. Ligeti has said that he considers it to be his most complex and technically demanding score. The work is scored for a reduced orchestra with many unusual instruments such as a harmonica, slide whistles, and an ocarina. The first and fifth movements have some minimalist elements and explore the extreme registers of the piano. The second movement starts slow and mysterious, similar to Béla Bartók's "night music." After a whip crack which marks a climax, the woodwind play a dissonant passage in their highest registers, accompanied by descending chromatic chords from the piano and the xylophone. The movement ends with an almost silent harmonica passage.

8) Sippal, dobbal, nadihegeduvel (2000) song cycle. This was one of his very last pieces. A setting of Sander Weores poems for percussion quartet and mezzo-soprano. They are, typically for Ligetti, on a tiny scale, and they make sounds like nothing else: each of the seven songs is simultaneously redolent of folk music and of modernist complexity, of childish immediacy and decidedly adult sophistication. They are also strangely melancholic. The Sippal songs have that quality that all the best absurdist poetry does of making you confront big ideas through lightness of touch, humor and sleight of hand.

- **Microtonal music**

  Microtonal music is music using microtones—intervals of less than an equally spaced semitone. Microtonal music can also refer to music which uses intervals not found in the Western system of 12 equal intervals to the octave. *Microtonal music* can refer to all music which contains intervals

smaller than the conventional contemporary Western semitone. The term usually refers to music containing very small intervals but can include any tuning that differs from the western 12-tone equal temperament. Traditional Indian systems of 22 śruti; Indonesian gamelan music; Thai, Burmese, and African music, and music using just intonation, meantone temperament or other alternative tunings may be considered microtonal. Microtonal variation of intervals is standard practice in the African-American musical forms of spirituals, blues and jazz.

The Hellenic civilizations of ancient Greece left fragmentary records of their music—e.g. the Delphic Hymns. The ancient Greeks approached the creation of different musical intervals and modes by dividing and combining tetrachords, recognizing three genera of tetrachords: the enharmonic, the chromatic, and the diatonic. Ancient Greek intervals were of many different sizes, including microtones. The enharmonic genus in particular featured intervals of a distinctly "microtonal" nature, which were sometimes smaller than 50 cents, less than half of the contemporary Western semitone of 100 cents.

The Italian Renaissance composer and theorist Nicola Vicentino (1511–1576) worked with microtonal intervals and built a keyboard with 36 keys to the octave known as the archicembalo. While theoretically an interpretation of ancient Greek tetrachordal theory, in effect Vicentino presented a circulating system of quarter-comma meantone, maintaining major thirds tuned in just intonation in all keys.

Jacques Fromental Halévy composed a quarter-tone work for soli, choir and orchestra entitled "Prométhée enchaîné" in 1849. In the 1910s and 1920s, quarter tones (24 equal pitches per octave) received attention from such composers as Charles Ives, Julián Carrillo, Alois Hába, Ivan Wyschnegradsky, and Mildred Couper. Alexander John Ellis, who in the 1880s produced a translation of Helmholtz's *On the Sensations of Tone*, proposed an elaborate set of exotic just intonation tunings and non-harmonic tunings. Ellis also studied the tunings of non-Western cultures and, in a report to the Royal Society, stated that they did not use either equal divisions of the octave or just intonation intervals. Ellis inspired Harry Partch immensely (Partch 1979, vii).

During the Exposition Universelle of 1889, Claude Debussy heard a Balinese gamelan performance and was exposed to non-Western tunings and rhythms. Some scholars have ascribed Debussy's subsequent innovative use of the whole-tone (six equal pitches per octave) tuning in such compositions as the *Fantaisie for piano and orchestra* and the Toccata from the suite *Pour le piano* to his exposure to the Balinese gamelan at the Paris exposition, and have asserted his rebellion at this time "against the rule of equal temperament" and that the gamelan gave him "the confidence to embark (after the 1900 world exhibition) on his fully characteristic mature piano works, with their many bell- and gong-like sonorities and brilliant exploitation of the piano's natural resonance." Still others have argued that Debussy's works like *L'isle joyeuse*, *La cathédrale engloutie*, *Prélude à l'après-midi d'un faune*, *La mer*, *Pagodes*, *Danseuses de Delphes*, and *Cloches à travers les feuilles* are marked by a more basic interest in the microtonal intervals found between the higher members of the overtone series, under the influence of Hermann Helmholtz's writings. Berliner's introduction of the phonograph in the 1890s allowed much non-Western music to be recorded and heard by Western composers, further spurring the use of non-12-equal tunings.

Major microtonal composers of the 1920s and 1930s include Alois Hába (quarter tones, or 24 equal pitches per octave, and sixth tones), Julian Carillo (24 equal, 36, 48, 60, 72, and 96 equal pitches to the octave embodied in a series of specially custom-built pianos), Ivan Wyschnegradsky (third tones, quarter tones, sixth tones and twelfth tones, non octaving scales) and the early works of Harry Partch (just intonation using frequencies at ratios of prime integers 3, 5, 7, and 11, their powers, and products of those numbers, from a central frequency of G-196). Prominent microtonal composers or researchers of the 1940s and 1950s include Adriaan Daniel Fokker (31 equal tones per octave), Partch (continuing to build his handcrafted orchestra of microtonal just intonation instruments), and Eivind Groven.

Digital synthesizers from the Yamaha TX81Z (1987) on and inexpensive software synthesizers have contributed to the ease and popularity of exploring microtonal music. Electronic music facilitates the use of any kind of microtonal tuning, and sidesteps the need to develop new notational systems.

A form of microtone known as the blue note is an integral part of rock music and one of its predecessors, the blues. The blue notes, located on the third, fifth, and seventh notes of a diatonic major scale, are flattened by a variable microtone. Musicians like Jon Catler have incorporated microtonal guitars like 31-tone equal tempered guitar and a 62-tone just intonation guitar in blues and jazz rock music. The band Radiohead have used microtonal string arrangements in their music, such as on "How to Disappear Completely" from their album *Kid A*.

Ferruccio Busoni (1 April 1866 – 27 July 1924) was an Italian composer, pianist, conductor, editor, writer, and piano teacher. He is the forgotten man of 20th century music, a situation largely due to the diversity of his talents and his resistance to easy classification. The child of professional musicians, Busoni was born in Tuscany but spent most of his professional life in Germany where, although he always regarded himself as primarily a composer, his early fame was achieved as one of the great pianists of his generation. Like Schoenberg – with whom he enjoyed a mutually respectful relationship – Busone was a formidable theoretician, and his Outline of a New Aesthetic in Music (1907) established him as one of the leading figuresof the avant-guarde and the furst musician to espouce microtonality and electronic music.

In 1894 he settled in Berlin, giving a series of concerts there both as pianist and conductor. He particularly promoted contemporary music. He also continued to teach in a number of masterclasses at Weimar, Vienna and Basel; among his pupils were Egon Petri and Stanley Gardner. His philosophy that "Music was born free; and to win freedom is its destiny," greatly influenced his students Percy Grainger and Edgard Varèse, both of whom played significant roles in the 20th century opening of music to all sound.

During World War I, Busoni lived first in Bologna, where he directed the conservatory, and later in Zürich. He refused to perform in any countries that were involved in the war. He returned to Berlin in 1920 where he gave master classes in composition. He had several composition pupils who went on to become famous, including Kurt Weill, Edgard Varèse, Friedrich Löwe, Aurelio Giorni and Stefan Wolpe. His compositions were largely neglected for many years after his death,

but he was remembered as a great virtuoso and arranger of Bach for the piano. Around the 1980s there was a revival of interest in his work. Most of Busoni's works are for the piano. Busoni's music is typically contrapuntally complex, with several melodic lines unwinding at once. Although his music is never entirely atonal in the Schoenbergian sense, his mature works, beginning with the *Elegies*, are often in indeterminate key. He was in contact with Schoenberg, and made a 'concert interpretation' of the latter's 'atonal' Piano Piece, Op. 11, No. 2 (BV B 97), in 1909. In the program notes for the premiere of his own *Sonatina seconda* of 1912, Busoni calls the work *senza tonalità* (without tonality). Johann Sebastian Bach and Franz Liszt were key influences, though late in his career much of his music has a neo-classical bent, and includes melodies resembling Mozart's.

Some idea of Busoni's mature attitude to composition can be gained from his 1907 manifesto, *Sketch of a New Aesthetic of Music*, a publication somewhat controversial in its time. As well as discussing then little-explored areas such as electronic music and microtonal music (both techniques he never employed), he asserted that music should distill the essence of music of the past to make something new. Many of Busoni's works are based on music of the past, especially on the music of Johann Sebastian Bach. The first version of Busoni's largest and best known solo piano work, *Fantasia contrappuntistica*, was published in 1910.

Busoni used elements of other composers' works. The fourth movement of *An die Jugend* (1909), for instance, uses two of Niccolò Paganini's Caprices for solo violin (numbers 11 and 15), while the 1920 piece *Piano Sonatina No. 6* (*Fantasia da camera super Carmen*) is based on themes from Georges Bizet's opera *Carmen*. Busoni also drew inspiration from non-European sources, including Indian Fantasy for piano and orchestra. It was composed in 1913 and is based on North American indigenous tribal melodies drawn from the studies of this native music by ethnomusicologist, Natalie Curtis Burlin. Busoni was a virtuoso pianist, and his works for piano are difficult to perform. His Piano Concerto, Op. 39 (1904) is one of the largest such works ever written. Performances generally last over seventy minutes, requiring great stamina from the soloist.

Busoni's *Turandot Suite* (1905), probably his most popular orchestral work, was expanded into his opera *Turandot* in 1917, and Busoni completed two other operas, *Die Brautwahl* (1911) and *Arlecchino* (1917). He began serious work on his best known opera, *Doktor Faust*, in 1916, leaving it incomplete at his death.

- **Minimalism**

  Minimalism is a twentieth-century Western Art music style which explores the limits of Western sound, often combining non-Western elements such as Indonesian gamelan or African polyrhythms with basic Western harmonic structures. It originaled in the New York Downtown scene of the 1960s and was initially viewed as a form of experimantal music called the New York Hypnotic School. Famous music composers who have been labeled as “minimalist” include: LeMonte Young, Terry Riley, Steve Reich, Philip Glass and Michael Nyman. These composers have been prolific in the minimalist genre and have been pivotal in the musical backlash that occured against the atonal, serialist music of the Fifties. Minimalist compositions are not simple, despite common notions towards the music genre. Although the name implies the sparse sound that a

listener often hears in minimalist works, the minimalist technique is about building on a single chord or scale to explore its many harmonic variations. Building a full-length piece around one or two chords or scales is extremely feasible. Harmonic modulation in minimalist pieces usually happens gradually, as minimalist music is often concerned with smooth transitions from one harmony to the next. The development of a minimalist piece of music could also be rhythmic, through the gradual integration of two or more rhythms. With this, minimalist music draws influences from the polyrhythms of traditional African percussion music. The influence of minimalist music is especially undeniable in electronic dance music. Techno music borrows much from minimalist music, with its repeating dance forms and gradual shifts in harmony. In general, the entire genre of Western art music has been influenced by minimalism since the Fifties, stretching the boundaries of harmony and form.

La Monte Young (October, 1935 - ?) is an American avant-garde artist, composer and musician, generally recognized as the first minimalist composer. His works have been included among the most important and radical post-World War II avant-garde, experimental, and contemporary music. Young is especially known for his development of drone music. Both his proto-Fluxus and "minimal" compositions question the nature and definition of music and often stress elements of performance art. (**Fluxus**—a name taken from a Latin word meaning "flow, flux" (noun); "flowing, fluid"—is an international network of artists, composers and designers noted for blending different artistic media and disciplines in the 1960s. They have been active in performance, Neo-Dada noise music and visual art as well as literature, urban planning, architecture, and design. Fluxus is sometimes described as intermedia.)

Born in Bern, Idaho, Young and his family moved several times in childhood, as his father searched for work before settling in Los Angeles, California. He was raised as a member of The Church of Jesus Christ of Latter-day Saints. He undertook studies at the University of California, Los Angeles, where he received a BA in 1958, then at the University of California, Berkeley, from 1958 to 1960. In 1959 he attended the summer courses at Darmstadt under Karlheinz Stockhausen and in 1960 relocated to New York in order to study electronic music at the New School for Social Research. His compositions during this period were influenced by Anton Webern, Gregorian chant, Indian classical music, Gagaku, and Indonesian gamelan music.

Young's first musical influence came in early childhood in Bern. He relates that "the very first sound that I recall hearing was the sound of wind blowing under the eaves and around the log extensions at the corners of the log cabin." Continuous sounds—human-made as well as natural—fascinated him as a child. The four pitches he later named the "Dream chord", on which he based many of his mature works, came from his early age appreciation of the continuous sound made by the telephone poles in Bern.

Jazz is one of his main influences and until 1956 he planned to devote his career to it. Young discovered Indian music in 1957 on the campus of UCLA. The discovery of the tambura, which he learned to play, was a decisive influence in his interest in long sustained sounds. Young also acknowledges the influence of Japanese music, especially Gagaku, and Pygmy music.

A number of Young's early works use the twelve-tone technique, which he studied under Leonard Stein at Los Angeles City College. (Stein had served as an assistant to Arnold Schoenberg when Schoenberg taught at UCLA). When Young visited Darmstadt in 1959, he encountered the music and writings of John Cage. By this time Young had taken a turn toward the conceptual, using principles of indeterminacy in his compositions and incorporating non-traditional sounds, noises, and actions.

When Young moved to New York in 1960, he had already established a reputation as an *enfant terrible* of the avant-garde. He initially developed an artistic relationship with Fluxus founder George Maciunas and other members of the nascent movement. Yoko Ono, for example, hosted a series of concerts curated by Young at her loft and absorbed, it seems, his often parodic and politically charged aesthetic. Young's works of the time, scored as short haiku-like texts, though conceptual and extreme, were not meant to be merely provocative but, rather, dream-like.

Young discovered classical music rather late. He cites Béla Bartók, Igor Stravinsky, Pérotin, Léonin, Claude Debussy and Organum musical style as important influences, but what made the biggest impact on his compositions was the serialism of Arnold Schoenberg and Anton Webern.

Young was also keen to pursue his musical endeavors with the help of psychedelics. Cannabis, LSD and peyote played an important part in Young's life from mid-1950s onwards. He said that "everybody [he] knew and worked with was very much into drugs as a creative tool as well as a consciousness-expanding tool." This was the case with the musicians of the Theatre of Eternal Music, with whom he "got high for every concert: the whole group."

Young's use of long tones and exceptionally high volume has been extremely influential with Young's associates. It has been notably influential on John Cale's contribution to The Velvet Underground's sound; Cale has been quoted as saying "LaMonte [Young] was perhaps the best part of my education and my introduction to musical discipline." Brian Eno was similarly influenced by Young's use of repetition in music. In 1981, he referred to *X for Henry Flynt* by saying "It really is a cornerstone of everything I've done since." Eno had himself performed the piece as a student in 1960. Andy Warhol attended the 1962 première of the static composition by La Monte Young called *Trio for Strings* and subsequently created his famous series of static films including *Kiss*, *Eat*, and *Sleep.* In 1963 Warhol, Young, and Walter De Maria briefly formulated a musical group. Lou Reed's 1975 album *Metal Machine Music* states "Drone cognizance and harmonic possibilities vis a vis Lamont Young's Dream Music" among its "Specifications". Drone rock pioneer Dylan Carlson has stated Young's work as being a major influence to him.

Young is the real "inventor" of minimalism. The term originally referred to his "dream house," a New York loft in which Young and his Theater Of Eternal Music (comprising violinist Tony Conrad, viola player John Cale, trumpet player Jon Hassell, keyboardist Terry Riley and others) developed a music made of semi-stationary waves, of slowly evolving amorphous sound. Music became a living organism. Colossal pieces such as *The Tortoise His Dreams And Journeys* (premiered in october 1964) and *A Well Tuned Piano* (premiered in june 1974) offered little or no respite for western

harmony and created a bold bridge between John Cage's "alea", Buddhist meditation and psychedelia.

After composing initially in the serialist style, Young modeled his music on the aleatory work of John Cage. Carrying Cage's experiments to an extreme, Young in fact took his music into a new area. Compositions like *for Brass* (1957) and *for Guitar* (1958), which reflect the influence of serialism (such as atonality and a chromatic structure of organization), show a strong propensity for pure tones held over long periods of time. In *for Brass*, perhaps the chief work of Young's early period, features sustained tones and silences that serve to combine all the timbres of the brass octet for which it was scored. In *for Guitar* contains a succession of pauses and staccato notes. In the *Trio for Strings* (1958), the violin sustains a note, pauses, sustains a note, pauses, and so on. To judge from Young's output, minimalism would seem to be an outgrowth of Cage's experiments. But the string trio is also a natural descendent of the pointillistic twelve-tone technique of Webern (1883-1945).

In 1959, Young won a fellowship and moved to Darmstadt, where he studied under Stockhausen. That experience brought about a decisive turn in his work, the radical implications of which were now emphasized. The *Poem for Chairs, Tables, Benches, etc.* of the following year, for example, consisted simply of a certain number of instructions for arranging the furniture in a room, and the result was twenty minutes of pure cacophony. Similarly, in *2 Sounds*, the two performers were to scrape cans on a window and a bucket on a glass door.

The following year, he returned to America and moved to New York in order to study electronic music with Cage. There, Young became one of the moving forces behind the Fluxus movement, which employed gestures rooted in Dadaism and chance operations. He thus became one of the primary figures of Manhattan's alternative scene.

Cage's influence was manifested in Young's first works of the Sixties, above all in the short *Compositions,* each of which was constructed around one event not necessarily of a musical nature. For example, *#2* called for the performer to build a fire in public, *#5* to release butterflies in the performance space, etc. The most programmatic was *#10*, which began with an instruction that could serve as a definition of Minimalism *ante litteram*: "Draw a straight line and follow it." The most attuned to this ideology is *#7*, which consisted of a perfect fifth (B and F#) notated on a staff along with the instruction "to be held for a long time."

The term "Minimalism" arose during this same period. For Young, "minimal" music was music "that employed minimal materials." Pieces like the *Composition* series and 1959's *Vision* (for twelve instrumentalists playing unconventional sounds within the space of thirteen minutes, as determined by chance operations) were perhaps unique among all the work that could legitimately be said to belong to the Minimalist school.

In 1970, Young began to study Indian raga under the guidance of the great North Indian vocalist Pandit Pran Nath (d. 1996). The spiritual and musical influence of the experience of the Himalayas became etched deeply in his work, which in any event continued to refine the instrumentation of

the "Dream House," which blended the drone of the Indian tamboura with the sine wave drone, in a technological simulation of the yin-yang. Since the 1950s he has assimilated elements of jazz improvisation, aleatory composition, serialism, electronics, and the Kirana style of North Indian vocal music. The fusion of these components made not only for a style of music, but for a way of conceptualizing music as a psycho-acoustic phenomenon. Young has paid the price for his total devotion to radical music by being marginalized: Only three recordings have been issued in thirty years, and public performances have been rare.

La Monte Young regards music as an external being with an independent existence, and thus is critical of a Western culture he sees making music conform to human existence in such a way as to be unnatural and counter to the essence of music. Sound is a creature gifted with its own life; sound is eternal and immutable: The note, sustained throughout the duration of the performance, is a function of the position of the listener, but in an ideal environment there would be no variations. Music is a form of religion and La Monte Young is priest of the ceremonies developed in his electronic temple. Young recovers the qualities of hypnotism and trance inherent in primitive music.

La Monte Young's Minimalism, at the borders of psycho-acoustic and musical space, represents the most radical undertaking of modern music, a sort of sonorous black hole into which all musical notions disappear.

1) Trio for Strings (1958) - Widely acknowledged as heralding the concept of Minimalism in music, La Monte Young's *Trio for Strings* is a landmark in twentieth-century music. Composed in strict adherence to serial technique, it takes serial notions such as symmetrical row construction and the static tonal surface of late Webern to a logical, if extreme, conclusion. *Trio for Strings* is comprised only of long sustained tones in varying alignments alternating with silences; the uncompromising clarity of the work is unprecedented. "Despite its Serial underpinnings, nothing like Young's *Trio for Strings* had ever been heard in Western music, a piece constructed exclusively of sustained tones and silences. It creates a musical landscape that seems not so much exotic as otherworldly.

   The other compositions that represent the transition to "Minimalist" are logical developments from the string trio: *Death Chant* (1961), a three-note dirge for male voices and percussive thigh-slaps, one of his rare repetitive (not droning) pieces; *Composition 1961*; *Aeolian Blues in Bb with a Bridge* (1961), an infinite version of the blues format; *The Second Dream of the High-Tension Line Stepdown Transformer* (1962), *Early Tuesday Morning Blues*, *Dorian's Blues in G* (1963), and *19 X 63 NYC fifth day of the hammer Bb Dorian Blues* (1963). Centered around drones of extended duration, these pieces clearly show the tendencies that would mark Young's future work.

2) *Compositions 1960* - Includes a number of unusual actions. Some of them are un-performable, but each deliberately examines a certain presupposition about the nature of music and art and carries ideas to an extreme. One instructs: "draw a straight line and follow it" (a directive which he has said has guided his life and work since). Another instructs the performer to build

a fire. Another states that "this piece is a little whirlpool out in the middle of the ocean." Another says the performer should release a butterfly into the room. Yet another challenges the performer to push a piano through a wall.

3) "Dream House" 1961 - The name Young used for his experiments with environments of continuous light and sound. The first "Dream House" was a loft in New York in which Young established himself along with his wife Marian Zazeela (an artist who worked with lighting designs) and The Theatre of Eternal Music (including organist Terry Riley, who served as a vocalist). The group played drone tones on bowed strings and voice, while Young improvised on sopranino saxophone. The atmosphere was decidedly less academic than it was with Fluxus, closer to the spirit of the street and the creative lofts of Greenwich Village.

   Together Young and Zazeela have realized a long series of semi-permanent "Dream House" installations, which combine Young's just-intuned sine waves in elaborate, symmetrical configurations and Zazeela's quasi-calligraphic light sculptures.[8] The effect is rigorous yet sensual, utilizing aspects of the viewer/auditor's perception to create sensory overload within a barely defined physical space. From January through April 19, 2009, "Dream House" was installed in the Solomon R. Guggenheim Museum in New York as part of *The Third Mind* exhibition. Dream House is a permanent sound/light installation on the third floor of 275 Church Street in Manhattan. It's run by the "minimalist" composer LaMonte Young and his wife Marian Zazeela. I put quotes around minimalist, because Young would probably disagree with you if you called him that to his face. Regardless of how you classify him, the man is a legend and has influenced or interacted with many musicians who are now considered avant icons. He performed early 60s loft shows with a young Yoko Ono, worked with Terry Riley and Tony Conrad, studied under Pandit Pran Nath and in turn served as a teacher to anti-art proto-punk Henry Flynt. Young had an extreme impact on the playing and philosophy of John Cale, who brought his minimalistic/drone style to the first two Velvet Underground records…basically influencing everybody until the end of time.

   In 1964, the "Dream House" grew into a more ambitious project: A place was selected and constructed in order best to produce and experience music considered in all its aspects as a living organism. The composition had an indefinite duration and consisted of a constant sound (made up of one or more tones); what the listener would experience would depend on where he was positioned, and moving would bring on a change in what he experienced. In other words, the listener would exist symbiotically with the sound and could participate in creating the sound for himself. The longest "Dream House" performance was that given at the Harrison Street gallery in New York, which lasted uninterruptedly for six years, from 1979-1985.

4) The Well Tuned Piano 1964 - Young composed what is perhaps his magnum opus, the colossal five-hour *The Well-Tuned Piano* for a piano tuned to just intonation (the title is meant as a parody of Bach's *Well-Tempered Clavier*). This piece requires a month for the tuning of the piano alone. This is the composition that best exemplifies the concept of music as a living organism. The performer begins playing the notes of the score, but soon the piano, because of

its just intonation, introduces unwanted variations. The performer adjusts to these changes, but then new variations are introduced by the instrument's tuning. The performer is constantly "chasing" the instrument and the music grows out of that dialectic process. In this sense the piece is like an organism that grows little by little. Initially frail and shy, the performance eventually mutates into a loud, stormy and hypnotic raga-like crescendo. Young considers *The Well-Tuned Piano*—a permuting composition of themes and improvisations for just-intuned solo piano—to be his masterpiece. Performances have exceeded six hours in length. One of the defining works of American musical minimalism, it is strongly influenced by mathematical composition as well as Hindustani classical music practice. Young has never considered the composition "finished," and dates the piece as 1964-73-81-Present. The length of this piece is deceiving, dynamic and ever-changing. The Well-Tuned Piano exists as a template for Young's continual improvisation and expansion (although the filmed performance, with lighting by Zazeela, from 1987 is the last time he played the piece in public), and that listening to the recording or watching the video collapses your sense of scale and time so six hours pass differently from how you might expect. In fact, time seems both to expand as well as contract.

The piece so takes over your brain that it seems as if it has always been playing, that no other music apart from this has ever existed; and yet, because of the way themes and ideas return throughout the performance, you're aware of a structure, you become conscious of musical anchors in the ocean of pianistic time that the piece creates.

The first and most significant thing that will strike your ears from the first second of The Well-Tuned Piano is the acidulous yet soft-focused beauty of the tuning system Young uses in the piece. The product of decades of research and of dissatisfaction with the artificial exigencies of equal temperament – that gigantic musical fudge that has arguably robbed classical music of much of its expressive power but to which our ears have unfortunately become almost completely accustomed.

5) *Dorian's Blues in G* 1963 - Young formed the Forever Bad Blues Band, a quartet (guitar, bass, drums and synthesizer) that plays hypnotic, dilated pseudo-blues.

6) Just Charles & Cello in the Romantic Chord

7) Pre-Tortoise Dream Music

8) B Flat Dorian Blues (The Theatre of Eternal Music)

9) Time Crystals (1990) was a string quartet.

Terrence "Terry" Riley (June, 1935 - ?) is an American composer and performing musician associated with the minimalist school of Western classical music, of which he was a pioneer. His work is deeply influenced by both jazz and Indian classical music. Born in Colfax, California, Riley studied at Shasta College, San Francisco State University and the San Francisco Conservatory before earning an MA in composition at the University of California, Berkeley, studying with

Seymour Shifrin and Robert Erickson. He was involved in the experimental San Francisco Tape Music Center, working with Steve Reich. His most influential teacher, however, was Pandit Pran Nath (1918–1996), a master of Indian classical voice, who also taught La Monte Young and Marian Zazeela. Riley made numerous trips to India over the course of their association to study and to accompany him on tabla, tambura and voice. Throughout the 1960s he traveled frequently around Europe as well, taking in musical influences and supporting himself by playing in piano bars, until he joined the Mills College faculty in 1971 to teach Indian classical music.

Riley also cites John Cage and "the really great chamber music groups of John Coltrane and Miles Davis, Charles Mingus, Bill Evans, and Gil Evans" as influences on his work, demonstrating how he pulled together strands of Eastern music, the Western avant-garde and jazz. Riley began his long-lasting association with the Kronos Quartet when he met founder David Harrington while at Mills. Over the course of his career, Riley composed 13 string quartets for the ensemble, in addition to other works. He wrote his first orchestral piece, *Jade Palace*, in 1991, and has continued to pursue that avenue, with several commissioned orchestral compositions following.

By the late 60s, Riley was already celebrated in experimental musical circles. In fact, since 1964, the Californian-born musician had become a cult figure on the west coast scene. That's because in November that year saw the first performance took place of *In C*, still Riley's most famous work, and variously heralded as the first masterpiece of minimalism and the work that ushered in a new musical era, after which the world was never quite the same. Some of that may have turned out to be true, but when Riley came up with *In C* on a bus ride in San Francisco, it was a piece that was important to him for different reasons. The work crystallised his musical thinking up to that point (as Keith Potter reveals in his book Four Musical Minimalists): his interest in improvisation – already cultivated thanks to collaborations with Pauline Oliveros, Morton Subotnick and others – and his love of John Coltrane and Miles Davis. *In C* also reflected and refracted the inspiration of the repetitive musical structures he had heard and loved in north African music. It was written as a piece that was defined by the interactions between the members of a diverse group of musicians and which would be different in terms of duration, structure and tempo every time it was played. And, like so many of the greatest musical breakthroughs, *In C* is simple to understand, but rich, subtle and diverse when you hear it performed.

1) *In C* (1964) - An early example of Minimalis, an aleatoric work in which short phrases are chosen by the musicians from a set list and played an arbitrary number of times, while the note C is repeated in eighth notes (quavers) behind them. *In C's* score is made from 53 musical modules, fragments of musical material and melodies and not all of them in the key of C either. As the piece progresses, different waves of pitch-centres and modalities are cycled through. The players move steadily through the fragments, although they can omit them as well and the modules can be played faster or slower than they're written, accompanied by an ever-present chiming octave C in a piano or mallet instrument. The idea for that time-keeping piano part could have been Steve Reich's, who, along with Oliveros and Subotnick, was part of the ensemble who played the piece for the first time at the San Francisco Tape Centre. How many times each is repeated and how long a performance lasts, will vary each time the piece is played

by different forces: it's possible to race through it in 20 minutes, or to luxuriate in it for an hour and a half.

Part of *In C's* notoriety is that it also seems to embody the hippy-ish sensibility of west coast America at the time and to evoke a trippy, blissed-out state of musical mind. On his own use of drugs, Riley told William Duckworth that LSD was "the element of the consciousness-raising movement … [with] marijuana as a sister drug … It had a lot to do with those times, you know. There was something emerging then that people were hungry for: almost as a public at large, especially young people. I know we weren't interested in making money. We were really only interested in having these mystical experiences." But that's to miss the point of *In C's* musical qualities and its subtly brilliant answer to the conundrum of how you create a piece that simultaneously empowers its performers and insists that they listen to each other and take responsibility for the performance as much as the composer, but which is also always essentially itself, a piece that cannot be mistaken for any other. *In C* does that brilliantly. Along with Cardew's Paragraph 7 from The Great Learning, it's as elegant and beautiful a solution as there is.

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2) *A Rainbow in Curved Air* (1969) - Is the third album of experimental music and classical minimalism by Riley (and one of the two works featured, the other being *Poppy Nogood* and the *Phanton Band*). Through the use of overdubbing, the composer, a keyboard virtuoso, plays all the instruments on the title track: electric organ, electric harpsichord (Rock-Si-Chord), dumbec (or goblet drum) and tambourine. The work begins with a simple minimalist drone but quickly erupts in exciting rapid-fire figurations far removed from typical slowly evolving minimalist structures (as in Riley's own *In C*). The rest of the piece explores various layered keyboard and percussion textures. It's music of still-inspirational and frankly feel-good electronic and overdubbed radiance, made from Riley playing, improvising and re-recording all the instrumental parts you hear in a mind-bending 18 minutes. Riley says that a good friend of his was running the lighting for the Who's shows, "and he turned Pete Townshend on to *A Rainbow in Curved Air*. The Who song *Baba O'Riley* was dedicated to both me and [Indian guru] Meher Baba. Pete has always said that I had a big influence on him." Riley's impact on Townshend could hardly be clearer when you hear Baba O'Riley's keyboard riffs and delays.

3) *Persian Surgery Dervishes* (1971) - Is a recording of two live solo electric organ concerts, the first held in Los Angeles on 18 April 1971 and the second in Paris on 24 May 1972. The two very different performances of the same composition "Persian Surgery Dervishes" are meant to

show the importance of improvisation in Riley's music. Riley plays a modified Yamaha electric organ tuned in just intonation.

4) Shri Camel (1976) - Is an album of experimental music and classical minimalism music. In 1970, Riely started to study with Indian vocal master Prandit Pran Nath and his musical activity since then has evolved a fluid exchange between improvisation and composition, between aspects of jazz, Indian music and classical structure. He has even created of a sort of contemporary music of the spheres – you can hear the uniqueness of Riley's musical 'interzone' in the keyboard imagination and virtuosity of Persian Surgery Dervishes and Shri Camel, with their hypnotic mix of unusual tunings, modalities and rhythmic invention. The only connection with "minimalism" on these records is Riley's continuing interest in exploring different kinds of repetition. Otherwise, his range of sources and his musical-mystical ambition are far from the process-based austerity of early Steve Reich or Philip Glass.

   But *In C* is also nearly 50 years old and Riley's life in music is still a continual search for the fundamentally spiritual qualities that he believes the art form should embody. In 1970, he started to study with Indian vocal master Prandit Pran Nath and his musical activity since then has evolved a fluid exchange between improvisation and composition, between aspects of jazz, Indian music and classical structure. He has even created of a sort of contemporary music of the spheres – you can hear the uniqueness of Riley's musical 'interzone' in the keyboard imagination and virtuosity of *Persian Surgery Dervishes* and *Shri Camel*, with their hypnotic mix of unusual tunings, modalities and rhythmic invention. The only connection with "minimalism" on these records is Riley's continuing interest in exploring different kinds of repetition. Otherwise, his range of sources and his musical-mystical ambition are far from the process-based austerity of early Steve Reich or Philip Glass.

5) *Salome Dances for Peace* (1989) - Is an album by the string quartet Kronos Quartet. Riley's association with violinist David Harrington, who went on to found the Kronos Quartet, has been the inspiration for a series of works (more than a dozen so far) that led Riley back to more conventional kinds of composition; conventional at least in the sense of how they are notated and performed – but not in how they sound. *Salome Dances* for Peace is a sensuous but epic 100-minute cycle for string quartet; *Sun Rings* is an even bigger set of pieces for quartet, choir, visuals and the sounds of space. Literally: the piece uses Nasa's captured sounds of the spinning planets to inspire a sonic meditation on our place in the cosmos.

Steve Reich (October, 1936 - ?) is an American composer who, along with La Monte Young, Terry Riley, and Philip Glass, pioneered minimal music in the mid to late 1960s. His innovations include using tape loops to create phasing patterns (for example, his early compositions *It's Gonna Rain* and *Come Out*) and the use of simple, audible processes to explore musical concepts (for instance, *Pendulum Music* and *Four Organs*). These compositions, marked by their use of repetitive figures, slow harmonic rhythm and canons, have significantly influenced contemporary music, especially in the US. Reich's work took on a darker character in the 1980s with the introduction of historical themes as well as themes from his Jewish heritage, notably the Grammy Award-winning *Different*

Trains. Reich's works *Piano Phase* (1967, for two pianos), and *Drumming* (1970–71, for percussion, female voices and piccolo) employ the technique called "phasing" in which a phrase, played by one player and maintaining a constant pace is played simultaneously by another but at a slightly quicker pace. This causes the players to go "out of phase" with each other and the performance may continue until they come back in phase.

It's rare that one says this about a contemporary composer, but it's become too easy to take Steve Reich for granted. Of course, that's a sign of just how influential his music has been, the way it has drawn on everything from African drumming to concept art and how it has influenced generations of pop, jazz and classical musicians over the last half-century. In fact, if you were to subtract Steve Reich from the total sum of today's musical culture, I think you'd notice more of a difference than if you took away any other single figure.

Even if you think you don't know Reich's music directly, you will almost certainly be familiar with what it does, thanks to the way his music and his example have been refracted by other composers in other fields. Here's a whistlestop tour: in the 1960s, with Terry Riley and Philip Glass, Reich gave pulse back to experimental music (listen to Clapping Music), he discovered tape-based techniques of looping and phasing using recordings of fragments of speech (*Come Out* and *It's Gonna Rain*) and then molecules of musical material (*Piano Phase*, *Violin Phase*, or the *Fluxus-ish Pendulum Music*). And phasing itself? Imagine you have a pattern that consists of 12 quavers. If you keep playing the original but the player next to you starts the same sequence, but beginning one quaver later, you start to phase the rhythm against itself and you can move through the whole pattern, quaver by quaver, creating a huge diversity of rhythmic possibility from a single cell. In theory it might sound simple but in practice it's pretty mind-bending, especially in Reich's *Piano Phase*, where the second player must gradually make the minuscule rhythmic shift from one semiquaver to the next, before locking into the next note in the pattern.

Later, Reich found a way of using tonal and modal chords but unmooring them from any conventional harmonic function (in *Six Pianos* and the final part of *Drumming*). By the mid-70s, he was ready to integrate everything he had discovered to encompass genuine harmonic direction and expressive potential. He went on to write pieces that have dealt with the Holocaust, Middle Eastern history and politics and contemporary conflict (*Different Trains*, *The Cave*, *Daniel Variations*).

1) *Come Out* (1966) - Reich expanded the range of *18 Musicians* even further in *Different Trains*, for string quartet and sampled voices and the music-theatre and installation pieces he has made with his wife, Beryl Korot, such as *The Cave* and *Three Tales*; there's even a multimedia micro-Gesamtkunstwerk called *City Life*. For me, though, it's when Reich focuses on the minutiae of musical material rather than its political or cultural message that his work is at its most powerful. That's an alchemy he manages in *Proverb*, his setting and meditation on Wittgenstein's aphorism "How small a thought it takes to fill a whole life," or in the impassioned austerity of his Daniel Variations, a piece based on the words of American journalist Daniel Pearl, who was beheaded in Pakistan 2002. Reich eventually used the voice of Daniel Hamm, one of the boys involved in the riots but not responsible for the murder; he was

nineteen at the time of the recording. At the beginning of the piece, he says, "I had to, like, open the bruise up and let some of the bruise blood come out to show them" (alluding to how Hamm had punctured a bruise on his own body to convince police that he had been beaten). The police had not previously wanted to deal with Hamm's injuries, since he did not appear seriously wounded.

Reich re-recorded the fragment "come out to show them" on two channels, which initially play in unison. They quickly slip out of sync to produce a phase shifting effect, characteristic of Reich's early works. Gradually, the discrepancy widens and becomes a reverberation and, later, almost a canon. The two voices then split into four, looped continuously, then eight, until the actual words are unintelligible. The listener is left with only the rhythmic and tonal patterns of the spoken words. Reich says in the liner notes of his album *Early Works* of using recorded speech as source material that "by not altering its pitch or timbre, one keeps the original emotional power that speech has while intensifying its melody and meaning through repetition and rhythm." The piece is a prime example of process music. In dance, the piece was used in 1982 by the Belgian choreographer Anne Teresa De Keersmaeker as part of one of her seminal works, *Fase*, which became a cornerstone of contemporary dance.

2) *Piano Phase* (1967) - Is a piece of music written for two pianos. It is his first attempt at applying his "phasing" technique, which he had previously used in the tape pieces *It's Gonna Rain* (1965) and *Come Out* (1966), to live performance. Reich further developed this technique in pieces like *Violin Phase* (also 1967), *Phase Patterns* (1970) and *Drumming* (1971); this latter work marks his last use of the phasing technique. Reich further developed this technique in pieces like *Violin Phase* (also 1967), *Phase Patterns* (1970) and *Drumming* (1971); this latter work marks his last use of the phasing technique. Reich's phasing works generally have two identical lines of music, which begin by playing synchronously, but slowly become out of phase with one another when one of them slightly speeds up. Reich had previously applied this technique only to sounds recorded on magnetic tape, but experimenting in his studio, he found it was possible for humans to replicate the effect.

3) *Music for 18 Musicians* (1976) - You perceive the significance and the novelty of the piece in terms of Reich's music right at the start - in the opening Pulse section, with which the piece also ends. It's a sequence of 11 chords that the whole ensemble breathes through (literally, since what determines how long each individual chord is held is the length of time the the bass clarinet player can sustain the repetitions of the bass note). What's novel about that? Well, where previous pieces had focused on a single harmonic idea (Four Organs, for example, is a hallucinogenically hypnotic extension of one chord) or rhythmic pattern (the whole of Drumming, which can last up to an hour and a half, is based on just one bar-long idea), there is more harmonic motion and difference in the opening of *Music for 18 Musicians* than in all of what he'd written up to this point. There's also a greater variety of instrumental timbre; again, pieces such as *Six Pianos* or *Violin Phase* do what they say on the tin, using ensembles of acoustic or recorded versions of a single instrumental colour. But the *18 Musicians* who play

their Music are percussionists, string players, clarinettists, singers and pianists, creating an ever-changing, kaleidoscopic soundworld.

But it's how Reich uses all of that colour and possibility over the hour of the whole work that makes the piece so magnetic. You hear the classic Reich technique of gradually building up a rhythm by adding notes in successive repetitions, and one of the 12 sections even uses the music of Violin Phase in a new context. Reich says the sections of Music for *18 Musicians* are based on the cycle of chords we hear at the start, so that the whole work creates a sequence of short pieces that's like a harmonic expansion and explosion of that cyclic pattern. Yet the experience of the piece is much richer than that suggests. Music for *18 Musicians* creates a labyrinthine experience for the listener. You're locked into the mesmerising way in which one pattern morphs into another, addicted to the groove and pulse of the music at the smallest scale of what's happening from one note to the next.

At the same time, the music describes a bigger journey, as melodies and patterns recur over the scale of the whole piece. Reich builds up waves of density and complexity that crest at different points (listen out for Section V and Section IX especially), creating an experiential arc that does much more than repeat a sequence of chords and rhythms. I find Music for *18 Musicians* a compelling and even moving piece, but given that it eschews, like all of Reich's music, any hint of obvious sentimentality, that expressive power comes from the notes themselves, from the warp and weft of pattern, melody and pulse. Reich expanded the range of 18 Musicians even further in *Different Trains*, for string quartet and sampled voices and the music-theatre and installation pieces he has made with his wife, Beryl Korot, such as *The Cave* and *Three Tales*; there's even a multimedia micro-Gesamtkunstwerk called *City Life*. For me, though, it's when Reich focuses on the minutiae of musical material rather than its political or cultural message that his work is at its most powerful. That's an alchemy he manages in *Proverb*, his setting and meditation on Wittgenstein's aphorism "How small a thought it takes to fill a whole life," or in the impassioned austerity of his *Daniel Variations*, a piece based on the words of American journalist Daniel Pearl, who was beheaded in Pakistan 2002.

4) Tehillim (1981) - Reich's “phasing” works generally have two identical lines of music, which begin by playing synchronously, but slowly become out of phase with one another when one of them slightly speeds up. Reich had previously applied this technique only to sounds recorded on magnetic tape, but experimenting in his studio, he found it was possible for humans to replicate the effect. In its standard chamber version, *Tehillim* is scored for four women's voices (one high soprano, two lyric sopranos and one alto), piccolo, flute, oboe, English horn, two clarinets, six percussion (playing small tuned tambourines without jingles, clapping, maracas, marimba, vibraphone and crotales), two electric organs, two violins, viola, cello and bass. The voices, winds and strings are amplified in performance.

   Tehillim may strike listeners familiar with much of Reich's other work as something of a departure from his earlier pieces. In contrast to his entire oeuvre, with the possible exceptions of *The Cave* (1993) and *Proverb* (1995), *Tehillim* is less "radical" musically. This difference is, on the one hand, thematic. It was the first major composition by Reich to reference explicitly

his new-found interest in his Jewish heritage and his Judaism as such. However, although this is obviously central to the work and although Reich has never subsequently (until his 2004 *You Are (Variations)*) set the Jewish scriptures to music, the real difference lies in the formal aspects of *Tehillim*.

Typically, Reich's music is characterised by a steady pulse and the repetition of a comparatively small amount of melodic material emanating from a clear tonal centre (a style of writing which is called 'minimalist'). Both aspects are certainly to be identified in *Tehillim* (the composition in no way marks a complete aesthetic break for Reich), for example in the quick, unchanging tempo of the first two parts, which are played one after another without a break and the close four-part canons of the first and fourth parts. However, these aspects together constitute only the broad outlines of the work; how they are presented is markedly different from his early work. These differences are a direct consequence of the need felt by the composer to, "set the text in accordance with its rhythm and meaning."

There is no fixed metre or metric pattern in *Tehillim*. The rhythm of the music comes directly from the rhythm of the Hebrew text. Secondly, the musical setting of lengthy 3-4 line texts results in the composition of extended melodies at that point atypical for Reich. "Though an entire melody may be repeated either as the subject of a canon or variation, this is actually closer to what one finds throughout the history of Western music." As such, this second aspect of extended melody contributes to the appearance of structures not without precedent in Western musical history.

"The use of extended melodies, imitative counterpoint, functional harmony and full orchestration may well suggest renewed interest in Classical, or more accurately Baroque, and earlier Western musical practice. The non-vibrato, non-operatic vocal production will also remind listeners a singing style derived from outside the tradition of 'Western Art Music.' However, the overall sound of *Tehillim,* and in particular, the intricately interlocking percussion writing which, together with the text, marks this music as unique by introducing a basic musical element that one does not find in earlier Western musical practice including the music of this century. *Tehillim* may thus be heard as traditional and new at the same time." None of the writing is informed by the sound or structure (in spite of the composer's recent study of Hebrew cantillation) of Jewish music generally or any existing tradition for singing the Biblical text. Indeed, a major factor in Reich's choosing the Psalms was that, "the oral tradition for Psalm singing in the Western synagogues has been lost. This meant I was free to compose the melodies for *Tehillim* without a living oral tradition to imitate or ignore."

5) *Daniel Variations* (2006) - It is scored for two each of soprano and tenor voices, clarinets, four pianos, string quartet and percussion (six players, playing Bass Drum, Gong, and four Vibraphones). *Daniel Variations* is in four movements, using text from the biblical book of Daniel for the first and third movements and, from the words of Daniel Pearl, the American-Jewish reporter, kidnapped and murdered by Islamic fundamentalists in Pakistan in 2002, for the second and fourth movements.

Philip Glass (January, 1937 - ?) is an American composer, considered one of the most influential music makers of the late 20th century. His music is also often controversially described as “minimal music,” along with the work of the other "major minimalists" La Monte Young, Terry Riley and Steve Reich. Glass has distanced himself from the "minimalist" label, describing himself instead as a composer of "music with repetitive structures." Though his early mature music shares much with what is normally called "minimalist," he has since evolved stylistically. Currently, he describes himself as a "classicist," pointing out that he is trained in harmony and counterpoint and studied such composers as Franz Schubert, Johann Sebastian Bach and Wolfgang Amadeus Mozart with Nadia Boulanger.

Glass is arguably the most influential composer across the whole range of the musical world, from film scores to music theatre, from rock and pop to new music. The music that Glass made in New York in the 60s and 70s had a combination of experimentalism, listener-friendliness and potential for commercial exploitation that none of his contemporaries have ever quite matched. There are other dots to join, though, between *Music in 12 Parts* and Glass's symphonies; most importantly, his series of operas, beginning with Einstein on the Beach (a piece he made with Robert Wilson in 1976). Einstein's opening number and its *Knee Plays* for an ensemble of voices counting numbers over and over again above an addictively sonorous electronic ground bass is one of the most imitated of any of the sounds of postwar music. It's also had the ultimate tribute of being parodied as much as any other piece. Then there's his film music: Glass's dozens of scores now include three Oscar nominations, for Kundun, The Hours, and Notes on a Scandal, but his most important music for film is surely the trilogy of non-narrative music-and-image spectaculars he collaborated on with director Godfrey Reggio, starting with Koyaanisqatsi in 1982. Whatever you think of what Glass did next with his musical language you can't doubt his influence on musicians from Brian Eno to Nico Muhly, from David Bowie to Hans Zimmer.

1) *1 + 1* (1968) employs the additive processes in which short phrases are slowly expanded.

2) *Music in 12 Parts* (1971-1974) - From a time when Glass and his ensemble were making the lofts of Manhattan one of the centres of the musical world: the opening of his *Music in 12 Parts*. Like Steve Reich's *Music for 18 Musicians*, this is one of the most significant game-changers in American postwar music. First performed in a now-legendary four-hour stint at New York's Town Hall in 1974 (and therefore pre-dating 18 Musicians by a couple of years), *Music in 12 Parts* is an encyclopedia of the techniques of additive rhythms and "music with repetitive structures" (Glass's preferred term for his music as opposed to "minimalism" and, in the richness of experience it offers, as well as its sheer length, there ain't nothing "minimal" about *Music in 12 Parts*) and it cements the soundworld of the Philip Glass Ensemble, a still fresh-sounding combo of voices, electric keyboards, and wind instruments. It's also, like Reich's *18 Musicians*, the piece in which Glass opens his musical world to a richer harmonic palette than his previous works had attempted, above all in Parts 11 and 12. Earlier pieces such as *Music in Changing Parts* or especially *Music in Fifths* and *Music in Contrary Motion* are the definitive trailblazers for Glass's musical language, in its purest state of plain harmony, rhythmic subtlety, and textural austerity.

3) *Einstein on the Beach* (1975) - is an opera in four acts (framed and connected by five "knee plays" or intermezzos). The opera eschews traditional narrative in favor of a formalist approach based on structured spaces in a series of storyboards. Glass recounts the collaborative process: "I put [Robert Wilson's notebook of sketches] on the piano and composed each section like a portrait of the drawing before me. The score was begun in the spring of 1975 and completed by the following November and those drawings were before me all the time." The premiere took place on July 25, 1976, at the Avignon Festival in France. The opera contains writings by Christopher Knowles, Samuel M. Johnson and Lucinda Childs. It is Glass's first and longest opera score, taking approximately five hours in full performance without intermission.

   The work became the first in Glass's thematically related Portrait Trilogy, along with *Satyagraha* (1979) and *Akhnaten* (1983). These three operas were described by Glass as portraits of people whose personal vision transformed the thinking of their times through the power of ideas rather than by military force.

4) *Glassworks* (1981) - Is a chamber music work of six movements. It is regarded as a characteristically Glass-like work. Following his larger-scale concert and stage works, *Glassworks* was Philip Glass's successful attempt to create a more pop-oriented "Walkman-suitable" work, with considerably shorter and more accessible pieces written for the recording studio. The studio album was released in 1982. This was intended to introduce my music to a more general audience than had been familiar with it up to then.

5) *Koyaanisqatsi* (1983) - American documentary film directed by Godfrey Reggio with music composed by Philip Glass and cinematography by Ron Fricke. The film consists primarily of slow motion and time-lapse footage of cities and many natural landscapes across the United States. The visual tone poem contains neither dialogue nor a vocalized narration: its tone is set by the juxtaposition of images and music.

   The film's soundtrack by Glass was released in 1983, after the release of the film. Even though the amount of music in the film was almost as long as the film itself, the soundtrack release was only 46 minutes long and featured only selections from the film's pieces. In 1998, Glass rerecorded the album through Nonesuch Records with a length of 73 minutes, 21 seconds. The re-recording of the album featured two additional tracks from the film, as well as extended versions of previous tracks from the original album. The album was released as a Philip Glass album titled *Koyaanisqatsi*, rather than a soundtrack to the film. The music has become so popular that the Philip Glass Ensemble has toured the world, playing the music for *Koyaanisqatsi* live in front of the movie screen.

   The opening for *The Grid* begins with slow sustained notes on brass instruments. The music builds in speed and dynamics throughout the piece's 21 minutes. When the piece is at its fastest, it is characterized by a synthesizer playing the piece's bass line ostinato. Glass's music

for the film is a highly recognizable example of the minimalist school of composition, which is characterized by heavily repeated figures, simple structures and a tonal (although not in the traditional common practice sense of the word) harmonic language. Glass was one of the first composers to employ minimalism in film scoring, paving the way for many future composers of that style.

6) *Symphony No 9* (2011) - It is written in 3 movements. The work was jointly commissioned by the Bruckner Orchester Linz, Carnegie Hall and the Los Angeles Philharmonic Association. The symphony has been highly regarded by critics and quickly became a bestseller on iTunes following its U.S. premiere. Mark Swed of the *Los Angeles Times* lauded the work, declaring it "late Glass at his most momentous, a significant symphony by America's most significant symphonist." Richard S. Ginell of *Variety* also praised the work, saying, "The 50-minute-plus Ninth is not Glass's biggest symphony – that would be the 97-minute, choral Fifth – but it is one of his more imposing pieces, three sprawling movements for a very large symphony orchestra." Andrew Clements of *The Guardian* was slightly more critical, but commended the work, noting, "If the music occasionally hangs fire, its craftsmanship, as ever with Glass, is exemplary."

Michael Nyman, (born 23 March 1944) is an English composer of minimalist music, pianist, librettist and musicologist, known for numerous film scores and for his multi-platinum soundtrack album to Jane Campion's *The Piano*. He has additionally written a number of operas, including *The Man Who Mistook His Wife for a Hat*, *Letters, Riddles and Writs*, *Noises, Sounds & Sweet Airs*, *Facing Goya*, *Man and Boy: Dada*, *Love Counts*, and *Sparkie: Cage and Beyond* and he has written six concerti, four string quartets and many other chamber works, many for his Michael Nyman Band, with and without whom he tours as a performing pianist. Nyman stated that he prefers to write opera rather than other sorts of music.

Nyman is one of the most misunderstood composers working today, whose work in cinema - especially with director Peter Greenaway but most famously as the composer of the score for Jane Campion's The Piano - tends to obscure the rest of his achievement. And as well as his concert works, chamber music and operas, Nyman's work as a journalist and writer - and latterly, visual artist too - assures him of a unique place in contemporary musical culture. He was the first person to coin the term "minimalism" and he was at the vanguard of what he termed Experimental Music, in a still-seminal tome from the 1970s. That's the point about Nyman: his success in popular terms has its roots not in an attempt to pander to the commercial mores of contemporary culture, but rather in a consistently questioning ethos of experimentation, which refuses to take anything for granted, whether it's the instrumental lineup of a new music ensemble (Nyman's own bands have included rebecs and shawms as well as saxophones and amplified strings, as well as the composer himself on piano), or the notion that to be a "serious" composer you have to eschew the technologies and developments of popular music. From the outside - or possibly from his own perspective - you might think that Nyman's music has been sidelined by the establishments of contemporary classical music. I'd say rather that his life in music so far has trumped them, by making himself essential to a much wider sphere of influence, exposure and, in a meaningful sense,

accessibility. Nyman is a bona fide experimentalist who just happens to be one of the most widely familiar composers on the planet.

1) *In Re Don Giovanni* (1977) - One of the pieces, that defined Nyman's style, a visceral re-working of Leporello's aria from Mozart's Don Giovanni. This was his first concert work for the Michael Nyman Band. It is built around a brief 16-bar phrase in the accompaniment of Leporello's catalog aria in *Don Giovanni.* Nyman says he discovered the piece playing the aria on his piano in the style of Jerry Lee Lewis, which "dictated the dynamic, articulation and texture of everything I've subsequently done."
2) *The Man Who Mistook His Wife For A Hat* (1986) - is a one-act chamber opera by Michael Nyman to an English-language libretto by Christopher Rawlence, adapted from the case study of the same name by Oliver Sacks by Nyman, Rawlence, and Michael Morris. The minimalist score makes use of songs by Robert Schumann, in particular, "Ich grolle nicht" from *Dichterliebe*, in which Dr. S. accompanies Dr. P., singing the ossia as a descant. Based on one of Oliver Sacks's case-studies, it is one of Nyman's most ambitious works, telling the story of Mr. P, a professional singer whose visual agnosis means that he can't recognize everyday objects. Nyman's score fuses and fragments Schumann's Lieder into the texture of his own sound world; the whole piece is a moving, non-narrative work of music-theatre.

3) *String Quartet No 3* (1990) - Nyman's concert music isn't only about celebratory sound and fury. This quartet is characterized by its subtle, meditative reflection.

4) *Musique a Grande Vitesse* (1993) - One of Nyman's most ambitious and brilliant pieces, which works both as an explosive showpiece for the Michael Nyman Band and orchestra and a technical and compositional tour-de-force. Nyman says that "the topography of MGV should be experienced without reference to planning, description or timetables," but there's a subtle interplay between small-scale rhythmic patterns and dislocations, as well as a bigger journey which is articulated by its five inter-connected sections. It's music that's as irresistible in its energy, speed, and sheer noise.

5) *Double Concerto for Saxophone and Cello* (1997) - Composed for John Harle and Julian Lloyd Webber. This five-movement concerto is another large-scale instrumental work that fuses Nyman's trademark rhythmic energy with large-scale structural sophistication and some genuinely lyrical writing for the soloists and orchestra. The combination of sax and cello work together.

- **Post-Minimalism**

In its general musical usage, *postminimalism* refers to works influenced by minimal music and it is generally categorized within the art music genre. Writer Kyle Gann has employed the term more strictly to connote the style that flourished in the 1980s and 1990s and characterized by:

1. a steady pulse, usually continuing throughout a work or movement;
2. a diatonic pitch language, tonal in effect but avoiding traditional functional tonality;

3. general evenness of dynamics, without strong climaxes or nuanced emotionalism; and
4. unlike minimalism, an avoidance of obvious or linear formal design.

Many composers are expanding the resources of minimalist music to include rock and world instrumentation and rhythms, **Serialism**, and many other techniques. Another notable characteristic is storytelling and emotional expression taking precedence over technique.

Other composers sometimes referred to as "**Post-minimalist**" include Erkki-Sven Tüür, Peteris Vasks, Giya Kancheli, Arvo Pärt, Gavin Bryars, Lepo Sumera, Valentin Silvestrov, Veljo Tormis, Ingram Marshall, Kevin Volans, Daniel Lentz, Louis Andriessen, Frederic Rzewski, and many composers associated with the Bang on a Can collective.

William Duckworth (January 13, 1943 – September 13, 2012) was an American composer who also was an author, educator and Internet pioneer. He wrote more than 200 pieces of music and is credited with the composition of the first postminimal piece of music, *The Time Curve Preludes* (1977–78), for piano. Duckworth was a Professor of Music at Bucknell University. Duckworth was born in North Carolina in 1943. He obtained a bachelor's degree in music from East Carolina University, then master's and doctorates in music education from the University of Illinois at Urbana. He studied composition under composer Ben Johnston and wrote his Ph.D. dissertation on the notation of composer John Cage. Over the years Duckworth enjoyed a close collaboration with James Jordan who frequently performs Duckworth's music with his world-renowned choral ensembles. Duckworth died at his home in West New York, N.J., after a long fight with pancreatic cancer.

Duckworth wrote more than 200 pieces of music. His best-known compositions include *The Time Curve Preludes,* 24 short pieces for piano and *Southern Harmony*, which consists of 20 pieces for an eight-part chorus and employs features of shape note singing and minimalism. Other works include *Mysterious Numbers*, written for chamber orchestra, *Imaginary Dances*, for solo piano and *Simple Songs about Sex and War*, written in collaboration with poet Hayden Carruth. "The Time Curve Preludes" were recorded by Bruce Brubaker in 2009. In the last months of his life, Duckworth completed a piano concerto for Brubaker.

1) *The Time Curve Preludes* (1978), a set of 24 short pieces for piano, has been described by music critic Kyle Gann as the first work of postminimalism. The harmonic language is more active than preexisting minimalist conventions and doesn't satisfy the established expectations of minimalist practice. Along with its elements of minimalism, the preludes utilize many references to piano music of earlier periods, a tenet of postmodernism. The music makes reference to folk music, jazz, medieval music, Erik Satie, banjo strumming and the style of Jerry Lee Lewis. One of the facets of earlier minimalism is the lack of explicit structure, while this set of pieces are of much more recognizable structure, including the division of 24 separate preludes. The number of preludes itself is a reference to Bach's Well-Tempered Clavier, though it doesn't utilize every key as does the Well-Tempered Clavier. The music also utilizes the Fibonacci series in developing proportional and rhythmic patterns, which were set out with the use of a numerical grid. The use of the Fibonacci sequence is not unique and appears in

Bartok's music as well. Duckworth's use of bitonality in Prelude No. 7 seems to be referential of Darius Milhaud's music. Most central to the piece is the Dies Irae, which is transformed into a major variant and serves as the central motive of the piece.

John (Coolidge) Adams (born Feb 15, 1947) is an American composer, born in Worchester MA and now living in the SF California region, with strong roots in minimalism. Adams' music should not be labeled as minimalist. He was born a generation after famous minimalists such as Philip Glass and Steve Reich and, despite minimalism's audible influences in harmony, Adams, himself, described his music as "post-minimalist," as he does not strictly follow minimalist techniques. His compositions tend to be more directional and climactic, possessing qualities of Romanticism, rather than the smooth soundscapes characterizing those of Philip Glass. It was in San Francisco that he heard the minimalist works of Glass, Reich and Terry Riley for the first time and was immediately drawn to its sound. However, he soon felt that although minimalism was "the most important stylistic development in Western art music since the Fifties," the genre had its limits, since repetition was its foundation. Adams coined the term "post-minimalism" starting with his piece for string septet *Shaker Loops* (1978). This style is characterized by greater dynamic contrasts and a more fluid and layered sound. His best music, although possessing traits of minimalism, is recognizably his work, bearing his trademark style of expanding the genre of minimalism by creating greater dynamic contrasts and a more fluid, layered sound.

Adams is considered one of the most important contemporary voices; his music is both radical and conservative than his minimalist forebears. He was never a composer to play by the rules his predecessors had mapped out for him – even if those rules were all about opening up musical freedoms. He was growing up when those twin antipodes of American music, John Cage and Elliott Carter, were in the full flowering of their creativity. As he studied at Harvard and worked as an orchestral clarinetist on the east coast, he was able to absorb influences from a huge variety of sources.

Some commentators say they are undecided over whether the most recent of Adams's music packs the same punch as his earlier work. It's not because his more recent work is less ambitious – in a way, it's more far-reaching in its subject matter and what it's trying to do musically, but the risks are greater, too. The saturation of the Chamber Symphony or a piece such as his orchestral Guide to Strange Places does not pay off, because there's both too much detail in the chromatic density of some of the harmony and not enough real complexity and because Adams has a way of subsuming the diversity of his musical sources beneath the sheen and dazzle of his own language, so that everything sounds weirdly homogeneous. Some commentators also found Doctor Atomic similarly disappointing compared with Klinghoffer or Nixon. But what is beyond doubt is that Adams is one of those contemporary voices we all need to hear and keep hearing.

1) *Shaker Loops* (1978) - Adams's breakthrough as a composer came when he moved to the west coast – his home ever since. And the piece that crystallized his creative world was his string septet Shaker Loops. Here's what Adams (incidentally, one of today's most virtuosically literate composers: check out his collected writings, Hallelujah Junction) says about this piece, written in 1978: "Rather than set up small engines of motivic materials and let them run free in a kind

of random play of counterpoint, I used the fabric of continually repeating cells to forge large architectonic shapes, creating a web of activity that, even within the course of a single movement, was more detailed, more varied, and knew both light and dark, serenity and turbulence." You could paraphrase: it's minimalism, but not as you know it. Attracted to the surfaces of the minimalism, but frustrated by its lack of harmonic interest and large-scale momentum, Adams's solution in Shaker Loops was at once more radical and more conservative. Radical, because he was prepared to fuse the purity of minimalist processes with a richer range of references and conservative because he wanted to find a way to restore old ideas of harmonic ebb and flow to this new style, to create his "large architectonic shapes." But just as with Grand Pianola Music, it's the sound and shimmer of Shaker Loops that will make you fall for this music.

2) *Grand Pianolo Music* (1982) - Here's what I love most about John Adams: the gilded celebration of sheer, unadulterated major-key glamour at the end of On The Dominant Divide, the finale of his Grand Pianola Music. Scored for two pianos, vocalists and ensemble, the piece was composed in 1982, a time when the idea of writing tonal music – let alone the spangly, hummable tune of On the Dominant Divide – was, according to many central European and academic diktats, beyond the stylistic and even political pale. As Adams himself remembers, "the audience response [at the premiere] included a substantial and (to me) shocking number of 'boos'. True, it was a very shaky performance, and the piece came at the end of a long concert of new works principally by serialist composers from the Columbia-Princeton school. In the context of this otherwise rather sober repertoire, Grand Pianola Music must doubtless have seemed like a smirking truant with a dirty face, in need of a severe spanking." The three movements of Grand Pianola Music are a brilliant *ne plus ultra* of one side of Adams's creativity. The piece came to him as a flash of inspiration in a dream "in which, while driving down Interstate Route 5, I was approached from behind by two long, gleaming, black stretch limousines. As the vehicles drew up beside me they transformed into the world's longest Steinway pianos … 20-, maybe even 30-feet long. Screaming down the highway at 90mph, they gave off volleys of B flat and E flat major arpeggios." The effect in the piece he wrote after he woke up is a sort of pile-up between Steve Reich, Rachmaninov, Liszt, Liberace – and the rest of music history.

3) *Harmonielehre* (1985) - Adams also wrote the huge three-movement orchestral piece Harmonielehre that recast the expressive power of late romanticism (it virtually quotes Mahler's 10th Symphony in its slow movement) in the garb of a post-minimalist workout. Again, those labels are far less helpful than simply hearing the music: try the unstoppable energy of the start of Harmonielehre.

4) *Nixon in China* (1987) - The first phase of Adams's development climaxes with two masterpieces of the mid-1980s (Nixon in China and Harmonielehre). Nixon in China, which dares to put recent events on the opera stage – dares, and wins, thanks to the poetry of Alice Goodman's libretto and the irresistible imagination of Adams's music. The score for Nixon is by turns souped-up tonal surrealism and a delicate, reflective meditation (in the final act

especially). The first 20 minutes or so of Nixon, is one of the most compelling openings to any opera, ever. Adams's music of the later 90s and the noughties has brought another two full-scale operas, The Death of Klinghoffer and Doctor Atomic, both on contemporary themes (the murder of Leon Klinghoffer on board the Achille Lauro in 1985, and the birth of the atomic bomb), and he hasn't shirked from big statements on everything from religion to pop culture to natural disasters in his other theatre and vocal works, some of them in collaboration with Peter Sellars.

5) *Violin Concerto* (1994) - Something else has happened in Adams's recent music. He has continued to develop his palette of references and harmonic richness, even encompassing the European modernism that he seemed at first to resist. There's an ongoing dialogue with Schoenberg (the title of Harmonielehre pays tribute to one of the Austrian composer's masterly didactic tomes) in music such as the *Chamber Symphony* and the *Violin Concerto*; on the other hand, there are obvious and affectionate reworkings of pop tunes and musicals in *I Was Looking at the Ceiling and Then I Saw the Sky*, and there's a welter of historical and contemporary reference in his recent orchestral piece, *City Noir*.

- **Movies**

Saint-Saens was the first major figure to compose for the cinema when he agreed to write the music for the costume melodrama L'Assassinat du Doc de Cuise in 1908. Although music had been employed since film's beginnings primarily as a means of covering up the noise of the projector, a commissioned score was the exception rather than the rule: the norm was to employ a pianist (or a small ensemble) who would play, or improvise, a live accompaniment to the film using cue sheets in which the classical repertoire and popular hits of the day were shamelessly plundered. A leap forward for so-called "silent" films and in 1915, the director D.W.Griffiths created a score with composer J.C.Breil for his Civil War epic The Birth of a Nation. This consisted of both original and traditional material arranged so that it could be precisely cued with the on-screen action. The score was then published, allowing it to be performed, in one form or another, at subsequent screenings around the country. On the whole, however, original scores for early Hollywood movies tended to be rather crude affairs and it was in Europe that a more sophisticated and experimental approach prevailed with the cinema attracting several leading figures of avant-garde. These included Erik Satie, whose witty, modern score forms the perfect complement to Rene Clair's Surrealist short film Entr'acte (1924); and Shostakovich, whose powerful music for New Babylon (1929), a film about the Paris Commune, convincingly encompasses biting satire and deep-felt emotion.

With the coming of sound movies in 1929, Hollywood producers realized the advantages of commissioning new music for film, and as studio music departments became ever eager, so they were boosted by an influx of talent from Europe – some of whom were escaping from the Nazis. Among the many European composers who were to have a profound impact on the "sound" on Hollywood in the 1930s and 1940s were Erich Korngold, Max Steiner, Franz Waxman, Miklos

Rosza and Dimitri Tiomkin. All of these composers worked within a narrow, essentially Romantic, style dubbed by Rosza "Broadway-cum-Rachmaninoff." Significantly, the major figures of European Modernism, Schienber and Stravinsky (both of whom loved in Hollywood), resisted the Hollywood dollar, while the acerbic Hanns Eisler only survived until he was discovered to be a Communist.

In America, the composer was the servant of the studio and few Hollywood composers had the kind of close working relationship that Proikofiev enjoyed with Sergei Eisenstein and which produced the masterpieces Alexander Nevsky and Ivan the Terrible. One who did was Bernard Herrmann, a composer whose sense of dramatic pacing was such that the director Alfred Hitchcock used to consult him before he started shooting. Hermann's scores for Hitchcock 0 in particular the hypnotically somnambulant Vertigo and the edgy nervousness of Psycho – are major elements of the success of his films. Herrmann had a strong musical identity and was not afraid to break out of the Romantic straightjacket, often employing simple, pared-down motifs which were repeated in such a way as to get, unnervingly, under the skin.

In the 1950s, there was a gradual loosening up of the whole notion of what sort of music was appropriate to accompany a film. Elmer Bernstein's jazzy score for The Man with a Golden Arm (1956) was followed by actual jazz scores like Duke Ellington's Anatomy of a Murder (1959), while the schoolroom drama Blackboard Jungle (1955) came with tailor-made rock'n'roll soundtrack. Meanwhile in France, director Jean-Pierre Melville used Bach piano music as the background to his version of Les Enfants Terribles, a decision, which was to influence forthcoming directors like Truffaut and Rivette, as well as the American Stanley Kubrick, who came to specialize in telling juxtaposition if disparate pieces of classical music, as in 2001 – A Space Odyssey in which Richard Strauss, Johann Strauss, Ligeti and Berio are combined to brilliant effect.

Despite the diversity of music now employed in the cinema, the composer is still the dominant figure when it come to film music, and his or her task is much the same as it was sixty years ago – to unify the action and underline the emotional highpoints. Currently, no figure looms as large as John Williams, the composer of Jaws, the Star Wars and Schindler's List, who sees himself as part of a grand tradition. Williams acknowledges a debt, not only to Hollywood legends Korngold and Steiner, but also to the major Romantic composers of the past like Tchaikovsky and Elgar.

John Williams (born February 8, 1932-?) is an American composer, conductor, and pianist. In a career spanning over six decades, Williams has composed some of the most popular and recognizable film scores in cinematic history, including the Star Wars series, the first two Jaws films, E.T. the Extra-Terrestrial, the Indiana Jones series, Close Encounters of the Third Kind, Superman, the first two Home Alone films, Hook, the first two Jurassic Park films, Schindler's List, Saving Private Ryan, the first three Harry Potter films, Catch Me If You Can, Memoirs of a Geisha, War Horse and Lincoln. He has had a long association with director Steven Spielberg, composing the music for all of Spielberg's feature films but The Color Purple and Bridge of Spies. Williams has also composed numerous classical concerti and other works for orchestral ensembles and solo

instruments and he served as the Boston Pops Orchestra's principal conductor from 1980 to 1993; he is now the orchestra's conductor laureate.

Tan Dun (born 1957, Changsha, Hunan-?) is a Chinese contemporary classical composer and conductor, most widely known for his scores for the movies *Crouching Tiger, Hidden Dragon* and *Hero*, as well as composing music for the medal ceremonies at the 2008 Beijing Olympics. His works often incorporate audiovisual elements; use instruments constructed from organic materials, such as paper, water and stone; and are often inspired by traditional Chinese theatrical and ritual performance. Dun was born in a village in Changsha in the Hunan province of China. As a child, he was fascinated by the rituals and ceremonies of the village shaman, which were typically set to music made with natural objects such as rocks and water. Due to the bans enacted during the Cultural Revolution, he was discouraged from pursuing music and was sent to work as a rice planter on the Huangjin commune. He joined an ensemble of other commune residents and learned to play traditional Chinese string instruments. Following a ferry accident that resulted in the death of several members of a Peking opera troupe, Dun was called upon as a violist and arranger. This initial success earned him a seat in the orchestra and, from there, he went to study at the Central Conservatory of Music in Beijing in 1977. While at the Conservatory, Dun came into contact with composers such as Toru Takemitsu, George Crumb, Alexander Goehr, Hans Werner Henze, Isang Yun and Chou Wen-Chung, all of whom influenced his sense of musical style. In 1986 he moved to New York City as a doctoral student at Columbia University, once again studying with Chou Wen-Chung, who had studied under Edgard Varèse. At Columbia, Dun discovered the music of composers such as Philip Glass, John Cage, Meredith Monk and Steve Reich, and began incorporating these influences into his compositions. He completed his dissertation, *Death and Fire: Dialogue with Paul Klee*, in 1993.

The conceptual and multifaceted composer/conductor Tan Dun has made an indelible mark on the world's music scene with a creative repertoire that spans the boundaries of classical music, multimedia performance and Eastern and Western traditions. Tan Dun's individual voice has been heard by wide audiences. His first *Internet Symphony*, which was commissioned by Google/YouTube, has reached over 15 million people online. His Organic Music Trilogy of *Water, Paper* and *Ceramic Concerti* has frequented major concert halls and festivals. *Paper Concerto* was premiered with the Los Angeles Philharmonic at the opening of the Walt Disney Hall. His multimedia work, *The Map*, premiered by Yo-Yo Ma and the Boston Symphony Orchestra, has toured more than 30 countries worldwide. His *The Gate (Orchestral Theatre IV)* was premiered by Japan's NHK Symphony Orchestra and crosses the cultural boundaries of Peking Opera, Western Opera and puppet theatre traditions. Other important recent premieres include *Four Secret Roads of Marco Polo* for the Berlin Philharmonic and *Piano Concerto "The Fire"* for Lang Lang and the New York Philharmonic. Tan Dun was commissioned by the International Olympic Committee (IOC) to write the Logo Music and Award Ceremony Music for the Beijing 2008 Olympic Games.

For Tan Dun the marriage of composition and inspiration has always culminated in his operatic creations, *Marco Polo* was commissioned by the Edinburgh Festival and has had four different productions including, most prominently, with De Nederlandse Opera directed by Pierre Audi; *The*

First Emperor with Plácido Domingo in the title role, commissioned by the Metropolitan Opera of New York; *Tea: A Mirror of Soul*, premiered at Japan's Suntory Hall, has since had new productions with Opera de Lyon, a co-production by Santa Fe Opera and The Opera Company of Philadelphia; and *Peony Pavilion*, directed by Peter Sellars which has had over 50 performances at major festivals in Vienna, Paris, London and Rome.

- **Musique Concrète**
  Musique concrète (French; literally, "concrete music"), is a form of **Electro-acoustic Music** that utilizes acousmatic sound as a compositional resource.

  Pierre Schaeffer (14 August 1910 – 19 August 1995) was a French composer, writer, broadcaster, engineer, musicologist and acoustician. His innovative work in both the sciences—particularly communications and acoustics—and the various arts of music, literature and radio presentation after the end of World War II. Among the vast range of works and projects he undertook, Schaeffer is most widely and currently recognized for his accomplishments in electronic and experimental music, at the core of which stands his role as the chief developer of a unique and early form of avant-garde music known as musique concrète. Schaeffer often created his "concrete music" with real-world sounds. The notable *Railroad Study* (French: "*Étude aux chemins de fer*"), for instance, featured recordings of the noises made by trains running along railroad tracks.

  The term **musique concrète** (French for "**real music**", literally "**concrete music**"), was coined by Schaeffer in 1948. Schaeffer believed traditionally classical (or as he called it, "serious") music begins as an abstraction (musical notation) that is later produced as audible music. Musique concrète, by contrast, strives to start with the "concrete" sounds that emanate from base phenomena and then abstracts them into a composition. The term musique concrète is then, in essence, the breaking down of the structured production of traditional instruments, harmony, rhythm, and even music theory itself, in an attempt to reconstruct music from the bottom up.

  Schaeffer developed the concept of including any and all sounds into the vocabulary of music. At first he concentrated on working with sounds other than those produced by traditional musical instruments. Later on, he found it was possible to remove the familiarity of musical instrument sounds and abstract them further by techniques such as removing the attack of the recorded sound.

  He was among the first musicians to manipulate recorded sound for the purpose of using it in conjunction with other sounds in order to compose a musical piece. Techniques such as tape looping and tape splicing were used in his research, often comparing to sound collage. The advent of Schaeffer's manipulation of recorded sound became possible only with technologies that were developed after World War II had ended in Europe. His work is recognized today as an essential precursor to contemporary sampling practices. Schaeffer was among the first to use recording technology in a creative and specifically musical way, harnessing the power of electronic and experimental instruments in a manner similar to Luigi Russolo, whom he admired and from whose work he drew inspiration. Furthermore, he emphasized the importance of "playing:" 'to enjoy

oneself by interacting with one's surroundings', as well as 'to operate a musical instrument'. This notion is at the core of the concept of musique concrète, and reflects on freely improvised sound, or perhaps more specifically electroacoustic improvisation, from the standpoint of Schaeffer's work and research.

- **Neoclassicism**

  Neoclassicism was a style cultivated between the two world wars, which sought to revive the balanced forms and clearly perceptible thematic processes of the 17th and 18th centuries, in a repudiation of what were seen as exaggerated gestures and formlessness of Late Romanticism. Because these composers generally replaced the functional tonality of their models with extended tonality, modality, or atonality, the term is often taken to imply parody or distortion of the Baroque or Classical style. Famous examples include Prokofiev's *Classical Symphony* and Stravinsky's *Pulcinella*. Paul Hindemith (*Symphony: Mathis der Maler*) and Darius Milhaud also used this style. Maurice Ravel's *Le tombeau de Couperin* is often seen as Neo-baroque, though the distinction from Neo-classicism is not always made.

  In place of the formal freedoms of pre-War years, composers now sought the discipline of a structured framework, and they found the models for this in the work of certain pre-romantics. The music of JS Bach and Mozart was especially admired for its clean line, rhythmic tightness and textural lucidity – and for the fact that it referred to nothing outside of itself or, as Stravinsky put it, was "powerless to express anything at all whether a feeling, an attitude of mind… a phenomenon of nature, etc." Stravinsky's Pulcinella (1917) was the turning point: written for the Russian Ballet, it consisted of a number of pieces by the eighteenth-century Italian Pergolesi, wittily but affectionately arranged for a chamber orchestra using odd instrumental combinations and decidedly spare and modern harmonies. For Stravinsky, this dynamic relationship with the past offered in a new way forward, and neoclassicism (as the style become known as) would remain a significant stimulus until after his "Mozartian" opera The Rakes Progress (1951).

  In Austria and Germany, the abandonment of expressionism by the avant-garde led to two separate developments both pulling in different directions but both involving a dialog with tradition. For Schoenberg, the old diatonic system of major and minor keys was over. In its place he invented an alternative system, Serialism, whereby the twelve tones of the chromatic scale were fixed in a specific order (or series) for each composition, which would act as the fundamental basis from which all subsequent ideas derived. This radical departure was held in check by the fact that Schoenberg wished to employ Serialism within the framework of traditional forms.

  For other Austro-German composers – Hindemith, Weill, Eisler – there was a political dimension to their rejection of expressionism which, with its preoccupation with the unconscious, they saw as a manifestation of Bourgeois neuroticism. They wished to create music that was clear, objective and incisive - that turned an unflinching (rather than sentimental) eye on the postwar reality. In common with Stravinsky, such composers favored woodwind instruments over strings and drew their inspiration partly form jazz-style combos (Weill and Eisler) and – in the case of Hindemith – from the pulsating motor rhythms of Baroque music.

To a significant extent, neoclassicism became the dominant influence on young experimental composers working in the inter-War years. It had an impact on the French group known as Les Six (in particular Poulenc) and was transmitted further afield through the Paris-based pedagogue Nadia Boulanger whose pupils in the 1920's and 30s included the Americans Aaron Copeland and Elliott Carter, and the Pole Grazyna Bacewicz. What all these different composers had in common was an interest in ordered forms of the past, which resulted in clearly developed thematic processes and translucent textures. Where they differed from the doctrinaire Schoenberg, and his most faithful pupil, Webern, was in their adherence to diatonic harmony and what one critic called "contemporary multiplicity of awareness," an attitude not dissimilar to postmodern composers of today.

Ottorino Respighi (9 July 1879 – 18 April 1936) was an Italian composer and musicologist. He is best known for his orchestral music, particularly the three Roman tone poems: *Fountains of Rome* (*Fontane di Roma*), *Pines of Rome* (*I pini di Roma*), and *Roman Festivals* (*Feste romane*). His musicological interest in 16th-, 17th- and 18th-century music led him to compose pieces based on the music of these periods. He also wrote a number of operas, the most famous of which is *La fiamma*. With the success of Verdi and Puccini, and of lesser figures such as Leoncavallo and Mascagni, that by 1900 Italy had almost no composers of insturmantal music. A career in music meant a career in opera. The burden of restoring the nation's instrumental tradition fell largely on two men: Ferruccio Busone and Ottorino Respighi. The trouble with Respighi's music is that it wears its influence on its sleeve, and of these influences none is more pronounced than Richard Strauss. There are indeed many works by Respighi in which he upholds the values of his illustrias predicessors, re-creating the logical lines of the 18th century, but much of his neoclassicism amounts to little more than skillful pastiche.

Respighi was born in Bologna, Italy. He was taught piano and violin by his father, who was a local piano teacher. He went on to study violin and viola with Federico Sarti at the Liceo Musicale in Bologna, composition with Giuseppe Martucci, and historical studies with Luigi Torchi, a scholar of early music. A year after receiving his diploma in violin in 1899, Respighi went to Russia to be principal violist in the orchestra of the Russian Imperial Theatre in Saint Petersburg during its season of Italian opera. While there he studied composition for five months with Rimsky-Korsakov. He then returned to Bologna, where he earned a second diploma in composition. During the second decade of the twentieth century, Respighi was active as a performer and composer. His compositions began to draw attention, and in 1913 he was appointed as teacher of composition at the Conservatorio di Santa Cecilia in Rome, where he lived for the rest of his life. In 1917 his international fame began to spread through multiple performances of the first of his Roman orchestral tone poems, *Fountains of Rome*.

A visit to Brazil resulted in the composition *Impressioni brasiliane* (*Brazilian Impressions*). He had intended to write a sequence of five pieces, but by 1928 he had completed only three, and decided to present what he had. Its first performance was in 1928 in Rio de Janeiro. The first piece, "Tropical Night", is a nocturne with fragments of dance rhythms suggested by the sensuous textures. The second piece is a sinister picture of a snake research institute, Instituto Butantan,

that Respighi visited in São Paulo, with hints of birdsong (as in *Pines of Rome*). The final movement is a vigorous and colorful Brazilian dance.

Apolitical in nature, Respighi attempted to steer a neutral course once Benito Mussolini came to power in 1922. His established international fame allowed him some level of freedom but at the same time encouraged the regime to exploit his music for political purposes. Respighi vouched for more outspoken critics such as Arturo Toscanini, allowing them to continue to work under the regime.

Feste romane, the third of his Roman tone poems, was premiered by Toscanini and the New York Philharmonic Orchestra in 1929; Toscanini recorded the music twice for RCA Victor, first with the Philadelphia Orchestra in 1942 and then with the NBC Symphony Orchestra in 1949. Respighi's music had considerable success in the USA: the *Toccata for piano and orchestra* was premiered (with Respighi as soloist) under Willem Mengelberg with the New York Philharmonic Orchestra at Carnegie Hall in November 1928, and the large-scale theme and variations entitled *Metamorphoseon* was a commission for the fiftieth anniversary of the Boston Symphony Orchestra. Respighi was an enthusiastic scholar of Italian music of the 16th, 17th and 18th centuries. He published editions of the music of Claudio Monteverdi and Antonio Vivaldi, and of Benedetto Marcello's *Didone*. His work in this area influenced his later compositions and led to a number of works based on early music, notably his three suites of *Ancient Airs and Dances* and the Suite *Gli uccelli* (The Birds). In his Neoclassical works, Respighi generally kept clear of the musical idiom of the classical period, preferring to combine pre-classical melodic styles and musical forms (like dance suites) with typical late-19th-century romantic harmonies and textures.

He continued to compose and tour until January 1936, after which he became increasingly ill. A cardiac infection led to his death by heart failure on 18 April that year at the age of 56.

Carl Orff (July 10, 1895 – March 29, 1982) was a 20th-century German composer, best known for his cantata *Carmina Burana* (1937). In addition to his career as a composer, Orff developed an influential approach toward music education for children. Orff was born in Munich and his family was Bavarian and was active in the Army of the German Empire. His paternal grandfather was a Jew who converted to Catholicism. Orff started studying the piano at the age of five, and he also took organ and cello lessons. He soon found that he was more interested in composing original music than in studying to be a performer. By the time he was a teenager, having studied neither harmony nor composition, Orff was writing songs; his mother helped him set down his first works in musical notation. Orff wrote his own texts and, without a teacher, learned the art of composing by studying classical masterworks on his own.

In 1911/12, Orff wrote *Zarathustra*, Op. 14, an unfinished large work for baritone voice, three male choruses and orchestra, based on a passage from Friedrich Nietzsche's philosophical novel *Thus Spake Zarathustra*. The following year, he composed an opera, *Gisei, das Opfer* (*Gisei, the Sacrifice*). Influenced by the French Impressionist composer Claude Debussy, he began to use colorful, unusual combinations of instruments in his orchestration.

In the mid-1920s, Orff began to formulate a concept he called *elementare Musik*, or elemental music, which was based on the unity of the arts symbolized by the ancient Greek Muses, and involved tone, dance, poetry, image, design, and theatrical gesture. Like many other composers of the time, he was influenced by the Russian-French émigré Igor Stravinsky. But while others followed the cool, balanced neoclassic works of Stravinsky, it was works like his *Les noces* (*The Wedding*), a pounding, quasi-folkloric evocation of prehistoric wedding rites, that appealed to Orff. He also began adapting musical works of earlier eras for contemporary theatrical presentation, including Claudio Monteverdi's opera *L'Orfeo* (1607). Orff's German version, *Orpheus*, was staged under Orff's direction in 1925 in Mannheim, using some of the instruments that had been used in the original 1607 performance.

Orff's relationship with German fascism and the Nazi Party has been a matter of considerable debate and analysis. His *Carmina Burana* was hugely popular in Nazi Germany after its premiere in Frankfurt in 1937. Given Orff's previous lack of commercial success, the monetary factor of *Carmina Burana*'s acclaim was significant to him. But the composition, with its unfamiliar rhythms, was also denounced with racist taunts. He was one of the few German composers under the Nazi regime who responded to the official call to write new incidental music for *A Midsummer Night's Dream* after the music of Felix Mendelssohn had been banned. Defenders of Orff note that he had already composed music for this play as early as 1917 and 1927, long before this was a favor for the Nazi regime. Orff was a friend of Kurt Huber, one of the founders of the resistance movement *Weiße Rose* (the White Rose), who was condemned to death by the *Volksgerichtshof* and executed by the Nazis in 1943. Orff by happenstance called at Huber's house on the day after his arrest. Huber's distraught wife begged Orff to use his influence to help her husband, but Orff declined her request. If his friendship with Huber was ever discovered, he told her, he would be "ruined".

He had a long friendship with German-Jewish musicologist, composer and refugee Erich Katz, who fled Nazi Germany in 1939. According to Canadian historian Michael H. Kater (de), during Orff's denazification process in Bad Homburg, Orff claimed that he had helped establish the White Rose resistance movement in Germany. There was no evidence for this other than his own word, and other sources dispute his claim. Kater also made a particularly strong case in his earlier writings that Orff collaborated with Nazi German authorities. However, in Orff's denazification file, discovered by Viennese historian Oliver Rathkolb in 1999, no remark on the White Rose is recorded; and in *Composers of the Nazi Era: Eight Portraits* (2000) Kater recanted his earlier accusations to some extent. In any case, Orff's assertion that he had been anti-Nazi during the war was accepted by the American denazification authorities, who changed his previous category of "gray unacceptable" to "gray acceptable", enabling him to continue to compose for public presentation, and to enjoy the royalties that the popularity of *Carmina Burana* had earned for him.

Most of Orff's later works – *Antigonae* (1949), *Oedipus der Tyrann* (*Oedipus the Tyrant*, 1958), *Prometheus* (1968), and *De temporum fine comoedia* (*Play on the End of Times*, 1971) – were based on texts or topics from antiquity. They extend the language of *Carmina Burana* in interesting ways, but they are expensive to stage and (on Orff's own admission) are not operas in the conventional sense. Live performances of them have been few, even in Germany.

Orff is most known for *Carmina Burana* (1936), a "scenic cantata". It is the first part of a trilogy that also includes *Catulli Carmina* and *Trionfo di Afrodite*. *Carmina Burana* reflected his interest in medieval German poetry. The trilogy as a whole is called *Trionfi*, or "Triumphs". The composer described it as the celebration of the triumph of the human spirit through sexual and holistic balance. The work was based on thirteenth-century poetry found in a manuscript dubbed the *Codex latinus monacensis* found in the Benedictine monastery of Benediktbeuern in 1803 and written by the Goliards; this collection is also known as *Carmina Burana*. While "modern" in some of his compositional techniques, Orff was able to capture the spirit of the medieval period in this trilogy, with infectious rhythms and simple harmonies. The medieval poems, written in Latin and an early form of German, are often racy, but without descending into smut. "Fortuna Imperatrix Mundi", commonly known as "O Fortuna", from *Carmina Burana*, is often used to denote primal forces, for example in the Oliver Stone movie *The Doors*. The work's association with fascism also led Pier Paolo Pasolini to use the movement "Veris leta facies" to accompany the concluding scenes of torture and murder in his final film *Salò, or the 120 Days of Sodom*. With the success of *Carmina Burana*, Orff disowned all of his previous works except for *Catulli Carmina* and the *Entrata* (an orchestration of "The Bells" by William Byrd (1539–1623)), which were rewritten until acceptable by Orff. As an historical aside, *Carmina Burana* is probably the most famous piece of music composed and premiered in Nazi Germany. *Carmina Burana* was in fact so popular that Orff received a commission in Frankfurt to compose incidental music for *A Midsummer Night's Dream*, which was supposed to replace the banned music by Mendelssohn. After several performances of this music, he claimed not to be satisfied with it, and reworked it into the final version that was first performed in 1964.

Orff was reluctant to term any of his works simply operas in the traditional sense. For example, he referred to his works *Der Mond* (*The Moon*, 1939) and *Die Kluge* (*The Wise Woman*, 1943) as *Märchenopern* ("fairytale operas"). Both compositions feature the same "timeless" sound, called timeless because they do not employ any of the musical techniques of the period in which they were composed, with the intent that they be difficult to define as belonging to a particular era. Their melodies, rhythms, and accompanying text form a unique union of words and music. About his *Antigonae* (1949), Orff said specifically that it was not an opera but rather a *Vertonung*, a "musical setting", of the ancient tragedy. The text is a German translation, by Friedrich Hölderlin, of the Sophocles play of the same name. The orchestration relies heavily on the percussion section and is otherwise fairly simple. It has been labelled by some as minimalistic, a term which is most pertinent in terms of the melodic line.

- **Neoromanticism**
  The resurgence of the vocabulary of extended tonality which flourished in the first years of the 20th century continues in the contemporary period, though it is no longer considered shocking or controversial in the larger musical world. Composers working in the **Neoromantic** vein include John Corigliano, George Rochberg (in some of his works after 1971), David Del Tredici and Krzysztof Penderecki (after about 1975). The vocabulary of extended tonality, which flourished in the late 19th and very early 20th centuries, continues to be used throughout the contemporary period. It never has been considered shocking or controversial.

  Sir Michael Tippett (2 January 1905 – 8 January 1998) was an English composer who rose to prominence during and immediately after the Second World War. In his lifetime he was sometimes ranked with his contemporary Benjamin Britten as one of the leading British composers of the 20th century. Among his best-known works are the oratorio *A Child of Our Time*, the orchestral *Fantasia Concertante on a Theme of Corelli*, and the opera *The Midsummer Marriage*. His neo-Romantic notions of self-expression attracted considerable, if far from universal, enthusiasm. Tippett always remained a maverick belonging to no category except his own. On the one hand he had little sympathy with the idea of modernity represented by serialism, but on the other he wrote music that is markedly more complex and demanding than that of a traditionalist.

  Tippett's talent developed slowly. He withdrew or destroyed his earliest compositions, and was 30 before any of his works were published. Until the mid-to-late 1950s his music was broadly lyrical in character, before changing to a more astringent and experimental style. New influences, including those of jazz and blues after his first visit to America in 1965, became increasingly evident in his compositions. While Tippett's stature with the public continued to grow, not all critics approved of these changes in style, some believing that the quality of his work suffered as a consequence. From around 1976 Tippett's late works began to reflect the works of his youth through a return to lyricism. Although he was much honoured in his lifetime, critical judgement on Tippett's legacy has been uneven, the greatest praise being generally reserved for his earlier works. His centenary in 2005 was a muted affair; apart from the few best-known works, his music has been performed infrequently in the 21st century.

  Having briefly embraced communism in the 1930s, Tippett avoided identifying with any political party. A pacifist after 1940, he was imprisoned in 1943 for refusing to carry out war-related duties required by his military exemption. His initial difficulties in accepting his homosexuality led him in 1939 to Jungian psychoanalysis; the Jungian dichotomy of "shadow" and "light" remained a recurring factor in his music. He was a strong advocate of music education, and was active for much of his life as a radio broadcaster and writer on music. The Tippett family originated in Cornwall.

  Tippett began at the Royal College of Music (RCM) in the summer term of 1923, when he was 18 years old. The question of Tippett's liability for war service remained unresolved until mid-1943. In November 1940 he had formalised his pacifism by joining the Peace Pledge Union and applying for registration as a conscientious objector. His case was heard by a tribunal in February 1942,

when he was assigned to non-combatant duties. Tippett rejected such work as an unacceptable compromise with his principles and in June 1943, after several further hearings and statements on his behalf from distinguished musical figures, he was sentenced to three months' imprisonment in HM Prison Wormwood Scrubs. He served two months, and although thereafter he was technically liable to further charges for failing to comply with the terms set by his tribunal, the authorities left him alone.

In 1965 Tippett made the first of several visits to the United States, to serve as composer in residence at the Aspen Music Festival in Colorado. Tippett's American experiences had a significant effect on the music he composed in the late 1960s and early 1970s, with jazz and blues elements particularly evident in his third opera, *The Knot Garden* (1966–69), and in the Symphony No. 3 (1970–72). Among the works he wrote in this period were *In Memoriam Magistri* (1971), a chamber piece commissioned by *Tempo* magazine as a memorial to Stravinsky, who had died on 6 April 1971, and the Piano Sonata No. 3 (1973). In February 1974 Tippett attended a "Michael Tippett Festival", arranged in his honour by Tufts University, near Boston, Massachusetts. He was also present at a performance of *The Knot Garden* at Northwestern University at Evanston, Illinois—the first Tippett opera to be performed in the US. Two years later he was again in the country, engaged on a lecture tour that included the Doty Lectures in Fine Art at the University of Texas.

Bowen has described Tippett as "a composer of our time", one who engaged with the social, political and cultural issues of his day. Rather than ignoring the barbarism of the 20th century, says Kemp, Tippett chose through his works to seek "to preserve or remake those values that have been perverted." The key early work in this respect is *A Child of Our Time.* Michael Kennedy has referred to Tippett's "open-eyed, even naive outlook on the world", while accepting the technical sophistication of his music. Others have acknowledged his creative ingenuity and his willingness to adopt whatever means or techniques were necessary to fit his intentions.

Tippett's approach to metre and rhythm is derived in part from Bartók and Stravinsky but also from the English madrigalists. Sympathy with the past, observed by Colin Mason in an early appraisal of the composer's work, was at the root of the neoclassicism that is a feature of Tippett's music, at least until the Second Symphony (1957). In terms of tonality, Tippett shifted his ground in the course of his career. His earlier works, up to *The Midsummer Marriage*, are key-centred, but thereafter he moved through bitonality into what the composer Charles Fussell has summarised as "the freely-organized harmonic worlds" of the Third Symphony and *The Ice Break*. Although Tippett flirted with the "twelve-tone" technique—he introduced a twelve-tone theme into the "storm" prelude that begins *The Knot Garden*—he generally rejected serialism, as incompatible with his musical aims. The style that emerged from Tippett's long compositional apprenticeship was the product of many diverse influences. Beethoven and Handel were initial models (Handel above Bach, who in Tippett's view lacked drama), supplemented by 16th- and 17th-century masters of counterpoint and madrigal—Thomas Weelkes, Monteverdi and Dowland. Purcell became significant later, and Tippett came to lament his ignorance of Purcell during his RCM years.

Tippett recognised the importance to his compositional development of several 19th- and 20th-century composers: Berlioz for his clear melodic lines, Debussy for his inventive sound, Bartók for his colourful dissonance, Hindemith for his skills at counterpoint, and Sibelius for his originality in musical forms. He revered Stravinsky, sharing the Russian composer's deep interest in older music. Tippett had heard early ragtime as a small child before the First World War; he noted in his later writings that, in the early years of the 20th century, ragtime and jazz "attracted many serious composers thinking to find ... a means to refresh serious music by the primitive". His interest in these forms led to his fascination with blues, articulated in several of his later works.

Although influences of folk music from all parts of the British Isles are evident in Tippett's early works, he was wary of the English folksong revival of the early 20th century, believing that much of the music presented as "English" by Cecil Sharp and his followers originated elsewhere. Notwithstanding his doubts, Tippett took some inspiration from these sources.

After the withdrawn works written in the 1920s and early 1930s, analysts generally divide Tippett's mature compositional career into three main phases, with fairly fluid boundaries and some internal subdivision in each main period. The first phase extends from the completion of the String Quartet No. 1 in 1935 to the end of the 1950s, a period in which Tippett drew on the past for his main inspiration. The 1960s marked the beginning of a new phase in which Tippett's style became more experimental, reflecting both the social and cultural changes of that era and the broadening of his own experiences. The mid-1970s produced a further stylistic change, less marked and sudden than that of the early 1960s, after which what Clarke calls the "extremes" of the experimental phase were gradually replaced by a return to the lyricism characteristic of the first period, a trend that was particularly manifested in the final works.

In a joint study of Tippett and Britten published in 1982, Whittall designated the pair as "the two best British composers of that ... generation born between 1900 and the outbreak of the First World War, and among the best of all composers born in the first two decades of the twentieth century". After Britten's death in 1976, Tippett became widely regarded as the doyen of British music, but critical opinion of his later works was not always positive. After the first performance of the Triple Concerto in 1980, Driver wrote that "not since *The Knot Garden* has [he] produced anything worthy of his early masterpieces".

Tippet's later compositions are "harder to come to terms with ... because of the more challenging nature of their musical language", a theme he developed in a detailed study of the Fifth String Quartet. After Tippett's death the more popular pieces from his first period continued to be played, but there was little public enthusiasm for the later works. After the relatively muted 2005 centenary celebrations, performances and recordings tailed off.

John Corigliano (born 16 February 1938 in New York City-?) is an American composer of classical music. His scores, now numbering over one hundred, have won him the Pulitzer Prize, five Grammy Awards, Grawemeyer Award for Music Composition and an Oscar. He is a distinguished professor of music at Lehman College in the City University of New York and on the composition faculty at the Juilliard School. Italian-American Corigliano was born in New York to a musical

family. His father, John Corigliano Sr., was concertmaster of the New York Philharmonic for 23 years, and his mother, Rose Buzen, is an accomplished educator and pianist. Corigliano studied composition at Columbia University (BA 1959) and at the Manhattan School of Music. Most of Corigliano's work has been for symphony orchestra. He employs a wide variety of styles, sometimes even within the same work, but aims to make his work accessible to a relatively large audience. Many of his works have been performed and recorded by some of the most prominent orchestras, soloists, and chamber musicians in the world. He has written symphonies, as well as works for string orchestra, wind band, concerti, chamber and solo pieces, opera, as well as for film.

Corigliano's most distinguished works include his *Clarinet Concerto* (1977), *Symphony No. 1* (1988), the opera: *The Ghosts of Versailles* (1991), *Symphony No. 2* for string orchestra (2000), *Mr. Tambourine Man: Seven Poems of Bob Dylan* (2000), and his score for the film *The Red Violin* (1998). His *Clarinet Concerto* is the first by an American composer to have entered the standard repertoire since Aaron Copland's clarinet concerto.

Christopher Rouse (born February 15, 1949-?) is an American composer. Though he has written for various ensembles, Rouse is primarily known for his orchestral compositions, including a Requiem, eleven concertos and four symphonies. His work has received numerous accolades, including the Kennedy Center Friedheim Award and the Pulitzer Prize for Music. Rouse has been Composer-in-Residence for the New York Philharmonic since 2012. Rouse was born in Baltimore, Maryland and studied with Richard Hoffmann at Oberlin Conservatory of Music, graduating in 1971. He later completed graduate degrees under Karel Husa at Cornell University in 1977. In between, Rouse studied privately with George Crumb.

Rouse is a neoromantic composer. Some of his works are predominantly atonal (e.g., *Gorgon*, Concerto for Orchestra) while others are clearly tonal (*Karolju*, *Rapture*). Most often he seeks to integrate tonal and non-tonal harmonic worlds, as in his *Concerti for Flute, Oboe, and Guitar*. All of his music has been composed, in his words, "to convey a sense of expresssive urgency." Rouse has been praised for his orchestration, particularly with percussion. He often quotes other composers' works (e.g., his *Symphony No. 1*, composed in 1986, incorporates quotations of Bruckner and Shostakovich) and his music also sometimes shows the influence of rock and roll. Rouse's oldest extant works are two brief pieces for percussion ensemble, both inspired by mythological subjects: *Ogoun Badagris* (1976, Haitian) and *Ku-Ka-Ilimoku* (1978, Polynesian); a later percussion score inspired by rock drumming, *Bonham* was composed in 1988.

The death of Leonard Bernstein in 1990 was the first in a series of deaths that made a profound impression on Rouse, and his *Trombone Concerto* (1991) became the first score of his so-called "Death Cycle," a group of pieces that all served as reactions to these deaths. These scores memorialized William Schuman (*Violoncello Concerto*—1992), the James Bulger murder (*Flute Concerto*—1993), the composer Stephen Albert (*Symphony No. 2*—1994), and Rouse's mother (*Envoi*—1995). After *Envoi* he purposely set out to compose scores that were more "light infused", works intended to take on a less dark cast; pieces from this second half of the 1990s include *Compline* (1996), *Kabir Padavali* (1997), the *Concert de Gaudi* (1998) and *Rapture* (2000). From 2000 on Rouse created works of varying temperaments, from his thorny Clarinet Concerto (2001)

to his rock-infused *Nevill Feast* (2003) to his romantic Oboe Concerto (2004). The most significant piece from these years is his ninety-minute *Requiem*, composed over 2001 and 2002. Rouse himself referred to the *Requiem* as his best composition. Major compositions of more recent vintage would include his *Concerto for Orchestra* (2008), *Odna Zhizn* (2009), *Symphony No. 3* (2011), Symphony No. 4 (2013), *Thunderstuck* (2012), and *Heimdall's Trumpet* (a trumpet concerto - 2012). In late 2006, Rouse composed his first wind ensemble piece *Wolf Rounds*, which premiered in Carnegie Hall March 29, 2007.

Daniel Catán (April 3, 1949 – April 8, 2011) was a Mexican composer known particularly for his operas. Catán was of Sephardic Jewish descent. He was born in Mexico City and studied philosophy at the University of Sussex and music at the University of Southampton. He received a Ph.D. from Princeton University, where he studied with Milton Babbitt, James K. Randall and Benjamin Boretz. Catán was the first Mexican composer to have an opera produced in the United States, when San Diego Opera produced his opera *Rappaccini's Daughter* in March 1994. He has also composed orchestral and chamber works and film music. His style can be described as neo-impressionist. His music is richly lyrical, often painting evocative colours with the orchestral palette with soaring melodies atop.

In addition to composition, Catán had a fruitful career as a writer on music and the arts, reflective of his knowledge of world literature. He lived in South Pasadena, California. In 1998, Catán received the Plácido Domingo Award for his contribution to opera and he received a Guggenheim Fellowship in 2000. His last opera, *Il Postino*, whose premiere featured Plácido Domingo in the role of Pablo Neruda, is based on the 1983 novel *Ardiente paciencia* by Antonio Skármeta and the 1994 film *Il Postino* by Michael Radford; it premiered at the Los Angeles Opera in September 2010. Catán died aged 62 on April 8, 2011, in Austin, Texas, a few days after he attended rehearsals for *Il Postino* at the Moores Opera Center at the University of Houston. At the time of his death, Catán was a member of the faculty at College of the Canyons and had been commissioned by the Sarah and Ernest Butler School of Music at the University of Texas at Austin to write a new opera, *Meet John Doe.*

Catán composed his music in a neo-Romantic and lyrical style. *Opera News* stated that his music had "a distinctive lushness that seemed of a piece with the twentieth century's great movie music yet remained unquestionably operatic in scope." Accountable to constraints of their commissions, Catán's compositions stand clearly self-contained. Music critic David Patrick Stearns wrote, "Though Catán's style was often compared to that of Puccini and Debussy, it changed with every work, from the lush nature painting of *Florencia en El Amazonas* (1996) to the Cuban ethnic influences of *Salsipuedes* (2004) and the more integrated sonorities that portrayed the inner emotions of *Il Postino* (2010). Other critics noted the influences of Richard Strauss and Heitor Villa-Lobos with his orchestral structures. Of his own music Catán said, "I have inherited a very rich operatic tradition. In my work, I am proud to say, one can detect the enormous debt I owe to composers from Monteverdi to Alban Berg. But perhaps the greatest of my debts is having learned that the originality of an opera need not involve the rejection of our tradition—which would be like blindly embracing the condition of an orphan—but rather the profound assimilation of it, so as to

achieve the closest union between a text and its music." Catán also cited in many interviews Igor Stravinsky, Maurice Ravel and Erich Wolfgang Korngold among those who had most influenced his music and compositional style.

Neoclassicism Devotional Music (Holy Minimalism)

Henryk Górecki (December 6, 1933 – November 12, 2010) was a Polish composer of contemporary classical music. According to Alex Ross, no recent classical composer has had as much commercial success as Górecki. Górecki became a leading figure of the Polish avant-garde during the post-Stalin cultural thaw. His Webernian-influenced serialist works of the 1950s and 1960s were characterized by adherence to dissonant modernism and drew influence from Luigi Nono, Karlheinz Stockhausen, Krzysztof Penderecki and Kazimierz Serocki. He continued in this direction throughout the 1960s, but by the mid-1970s had changed to a less complex sacred minimalist sound, exemplified by the transitional Symphony No. 2 and the hugely popular Symphony No. 3 (*Symphony of Sorrowful Songs*). This later style developed through several other distinct phases, from such works as his 1979 *Beatus Vir*, to the 1981 choral hymn *Miserere*, the 1993 *Kleines Requiem für eine Polka* and his requiem *Good Night*.

His name remained largely unknown outside Poland until the mid-to late 1980s, and his fame arrived in the 1990s. In 1992, 15 years after it was composed, a recording of his Third Symphony, *Symphony of Sorrowful Songs*—recorded with soprano Dawn Upshaw and released to commemorate the memory of those lost during the Holocaust—became a worldwide commercial and critical success, selling more than a million copies and vastly exceeding the typical lifetime sales of a recording of symphonic music by a 20th-century composer. Apart from two brief periods studying in Paris and a short time living in Berlin, Górecki spent most of his life in southern Poland.

Górecki's music covers a variety of styles, but tends towards relative harmonic and rhythmical simplicity. He is considered to be a founder of the so-called *New Polish School*. His first works, dating from the last half of the 1950s, were in the avant-garde style of Webern and other serialists of that time. Some of these twelve-tone and serial pieces include *Epitaph* (1958), First Symphony (1959), and *Scontri* (1960) (Mirka 2004, p. 305). Danuta Mirka has shown that Górecki's compositional techniques in the 1960s were often based on geometry, including axes, figures, one- and two-dimensional patterns, and especially symmetry. Thus, she proposes the term "geometrical period" to refer to Górecki's works between 1962 and 1970. Building on Krzysztof Droba's classifications, she further divides this period into two phases: (1962-63) "the phase of sonoristic means"; and (1964-70) "the phase of reductive constructicism." During the middle 1960s and early 1970s, Górecki progressively moved away from his early career as radical modernist, and began to compose with a more traditional, romantic mode of expression. His change of style was viewed as an affront to the then avant-garde establishment, and though he continued to receive commissions from various Polish agencies, by the mid-1970s Górecki was no longer regarded as a composer that mattered. By the early 1970s, Górecki had begun to move away from his earlier radical modernism, and was working towards a more traditional, romantic mode of expression that was dominated by the human voice. One critic later wrote that "Górecki's

new material was no longer cerebral and sparse; rather, it was intensely expressive, persistently rhythmic and often richly colored in the darkest of orchestral hues". Górecki progressively rejected the dissonance, serialism and sonorism that had brought him early recognition, and pared and simplified his work. When placing Górecki in context, musicologists and critics generally compare his work with such composers as Olivier Messiaen and Charles Ives.

Since Górecki's move away from serialism and dissonance in the 1970s, he is frequently compared to composers such as Arvo Pärt, John Tavener and Giya Kancheli. The term holy minimalism is often used to group these composers, due to their shared simplified approach to texture, tonality and melody, in works often reflecting deeply held religious beliefs. However, none of these composers has admitted to common influences.

Arvo Pärt (born 11 September 1935) is an Estonian composer of classical and sacred music. Pärt grew up in an Estonia that was buffeted between the Soviets and the Nazis during World War II and then stood as a Soviet Socialist Republic until 1991. For thirty-five years Pärt has occupied a prominent place among the composers of Eastern European origin who are associated with a musical style sometimes called the New Simplicity or New Spirituality. Since the late 1970s, Pärt has worked in a minimalist style that employs his self-invented compositional technique, "tintinnabuli." His music is in part inspired by Gregorian chant. As of 2013, Part had been the most performed contemporary composer in the world for three years in a row.

Pärt was born in Paide, Estonia and was raised by his mother and stepfather in northern Estonia. In 1980, after a prolonged struggle with Soviet officials, he was allowed to emigrate with his wife and two sons. He lived first in Vienna, where he took Austrian citizenship and then relocated to Berlin, Germany, in 1981. He returned to Estonia around the turn of the 21st century and now lives alternately in Berlin and Tallinn. He speaks fluent German and has German citizenship as a result of living in Germany since 1981.

Familiar works include *Cantus In Memoriam Benjamin Britten* for string orchestra and bell (1977), the string quintet *Fratres I* (1977, revised 1983) which he transcribed for string orchestra and percussion, the solo violin *Fratres II* and the cello ensemble *Fratres III* (both 1980). Pärt is often identified with the school of minimalism and, more specifically, that of mystic minimalism or holy minimalism. He is considered a pioneer of the latter style, along with contemporaries Henryk Górecki and John Tavener. Although his fame initially rested on instrumental works such as *Tabula Rasa* and *Spiegel im Spiegel*, his choral works have also come to be widely appreciated.

Pärt is an unusual modern composer in that he is well know (and is also a stereotypical artist) : a reclusive, extravagantly bearded Estonian who's ensconced in a world of so-called "holy minimalism" (a reverie of simplicity that luxuriates in the pure sounds of "tintinnabulatory" tonality, which sounds corrective, for some, and sentimental, for others). Tintinnabulatory music is also a mode of archaism in a world of chaotic modernity. The problem with Pärt is that his music has become a victim of its own success. It's no wonder that music like *Fratres* or *Spiegel im Spiegel* or *Tabula Rasa*, are so beloved of documentary makers and film producers for moments of heightened emotion: the sudden atmosphere of stillness and meditation that Pärt's music instantly

communicates is one of its most appealing qualities. But there's more to the man and his work than that immediate sensory reaction. In fact, the style and technique of Pärt's music has a surprising 2 Period history.

Period 1: He composed his early works using a range of neo-classical styles influenced by Shostakovich, Prokofiev and Bartók. In the early 1960s, Pärt began applying serial principles to his works, by the mid-'60s he was immersed in the study of Bach and soon he began producing pieces in which modernist dissonance appeared in tense contrast to clearly defined neo-Baroque tonality.

Through the 1960s, he experimented with collage, with neo-classicism and with aggressive dissonance, in ways that were bound to alienate him from the Soviet authorities but which began to bring him respect in the west. Pärt's modernist credentials were cemented in his *First* and *Second Symphonies* (1963 and 1966), but a crisis came in 1968 with his *Credo*. The piece only avoided censure by the communists because its conductor, Neeme Järvi, didn't show the score to the Estonian composers' union before its premiere. And at its first performance, the piece was a lightning rod both because of its musical extremity and its religious conviction.

Credo shocked Soviet officials less through its musical innovations than its title, which evoked Christianity (officially forbidden). This, however, not only earned the ire of the Soviet establishment, but also proved to be a creative dead-end. Next, Pärt went into a self-imposed, eight year, creative exile, to try to find resolution to the creative conflict opened up in *Credo*. In this context, Pärt's biographer, Paul Hillier, observed that: "He had reached a position of complete despair in which the composition of music appeared to be the most futile of gestures and he lacked the musical faith and willpower to write even a single note." His *Third Symphony*, from 1971, is the only piece that dates from this transitional period. It was an attempt to fuse elements of the traditions to which Pärt was drawn: Gregorian chant, harmonic simplicity and the spiritual explorations with his Russian Orthodox faith.

Period 2: By 1976 he seized the essence of the style that has served him ever since: a tonal technique he dubbed "tintinnabuli" ("little bells"), referring to bell-like resonances—sometimes involving actual bells but more commonly conveyed in his music by orchestral, chamber, or choral groupings. In this music, the tintinnabulation parts are sounded while the melody part moves slowly in simple patterns that gravitate around the home pitch. The particular behavior of tintinnabulation and melody parts is strictly regulated by some theoretical pattern of interaction devised by the composer for each new piece.

Ttintinnabuli can be heard for the first time in a two-and-a-half minute piano miniature, *Für Alina* (1976). This little piece is the seed from which the rest of Pärt's musical life has grown. The music that began to emerge after this period was radically different. This period of new compositions included *Fratres*, *Cantus In Memoriam Benjamin Britten*, *Concerto for Two Violins*, *Summa* and *Tabula Rasa*. *Spiegel im Spiegel* (1978) is another well-known example of tintinnabuli which has been used in many films. The music is characterised by simple harmonies, often single unadorned notes, or triads, which form the basis of Western harmony. Tintinnabuli works are rhythmically simple and do not change tempo. Another characteristic of Pärt's later works is that they are

frequently settings for sacred texts, although he mostly chooses Latin or the Church Slavonic language used in Orthodox liturgy instead of his native Estonian language. Large-scale works inspired by religious texts include *St. John Passion*, *Te Deum*, and *Litany*. Choral works from this period include *Magnificat* and *The Beatitudes*.

It can be easy to be fooled by preconceptions about Pärt's later works. To dismiss them as cliched and sentimental holy minimalism is simply wrong. The power of the "tintinnabulation," comes from its combination of ascetic rigour and the apparent simplicity of its materials. And there are mysteries here. Pärt designed strict rules to control how the harmonic voices move with the melodic lines in his music, diktats which are as strict as serialism. Ironically, given his rejection of his previous avant garde obsessions, the success of his new musical language is dependent on precisely the objectivity of thinking that serial composition demands. That austerity of process makes Pärt's tintinnabulation a new kind of tonality and explains why his music sounds simultaneously ancient and modern and why it embodies a genuine expressivity rather than a rehearsal of second-hand conventions.

Pärt explained his tintinnabulation method in a program note he wrote in 1984 for ECM records:

> Tintinnabulation is an area I sometimes wander into when I am searching for answers—in my life, my music, my work. In my dark hours, I have the certain feeling that everything outside this one thing has no meaning. The complex and many-faceted only confuses me and I must search for unity. What is it, this one thing, and how do I find my way to it? Traces of this perfect thing appear in many guises—and everything that is unimportant falls away. Tintinnabulation is like this. Here, I am alone with silence. I have discovered that it is enough when a single note is beautifully played. This one note, or a silent beat, or a moment of silence, comforts me. I work with very few elements—with one voice, with two voices. I build with the most primitive materials—with the triad, with one specific tonality. The three notes of a triad are like bells. And that is why I call it tintinnabulation.

The success of Pärt's work (the repertory of choral works he has composed over the last four decades, the instrumental works, even the new symphony he composed in 2008) is much more than simple popular acclaim for a composer who uses some familiar chords. Pärt has said that what he wants his music to express is "love for every note," and, in turn, communicate the spiritual power that he sees as music's essential purpose. Pärt is too modest to say that he has achieved that, but for the listeners who love his music, it's an irrefutable truth.

1) *Symphony No 3* (1971) - comes from a period when he was washing his hands of the edgy collage technique he used in the 1960s. During this time, he plunged deeply into a study of Russian orthodox chant and vocal music from the Middle Ages and Renaissance. You can almost hear Pärt evolving spiritually in this transitional work. It's 1971 and he sounds like a composer searching for a unique perspective, while also relying on his musical forebears. Opening with a lonely oboe solo, the symphony slowly gains strength and, as it stretches out, becomes a kind of Symphonic Fantasy on the advent hymn "Veni Veni Emmanuel." Pärt wrote this transitional work in 1971, just before a compositional silence of nearly six years from which he emerged with his minimalist-oriented

"tintinnabulation" technique, for which he remains best known. In the *Symphony No. 3,* Pärt rejected the serialist idiom he had pioneered in his Estonian homeland and turned to a dense, eclectic sound influenced by his study of early music: chant, Machaut and the Flemish composers of the Renaissance. The work has echoes of everything from Russian Orthodox chant (clearly anticipating the direction in which Pärt would go) to the big string sound of Hovhaness. The composer has called this "a joyous work" that nevertheless was not "the end of my despair and search." The work may not satisfy fans of Pärt's pure, transparent mature language, but for those who wonder about the road he took to get there, it makes fascinating listening.

2) *Fur Alina* (1976) - is a work for piano. This was his first piece to introduce his new signature style of composition, referred to as the tintinnabuli style, and is considered as an essential work of this style. *Für Alina* was dedicated to a family friend's eighteen-year-old daughter who had just gone to study in London. Its introspection calls to mind a vivid image of youth, off to explore the world. The piece appears very simple on the page and could be played by any person willing to spend a little time with a piano. It has both the left and right hand written in G clef and only the echoing bass octave is written in F clef. Its simplicity is deceptive. To achieve purity of sound remains a challenge and demands an accomplished pianist with a good ear to produce the harmonic balance and symmetry the composition requires. It is common to repeat the composition several times. Variations could also be applied from one repetition to the other. The score of *Für Alina* is only two pages long. The only notation related to tempo is *Ruhig, erhaben, in sich hineinhorchend*, which roughly translates as *peacefully, in an elevated and introspective manner.* Considering there is no time signature, the tempo is free, yet introspective in a way that allows the player to personalize the experience of playing it by responding to the notes and occasional dissonance.

   If played softly enough, with the pedal down and given enough time, the notes can produce a humming of dissonance on the piano, a phenomenon that only adds to the transcendental nature of the piece. The two-page score of *Für Alina* is an artifact of human perfectionism. Visually, it lacks the shoulder-shrugged, pianistic flair of Rachmaninoff, the rococo loop-di-loop satisfaction of Bach, or the palm-on-forehead-"So-that's-how-he-did-it!" of reading through Beethoven or Wagner. This work is Pärt at his most naked minimalism, the notes don't even have stems. There are no time signatures, and the tempo marking – *Ruhig, erhaben, in sich hineinhorchend* ("peacefully, in an elevated and introspective manner") – seems to imply a slow tempo while politely declining to say how slow. Somehow, when fully beheld, *Für Alina* is one of the most complete and arm-tingling-ly beautiful pieces of music ever.

   To some extent the piece is utterly infuriating. It is straightforward yet allusive, childish yet genius. As a feat of human craft, *Für Alina* removes all but the minimum from the page to activate the potential of natural acoustics. As a work of art, it pushes deeper into the human relationship with the mystical and the divine than some very intentional sounds and typographical decisions should be able to push.

3) *Fratres* (1977), means "brothers" in Latin. The first version was written in 1977 and was followed by a wide variety of arrangements for other instruments. It is a mesmerising set of variations on a

six-bar theme combining frantic activity and sublime stillness that encapsulates Pärt's observation that 'the instant and eternity are struggling within us.' Structurally, *Fratres* consists of a set of eight or nine chord sequences separated by a recurring percussion motif. The chord sequences themselves follow a clear pattern and while the progressing chords explore a rich harmonic space, they nevertheless appear to have been generated by means of a simple formula. The first version for string quintet and wind quintet (early music ensemble) was written by Pärt in 1977. Further versions were written over the years leading up to about 1992. It exists most prominently in its versions for solo violin, string orchestra, percussion and for violin and piano. The similarity between versions varies: for instance, the versions for viola and piano, or cello and piano, are almost exactly the same as that for violin and piano, whereas the version for string quartet is more similar to the cello version. The tintinnabuli principle is easily apprehended in *Fratres*. In fact, the work's mechanics are so clear as to allow general listeners to grasp its essence in an analytical sense. The principal melody consists of three measures:

The first consists of four notes spread over seven beats.
The second consists of six notes over nine beats.
The third consists of eight notes over eleven beats.

It is as if the sentence "My name is John" morphed successively into "My name in fact is John" and then "My name in honest fact is John," and those three sentence formulations were stated one right after the other. Then, without a break, Pärt inverts the melody, meaning that intervals that formerly moved down now move up and vice versa. Imagine that the sentences "My name is John" and so on are propped up on a mirror; the first time through you read the sentences themselves and the second time you read their reflected image, which, naturally, consists again of three measures of seven, nine, and eleven beats.

The melody, however, is not a single line. Instead, it is made up of two notes unrolling in harmony, parallel to each other, at the interval of a tenth. You could picture them as two people walking in the same direction lengthwise across the steps of a wide staircase, though one considerably higher on the staircase than the other. At each new note they step simultaneously to the stair above or below, or (at the midpoint of each measure) across several stairs—but in each case one of the people remains ten stairs above the other. To make the game plan more interesting, Pärt injects a third voice, a third person. This character walks crosswise along the same staircase to the same rhythm and its four notes expand much as other parts do; but rather than walk to a consecutive step up or down, its nature is to either take each pace along the same step or to jump over several. Things are arranged so its trajectory remains in the space between the two melody notes, so nobody bumps into anybody else.

4) *Berliner Messe* (1990) - (or *Berlin Mass*) is a mass setting for the 90th Katholikentag in 1990, it was originally scored for soloists and organ. Pärt later revised the piece for chorus and string orchestra. Pärt uses his *tintinnabuli* technique throughout, with movements taking many forms within that style—flowing from quietly reverent duets between parts to full chorus proclamations of faith. The work consists of five movements of the Mass ordinary and three movements intended for the celebration of Pentecost:

- Kyrie
- Gloria
- *Erster Alleluiavers* (First Alleluia)
- *Zweiter Alleluiavers* (Second Alleluia)
- Veni Sancte Spiritus
- Credo
- Sanctus
- Agnus Dei

The fact that the Mass was originally written for Pentecost is evidenced by the presence of the two Alleluias and the Veni Sancte Spiritus. However, Pärt has also set two Alleluia verses to permit the work to be used at Christmas. All five of these movements are marked "ad lib" in the score. While firmly established as one of the most important instrumental composers of the Twentieth Century, Part fully distinguished himself as a choral composer, with this piece.

Berliner Messe contains compositions elaborated with Part's *tintinnabuli* method. The earliest pieces are the *Cantate* and *Summa*, both dating from 1977. The former was revised twenty years later into the form presented here. His *De Profundis* was composed in 1980, the *Magnificat*, based on Luke's account of the Blessed Virgin's Song in 1989 and the *Beatitudes* in 1990 with revision a year later. Part's *Berlin Mass* was composed and revised in 1992, making it the most recent composition of the collection.

What does this music sound like to the layman? It would sound like Gregorian chant, but differing from that style in several significant ways, the least of which is the passing of 1500 years. Part here writes *choral* music, that is music for the church. His writing is decidedly more Roman Catholic than the Eastern Orthodox of England's John Tavener, the other towering choral composer (lest one considers Krzysztof Penderecki). The "Cantate" is a beautiful setting of Psalm 95 ("O sing unto the Lord a new song?") with organ accompaniment. The Mass has a traditional string accompaniment, as it was originally scored for string quartet. The setting is traditional. "De Profundis" (Psalm 129, "Out of the deep have I called unto thee, o Lord?") is one of Part's most enduring settings, having been recorded many times.

Sir John Tavener (28 January 1944 – 12 November 2013) was a British composer, known for his extensive output of religious works, including *The Protecting Veil*, *Song for Athene* and *The Lamb*. Tavener was born in Wembley, London. His parents ran a family building firm and his father was also an organist at St Andrew's Presbyterian Church. Tavener entered the Royal Academy of Music in 1962. During his studies, he decided to give up the piano and devote himself to composition.

Tavener first came to prominence with his cantata *The Whale*, based on the Old Testament story of Jonah and premiered in 1968. Then aged 24, he was described by *The Guardian* as "the musical discovery of the year," while *The Times* said he was "among the very best creative talents of his generation." Tavener's younger brother, Roger, was then doing some building work on Ringo Starr's home and, gaining the musician's interest, persuaded the Beatles to have *The Whale* recorded by Apple Records and released in 1970. During his career he became one of the best

known and popular composers of his generation, most particularly for *The Protecting Veil*, which as recorded by cellist Steven Isserlis became a bestselling album and *Song for Athene* which was sung at the funeral of Princess Diana. Tavener was knighted in 2000 for his services to music. Other works by Tavener released by Apple included his *A Celtic Requiem*, which impressed Benjamin Britten enough to persuade Covent Garden to commission an opera from Tavener: the ultimate result, to a libretto by playwright Gerard McLarnon, was *Thérèse*.

Tavener converted to the Greek Orthodox Church in 1977. Orthodox theology and liturgical traditions became a major influence on his work. He was particularly drawn to its mysticism, studying and setting to music the writings of Church Fathers and completing a setting of the Divine Liturgy of St. John Chrysostom.

Tavener's *Fall and Resurrection*, first performed in 2000, used instruments such as ram's horn, ney flute and kaval. It was dedicated to the Prince of Wales, with whom Tavener formed a lasting friendship. In 2003 Tavener composed the exceptionally large work *The Veil of the Temple*, based on texts from a number of religions. Identified by Tavener as "the supreme achievement of my life," it is set for four choirs, several orchestras and soloists and lasts at least seven hours. In 2007 Tavener composed *The Beautiful Names*, a setting of the 99 names of God in the Muslim tradition, sung in Arabic. It had been reported, particularly in the British press, that Tavener left Orthodox Christianity to explore a number of other different religious traditions, including Hinduism and Islam and became a follower of the Traditionalist philosopher Frithjof Schuon. He remains devotedly Christian. Speaking on the BBC Four television programme *Sacred Music* in 2010, Tavener described himself as "essentially Orthodox." He reiterated both his desire to explore the musical traditions of other religions and his adherence to the Orthodox Christian faith, on *Start the Week*, recorded only days before his death and broadcast on 11 November 2013.

While Tavener's earliest music was influenced by Igor Stravinsky and Olivier Messiaen – often invoking the sound world of Stravinsky, in particular *Canticum Sacrum* and the ecstatic quality found in various works by Messiaen – his later music became more sparse, using wide registral space and was usually diatonically tonal. Tavener recognised Arvo Pärt as "a kindred spirit" and shared with him a common religious tradition and a fondness for textural transparency.

If you've only heard *Song for Athene*, you might not think that its composer would be much of a fan of Anton Webern or Elliott Carter. But after Carter's death Tavener wrote: “He did something no other modernist has ever achieved. He, in the last 10 years of his life, seemed to rid modernism of all its angst, creating sparkling edifices of joy and beauty, like the Flute Concerto and Dialogues for Piano and Chamber Orchestra. From a composer's point of view, he was an absolute master - and he did it better than any of us." In Webern, Tavener hears a crystalline meditation on musical material that transcends the composer's ego; qualities he has found also in the lucid music of Stravinsky's late, serial period, as well as the radiant musical spirit of Olivier Messiaen.

What all of these enthusiasms have in common, from Tavener's point of view, is an attempt to find a musical objectivity, a sense of letting the material achieve a life that has its own internal energy, something outside the composer's subjectivity or "angst." That's Tavener's main critique of some

20th century music (indeed, music in general): he identifies a morbid, decadent subjectivity as the driving force behind much of the avant-garde and the expressionism that preceded it. There's a parallel with Tavener's spiritual life in this essential view: for much of his life an Orthodox Christian, his ideal relationship with his spirituality as it's expressed in his music is that he should be a channel through which the music flows, with as little impediment from the predilections of his own personality as possible. "I wanted to produce music that was the sound of God. That's what I have always tried to do." That's language liable to alienate non-religious listeners, but what it's really about is a striving to release his music from the mundanities of his own consciousness. You hear the results of that attempt on the grandest and gentlest scale in *The Veil of The Temple* from 2003, a seven-hour-long cycle for choir that's a combination of liturgical vigil and spiritual epic.

In his mid-20s, Tavener symbolised what must have seemed like a visionary coming-together of the pop and classical musical avant-gardes. In 1968, his gleefully postmodernist cantata *The Whale* was the first piece played by the-then young turks of new-music performance, the London Sinfonietta, and it was then released in 1970 on The Beatles' Apple record label. The piece is a riotous recreation of the story of Jonah and the Whale. "The Whale is a piece written by an angry young man," Tavener said in 2004. "I was angry because the world didn't see the cosmos in metaphysical terms. I was also angry because what I saw of so-called classical music in those days was very po-faced. I wrote *The Whale* as a reaction in a way. The piece is very fantastical." Tavener's musical maximalism continued throughout the 1960s and into the 1970s, in pieces such as *Celtic Requiem*, with its Irish folk tunes, electric guitars and children's songs and his opera for the Covent Garden, Thérèse.

What's surprising when you hear pieces like *The Whale* or *Ultimos Ritos*, a sprawling fresco of the "last rites" is not just the sounds they make, it's their aesthetic of open-eared inclusion that's so striking. It's all markedly different from a choral piece such as *The Lamb*, with its slowness and stillness, and above all, its harmonic attractiveness and consonance. *The Lamb*, like so many of Tavener's dozens of choral pieces, seems to embody an aesthetic of excluding any superfluous sound and fury in its simplicity, For some, that turn to the musical terra cognita of diatonic harmony makes Tavener a pseudo-spiritual sell-out, writing music whose "transcendence" is nothing of the sort, but rather a cheaply achieved audience manipulation.

But it's not that straightforward and certainly not in the music that Tavever has written in recent years. At its most affecting, Tavener's work isn't about trying to fill your ears and your body with a cynically achieved ethereality, it's about giving the listener the space to create his or her own sense of private contemplation. That's still not going to work for some listeners, who still hear Tavener only as a badge of that which makes us most wretched; that's to say, humanity's belief in its own wretchedness, as if the human condition were something we had to escape rather than celebrate.

Tavener's recent music has accommodated both a greater range of thinking than his Orthodox-inspired works of the 1980s and 1990s with a renewed interest in a more modernist style of dissonance and conflict. And as you'll find in *The Protecting Veil*, there's more in this music than merely a rapt penitential radiance. In fact, there's a numinous wildness in Tavener's stratospheric writing for the solo cello and the blazing intensity of the textures he finds from the string orchestra.

As a composer who genuinely became a major cultural figure in the country's consciousness, Tavener is unique in the story of post-war British music; his music deserves and repays hearing and re-hearing with ears and minds as open as his have always been.

1) *The Whale* (1966) – is a "dramatic cantata." It is loosely based on the biblical allegory of Jonah and the Whale, although Tavener admitted that "The 'fantasy' grew and perhaps at times nearly 'swallowed' the biblical text: so the swallowing of Jonah became almost 'literal' in the biblical sense." The libretto includes the words of an encyclopaedia entry describing certain facts about the whale and this is contrasted with themes within the music which attempt to portray the reality of the whale itself, whose existence is greater than the sum of all the facts about it. *The Whale* has eight sections: I. Documentary, II. Melodrama and Pantomime, III. Invocation. IV. The Storm, V. The Swallowing, VI. The Prayer. VII. In the Belly and VIII. The Vomiting.

   In the 1960's, some people bought up practically anything that appeared on The Beatles' Apple Records. Much of it was forgettable, of course, but John Tavener's *The Whale* was not. *The Whale* is a challenging, two-part, half hour mix of esoteric, avant garde classical adventurism -- a kindred spirit of 2001: A Space Odyssey's *Lux Aeterna* (for 16 unaccompanied voices) and Frank Zappa's later, neo-operatic musings for *200 Motels*. Unlike most Apple artists, Tavener went on to enjoy a successful career that would render *The Whale* a footnote.

   Tavener's description:

   > This was the first idea which came to me, these notes and the rhythmic interversions form the basis of a fantasy on the Biblical allegory 'Jonah and the Whale.' A fantasy which grew around the text from the Vulgate and at times moved so far from it that I decided to call the piece *The Whale*. The fantasy' grew and perhaps at times nearly 'swallowed' the biblical text; so the swallowing of Jonah became almost 'literal' in a musical sense. The sections which are pure 'fantasy' in *The Whale* are informed by a deliberate monotony and are always characterised by a rather dry 'drum-beat.' These sections occur three times in the piece, first at the beginning, then at the middle of the 'Melodrama and Pantomime,' in a very soft bell-like passage representing the storm and finally towards the end of the prayer when Jonah is in the belly of the Whale. *The Whale* was a very exciting musical experience for me and the composition of it took over a year with only a few interruptions. It may be of superficial interest to note that I visited Cornwall at the height of winter in an abortive attempt to see a real whale. *The Whale* seems musically a long way from me now, but it was something that I had to write and if its youthful exuberance seems excessive, I still stand by it. I completed The Whale fifteen years ago in Tythe Barn, the home of Lady Birley to whom the work is dedicated.

2) *The Lamb* (1982) is a choral work. Tavener's setting of Willaim Blake's poem *The Lamb* (from the 1789 publication Songs of Innocence) was performed as part of the traditional "Nine Lessons and Carols" broadcast from King's College, Cambridge, on Christmas Eve, 1982. The composer so wanted Mother Thekla -- his friend, associate, and collaborator -- to hear it that he urged the sagely nun to borrow a radio so she could listen to the program from the convent. The music that followed would turn out to be one of Tavener's best-known works; so commercially successful that

his publisher proclaimed it "the biggest selling choral title in our catalogue, by any composer, living or dead."

The piece was originally conceived as a birthday present for the composer's nephew Simon on the occasion of his third birthday. One of Tavener's numerous occasional pieces composed for special events in the lives of family and loved ones, the music for *The Lamb* came to Tavener as an artistic revelation. As Tavener himself recalls: "I looked through the poems of William Blake and I found *The Lamb*. I read the words, and immediately I heard the notes." The composer sensed the potential for success in the piece and immediately sent it to his publisher and arranged for the performance at King's College. The work, scored for a cappella choir, is as gentle and meek as the title implies. Its most striking surface feature is the variation in texture that marks certain divisions in the text. The scoring alternated between three types of color: unison, contrary motion and full harmony. The haunting melody appears alone at first, as the voices sing together; at the second line, however, the lines are set atop a mirror as a lower line follows in intervallic inversion. Retrograde iterations of the melody follow on the horizontal plane, while the vertical sonorities shimmer with crystalline dissonance. Finally, at the last quatrain of the first verse, the ensemble joins in with lush harmony -- not coincidentally, on the line "Gave thee such a tender voice." The second verse of the poem is given the same musical treatment, with the inverted counterpoint symbolically setting the paradoxical line in which the Creator of the universe becomes a little child. The paradox is reconciled into doctrine with the warm cadential progression of the final four lines. This simple homophonic piece is usually performed as a Christmas carol. Later prominent works include *The Akathist of Thanksgiving* of 1987, written in celebration of the millennium of the Russian Orthodox Church; *The Protecting Veil*, first performed by cellist Steven Isserlis and the London Symphony Orchestra at the 1989 Proms; and *Song for Athene* (1993). The two choral works were settings of texts by Mother Thekla, a Russian Orthodox abbess who was Tavener's long-time spiritual adviser until her death in 2011. *Song for Athene* in particular gained world-wide exposure when performed at the funeral of Diana, Princess of Wales in 1997.

3) *The Protecting Veil* (1988) for cello and strings - The Feast of the Protecting Veil of the Mother of God was instituted in the Orthodox Church to commemorate her appearance in the Church at Vlacherni (Constantinople) in the early tenth century, possibly 902. At this time of grave danger for the Greeks from Saracen invasion, Andrew, The holy fool and his disciple Epiphanios, saw the Mother of God during an All-Night-Vigil. She was standing high up above them in the air, surrounded by a host of saints. She was praying earnestly and spreading out her Veil (stole) as a protective shelter over the Christians. Heartened by this vision, the Greeks withstood the Saracen assault and drove away the Saracen army. The feast the Protecting Veil is kept by the Orthodox Church in celebration of this event.

Tavener's description: I have tried to capture some of the almost cosmic power of the Mother of God. The cello represents The Mother of God and never stops singing throughout. One can think of the strings as a gigantic extension of her unending song. The music falls into eight continuous sections and use is made of the eight Byzantine tones. Various Feasts were in my mind as I composed; for instance the second is related to her birth, the third section to the Annunciation, the

fourth to the Incarnation, the fifth (which is totally unaccompanied) to her lament at the foot of the cross, the sixth to the Resurrection, the seventh to her Dormition and the first and last sections to her cosmic beauty and power over a shattered world. *The Protecting Veil* ends with a musical evocation of the tears of the Mother of God. Having said all this, it is perfectly possible to listen to *The Protecting Veil* as 'pure' music but I think that it may be helpful if I recount what was in my mind during the composition. It is an attempt to make a lyrical ikon in sound, rather than in wood and using the music of the cellist to paint rather than a brush. The music is highly stylised, geometrically formed and meditative in character.

4) *Funeral Canticle* (1996) – Tavener's description: "was written in loving memory of my father. Such was his love of life and people that he constantly surprised us by rallying round when he was thought to be at the point of death. So I wrote this work during the last year of my father's life, in preparation for the interdenominational funeral service that was his wish."

For Tavener, mortality is a knot in a string whose ends extend forever in both directions and while virtually all of his works have an air of prayerfulness and godly mystery to them, "in memoriam" works such as the *Funeral Canticle* afford the opportunity for deep musical and poetic rumination on the duration of life and the infinity of existence. Though mortal mourning is never entirely absent from works in this vein, it is coupled by an assurance of celestial existence -- an assurance fueled by the composer's personal religiosity. *The Funeral Canticle* is one of two works inspired by the passing of the composer's father. The other, *Eternal Memory*, is a co-memorial to Tavener's father and to the late Lady Diana, Princess of Wales. While the ruminations of that work are more secularly philosophical -- it takes its text from William Blake's Auguries of Innocence and Eternity -- *The Funeral Canticle* is more explicitly religious, having been prepared for the interdenominational funeral service that his father had requested. Its texts include the *kliros* from the traditional Orthodox funeral service, interspersed with verses composed by Tavener's longtime friend, collaborator (Mary of Egypt, Akathist) and spiritual guide, Mother Thekla of the Monestary at Normanby. As is the case with many of Tavener's other works, an overarching motto permeates the piece. Here, it is a solemn chant in Greek: "Remember eternal things."

Though a sense of stasis pervades the work -- for there is no hurry when distances are traversed over eternities -- each sectional division is marked by a distinct kind of calm. The opening motto is given in what sounds like Byzantine chant; the subsequent lines: "We are born as naked infants, Then baptized into Christ our God," are set in delicate, sinuous parallel chords; the *kliros* that follows is set in rich chord progressions overlaid with solemn repetitions, the sustained tones in the upper voices hovering over a restlessly ponderous bass. The Greek chant returns, followed again by a lush texture of parallel thirds and a rich Alleluia passage. The warm harmonies of the *kliros* return, followed by another Greek chant and another verse: "Grant O Lord in love unceasing ... rest among the faithful, in the life beyond compare." After the Alleluia, the final iteration of the *kliros* brings the work to a close. One senses a deliberate (and to those familiar with Tavener's work, expected) attempt to create an air of timelessness in this work. There seems to be a circular trajectory to the repeating textural patterns: the liturgical and ancient sounds of the Greek chant give way to the parallel harmonies, which are supplanted by the rich chords of the *kliros.* Law,

theology, speculation seem to fade and blend into the higher reality of the eternal unknown; material objects and mortal ideas, "the idols of the world," disappear in the wake of "eternal things." Tavener has constructed a terrestrial musical frame, made of simple signs and symbols, through which to view existence from a celestial perspective.

5) *Eternity's Sunrise* (1997) - Time, for Travener, seems to be not the moving endpoint of a line continually being drawn, but the whole line itself, stretching forever in both directions. The composer's own deep religiosity fuels his constant experimentation with the concepts of time, space, eternity, and infinity, resulting in musical works that aren't journeys but states. As with fellow Russian Orthodox composer Arvo Pärt, Tavener's compositions are made of symmetries and patterns that combine to form hovering, three-dimensional sonic shapes. In essence, Tavener composes musical holograms. Or perhaps we should say that the hearing of his works is a hologram; the composition itself is just the film used to project it. It is also interesting to note that just as each fragment of a broken holographic film creates the whole original visual image, so do Tavener's scores create micro/macroscopic resonances, fractals that replicate themselves on various levels.

   Like Tavener's other "in memoriam" works (such as the one for Annon Lee Silver), *Eternity's Sunrise* emphasizes the eternal nature of the spirit rather than the passing of the mortal body. Tavener achieves this by taking two texts of William Blake, both of them on the subject of eternity and converging them. The familiar couplet from "Eternity" is interpolated between lines from "Augeries of Innocence," with recurring Alleluias interspersed as well. This device alone has the effect of forcing the listener to rearrange chronology, to assemble the musical object rather than just watch the constituent parts pass by. Blake's texts themselves are rather holographic: a grain of sand contains an entire world and an hour holds eternity. The sonorities employed by the composer also defy chronological rigor. The agile, angular solo soprano line is at once vaguely liturgical and strikingly modern and the handbells lend an air of timeless ritual. The clean, warm sonority of the Baroque instrumental ensemble sounds as new as it does old. Paul Goodwin, who conducted the Academy of Ancient Music in the premiere of the work on July 1, 1998, admitted as much: "However hard we in the early music movement try to achieve the sounds and techniques of the past, we can never escape the fact that ultimately, we see everything through twentieth-century eyes and, therefore, represent a twentieth-century movement." By combining so many chronological references and associations, Tavener's work seeks to transcend them all and find a space outside and above the ticking of the clock. Perpendicular to the axis stretching from the infinite past to the future, Tavener places another one, stretching from the terrestrial to the celestial. Not only does the composer identify these symbols in his notes; he also makes them explicit in performance. The singer, representing the earth, performs at floor level; the handbell performer, in his role as the angels, is raised above the soprano; the full instrumental ensemble takes its place in the heavens.

   Tavener's description: 'I shared in the image of God, but did not keep it safe; the Lord shares in my flesh, so as to save the image and to make the flesh immortal' - St Gregory of Nazianzus. My first ideas for *Eternity's Sunrise* came to me in January 1997, soon after my father's death. These ideas

were taken up again in September the same year, in response to a commission from the Academy of Ancient Music, which happened soon after the death of Diana, Princess of Wales. There is no such thing as accident or coincidence, so I dedicated my piece to the memory of the Princess. The concept of solo soprano (representing earth) at ground level, handbells (representing the angels) at an intermediate position and the main baroque ensemble at a high level (representing heaven) fitted exactly with the Blake text which I had decided to set. When seen as things truly are, the earth is a mirror of the Eternal World and when seen correctly, it is possible in this world to live in *Eternity's Sunrise*. God does not exist in the world. And yet at the same time He is reflected in it, giving it form and structure. The music should be played with quiet joy, as a day of sunshine and calm, full of gentleness and radiance.

- **New-Age**

  New-age music is a genre of music intended to create artistic inspiration, relaxation, and optimism. It is used by listeners for yoga, massage, meditation, and reading as a method of stress management or to create a peaceful atmosphere in their home or other environments, and is associated with environmentalism and New Age spirituality. The harmonies in new-age music include a drone bass, and are often structured as variations on a theme. The music often contains recorded sounds of nature and used as an introduction to a track or throughout the piece. New age includes both electronic forms, frequently relying on sustained synth pads or long sequencer-based runs, and acoustic forms, featuring instruments such as flutes, piano, acoustic guitar and a wide variety of non-western acoustic instruments. Vocal arrangements were initially rare in new age, but as it has evolved vocals have become more common, especially vocals featuring Native American-, Sanskrit-, or Tibetan-influenced chants, or lyrics based on mythology such as Celtic legends. New-age music was influenced by a wide range of artists from a variety of genres. Irv Teibel's *Environments* series (1969–79) featured natural soundscapes, tintinnabulation, and "Om" chants and were some of the first publicly available psychoacoustic recordings. In 1973, Mike Oldfield's progressive rock album *Tubular Bells* became one of the first albums to be referred to under the genre description of new age. Steven Halpern's 1975 *Spectrum Suite* was a key work that began the new-age music movement. By 1989, there were over 150 small independent record labels releasing new-age music. New-age music was influenced by a wide range of artists from a variety of genres—for example, folk-instrumentalists John Fahey and Leo Kottke, minimalists Terry Riley, Steve Reich, La Monte Young, and Philip Glass, synthesizer performers Pink Floyd and Brian Eno, and impressionistic jazz artists Keith Jarrett, Paul Horn (beginning with 1968's *Inside*) and Pat Metheny. Many different styles and combinations of electronic, experimental and acoustic new age were introduced in the 1970s including music from Asia, such as Kitaro and Yellow Magic Orchestra.

  Steven Halpern (born 1947 in New York) is a New Age musician. He is a Grammy-award nominee and considered to be one of the founding fathers of New Age music. Halpern played trumpet and guitar in the New York City jazz scene of the 1960s, but became disenchanted with it and moved to California. There he began exploring the idea of creating music entirely for the purpose of relaxation, which he called "anti-frantic alternative" music. He began creating music which did not adhere to traditional Western tonality, but which instead consisted of static, minimalist pieces for

electric piano inspired by Eastern music. He is a proponent of theories which emphasize the healing properties of music.

His first album was *Spectrum Suite*, released in 1975 and which is considered to be one of the first true new age music albums. He began an alternative marketing campaign in order to raise awareness about his music as the genre was not yet widely known. He focused at venues like health food stores, yoga conferences, and alternative retailers.

Andreas Vollenweider (born 4 October 1953) is a Swiss harpist, who is generally categorised as New Age and uses a modified, electroacoustic harp of his own design. He has collaborated with Bobby McFerrin, Carly Simon, Luciano Pavarotti and in 1987 received a Grammy Award for the album Down to the Moon. Vollenweider's style has been described by the New York Times as "swirling atmospheric music, which evokes nature, magic and fairy tales". He has toured internationally and produced fourteen regular albums in a career that spans four decades. Vollenweider lives outside Zurich.

His style has been described as weaving "elements of European classical and folk music, Third World vocal and percussive effects and natural sound effects into cyclical suites". Vollenweider is perceived as one of the purveyors of the New Age genre, although his earlier recordings appeared on the jazz Billboard chart. The composer found that "what I am doing is really a very old thing, a very 'old age' thing, because I'm doing what people have been doing for thousands of years'.

- **New Complexity**
  New Complexity is a current within today's European contemporary avant-garde music scene, named in reaction to the New Simplicity. Among the candidates suggested for having coined the term are the composer Nigel Osborne, the Belgian musicologist Harry Halbreich and the British/Australian musicologist Richard Toop, who gave currency to the concept of a movement with his article "Four Facets of the New Complexity".

  Though often atonal, highly abstract and dissonant in sound, the "New Complexity" is most readily characterized by the use of techniques which require complex musical notation. This includes extended techniques, micro tonality, odd tunings, highly disjunct melodic contour, innovative timbres, complex polyrhythms, unconventional instrumentations, abrupt changes in loudness and intensity, and so on. The diverse group of composers writing in this style includes Richard Barrett, Brian Ferneyhough, Claus-Steffen Mahnkopf, James Dillon, Michael Finnissy, James Erber and Roger Redgate.

  Brian Ferneyhough (born 16 January 1943) is an English composer, who has resided in California since 1987. His work is characterized by highly complex notation and the extensive use of irregular nested rhythmic tuplets. Ferneyhough is typically considered to be the central figure of the New Complexity movement. Ferneyhough taught composition at the Hochschule für Musik Freiburg and the University of California at San Diego and, currently, Stanford University and is a regular lecturer in the summer courses at Darmstädter Ferienkurse. Ferneyhough was born in

Coventry and received formal musical training at the Birmingham School of Music and the Royal Academy of Music from 1966–67.

Ferneyhough's initial forays into composition were met with little sympathy in England. His submission of *Coloratura* to the Society for the Promotion of New Music in 1966 was returned, with a suggestion that the oboe part should be scored for clarinet. While Ferneyhough did find it hard, one source of support came from Hans Swarsenski who saw the same thing happen to Cornelius Cardew; Cardew enjoyed a prestigious continental reputation, but a poor one in his homeland. Swarsenski said of Ferneyhough: 'I've taken on an English composer who is I think is enormously talented. If this doesn't work, this is the last time.' Ferneyhough continued to struggle, but the premiere of his *Cassandra's Dream Song* and his *Missa Brevis* (for 12 singers) at the Royan festival (France) in 1974, marked a breakthrough for Ferneyhough's career. From here, Ferneyhough became closely associated with New Complexity. New Complexity is characterized by its extension of the modernist tendency towards formalization (particularly as in integral serialism). Ferneyhough's actual compositional approach, however, rejects serialism and other "generative" methods of composing; he prefers instead to use systems only to create material and formal constraints, while their realisation appears to be more spontaneous. His scores make huge technical demands on performers. His opera, *Shadowtime*, with a libretto by Charles Bernstein, and based on the life of the German philosopher Walter Benjamin, was premiered in Munich on 25 May 2004. As is usual for Ferneyhough's works, the opera received mixed reviews (both Bach and Mozart were considered to complex during their careers).

What is complexity in music? Is there any music more complex than, say, the six-part *Ricercar*, with its six independent but symbiotically related strata of ever-changing musical information, from Bach's Musical Offering? Has anyone in the 20th or 21st century come close to demanding as much from his or her listeners and performers than JS Bach did in that piece, or any of his innumerable fugues? Or what about Beethoven's late quartets? Aren't they the acme of musical complexity, in the sense of a rich stream of musical meanings and unpredictabilities, for the players just as much as the audience? Or is the bar set still higher by Schoenberg's *First Chamber Symphony*, that jam-packed single movement that compresses pretty well the entire classical and romantic tradition of forms, structures and expressivity into 20 minutes? Or what about the compressed atonality of Webern's early works, or the quasi-neural network of multiple musical connections of his later music? The impossible canons of Conlon Nancarrow, taking his player pianos to other dimensions in the Mexican desert? Or the vertiginous sound and fury of the postwar avant-garde composers Ligeti, Stockhausen, Boulez, Xenakis … ?

Ferneyhough's works are often referred to as the *ne plus ultra* of musical complexity, in the sense of notational overload, performing difficulty and even philosophical questioning. A good example is his piano piece *Lemma-Icon-Epigram* (And this is one of Ferneyhough's "simpler" scores, by the way.) The comments below include some pretty polarised opinions on this piece, falling into a typical new-music polemic, of "It sounds like a monkey throwing itself on the keyboard" versus "If you don't get this, you're a philistine." If you're new to this music, though, you may need some help in decoding the score. This is how one might approach the very first bar:

> First, the pianist has to play a group of 11 hemi-demi-semiquavers in the time of seven in the basic tempo of quaver = around 50, followed by a single hemi-demi-semiquaver rest and then a semiquaver rest. That volley of notes is followed by a group of 11 hemi-demis in the time of eight, enclosing a triplet and dotted notes; then comes a group where you need to count 10 hemi-demis in your head in the time of eight, but you also have to subdivide them into one group of five against four in your new virtual tempo and then six against four, before a final hemi-demi rest in that overall scheme of 10 against eight.

Got that? And that's just the rhythm. There's then, of course, the small matter of the notes you have to play in this rhythm, the dynamics and the huge variety of expressive markings and pedal indications. And that's just to be able to get close to playing the first five seconds of this 14-minute piece. It is, well, pretty complex!

So what does this kind of notational complexity mean? What does it produce in performance and what does it sound like? Virtually every single bar of Ferneyhough's music poses these questions (his mature music, at least – he grew up playing in brass bands in the Midlands, but left what he saw as the UK's musical provincialism for the more experimental climes of Europe and the US). It's in performance that the open-ended and endlessly fascinating answers are disclosed: philosophical solutions that pile musical riddle on to musical riddle to push at the existential limits of what a musical work might be.

Ferneyhough holds no compositorial guillotine of musical perfection over the heads of his performers. Asking any of the musicians who regularly commission and play his pieces to perform them perfectly, according to the precise letter, dot, and micro-indication of his scores, is not Ferneyhough's abiding aim. Ferneyhough's desire to put all that information on the page is really the start of a dialogue, with the possibilities of what the performer is going to do with the piece and with what the listeners will hear. Even more fundamentally, the notation is a sort of scratching at the surface of what the actual musical work of *Lemma-Icon-Epigram* might be.

If Ferneyhough wanted his scores to be a sort of straitjacket for the performer, to determine precisely what they should be doing at every micro-second of the piece, he would have become an electronic or electro-acoustic composer. In that case, a single recording could and would represent the definitive realisation of each of his pieces. In fact, as hundreds of composers have discovered in the past, the more information you give for your performers to interpret, the more open-ended rather than fixed the work becomes, as every expressive mark becomes something that's played and interpreted differently by each different performer.

Ferneyhough has said as much himself in the trademark poetical convolutions of his prose:

> What can a specific notation, under favourable conditions, hope to achieve? Perhaps simply this: a dialogue with the composition of which it is a token such that realm of non-equivalence separating the two (where, perhaps, the 'work' might be said to be ultimately located?) be sounded out, articulating the inchoate, outlining the way from the conceptual to the experiential and back.

What Ferneyhough's really saying is that the "work" is not to be found only on the printed page (his "non-equivalence" phrase), but somewhere between and beyond the sum of the score's indications and the sum of all of the possible performances that may result from it – as well as being a record of Ferneyhough's own gigantically complex compositional processes.

The following general points will give a framework to begin to understand Ferneyhough's music and will also have something to say about the whole culture of classical music:

- What happens, then, when you hear a piece of Ferneyhough's, in the process of communication from performer to audience? While it's true to say that Ferneyhough does not expect perfection on the part of his performers, he does expect them to try to get there and part of the thrill of what you hear in any performance of Ferneyhough's music is an experiential extreme of the world's most virtuosic musicians pushing themselves to the boundaries of what they can do – and sometimes beyond. (At least one of Ferneyhough's pieces, *Time and Motion Study II* for solo cello and electronics, makes expressive play with that idea, virtually strapping the cellist into a sort of musical electric chair in which one of the strictures that binds the musician to the attempt to realise the work is the labyrinthine density of the notation, sometimes written on five staves instead of the single stave that a cellist usually needs.) There is no chance – not even if you're Pierre Boulez or Oliver Knussen – of notating down what you hear when you hear a Ferneyhough piece. And similarly, there's no chance that the mind-bending rhythmic density of that first bar of *Lemma-Icon-Epigram* is heard as it is written. The effect of that first bar, without the score, is of a coruscating burst of piano sound that propels the start of the musical labyrinth of the piece; it isn't of 10 hemi-demis in the time of eight, or whatever else the score says.

- If you talk to the players who most often play Ferneyhough, they all say that his notation has to be the way it is to achieve the results he wants in performance, even if there's a vanishingly tiny possibility of all that information being communicated to the listener. What we're getting as listeners is a trace of the score the performer is playing from, which is in turn only a trace of the musical work that Ferneyhough has imagined. And yet, because of the ferocity of concentration on the part of the musician and because of the range and imagination of what you hear, what you actually get when you hear a performance of his music is something definitive, direct and undeniable – a sheer thrill of musical extremity.

- Listen to Ferneyhough's works for solo instruments or chamber ensemble. There's also an unclassifiable music-theatre piece on Walter Benjamin called *Shadowtime*; there are those gigantically ambitious orchestral pieces, including the most recent, *Plötzlichkeit*; and there are some brilliant large ensemble pieces that grab you by the scruff of the neck and don't let go. Try the *Carceri d'Invenzione* pieces or *Terrain*, a kind of uber-violin concerto. Oh, and Ferneyhough has also written one of the most important canons of string quartets in the entire literature, six of them so far.

- One last thing: just what is it that Ferneyhough's music has to tell us about the entire literature of western classical music? That it's all essentially unknowable and essentially experiential, revealed in all of its elusive but definitive power through the evanescent illumination of performance. It is as difficult to answer the question of what Beethoven's *Fifth Symphony* really is as what *Lemma-Icon-Epigram* might be. In that fundamental sense, Ferneyhough's music is no more and no less complex than any other classical music.

1) *Lemma-Icon-Epigram* (1982) – is the first for piano solo of Ferneyhough (there was an earlier *Three Pieces*). It was written for Massimiliano Damerini who remarkably learned the work within a month to give its premiere at the Venice Biennale in 1981. The title refers to a poetic means from the Italian poet Alciati (Adnrea Alciato, 1492-1550), see Ferneyhough's description, below. Ferneyhough has made fascinating utilizations of extra-musical concepts; materials from literature: process, contexts, paradigms, cognitive substancesa and visuals to enrich his working means. The conceptual is always a guide to the meaning the substance of his work, but it is these historical loci, these workable icons that really gives his music some resonance with reality. Here the usage of the term "epigram" signifies something beside itself, a paradigm that here is developed into **<u>three structures</u>**:

- The **<u>first</u>**, a more melismatic free register with a sustained interest in linear motion upwards. There is material of fast, clipped, wistful, mercurial landing sometimes on isolated tones, to catch one's breadth; sometimes a trill on these tones halts the progress forward, but nothing that disrupts the overall powerful momentum. These brilliant upper register tones remind one of celesta, or harp-heavenly like qualities;
- This seamlessly leads to the **<u>second</u>** part of more sustained chords, labored section, like a mirror, like the work doesn't yet know where to go, yet is very balanced and punctuated. You feel the structure is working and again quite beautifully voiced atonal chords are punctuated by short basso tones, isolated to be more percussive and equally structural. Ferneyhough's describes his work habits as merely beginning with tones, intervals, anything that simply comes to him, allowing the intuitive to enter the process.
- The **<u>last part</u>** begins as this second part decays, again reiterating the beauty of the opening melismata and the linear Baroque-like keyboard manners. The structural complexity of the work has been admirably discussed in the new music journal, Perspectives of New Music, in the 1980's and by Ferneyhough in interview in his 'Collected Writings.' Ferneyhough works with a transformation of individual tones, both locally and over the spectrum of the work: chordal inversions, chordal reiterations with transpositions, transposed groups, fixed orderings, as the rhythmic structure inverted and filter techniques where only certain intervals and rhythms are ''allowed'' and with phrasal spacings within each of the 3 Sections.

As described by Ferneyhough:

> The title of this work refers to a poetic form, the Emblema, developed most notably by the Italian poet Alciati during the first half of the sixteenth century. In general usage, the term is taken to mean an epigram which describes something so that it signifies something else. Later developments distinguished three components:

1. Lemma — A superscription (or adage)
2. Icon — An image
3. Epigram — A concluding epigram in which the preceding elements are commented on or explained

2) *Carceri d'Invenzione III* (1986) – is part of a larger, 7-part music cycle. Ferneyhough's daunting cycle, *Carceri d'Invenzione,* is in seven sections that comprise some of the most grueling repertoire currently available for both performers and audience. The title "Carceri d'Invenzione" comes from the series of etchings of the same name by an Italiain artist, Giovanni Battista Piranesi (1720-1778):

> A native of Venice, Piranesi went to Rome at age twenty and where he remained for the remainder of his life. Rome was the inspiration for and subject of most of his etchings that number over a thousand. Piranesi studied architecture, engineering and stage design and his first plans for buildings reflect his training combined with the tremendous impact of classical Roman architecture. The fourteen plates depicting prisons (probably Piranesi's best-known series) were described on their title page as 'capricious inventions.' Spatial anomalies and ambiguities abound in all the images of the series; they were not meant to be logical but to express the vastness and strength that Piranesi experienced in contemplating Roman architecture. They include explicit references to the justice system under the Roman Republic and to the cruelty for which certain emperors were known.

The pictures are fascinating due to their ability to create perspectival effects of many different kinds. For example, a stairway begins in the very foreground right at the feet of the observer, inviting the viewer in a specific direction into the image. This path crosses arches and galleries and splits along the way, disappearing into the background and out of sight. Although the staircase seems to continue ad infinitum, Piranesi creates a sense of perspective in which the same detail relates simultaneously to its environment and to that of the observer. Ideally, this occurs in all possible perspectives, from very close and large to infinitesimally small and infinitely distant. Ferneyhough said in 1986:

> *The Carceri d'Invenzione* (...) impressed me, in first instance, by reason of their obvious intensity, richness and expressive power. After much subsequent reflection it struck me that it was the masterly deployment of layering and perspective which gave rise to this impression of extraordinary immediacy and almost physical impact. At one and the same time the observer is drawn ineluctably down towards the dark center while forcibly thrust away along centrifugal rays of absolutely non-naturalistic, mutually conflicting lines of force.

The piece is performed with a small chamber ensemble. Parts of it are like the calculated chaos of Charles Ives, but Ferneyhough's intricacies make Ives resemble the purity of medieval chant. This is complexity at an entirely different level and further, not music for beginners.

The 7-Part *Carceri d'Invenzione* is made up of the following parts:

1. *Superscriptio* – for solo piccolo
2. *Carceri d'Invenzione I* – for chamber orchestra
3. *Carceri d'Invenzione II* – for solo flute and chamber orchestra
4. *Carceri d'Invenzione III* – for 15 woodwind instruments and percussion
5. *Mnemosyne* – for bass flute and tape
6. *Intermedio Alla Ciacaccona* – for solo violon
7. *Etude Transcendentales* – for soprano and ensemble

The initial *Superscriptio* piccolo solo with shrill, puffing whistles both breathy and breathless, is described by the composer as follows:

> Formally, *Superscriptio* is constructed upon a dense network of metric and proportional relationships, wherein variations of texture and momentum are achieved by means of distortions in the pattern created by the mobile juxtaposition of diverse bar lengths, as well as by the gradual de-synchronization of gestural shaping, dynamic intensity and rhythmic density – elements which, at the outset, are all heard to be changing simultaneously.

With all due respect to Ferneyhough, most listeners approaching this extraordinary work will not have a clue what to make of such a remark. This is a fine example of a situation in which one should temporarily set aside cerebral analysis, and just listen.

Carceri d'Invenzione I for chamber orchestra shows the treatment of eight different series of numbers (chords); 48 Modules and their transformations.

Carceri d'Invenzione II for solo flute and chamber orchestra is a much larger ensemble, with the flutist rocking out in ecstasy and with the ensemble occasionally sounding like bees swarming around a hive before moving on. In *Carceri d'invenzione III*, we are very clearly in the imaginary prisons of the Piranesi's famous prints, each woodwind instrument squirming away garrulously, desperately and diligently as the domineering beat of the percussion periodically flays them. It's a compelling work right to the mystical end, where it empties out into a smokey smear of bass flute and cymbal. Trigger attacks rule the changing of sound in *Carceri d'Invenzione III* for 15 woodwind instruments and percussion. The end of *Carceri d'Invenzione III* has a large ensemble working furiously, before ultimately dying out and leaving, *Mnemosyne*, the sole portion of the cycle using electronics.

The limitation of time and space is the main characteristic of *Mnemosyne* for bass flute and tape and the closely related *Intermedio alla ciaccona* for violin solo. The ensemble swoons together in a crescendo, but then breaks apart, the instrumental lines flying off in all directions like bottle rockets. With only a slight pause, violinist plunges into *Intermedio alla ciaccona*, its nervous rhythm packed with double-stops, harmonics and tiny swoops, all delivered at hyperspeed. Imagine a traditional violin encore except the line has mutated into a skein of flickering little events. If nothing else, one could marvel at his fingers finding the right position on the strings, given the wide intervallic leaps.

An example of Ferneyhough's use of vocal text is the last of the nine *Etude Transcendentales* for soprano and ensemble.

Perhaps the finest of the above are are the *Etudes Transcendantales / Intermedio II*, which are baroque concerto being subjected to experiments in metre, timbre and texture – sort of like Schnittke, but with more emphasis on microtones and a vocalist using texts by Ernst Meister and Alrun Moll. *Etudes* sounds more like a concerto grosso being slowly stretched apart like taffy, with the pieces hardening and splintering into thousands of tiny microtonal fragments.

It's been said before, but it's a tribute to the increasing prowess of contemporary musicians and their familiarity with unusual techniques and notation, that any of them could even play this piece. As with some of the spectral composers, you sense that what Ferneyhough is doing is not quite perceivable in the way that he would ideally like you to perceive it – that some arcane information is perhaps bypassing your normal sensory array and digging deep inside your brain, to do some as yet unexplained work. One has to respect a composer whose music has a near physiological effect as one tries to grasp it.

3) *Bone Alphabet* (1991) is generally considered one of the most difficult works in the solo percussion repertoire. It came about as the result of a request by Steven Schick for a solo work for a group of instruments small enough to be transportable as part of the performer's personal luggage when traveling by air. The precise instruments to be utilized weere left unspecified, other than by requiring each of the seven sound sources, selected, to be capable of supporting a wide range of dynamics and of having closely similar attack and decay characteristics to the other instruments. An additional constraint was that no two adjacent instruments making up the gamut of possibilities were to be constructed of the same material (so that, for instance, a Chinese gong could not be located next to a cowbell). The gestures that we hear, then, might be considered the "letters" of Ferneyhough's alphabet. Sometimes they coalesce into words or even poetic phrases. More often, they claim our attention in and of themselves for their distinctive articulation of musical time and space. Like much of Ferneyhough's output, *Bone Alphabet* is a study in the unequal or "irrational" division of the rhythmic pulse. As important as these temporal relationships are to Ferneyhough's aesthetic, the most potent ratio in *Bone Alphabet* is surely the 1:7 inherent in the solo percussionist's fearsomely balletic encounter with seven different instruments in an inevitably incredible choreography.

The work was composed as a succession of thirteen distinct types of musical comportment, each made up of a different number of subsections. A second stage of the compositional process involved detaching these subsections from their original context and redistributing them in a kaleidoscopic and relatively unpredictable manner. The resulting rhetorical language of *Bone Alphabet* reveals itself as a non-linear succession of unprepared contrasts and unexpected conjunctions. In spite of its radically limited instrumentation, the work is conceived polyphonically throughout, the individual voices being distinguished primarily by sharply etched articulational characters, given the same group of seven sounds is shared by all voices. It is the principal task of

the interpreter to discover ways of surmounting the initial timbral constraints by recourse to a compensatingly capacious reservoir of stamina and physical dexterity.

4) *Terrain* (1992) - is a maddeningly difficult virtuosic tour de force, violin concerto The dynamic, other-worldly dance between soloist and ensemble takes one's breath away! Very easy to enjoy on a first-listen, which is unusual for a Ferneyhough composition. Intensely modern sound right out of the gate and a very jazz-like flow and organization. A bit extreme for general listeners but Ferneyhough (like Bob Dylan), rarely places audience pleasing at the top of his priority list. The music is almost sad, which is a rather unfrequent feeling in Ferney, that is, sad without trying to be witty and despite all the surface activity. The violin part is for the most part blended with the ensemble. It is jazzy sounding in a couple of spots.

5) String Quartet No 5 (2006) – This piece came nearly 17 years after Ferneyhough's fourth. The Arditti Quartet has premiered most of Brian Ferneyhough's music for strings, including his *String Quartet no 5* and has had a closer association with Brian Ferneyhough than any other living composer. The Arditti Quartet has helped shape contemporary music over the last 25 years. They can perform whatever the most innovative composers can create and the avant garde wouldn't be what it is today without musicians of this calibre. The Arditti Quartet is said to be able to 'extract' music from Ferneyhough's compositions. The word 'extracted' is used as it is usually like this with Ferneyhough, receiving pages of the score at the very last moment. It is almost as if he desires pressure in order to produce the work. The premiere of the 5th Quartet was no exception, with the final pages and corrections coming in the last week before the premiere.

   Many believe that Ferneyhough's chamber music, in particular the quartets, are his most coherent forms of composition. To have his complexity unleashed but in only 4 parts allows the listener to grasp most of what is happening. The *5th Quartet* has a greater clarity than it's two immediate predecessors. The work uses silences or stops in the flow of the music to punctuate and change direction of the musical material. This allows the listener more time and space to follow the works development. The second movement of the 4th quartet also has employed the same idea. What is interesting about the 5th quartet is that it comprises a mixture of duos, trios and quartet music. This allows more contrast in the density of the music and therefore more contrast for the listener. The only <u>real</u> solo of the work is a brutal and aggressive cello cadenza. The second "solo," with accompaniment, is for 1st violin playing with a practise mute, accompanied by the other 3 players only with normal mutes. This requires a responsibility and intensity of playing and thought from the leader in order to project. The *5th Quartet* challenges it's performers with extremes of dynamics, from the brutality and extreme fortissimi of the cello solo to the last section of the work which is in double harmonics and only at the limit of audibility.

   James Dillon (born October 29, 1950) is a Scottish composer who is often regarded as belonging to the New Complexity school. Dillon studied art and design, linguistics, piano, acoustics, Indian rhythm, mathematics and computer music, but is self-taught in composition. Dillon taught at Darmstadt from 1982–92 and has been a guest lecturer and composer at various institutions

around the world. He taught at the University of Minnesota School of Music in Minneapolis, Minnesota from 2007 to 2014.

His major works include choral and vocal music, including the cycle *L'évolution du vol* (1993) and the opera *Philomela* (2004), the orchestral works *helle Nacht* (1987), *ignis noster* (1992), *Via Sacra* (2000), and *La navette* (2001), as well as a violin concerto for Thomas Zehetmair (2000) and the piano concerto *Andromeda* (2006), all showing an ease of writing for large forces. From 1982–2000, Dillon worked on the *Nine Rivers* cycle, a 3-hour work for voices, strings, percussion, live electronics and computer-generated tape. The epic work was first performed in full in Glasgow, November 2010.

His considerable body of chamber music, often written expressly for a performer's individual abilities, includes solos for clarinet, drumkit, cello, flute, piccolo, guitar, violin, viola, and accordion, alongside seven string quartets, the five-part *Book of Elements* for piano (2002) and *the soadie waste* for piano and string quartet (2002/3).

In the world of contemporary music, epic scale is often viewed as the preserve of composers such as Karlheinz Stockhausen or Morton Feldman, whose notoriously gigantic theatrical and instrumental essays seem to be the *ne plus ultras* of new music set on a huge, cosmic canvas. That's partly because so much contemporary music commissioning asks for pieces of about 10-20 minutes' duration. Thus it is rare that composers have the chance to pitch their imaginations at the largest of scales. But convention hasn't stopped the 62-year-old Scottish-born composer James Dillon from writing some of the boldest and most expressively extreme orchestral, chamber and theatre works out there. With a composer as uncompromising as Dillon, there is no substitute for starting by plunging ears-first into two of his huge musical cycles.

First comes the utterly unclassifiable *Nine Rivers* project, a collection of nine pieces for forces ranging from six percussionists to a large ensemble with live electronics and pretty well everything in between. As Dillon says of the whole cycle, which took him 17 years to compose: "Nine Rivers is a mythos of imagined waters, of fairies and snake-gods, a melancholy of flow, a requiem for poisoned rivers, an odyssey, a theatre of memory …" That suggests some of the elemental intensity that Nine Rivers contains: its soundworld of teeming, ever-changing energy, its fundamental investigation of the two types of time and experience that the word "river" suggests. As Dillon says, you have the idea of flowing water, of course, but more rarely, a "river" can also denote "he who rives – who tears apart, or in pieces, who severs, divides or cleaves." All that means is that when you encounter the piece (whose world premiere as a single, day-long event was held in 2010 in Glasgow) you're in for about five hours of full-on musical flux, after which you're left existentially battered and bruised. From the strange, still centre of the piece to the multimedia meditation of La Coupure, (The Cut), it is like being put through a wringer. The richness of Dillon's music in Nine Rivers lies partly in its surfeit of information and influences. He talks about quantum mechanics, the poetry of Rimbaud, the aphorisms of Heraclitus, among other things, as being important for the cycle. The relationship between acoustic instruments and electronics is just one of many questions asked by the piece. As a listener, you grab on to any thread you can and hold on tight. The idea of comprehending the whole of what's going on at any given moment seems

thrillingly impossible. But, as Brian Ferneyhough has recently said, that's a basic condition of life. We are always filtering out excess information to focus on what we need, whether we are commuting to work or listening to a Beethoven symphony.

Second, *The Book of Elements*, a five-part essay in continuity versus discontinuity and concentrated substance for solo piano that amounts to the most significant contribution to the pianist's repertoire since György Ligeti's *Etudes*. Next to Nine Rivers, and partly because it is written for solo piano, *The Book of Elements*, contains music of relative clarity and distilled energy. But its subtlety and the kaleidoscopic experience of listening to the trajectory of all five volumes is just as all-encompassing as anything else Dillon has written. The cycle moves from the 11 short pieces of Book 1 to the single movement of Book 5. What you hear is an idiom that sounds less iconoclastic than some of Dillon's earlier music, one that is unafraid of subconscious references – the ghosts of Debussy, Bartók and even Schumann and Chopin haunt some passages – and that finds a lyricism and flexibility that is definitively Dillon's own.

In both pieces, Dillon's combination of sonic immediacy and multi-layered complexity creates some of the richest experiences you can have in new music. This is music that seems to animate a mythic power that is both primeval and preternaturally sophisticated.

Now, those aren't the only cycles in Dillon's output. There is his orchestral triptych on the idea of illumination, made up of Helle Nacht, Ignis Noster and a flute concerto, Blitzschlag. That is not to mention his collection of six string quartets, his opera Philomela and other self-contained orchestral works such as a craggily melodic violin concerto and a piano concerto Andromeda, written, like so much of his piano music, for his wife, Noriko Kawai, to play, or the coruscating brilliance of La Navette.

Dillon's music is fearlessly, relentlessly explorative. To hear it is to confront a volcanic imagination that makes listening an act of thrilling, vertiginous unpredictability.

1) *Ignis Noster* (1992) The title of ignis noster – literally 'our fire' – derives from a number of alchemical treatises dating from the fifteenth and sixteenth centuries and may be more accurately translated as 'divine fire,' a principal element of the philosopher's prima material, essential to the art of transformation. Both Heraclitus and Parmenides were to associate fire with origins, Heraclitus with the ever-living, Parmenides with an ontological nothingness. Throughout ancient literature one discovers a cross-cultural complex of related metaphors: fire as destruction, as energy, as consummation, as passing, as transience and betweenness, etc. The alchemical idea of 'transformation', 'origin' as a consuming energy and a dialectic between the two, are the three principal themes which pervade ignis noster. Metaphorical associations, however, whilst inextricably linked to a poetic intention, are destined to recede into a series of traces. The chain of associations within a musical work proceed not simply as an analogue to extra-musical thinking, but are themselves transformed in the act of musical construction, consumed by the oneiric flames of the imagination. I must stress, however, that if ignis noster has a programme, it is not in the mode of representation or illustration. It could be argued that all the music has a programme. What are generally regarded as abstract technical matters – the

significant decisions taken about the construction of a musical work, and about the relationship of these decisions to the intention of the author – may themselves contain programmatic elements, and read as a narrative. How does one, then, describe a 'form of existence' without recourse to descriptive convention? My initial intention (in some ways straightforward) was to project an imperious, vertiginous form. One significant technical shift in ignis noster – and for me a fairly radical one – was the movement away from a strictly relational approach to construction (as exemplified in my other work for large orchestra, helle Nacht), to what may be described as the (confrontational) iteration of rival techniques. In helle Nacht I derived almost all of the musical material from a single universe of reference, namely the harmonic spectrum constructed upon a single frequency. In ignis noster I am 'planing' – to use American musicological jargon – a number of generative processes which run in parallel and whose connection lies only in the fact that they coexist within the same reality. In a single and fluctuating progression ignis noster divides into eighteen linked sections, each in a state of continuous and dense transformation. The sections are defined as three virtual states: the first potentially static – material which is clearly stratified and confrontational; the second potentially dynamic – material which is interlaced or mixed and the third a dialectic between the two and within the same section. Ignis noster was commissioned by the BBC for the BBC Symphony Orchestra and was composed between October 1991 and June 1992. The work is scored for large orchestra.

2) Viloin Concerto (2000) - was his third BBC Proms commission and was premiered to great acclaim in the 2000 season by soloist Thomas Zehetmair and the BBC Scottish Symphony Orchestra. Here, Dillon sets the piped drones and nimble fiddlework of the Scottish folk tradition against the overlapping webs of sound that have always characterized his virtuosic use of the orchestra. As in the earlier *Blitzschlag* both soloist and orchestra are engaged in a dance; like the moth and the flame, there is a strange attraction.

3) La navette (2001) based on a grim Greek myth involving the weaving of a telltale tapestry (the word navette means shuttle) Dillon's entangled skeins of sound take on a threatening intensity, shot through with mysterious radiances and rhythmic tics from the percussion. Here and there the piece seemed to loose its way, but the cumulative power and unexpected sense of release at the end were undeniably powerful.

4) The Book of Elements (2002) The *Book of Elements* consists of five Volumes each commissioned for a different prominent pianist of contemporary music by various music festivals. Dillon adopted an aesthetic of the miniature, the fragment: there is no beginning, no end and no development. Musical thoughts and ideas appear, sparkle and vanish. Dillon's piano music is a glass bead game: there are complex references and memories of past music: Bartok, Scriabin, Messiaen and many more. But they appear not as quotations in a self-consciously post-modern way, more like shadows. Dillon's music is rhythmically very complex. But the music remains obscure: all the intellectual effort doesn't translate into a consistent experience for the listener. Volume III is one of the most virtuosic and absolutely brilliantly performed; Volume IV starts

with beautiful, slow moving sound colours reminiscent of Debussy. Dillon's *The Book of Elements* is a rich challenge for any pianist with an interest in contemporary music.

5) *Andromeda* (2006) - Though Dillon titled his concerto as *Andromeda*, he told us that he wanted the audience to listen rather than to rely on the title. But in his own programme note he spends the first 70 words on Andromeda, the offspring of Celeus and Cassiopeia (night and darkness) who is a personification of the dawn. We learned during the pre-concert talk that Dillon never studied composition, never had a composition teacher. In his twenties he became very interested in music analysis, particularly in Schenker. Nevertheless, he wanted to compose music which could not be analysed. I am wondering how many of the prommers appreciated such statements in Dillon's programme note as the following two quotes. 'If the concerto during the early period of modernism inherits and maintains the idea of the heroic struggle, the emphasis often shifts to the level of the material itself. Its repertory of gestures function only as a chain of traces in a theatre of memory.' 'The invocation of the Andromeda myth serves only as an allegory to some protean theatre, whether it's the uncanny cries of Andromeda or perhaps the echo of the shoreline.' The 35 minute-long piece which, according to Dillon, is somewhere between concerto and concertante, consists of 15 continuous sections including a coda. Dillon had large forces at his disposal including five percussionists, seven trumpets/trombones/tubas and so on. It is clear t hat Dillon knows what various instruments are capable of and he utilises those possibilities.

- **New Objectivism**

New Objectivity reflected an unsentimental reality instead of the more inward-looking, abstract or psychological that was characteristic of **Expressionism**. The **New Objectivity** (in German: Neue Sachlichkeit) is a term used to characterize the attitude of public life in Weimar Germany, as well as the art, literature, music, and architecture created to adapt to it. Rather than some goal of philosophical objectivity, it was meant to imply a turn towards practical engagement with the world – an all business attitude, understood by Germans as intrinsically "American." Leading up to World War I, much of the art world was under the influence of **Futurism** and **Expressionism**, both of which abandoned any sense of order or commitment to objectivity or tradition. **Expressionism** was in particular the dominant form of art in Germany, and it was represented in many different facets of public life – in theater, in painting, in architecture, in poetry, and in literature. Expressionists abandoned nature and sought to express emotional experience, often centering their art around inner turmoil (angst), whether in reaction to the modern world, to alienation from society, or in the creation of personal identity. In concert with this evocation of angst and unease with bourgeois life, **Expressionists** also echoed some of the same feelings of revolution as did **Futurists**. The **New Objectivity** was a reaction against this.

Composer Paul Hindemith may be considered both a **New Objectivist** and an **Expressionist**, depending on the composition, throughout the 1920s; for example, his wind quintet Kleine Kammermusik Op. 24 No. 2 (1922) designed as Gebrauchsmusik, or one may compare his operas Sancta Susanna (part of a fairly expressionist trilogy) and Neues vom Tage (a parody of modern life). His music typically harkens back to baroque models and makes use of traditional forms and

stable polyphonic structures, together with modern dissonance and **Jazz-inflected** rhythms. Ernst Toch and Kurt Weill also composed **New Objectivist** music during the 1920s. Though known late in life for his austere interpretations of the classics, in earlier years, conductor Otto Klemperer was the most prominent to ally himself with this movement. The **New Objectivity** comprised two tendencies, characterized in terms of a left and right wing: on the left were the verists, who "tear the objective form of the world of contemporary facts and represent current experience in its tempo and fevered temperature;" and on the right the classicists, who "search more for the object of timeless ability to embody the external laws of existence in the artistic sphere." The movement essentially ended in 1933 with the fall of the Weimar Republic and the rise of the Nazis to power.

Paul Hindemith (16 November 1895 – 28 December 1963) was a German composer, violist, violinist, teacher and conductor. Notable compositions include his song cycle *Das Marienleben* (1923) and opera *Mathis der Maler* (1938). Born in Hanau, near Frankfurt am Main, Hindemith was taught the violin as a child. He entered Frankfurt's Hoch'sche Konservatorium, where he studied violin with Adolf Rebner, as well as conducting and composition with Arnold Mendelssohn and Bernhard Sekles.

During the 1930s he made a visit to Cairo and several visits to Ankara where (at the invitation of Mustafa Kemal Atatürk) he led the task of reorganizing Turkish music education and the early efforts for the establishment of the Turkish State Opera and Ballet. Towards the end of the 1930s, he made several tours in America as a viola and viola d'amore soloist. Hindemith's relationship to the Nazis is a complicated one. Some condemned his music as "degenerate" (largely based on his early, sexually charged operas such as *Sancta Susanna*), and in December 1934, during a speech at the Berlin Sports Palace, Germany's Minister of Propaganda Joseph Goebbels publicly denounced Hindemith as an "atonal noisemaker." Other officials working in Nazi Germany, though, thought that he might provide Germany with an example of a modern German composer, as by this time he was writing music based in tonality, with frequent references to folk music; the conductor Wilhelm Furtwängler's defense of Hindemith, published in 1934, takes precisely this line. The controversy around his work continued throughout the thirties, with the composer falling in and out of favor with the Nazi hierarchy; he finally emigrated to Switzerland in 1938 (in part because his wife was of partially Jewish ancestry). In 1935, the Turkish government commissioned Hindemith to reorganize that country's musical education, and, more specifically, to prepare material for the "Universal and Turkish Polyphonic Music Education Programme" for all music-related institutions in Turkey, a feat which he accomplished to universal acclaim. This development seems to have been supported by the Nazi regime: it may have got him conveniently out of the way, yet at the same time he propagated a German view of musical history and education.

In 1940, Hindemith emigrated to the United States. At the same time that he was codifying his musical language, his teaching and compositions began to be affected by his theories. Once in the U.S. he taught primarily at Yale University. During this time he also gave the Charles Eliot Norton Lectures at Harvard, from which the book *A Composer's World* was extracted (Hindemith 1952). He became an American citizen in 1946, but returned to Europe in 1953, living in Zürich and teaching at the university there.

Hindemith is among the most significant German composers of his time. His early works are in a late romantic idiom, and he later produced expressionist works, rather in the style of early Arnold Schoenberg, before developing a leaner, contrapuntally complex style in the 1920s. This style has been described as neoclassical, but is very different from the works by Igor Stravinsky labeled with that term, owing more to the contrapuntal language of Johann Sebastian Bach and Max Reger than the Classical clarity of Mozart. The new style can be heard in the series of works called *Kammermusik* (Chamber Music) from 1922 to 1927. Each of these pieces is written for a different small instrumental ensemble, many of them very unusual. *Kammermusik No. 6*, for example, is a concerto for the viola d'amore, an instrument that has not been in wide use since the baroque period, but which Hindemith himself played. Around the 1930s, Hindemith began to write less for chamber groups, and more for large orchestral forces. In 1933–35, Hindemith wrote his opera *Mathis der Maler*, based on the life of the painter Matthias Grünewald. This opera is rarely staged, though a well-known production by the New York City Opera in 1995 was an exception (Holland 1995). It combines the neo-classicism of earlier works with folk song. As a preliminary stage to the composing of this opera, Hindemith wrote a purely instrumental symphony also called *Mathis der Maler*, which is one of his most frequently performed works. In the opera, some portions of the symphony appear as instrumental interludes, others were elaborated in vocal scenes. Hindemith wrote *Gebrauchsmusik* (Music for Use)—compositions intended to have a social or political purpose and sometimes written to be played by amateurs. The concept was inspired by Bertolt Brecht. An example of this is his *Trauermusik* (Funeral Music), written in January 1936. Hindemith was preparing the London premiere of *Der Schwanendreher* when he heard news of the death of George V. He quickly wrote this piece for solo viola and string orchestra in tribute to the late king, and the premiere was given that same evening, the day after the king's death. Other examples of Hindemith's Gebrauchsmusik include:

- the *Plöner Musiktage* (1932): a series of pieces designed for a day of community music making open to all inhabitants of the city of Plön, culminating in an evening concert by *gymnasium* students and teachers.
- a Scherzo for viola and cello (1934), written in several hours during a series of recording sessions as a "filler" for an unexpected blank side of a 78 rpm album, and recorded immediately upon its completion.
- *Wir bauen eine Stadt* ("We're Building a City"), an opera for eight-year-olds (1930).

Hindemith's most popular work, both on record and in the concert hall, is probably the *Symphonic Metamorphosis of Themes by Carl Maria von Weber*, written in 1943. It takes melodies from various works by Weber, mainly piano duets, but also one from the overture to his incidental music for *Turandot* (Op. 37/J. 75), and transforms and adapts them so that each movement of the piece is based on one theme. In 1951, Hindemith completed his *Symphony in B-flat*. Scored for concert band, it was written for the U.S. Army Band "Pershing's Own". Hindemith premiered it with that band on April 5 of that year. Its second performance took place under the baton of Hugh McMillan, conducting the Boulder Symphonic Band at the University of Colorado. The piece is representative of his late works, exhibiting strong contrapuntal lines throughout, and is a cornerstone of the band

repertoire. Hindemith recorded it in stereo with members of the Philharmonia Orchestra for EMI in 1956.

Most of Hindemith's music employs a unique system that is tonal but non-diatonic. Like most tonal music, it is centered on a tonic and modulates from one tonal center to another, but it uses all 12 notes freely rather than relying on a scale picked as a subset of these notes. Hindemith even rewrote some of his music after developing this system. One of the key features of his system is that he ranks all musical intervals of the 12-tone equally tempered scale from the most consonant to the most dissonant. He classifies chords in six categories, on the basis of how dissonant they are, whether or not they contain a tritone, and whether or not they clearly suggest a root or tonal center. Hindemith's philosophy also encompassed melody—he strove for melodies that do not clearly outline major or minor triads. His piano work of the early 1940s *Ludus Tonalis* contains twelve fugues, in the manner of Johann Sebastian Bach, each connected by an interlude during which the music moves from the key of the last fugue to the key of the next one. The order of the keys follows Hindemith's ranking of musical intervals around the tonal center of C. One traditional aspect of classical music that Hindemith retains is the idea of dissonance resolving to consonance. Much of Hindemith's music begins in consonant territory, progresses rather smoothly into dissonance, and resolves at the end in full, consonant chords. This is especially apparent in his *Concert Music for Strings and Brass*.

- **New Simplicity**
  A movement in Denmark (*Den Nye Enkelhed*) in the late nineteen-sixties and another in Germany in the late seventies and early eighties, the former attempting to create more objective, impersonal music, and the latter reacting with a variety of strategies to restore the subjective to composing, both sought to create music using simple textures. The German **New Simplicity's** best-known composer is Wolfgang Rihm, who strives for the emotional volatility of late 19th-century **Romanticism** and early 20th-century Expressionism. Called *Die neue Einfachheit* in German, it has also been termed "New Romanticism", "New Subjectivity", "New Inwardness", "New Sensuality", "New Expressivity", and "New Tonality".

  Styles found in other countries sometimes associated with the German **New Simplicity** movement include the so-called "Holy Minimalism" of the Pole Henryk Górecki and the Estonian Arvo Pärt (in their works after 1970), as well as Englishman John Tavener, who unlike the **New Simplicity** composers have turned back to Medieval and Renaissance models, however, rather than to 19th-century romanticism for inspiration. Important representative works include Symphony No. 3 "Symphony of Sorrowful Songs" (1976) by Górecki, *Cantus in memoriam Benjamin Britten* (1977) by Pärt, *The Veil of the Temple* (2002) by Tavener, and "Silent Songs" (1974–1977) by Valentin Silvestrov.

  Karlheinz Stockenhausen (1928 - 2007) was a German composer, widely acknowledged as one of the most important and controversial composers of the 20th and early 21st centuries. He is most known for his work in electronic music, aleatory (controlled chance), serial composition and musical spatialization. See the detailed biography in the section on Serial Music.

Beginning with mantra for two pianos and electronics (1970), he turned to formula composition, a technique which involves the projection and multiplication of a single, double, or triple melodic-line formula. Two such pieces, *Tierkreis* ("Zodiac", 1974–75) and *In Freundschaft* ("In Friendship", 1977), have become Stockhausen's most widely performed and recorded compositions. This dramatic simplification of style provided a model for a new generation of German composers, loosely associated under the label *neue Einfachheit* or New Simplicity that began in the late 1970s. The best-known of these composers is Wolfgang Rihm, who studied with Stockhausen in 1972–73.

1) *Tiertreis* (1974/75) - The title is the German word for Zodiac and the composition consists of twelve melodies, each representing one sign of the zodiac. Described by one early critic as "melodic naïveté" in the form of "cheerful, empty-headed little tune[s]," *Tierkreis* has proved to be Stockhausen's most popular composition. *Tierkreis* was originally written for music boxes as a component part of a theater piece titled *Musik im Bauch* (Music in the Belly), which has been interpreted variously as "a fairy tale for children" or else as "a ritual played out in Mexican Indian scenery." The twelve melodies (with or without their accompaniments) form an autonomous work which can be played by any suitable instrument and can also be sung. The twelve melodies are serial in conception and all are based on tone rows. Because music boxes preclude any significant variation in dynamics or timbre, the structure of the *Tierkreis* melodies emphasize pitch and rhythm. Each melody is to be played at least three times through, with variations or improvisations which in some performances have been very extensive. Performances documented in recordings last between 12 and 63 minutes.

2) *In Freundschaft* ("In Friendship", 1977) is a fifteen-minute work requiring the performer to memorise and incorporate movements that embody structural and melodic elements of the score. The compositional structure is designed to be audible – an exercise in listening that Stockhausen elucidates in his lecture "The Art, to Listen." The melodic material that forms the basis of the entire work is given in the very first line, five fragments that he calls 'limbs' and that he then inverts and otherwise manipulates (in line with the traditions of serialism), interspersed with a 'middle layer' of trills. The piece is essentially the gradual coming together of the limbs and their inversions through seven melodic cycles.

Wolfgang Rihm (born 13 March 1952 in Karlsruhe) is a German composer. Rihm's early work, combining contemporary techniques with the emotional volatility of Mahler and of Schoenberg's early expressionist period, was regarded by many as a revolt against the avant-garde generation of Boulez, Stockhausen (with whom he studied in 1972–73). In the late 1970s and early 1980s his name was associated with the New Simplicity movement. His work still continues to plough expressionist furrows, though the influence of Luigi Nono, Helmut Lachenmann and Morton Feldman, among others, has affected his style significantly. Rihm is an extremely prolific composer, with hundreds of completed scores, a large portion of which are yet to be commercially recorded.

Important works include thirteen string quartets, the operas *Die Hamletmaschine* (1983–1986, text by Heiner Müller) and *Die Eroberung von Mexico* (1987–1991, based on texts by Antonin Artaud),

over twenty song-cycles, the oratorio *Deus Passus* (1999–2000), chamber orchestra piece *Jagden und Formen* (1995–2001), more than thirty concertos and a series of related orchestral works bearing the title *Vers une symphonie fleuve*. The New York Philharmonic premièred Rihm's 2004 commission *Two Other Movements*.

Tradition, Mahler once famously said, is "Schlamperei" - which means something akin to sloppiness. Mahler meant it in terms of performance practice, but it's an axiom many contemporary composers have followed to the letter, throwing out any "sloppy" vestiges of previous traditions, the tainted sentimentality of romanticism, the overblown rhetoric of expressionism, or any of the too easily imitated "isms" that have been part of the story of 20th and 21st-century music. That rough axiom for many of the greats of contemporary music, became an ideology after the second world war. His rejection of this ideology makes Rihm one of the most radical figures writing today, precisely because of his superficial conservatism. To those who know his music, he's someone whose unstoppable musical creativity, whose tumult of pieces for orchestras, opera houses, string quartets, for the familiar forms of musical institutions and for famous soloists such as Anne-Sophie Mutter, makes him one of the most approachable, engaging and profound composers writing music today. Rihm is arguably contemporary music's most prolific composer, with more than 400 works – and counting – to his name.

Born in Karlsruhe in 1952, when the generation of Stockhausen, Boulez and Nono were in their first, iconoclastic phase of maturity, Rihm had already written a symphony as a teenager (it's astonishingly good, too, a compelling essay in a wildly expressive atonal language that teems with ideas, energy, and meaning). As a young composer, he challenged the masters of ideological purity with a language that wasn't afraid to reference, to transmute and to deal with the music of the past, composing pieces that had the temerity to take on the legacy of Austro-German music rather than rejecting the achievements or the aesthetic of Berg and Schoenberg, or Schumann, Schubert or Beethoven.

This was a crazy way of doing things for any self-respecting avant garde composer in the 1970s, and Rihm unwittingly found himself part of a movement misleadingly called the "New Simplicity." However, Rihm's gigantic musical output – one of the greatest and grandest in terms of sheer quantity of hours of music composed, of consistent quality, of massive emotional range, of variety of forces and scales – resists any attempt to reduce its reach to a handy label.

If you listen to his *Lichtes Spiel* for violin soloist and strings, you might think that Rihm specialises in modern-sounding nostalgia; if you hear one of his *Fetzen* for string quartet and accordion, you'll think of him as a modernist, all sharp elbows and crystalline energy. If you go for one of his operas, such as the recent *Dionysos*, you might hear him as the heir to Berg's operatic canon. If you hear his cello concerto, the *Konzert in Einem Satz*, you could describe him as a lyrical atonalist, picking up where Schoenberg and Karl Amadeus Hartmann left off. Listen to one of his *Klavierstücke*, though, and you're hearing music of blistering, unpredictable intensity.

The first thing you need to do with Rihm is give up on any idea of coming to terms with the whole, generously proportioned effulgence of his life's work and remember that the longest journey starts

with a single step, or in this case, a single work. For example, *Jagden und Formen*, a 50-minute, single-movement musical thrill-ride for large ensemble that embodies some of the signature qualities of Rihm's music: its addictive energy, its torrent of ideas, its massively ambitious scale, as well as its uncanny sense of drama and pacing. The title means "hunts and forms"; I prefer thinking of it as "hunting and forming", because the music is in a constant state of volatility, of change. A spirit of restless dynamism animates every bar of this music. And that's why it's important you stay with it until the end because when you get there, you'll experience one of the most life-enhancing jolts of musical energy in post-war music. Whatever else post-tonal music was supposed to do, it was supposed to sound like this.

You'll find a similar sense of momentum, even mania, in the movements that make up his *Chiffre-Zyklus*, but for a concentrated shot of Rihm at his best, go for any of his by turns monumental and delicate Piano Pieces (*Klavierstücke*) or any of the *Fetzen* and for a elementally powerful hit of Rihm the dramatist, have a listen to the psycho-philosophical narrative of *Jakob Lenz*, his first and most successful opera, or try his larger-scale music-theatre pieces such as *Die Erorberung von Mexico* ("The Conquest of Mexico") or the experimental soundscapes of *Die Hamletmaschine*.

Rihm's influence as a teacher at the Hochschule in his hometown of Karlsruhe, and as a writer, thinker and proselytiser and the infectious big-heartedness of his personality, makes him one of the most positive presences in the landscape of new music. Keeping up with his ceaseless flow of creativity is a life's work in itself.

1) *Klavierstruck II* (1970) - Rihm's Klavierstücke are not a cycle in the conventional sense, just a set of piano pieces written mostly in his first mature decade of composition. There is no doubt at all about the intensity, potency, extravagance and generosity of his music. One senses some of Rihm's early development through the course of the seven works presented here, as the music develops both in its distinctiveness and multifariousness. For all the trumpeting of Rihm's 'neo-romanticism' (a term which has a very different meaning in German music to its Anglo-Saxon equivalent), the extent to which his keyboard idiom exploits types of figurations, dynamics, articulations, gestures, that seem to be absolutely at cross-purposes to that which would be conventionally associated with a 'romantic' style. Rihm alternates extremes continually, with little middle ground, producing ultra-dialectical force-fields even when alluding to found materials from musical history. His harsh, brutal, stabbing accents, sometimes in the context of otherwise pianissimo passages, quite exceed many widely-held notions of taste and balance and continuity and necessitate particular keyboard approaches that similarly exceed the boundaries of what is commonly taught and practised (these factors have precedents in the music of Haydn, Mozart, Beethoven, Schubert, Schumann, some Liszt, even sometimes Brahms, that 20th century performance practice has for the most part sought to eliminate in it's construction of the 'classical' and the 'romantic'). There is no obvious referential link between the Schumann and Rihm pieces presented here; however, Schumann has some of the strongest affinities and precedents are to be found for Rihm's contemporary concerns. The first three of Rihm's Klavierstücke, which share an opus number, have a number of common qualities as well as a progressive sense of development. Klavierstück 1 evinces a

type of post-expressionistic harmonic and gestural language, constructed from a series of short sections delineated in the score by a series of numbered tempo categories, usually some variant of either very slow or very fast. Both explosiveness and lyricism are generally presented in somewhat fragmentary fashion, only occasionally allowed a relatively more sustained exposition along the route towards the uneasy calm of the end. Klavierstück 2 continues in this vein, though here the material types (now including repeated notes and chords, groups of grace notes, use of the 'second escapement' technique, highly still passages with chronometrically notated durations) are allowed a little more extended presentation, as well as a more palpable and audible development, which in various ways intensifies the force of the contrasts.

2) *String Quarter 3* (1977) - Rihm's most characteristic chamber pieces are his ten numbered string quartets. The shadow of Beethoven's late quartets hovers over all these pieces but as models of dense argument rather than as sources of quotations. Quartet no. 3 entitled *Im Innersten* (Into the innermost) opens with a flourish that briefly coalesces into expansive melody before a mood of restless anxiety establishes itself. The pattern of contrast continues. Leading, in the long final movement, to passages where time seems suspended and the players float free of each other.

3) *Chiffre-Zyklus* (1988) - The cycles and series into which Rihm regularly groups his works provide a useful way of navigating through what is now his huge output. The Chiffre pieces from the 1980s form one of the earliest of these cycles. What began in 1983 with Chiffre I, a piece for piano and seven instruments, became a complex work-in-progress and was eventually expanded to 11 works for ensembles of varying sizes, which may be performed as independent pieces or as an evening-long sequence. The title means "cipher"; musical links between the works are not often clearly audible, though they share family characteristics, such as the dramatic use of pauses and silences - Chiffre II is called Silence to Be Beaten. As always with Rihm, the music seems to be created from first principles, the raw material sculpted into striking shapes and gestures, although the grammar can be hard to unravel.

4) *Jagden und Formen* (2001) (Hunts and Forms) - has evolved over several years. Even now, subsequent revisions are not out of the question, since Rihm's approach to composing is open-ended, with largescale pieces growing out of related, smaller essays. That is certainly true of *Jagden und Formen*, which has affinities with a number of recent orchestral scores bearing similar titles. So this new work stands at the provisional end of a long term process in which ideas and materials are revisited. Rihm is a composer who writes very fast, so that the title's curious metaphor of the hunt to describe the immediacy of the compositional act is in many ways apposite. There is certainly a sense of relentless forward motion, of breathlessness almost. The obsessive dotted rhythms and surging quavers that punctuate the work are a concrete example of this. But for a figure as eclectic as Rihm, *Jagden und Formen* is remarkably singleminded, cast in what one could call a modernist idiom. Only at the end of the piece does Rihm introduce brash, chordal utterances clearly reminiscent of tonal (or preatonal) orchestral music. Although Rihm claims not to have conceived of *Jagden und Formen* as a Concerto for Orchestra, there is no denying that certain instruments take centre stage for extended periods.

5) *Lichtes Spiel* (Light Play) (2009) - The title might be translated as "Light Game" or "Light Play", and may be taken as a pun on the German expression "leichtes Spiel", meaning "an easy job"; or what we might call "Child's Play." Rihm has said that he intended it as "a transparent orchestral movement… something light, but not 'lightweight." The result, which uses instrumental forces of Mozartian proportions, is a detailed, finely wrought score in which the composer provides fine-tuned indications of how practically every note is to be articulated. Instructions for tempo and mood are similarly precise. For example, the notation governing the opening section: *Un poco sostenuto, non troppo lento, poco à poco più scorrendo* ("A bit sustained, not too slow, bit by bit more scurrying"). It is the sort of directive one sometimes finds in Beethoven, particularly in his late works. A fair amount of variety is incorporated into this work as well and extends to its dynamics, which occasionally reach a point of relative loudness – most notably in a passage marked *Allegro, un poco pesante* ("Fast, rather heavy") about three-quarters of the way through. Nonetheless, high volume is a rarity in this piece, which is overwhelmingly skewed toward the quiet end of the sonic spectrum. In fact, the overriding dynamic indication would appear to be *pianissimo*: the work begins and ends at this very quiet level and it returns throughout as a sort of reference point from which the music may depart but to which it always returns.

- **Polystylism/Eclecticism**

Some authors equate **Polystylism** with **Eclecticism**, while others make a sharp distinction. **Polystylism** (or **Musical Eclecticism**) is a growing trend in the 21st century. It combines elements of diverse musical genres and compositional techniques into a unified and coherent body of works. Composers have often started their musical career in one discipline and have later migrated to or embraced others, while retaining important elements from the former discipline. In some cases, a composer now labeled "classical" may have started out in another discipline.

Following are some examples. A specific label for John Zorn's music is difficult to choose: he started out as a performance artist and moved through various genres including jazz, hardcore punk, film music, and classical, and often embraces Jewish musical elements. All of these diverse styles appear in his works. Julian Anderson combines elements from many different musical genres and practices in his works. Elements of **Modernism**, **Spectral Music** and **Electronic Music** are combined with elements of the **Folk Music** of Eastern Europe and the resulting works are often influenced by the modality of Indian ragas. Tansy Davies's music also fuses elements of pop and classical music. Prince and Iannis Xenakis are both major influences.

Hans Henze (1 July 1926 – 27 October 2012) was a German composer whose prolific oeuvre of works is extremely varied in style, having been influenced by serialism, atonality, Stravinsky, Italian music, Arabic music and jazz, as well as traditional schools of German composition. In particular, his stage works reflect his consistent cultivation of music for the theatre throughout his life. Henze was also known for his political convictions. He left Germany for Italy in 1953 because of a perceived intolerance towards his leftist politics and homosexuality. Late in life he lived in the village of Marino in the central Italian region of Lazio and in his final years still travelled extensively, in particular to Britain and Germany, as part of his work. An avowed Marxist and member of the Communist Party of Italy, Henze produced compositions honoring Ho Chi Minh and

Che Guevara. At the 1968 Hamburg premiere of his requiem for Che Guevara, titled *Das Floß der Medusa* (*The Raft of Medusa*), the placing of a red flag on the stage sparked a riot and the arrest of several people, including the librettist. Henze spent a year teaching in Cuba, though he later became disillusioned with Castro.

Henze's father, Franz, had served in the First World War and was wounded at Verdun. Franz Henze then moved to Dünne, a small village near Bünde, where he fell under the spell of Nazi propaganda. The older boys, including Hans, were enrolled in the Hitler Youth. Although the Henze household was filled with talk of current affairs, Hans was also able to hear broadcasts of classical music (especially Mozart) and eventually his father realized that his son had a vocation as a musician. Henze began studies at the state music school of Braunschweig in 1942, where he studied piano, percussion, and theory. In 1943, Franz Henze re-joined the army and he was sent to the Eastern front, where he died. Henze had to break off his studies after being conscripted into the army in 1944, towards the end of Second World War. He was soon captured by the British and held in a prisoner-of-war camp for the remainder of the war.

Henze had some successful performances at Darmstadt and he also took part in the famous Darmstadt New Music Summer School, a key vehicle for the propagation of avant-garde techniques. At the 1947 summer school, Henze turned to serial technique. In his early years he worked with twelve-tone technique, for example in his *First Symphony* and *Violin Concerto* of 1947.

In 1953, Henze left Germany, in reaction against homophobia and the country's general political climate. In addition, his publisher, Schott's, had also offered Henze an advance on royalties, on condition that he leave his conducting posts to focus on composition. This financial incentive allowed Henze to move to Italy, where he remained for most of his life. Henze settled on the island of Ischia in the Gulf of Naples.

In the following period, he greatly strengthened his political involvement which also influenced his musical work. For example, the première of his oratorio *Das Floß der Medusa* in Hamburg failed when his West Berlin collaborators refused to perform under a portrait of Che Guevara and a revolutionary flag had been placed upon the stage. His politics also influenced his Sixth Symphony (1969), Second Violin Concerto (1971), *Voices* (1973), and his piece for spoken word and chamber orchestra, *El Cimarrón*, based on a book by Cuban author Miguel Barnet about escaped black slaves during Cuba's colonial period. His political critique reached its high point in 1976 with the premiere of his opera *We Come to the River*. His later works, while less controversial, continued his political and social engagement. His *Requiem* (1990–93) comprised nine *sacred concertos* for piano, trumpet and chamber orchestra, and was written in memory of Michael Vyner, the artistic director of the London Sinfonietta. The choral Ninth Symphony (1997), – "dedicated to the heroes and martyrs of German anti-fascism" – to a libretto by Hans-Ulrich Treichel based on motifs from the novel *The Seventh Cross* by Anna Seghers is a defiant rejection of Nazi barbarism, with which Henze himself lived as a child and teenager. Henze died in Dresden on 27 October 2012 at the age of 86.

Henze's music has incorporated neo-classicism, jazz, the twelve-tone technique, serialism, and some rock or popular music. Although he did study atonalism early in his career, after his move to Italy in 1953, Henze's music became considerably more Neapolitan in style. While Mendelssohn and Weber were important influences, the music for *Ondine* contains some jazz and there is much in it redolent of Stravinsky—not only Stravinsky the neo-classical composer, but also the composer of *The Rite of Spring*.

There is a story that Hans Werner Henze reports in his fascinating and brave autobiography Bohemian Fifths that symbolises his central place in the cultural and political conflicts of postwar music. Henze relates that at a dinner party (at which he wasn't present), the Italian composer Luigi Nono threw some Meissen porcelain to the floor in disgust at the mere mention of Henze's opera. The reason for the offence? Well, as the philosopher Theodor Adorno also said to Henze about the piece, "your music is not chaotic enough." As Henze put it, when I met him in 2009 at his home near Rome: "What a thing to say! There you are every day, trying to put something reasonable and clear on paper and somebody comes and says it is not sufficiently chaotic." Henze was an outsider in the terms and frames of the postwar avant garde – especially to one of the most single-minded modernists of them all like Nono. That's what Adorno meant by the lack of chaos: Henze's music simply wasn't deemed abrasive or critical enough in the 50s and 60s by his ultra-critical colleagues. He wrote operas, and avowedly lyrical, large-scale operas. By 1970 he had even written six symphonies, a genre that no self-respecting avant gardiste would consider using without a shrug of ironic distance.

Yet Henze's creative exile from the ideologies propagated by the generation of young musical Turks such as Nono or Stockhausen meant that he connected with more listeners and that his music achieved its arguably more radical aims more completely than many of his contemporaries.

His home in the hills outside Rome was as lavish, abundant, and sensual as his music, yet his political sympathies were those of a lifelong communist. And Henze did more than most to make his music part of the enlightening of international social consciousness, premiering his Sixth Symphony in Cuba and living there in 1969 and 70.

Writing music for Henze was an unavoidable, irresistible compulsion. You can hear that fluency at its best in *Ondine*, the masterful ballet he wrote for Frederick Ashton and the Royal Ballet in 1958. The idiom is quintessential Henze, a fusion of Stravinskian neo-classicism and rhythmic drive with a voluptuous expressive language, bringing the tragic water-nymph of the story vividly to life. For Henze, his music was the sound of his inner life. There was only a gossamer-thin separation between the man and his music, and his fundamental artistic credo was that music ought to have something to say about human emotion and ought to contribute to contemporary society. That way of thinking also meant that he was out of step with the formalist side of postwar music. Music, for Henze, was the living, breathing sound of resistance to any kind of system, a means of creating political and cultural freedom.

Henze's symphonies are diverse; listen to the magnificently angry expressionism of his Sixth Symphony and compare it to the frankly gorgeous pleasures of the Eighth, inspired by A

Midsummer Night's Dream or the choral Ninth. Henze knew exactly what he was doing composing a choral symphony as his ninth essay in the genre: unlike the Beethoven, the choir are present throughout and Henze's piece is a personal and public attempt to reflect and reconcile the nightmare of Germany's early 20th-century history, setting a version of Anna Seghers's 1942 novel about prisoners attempting to escape from a concentration camp, dedicated "to the heroes and martyrs of German anti-fascism" – and it's a gigantic, fearlessly coruscating work to experience.

For all its public grandeur, the reason that Henze's music matters and will continue to matter is that it's a distillation of his essential, generous humanity. The piece he wrote after the death of his partner of more than 40 years, Fausto Moroni, *Elogium Musicum*, is one of the most moving pieces he ever wrote, and that second act of *Phaedra* has a visionary luminescence, music that realises a character's return from the dead just as its composition symbolised the composer's recovery.

By the end of his life, Henze was disillusioned with the loss of his health, his bereavement and his sense of his own death. But he knew that he had outlived an era of ideologies, whether political or musical and he must have known too, that his music voiced an expressive freedom that inspired generations of German composers from Wolfgang Rihm to Jörg Widmann and Detlev Glanert. That essential freedom of the spirit is something that Henze's music yearns for and realises as completely as the work any other 20th or 21st century composer. Henze's life may be over, but we're only just beginning to understand the real importance of his music.

1) *Ondine* (1958) - is a ballet in three acts created by the choreographer Sir Frederick Ashton and composed by Hinze. Ashton originally produced Ondine for the Royal Ballet in 1958, with Henze commissioned to produce the original score, published as *Undine*, which has since been restaged by other choreographers. Henze and Ashton decided their ballet would be the product of their own contemporary sensibilities with references to other works. Eventually, they decided that *Ondine* would have a "gothic-revival" setting. Despite his experience in the ballet world, Henze had never before composed a subject in the romantic style which Ashton requested, however Ashton had been impressed by Henze's treatment of magical material in his opera *König Hirsch*. Henze attended many ballet performances at Covent Garden, frequently accompanied by Ashton who told him clearly what he liked and what he did not like in music for dance. Eventually the work was completed, but when Ashton heard a recording of the orchestrated score he realised that he would have to revise his ideas; the sustained orchestral sounds were such a contrast to the piano score and made him think very differently. Henze later arranged the *Wedding Music* for wind orchestra in 1957 and a further two orchestral suites in 1958.

2) *Voices* (1973) is a collection of 22 independent songs which may be performed individually, with alterations to the instrumentation. In its full version, it is written for mezzo-soprano, tenor, electronics and fifteen instrumentalists who are required to play about 70 different instruments from all over the world. The piece makes use of radio broadcasts, sports commentaries, a speech by John F. Kennedy and an extract from Sibelius's Second Symphony. The songs set a diverse range of words, almost all of which are from the twentieth century, the linking theme being alienation and oppression. Henze has said:

The voices of the title are those of young and old artists whose work is politically committed. These people are concerned with their fellow human beings, with the contemporary human condition within the world around them and with all the problems of race and class in which they themselves often seem fated to be embroiled.

3) *7th Symphony* (1984) - Unlike its immediate predecessors, Henze has stated that this work is very much a 'German' symphony, in the Beethovenian tradition. Accordingly, it is cast in four movements and is broadly analogous to the 'classical' form: Introduction, slow movement, Scherzo and Finale. However Henze uses even more traditional German motifs across the movements: an *allemande* (a German dance) in the first and *Liedform* in the second. For the two final movements he focuses on the eighteenth-century poet Friedrich Hölderlin, incarcerated at Tübingen where he was subjected to what amounted to torture in the name of medical intervention. The final movement is a deeply lyrical orchestral setting of Hölderlin's late poem *Hälfte des Lebens* (*Half of Life*).

4) *Requiem* (1991-1993) - Henze composed the nine Sacred Concertos that comprise his *Requiem* over the course of three years from 1991 to 1993 on commissions from the London Sinfonietta. In addition to Henze, the London Sinfonietta also commissioned seven other prominent composers (Luciano Berio, Sir Harrison Birtwistle, Sir Peter Maxwell Davies, Toru Takemitsu, Oliver Knussen, and Nigel Osborne) to write works in artistic Director Michale Vyner's memory to make up the program which was performed on the 6 May 1990. The Requiem consists of nine Sacred Concertos that, with one exception, carry the common movement titles of the Requiem Mass, albeit out of order. Henze also chooses to interpolate the Ave verum corpus in with the other movements. Even though the movements carry the traditional titles, there are no singers and no text within the work. In his autobiography, Henze states that this choice was made to open up the scope of the Requiem and make it a "...secular, multicultural piece, an act of brotherly love that was written, 'in memoriam Michael Vyner,'whose name does duty for all the many other people in the world who have died before their time and whose sufferings and passing are mourned in my music."

5) *Phaedra* (2007) is a 'concert opera' in two-acts. Its first performance was given at the Berlin State Opera on 6 September 2007. Although Henze announced in 2003 that *L'Upupa und der Triumph der Sohnesliebe* would be his last opera, it became known during 2006[2] that in spite of serious illness, he was preparing a new opera based on the classical myth of Phaedra. The libretto is by Christian Lehnert and deals in a highly innovative way with the story of Phaedra, whose love for her stepson Hippolytus triggers catastrophe. The first part of the opera tells this legend much as previously retold by Euripides, Racine and Sarah Kane. The second part, however, follows a mythological tradition alluded to by Ovid. Hippolytus, fatally wounded, is brought back to life by the goddess Artemis, and is given a new life under the name of Virbius. In this new existence, however, he is only able to experience his own consciousness in a fragmentary, kaleidoscopic way. The first act is rooted in Greece and Greek myth. The second,

composed after Henze's collapse and two-month coma, is set in Nemi, near Henze's home in Italy, and the location of the ancient cult and priesthood of Virbius. As the struggles of the goddesses and the identity of Hippolyt become gradually more and more abstract and remote, the wholeness of nature reasserts itself and the Minotaur, in Henze's words, "proclaims a kind of freedom, the spring comes... into the world and the woods." In its latter stages, the opera seems to abstract itself even from the stage, treading "a metaphysical tightrope between this world and the next, effortlessly invoking a porous divide between the living and the dead. The opera's end is both transcendental and inconclusive: 'We are all born naked. We press towards mortality and dance,' sings the Minotaur in his final hymn."

Alfred Schnittke (November 24, 1934 – August 3, 1998) (Sh Nit Ke) was a Soviet and Russian composer. Both of his parents were German. Schnittke's early music shows the strong influence of Dmitri Shostakovich. He developed a polystylistic technique in works such as the epic Symphony No. 1 and his first concerto grosso. In the 1980s, Schnittke's music began to become more widely known abroad with the publication of his second and third string quartets and the String Trio; the ballet *Peer Gynt* (1985–1987); the third, fourth and fifth symphonies; and the viola and first cello concertos.

Schnittke's father, Harry Viktorovich Schnittke, was Jewish and born in Frankfurt. He moved to the USSR in 1927 and worked as a journalist and translator from the Russian language into German. His mother, Maria Iosifovna Schnittke, was a Volga German born in Russia. Alfred Schnittke was born in Engels in the Volga-German Republic of the Soviet Union. He began his musical education in 1946 in Vienna where his father had been posted. In Vienna, Schnittke fell in love with music which is part of life, part of history and culture, part of the past which is still alive. Schnittke's experience in Vienna gave him a certain spiritual experience and discipline for his future professional activities. It was Mozart and Schubert, not Tchaikovsky and Rachmaninoff, whom he kept in mind as a reference point in terms of taste, manner and style. This reference point was essentially Classical. In 1948, the family moved to Moscow. Schnittke completed his graduate work in composition at the Moscow Conservatory in 1961 and taught there from 1962 to 1972. Thereafter, he earned his living chiefly by composing film scores, producing nearly 70 scores in 30 years. Schnittke converted to Christianity and possessed deeply held mystic beliefs, which influenced his music.

Schnittke and his music were often viewed suspiciously by the Soviet bureaucracy. His First Symphony was effectively banned by the Composers' Union. After he abstained from a Composers' Union vote in 1980, he was banned from travelling outside of the USSR.

Schnittke's early music shows the strong influence of Dmitri Shostakovich, but after a visit of the Italian composer Luigi Nono to the USSR, he took up the serial technique in works such as *Music for Piano and Chamber Orchestra* (1964). He created a new style which has been called "polystylism", where he juxtaposed and combined music of various styles past and present. He once wrote, "The goal of my life is to unify serious music and light music, even if I break my neck in doing so." His first concert work to use the polystylistic technique was the Second Violin Sonata, *Quasi una sonata*. He experimented with techniques in his film work, as shown by much of the sonata

appearing first in his score for the animation short "The Glass Harmonica". He continued to develop the polystylistic technique in works such as the epic First Symphony and First Concerto Grosso.

In the 1980s, Schnittke's music began to become more widely known abroad, thanks in part to the work of émigré Soviet artists such as the violinists Gidon Kremer and Mark Lubotsky. Despite constant illness, he produced a large amount of music, including important works such as the Second (1980) and Third (1983) String Quartets and the String Trio (1985); the *Faust Cantata* (1983), which he later incorporated in his opera *Historia von D. Johann Fausten*; the ballet *Peer Gynt* (1985–1987); the Third (1981), Fourth (1984) and Fifth (1988) Symphonies (the last of which is also known as the Fourth Concerto Grosso) and the Viola (1985) and First Cello (1985–1986) concertos.

As his health deteriorated, Schnittke started to abandon much of the extroversion of his polystylism and retreated into a more withdrawn, bleak style, quite accessible to the lay listener. The Fourth Quartet (1989) and Sixth (1992), Seventh (1993) and Eighth (1994) symphonies are good examples of this. Some Schnittke scholars have argued that it is the late works that will ultimately be the most influential parts of Schnittke's output. After a stroke in 1994 left him almost completely paralysed, Schnittke largely ceased to compose. He did complete some short works in 1997 and also a Ninth Symphony; its score was almost unreadable because he had written it with great difficulty with his left hand. The Ninth Symphony was first performed on 19 June 1998 in Moscow in a version deciphered – but also 'arranged' – by Gennady Rozhdestvensky, who conducted the premiere.

1) Symphony No 1 (1969-74) – His First Symphony (he wrote eight, left a ninth unfinished at his death, and there's a Bruckner-style symphony number zero that he didn't acknowledge as part of his canon) is above all, a thrilling and disturbing musical riot. During this composition Schnittke coined the phrase "polystylism" to cope with a musical aesthetic in which the kitchen sink is just the start of what he chucks into his "symphonic" structure. On the surface, you're listening to a large-scale, four-movement symphony that lasts a Mahlerian 75 minutes or more, and which ought to be the heir to a symphonic tradition whose immediate predecessor, in Russian music, is Shostakovich. It's also a piece that should signal the start of the mature composer's style, written when Schnittke was in his mid-30s. But what you actually hear is an hour-and-a-quarter-long pile-up of musical quotations and strange symphonic theatre. There are references – more like unabashed thievings – to melodies and whole musical chunks from Tchaikovsky, from Strauss and from Chopin; there's even a full-on jazz improvisation in the middle of the second movement, a set for violin and piano; and the whole thing is framed by an apocalyptic version of Haydn's Farewell Symphony. The players come on to the stage during the opening few minutes of the symphony and they troop off during the final movement leaving a solo violinist playing Haydn's symphony, only to reassemble to play a gigantic unison C as the symphony's conclusion. But this is more than a music-historical joke. Had it lasted a mere 10 minutes or so, you could hear Schnittke's mashup of the whole of western music as a sophisticated symphonic gag, a parody of the end of history. But the sheer size of Schnittke's

symphony demands that you take it seriously. And just as he does not limit himself to any single genre, style or period for his outrageous symphonic pilferings, you have a range of options as to how you take this piece.

You could hear it as one of the great embodiments of musical post-modernism, during the immediate post-war years. At the other extreme, you might feel that this symphony is among the most nihilistic ever written: instead of even attempting an originality of voice, instead of a belief in the possibility of musical renewal, all that remains is to regurgitate the past as a grotesque cavalcade, an enterprise for which the moniker "symphony" is nothing more than a cynical sticking-plaster, since any pretence of "symphonic" coherence belongs to another musical universe than the surreal space that this piece creates.

2) Piano Quintet (1976) - written shortly after the First Symphony in the wake of his mother's death. Where the symphony is a cataclysmic colloquy, the Quintet sounds like a single-minded expression of lament and loss. That's because of the directness and the bleakness of its emotional expression above all in its third and fourth movements, music that Schnittke said "are real experiences of grief which I would prefer not to comment on because they are of a very personal nature." The final fifth movement is a surreal lullaby in which a short melody in the piano part is encircled by sinister string lines; the music resolves into an image of limbo, as the piano repeats its tune into the infinite.

3) Concerto Grosso No 1 (1977) - One of his most famous pieces: the Concerto Grosso no. 1, which returns to the hyper-real world of the First Symphony, but in a more compressed and in a sense still more stylistically extreme form. In the Concerto Grosso, Schnittke said he wanted to realise "one of my life's goals … to overcome the gap between 'E' (Ernstmusik, serious music) and 'U' (Unterhaltung, music for entertainment), even if I break my neck in doing so!" That means that beneath and within its frame of pseudo-baroque figuration, you'll hear, as Schnittke's biographer Alexander Ivashkin says, "the transformation of a cheerful song chorale of Soviet schoolchildren, a nostalgic atonal serenade, quasi-Corellian allusions" – as well as Schnittke's grandmother's favourite tango and quotations from his film scores. The recitativo central movement, the work's "atonal serenade," though, rhymes with the Quintet's grief-stricken passages; as if this movement were the skull beneath the work's polystylistic skin.

4) Concerto for Mixed Chorus (1985) – is music to make an avowedly spiritual statement, a piece that confirms Schnittke as a composer of some of the most important religious music of the late 20th century (born to an atheist Russian Jewish father in 1934, he converted to Roman Catholicism in 1982). You can hear the same essentially devout spirit animating the Fourth Symphony, especially its final few minutes, a setting of the Ave Maria that Schnittke wanted to bring together Jewish, Orthodox, Catholic and Lutheran ideas and musics.

5) Peer Gynt ballet (1988) - Schnittke's score for the full length ballet, 'Peer Gynt,' is one of the orchestral masterworks of his final period. The libretto transplants Peer from the situations in Ibsen's famous play to analogous ones of the modern world. The musical universe is as far

removed from the world of Grieg's famous incidental music as can be imagined. The composer's famous polystylism is used to depict the various worlds that Peer encounters along his travels--a ragtime polka for Hollywood and the film industry, a pseudo bit of Grieg for his yearnings for home, and so forth. Because of the dramatic context, the individual numbers are of manageable lengt and the composer's experience as the creator of some sixty film scores comes fully into play. Schnittke suffered his first stroke between the composition of the first three acts and the extended epilogue that concludes the work. This epilogue, which includes a wordless chorus on tape, ushers in the austerity of Schnittke's final works. It is unbelievably haunting in effect.

6) Symphony No 8 (1994) - In his last years, Schnittke composed some of his most austere music, which seems, on the surface, to be the distillation of his life in music and a radical simplification of its means and methods: listen, for example, to the last movement of the Eighth Symphony, or any of the Ninth, deciphered from Schnittke's handwriting: because of the strokes he suffered, he was forced to write with his left hand. Is this, as Gerard McBurney thinks, the Schnittke whose music will prove the test of time, or will it be his more notorious polystylistic pieces that will continue to be heard as the heart of his achievement?

- **Primitivism**

  Primitivism was a reaction from the perceived over-refinement of such Impressionist artists as Debussy and Ravel. Its adherents favored simple, clear-cut tunes of folk character that revolved around a central note and moved within a narrow compass; massive harmonies based on block like chords moving in parallel formation with harshly percussive effect; and a strong impulsion to a tonal center. Much in evidence were ostinato rhythms repeated with an almost obsessive effect and a rugged orchestration featuring massed sonorities which contrasted sharply with the coloristic subtleties of the Imperssionists.

  Twentieth-century composers found inspiration not only in African music but also in the songs and dances of the borderlands of Western culture southeastern Europe, Asiatic Russia, and the Near East. Out of the unspoiled, vigorous folk music of these regions came rhythms of an elemental power that tapped fresh sources of feeling and imagination. Milestones in this development were such pieces as Bartók's *Allegro barbaro* and Stravinsky's *Le Sacre du printemps* (The Rite of Spring).

  In antiquity the superiority of the simple life was expressed in the Myth of the Golden Age, depicted in the genre of European poetry and visual art known as the Pastoral. The debate about the merits and demerits of a simple, versus a complex life, gained new urgency with the European encounter with hitherto unknown peoples after the exploration of the Americas and Pacific Islands by Columbus and others. During the Enlightenment, arguments about the supposed superiority of indigenous peoples were chiefly used as a rhetorical device to criticize aspects of European society. In the realm of aesthetics, however, the eccentric Italian philosopher, historian and jurist Giambattista Vico (1688–1744) was the first to argue that primitive man was closer to the sources of poetry and artistic inspiration than "civilized" or modern man. Vico was writing in the context of

the celebrated contemporary debate, known as the great Quarrel of the Ancients and the Moderns, over which was better, the classic poetry of Homer and the Bible or modern vernacular literature.

The 19th century saw for the first time the emergence of historicism, or the ability to judge different eras by their own context and criteria. A result of this new historicism, new schools of visual art arose that aspired to hitherto unprecedented levels of historical fidelity in setting and costumes. Neoclassicism in visual art and architecture was one result. Another such "historicist" movement in art was the Nazarene movement in Germany, which took inspiration from the so-called Italian "primitive" school of devotional paintings (i.e., before the age of Raphael and the discovery of oil painting). Stravinsky's *The Rite of Spring*, is "primitivist" in that its programmatic subject is a pagan rite: a human sacrifice in pre-Christian Russia. It uses dissonance and loud, repetitive rhythms to depict "Dionysian" modernism, i.e., abandonment of inhibition (restraint standing for civilization). Nevertheless, Stravinsky was a master of learned classical tradition and worked within its bounds. In his later work he adopted a more "Apollonian" neoclassicism, to use Nietzsche's terminology, although in his use of serialism he still rejects 19th-century convention.

- **Process Music**

  Process music is music that arises from a process. It may make that process audible to the listener, or the process may be concealed. Primarily begun in the 1960s, diverse composers have employed divergent methods and styles of process. These processes may involve specific systems of choosing and arranging notes through pitch and time, often involving a long term change with a limited amount of musical material, or transformations of musical events that are already relatively complex in themselves. Steve Reich defines process music not as, "the process of composition but rather pieces of music that are, literally, processes. The distinctive thing about musical processes is that they determine all the note-to-note (sound-to-sound) details and the overall form simultaneously. (Think of a round or infinite canon.)"

  Although today often used synonymously with minimalism, the term predates the appearance of this style by at least twenty years. Elliott Carter, for example, used the word "process" to describe the complex compositional shapes he began using around 1944 with works like the Piano Sonata and First String Quartet, and continued to use throughout his life. Carter came to his conception of music as process from Alfred North Whitehead's "principle of organism", and particularly from his 1929 book, *Process and Reality*. The term *Process Music* (in the minimalist sense) was coined by composer Steve Reich in his 1968 manifesto entitled "Music as a Gradual Process" in which he very carefully yet briefly described the entire concept including such definitions as phasing and the use of phrases in composing or creating this music, as well as his ideas as to its purpose and a brief history of his discovery of it.

  For Steve Reich it was important that the processes be audible: "I am interested in perceptible processes. I want to be able to hear the process happening throughout the sounding music.… What I'm interested in is a compositional process and a sounding music that are one and the same thing." This has not necessarily been the case for other composers, however. Reich himself points to John Cage as an example of a composer who used compositional processes that could not be heard when

the piece was performed. The postminimalist David Lang is another composer who does not want people to hear the process he uses to build a piece of music.

- **Serialism**
  One of the most important post-war movements among the high modernist schools. Serialism was led by composers such as Luigi Nono, Pierre Boulez, Bruno Maderna, and Karlheinz Stockhausen in Europe, and by Milton Babbitt, Donald Martino, and Charles Wuorinen in the United States.

  "Serial music" is a problematic term because it is used differently in different languages and especially because, shortly after its coinage in French, it underwent essential alterations during its transmission to German. The use of the word "serial" in connection with music was first introduced in French by René Leibowitz (1947), and immediately afterward by Humphrey Searle in English, as an alternative translation of the German *Zwölftontechnik* twelve-tone technique or *Reihenmusik* (row music); it was independently introduced by Herbert Eimert and Karlheinz Stockhausen into German in 1954 as *serielle Musik*, with a different meaning, translated into English also as "serial music".

  Serialism is a method or technique of composition that uses a series of values to manipulate different musical elements (”parameters”). It is not, by itself, a system of composition, nor is it a style. Pitch serialism is also not necessarily incompatible with tonality, though it is most often used as a means of composing atonal music.

  - 12-Note Serialism - Is often broadly applied to all music written in what Arnold Schoenberg called "The Method of Composing with Twelve Notes related only to one another." Serialism began primarily with this twelve-tone technique of Schoenberg. Twelve-tone technique orders the twelve notes of the chromatic scale, forming a row or series and providing a unifying basis for a composition's melody, harmony, structural progressions, and variations.
  - “Integral” or “Compound” (or “Total”) Serialism - is sometimes used more specifically to apply only to music where at least one element (other than pitch) is subjected to being treated as a row or series. The technique of Total Serialism was realized in the works of post-war avant-guardists, with two predecessors: Anton Webern and Oliver Messiaen. **Total serialism** is the use of series for aspects such as duration, dynamics, timbre and register as well as pitch (often called “parameters”).
  - Other terms, used especially in Europe to distinguish post–World War II serial music from twelve-tone music and its American extensions, are **general serialize** and **multiple serialism.**

  Serialism is most specifically defined as the structural principle according to which a recurring series of ordered elements are used in order or manipulated in particular ways to give a piece unity. A row may be assembled pre-compositionally), or it may be derived from a spontaneously invented thematic or motivic idea. The structure of the row, however, does not in itself define the structure of a composition, which requires development of a comprehensive strategy.

  History and Development Before World War II

In the late 19th and early 20th century, composers began to struggle against the ordered system of chords and intervals known as "functional tonality". Composers such as Debussy and Strauss found differing ways of stretching the limits of the tonal system in order to accommodate their ideas. After a brief period of free atonality, Schoenberg and others began exploring tone rows, in which an ordering of the twelve pitches of the equal tempered chromatic scale is used as the source material of a composition. This ordered set, often called a row, allowed for new forms of expression and (unlike free atonality) the expansion of underlying structural organizing principles without recourse to common practice harmony.

History and Development After World War II

The serialization of rhythm, dynamics, and other elements of music was partly fostered by the work of Olivier Messiaen and his analysis students, including Karel Goeyvaerts and Boulez, in post-war Paris. Several of the composers associated with the Darmstadt school (discussed below), notably Karlheinz Stockhausen, Karel Goeyvaerts, and Henri Pousseur developed a form of serialism that initially rejected the recurring rows characteristic of twelve-tone technique, in order to eradicate any lingering traces of thematicism. Instead of a recurring, referential row, each musical component is subjected to control by a series of numerical proportions. In Europe, the style of some serial as well as non-serial music of the early 1950s emphasized the determination of all parameters for each note independently, often resulting in widely spaced, isolated "points" of sound, an effect called first in German "punktuelle Musik" ("pointist" or "punctual music"), then in French "musique ponctuelle", but quickly confused with "pointillistic" (German "pointillistische", French "pointilliste").

Igor Stravinsky's adoption of twelve-tone serial techniques offers an example of the level of influence that serialism had after the Second World War. Previously Stravinsky had used series of notes without rhythmic or harmonic implications. Because many of the basic techniques of serial composition have analogs in traditional counterpoint, uses of inversion, retrograde and retrograde inversion from before the war are not necessarily indicative of Stravinsky adopting Schoenbergian techniques.

During this period, the concept of *serialism* influenced not only new compositions but also the scholarly analysis of the classical masters. Adding to their professional tools of sonata form and tonality, scholars began to analyze previous works in the light of serial techniques; for example they found the use of row technique in previous composers going back to Mozart and Beethoven. In particular, the orchestral outburst that introduces the development section half-way through the last movement of Mozart's next-to-last symphony is a tone row that Mozart punctuates in a very modern and violent episode.

Twelve-tone technique basis

The principle is that in a row, no element of the aggregate should be reused until all of the other members have been used, and each member must appear only in its place in the series. This rule is violated in numerous works still termed "serial." The twelve notes of the basic chromatic scale are organized into a row. This "basic" row is then used to create permutations, that is, rows derived from the basic set by reordering its elements. The row may be used to produce a set of intervals, or

a composer may have wanted to use a particular succession of intervals, from which the original row was created. A row that uses all of the intervals in their ascending form once is an all-interval row. In addition to permutations, the basic row may have some set of notes derived from it, which is used to create a new row, these are *derived sets*. Because there are tonal chord progressions that use all twelve notes, it is possible to create pitch rows with very strong tonal implications, and even to write tonal music using twelve-tone technique. Most tone rows contain subsets that can imply a pitch center; a composer can create music centered on one or more of the row's constituent pitches by emphasizing or avoiding these subsets, respectively, as well as through other, more complex compositional devices.

Total Serialism techique basis

To serialize the other elements of music, a system quantifying an identifiable element must be created or defined (this is called "parametrization", after the term in mathematics). For example, if duration is to be serialized, then a set of durations must be specified. If tone colour (timbre) is to be serialized, then a set of separate tone colours must be identified, and so on. The selected set or sets, their permutations and derived sets form the basic material with which the composer works.

One short comment about Milton Babbitt's contribution to the postwar serialism movement: many feel he was unjustly slighted by his European counterparts in the Darmstadt School. After having established the theoretical foundations in his **1946** "dissertation" The Function of the Set Structure in the Twelve-Tone System, Babbitt composed Three Compositions for Piano in **1947**. There the duration was already "serially" controlled. In **1948** he turned his attention to other elements of music in Composition for Four Instruments. In Darmstadt, the first totally-serial work, Olivier Messiaen's Mode de valeurs et d'intensités was composed in the summer of **1949**, while Boulez's Structures for two pianos and Karlheinz Stockhausen's Kreuzspiel did not appear until **1951** or after.

Olivier Messiaen (December 10, 1908 – April 27, 1992) was a French composer, organist and ornithologist, one of the major composers of the 20th century. His music is rhythmically complex; harmonically and melodically it often uses *modes of limited transposition*, which he abstracted from his early compositions and improvisations. Messiaen also drew on his Roman Catholic faith for his pieces. He travelled widely and wrote works inspired by diverse influences such as Japanese music, the landscape of Bryce Canyon in Utah and the life of St. Francis of Assisi. He said he perceived colours when he heard certain musical chords (a phenomenon known as synaesthesia in its literal manifestation); combinations of these colours, he said, were important in his compositional process. For a short period Messiaen experimented with the parametrisation associated with "total serialism", in which field he is often cited as an innovator. His style absorbed many exotic musical influences such as Indonesian gamelan.

Messiaen entered the Paris Conservatoire at the age of 11 and was taught by Paul Dukas, among others. He was appointed organist at the Église de la Sainte-Trinité in Paris in 1931, a post held until his death. On the fall of France in 1940, Messiaen was made a prisoner of war, during which

time he composed his *Quatuor pour la fin du temps* ("Quartet for the end of time") for the four available instruments—piano, violin, cello and clarinet. The piece was first performed by Messiaen and fellow prisoners for an audience of inmates and prison guards. He was appointed professor of harmony soon after his release in 1941, and professor of composition in 1966 at the Paris Conservatoire, positions he held until his retirement in 1978. His many distinguished pupils included Quincy Jones, Pierre Boulez, Karlheinz Stockhausen and Yvonne Loriod.

He found birdsong fascinating, notating bird songs worldwide and incorporating birdsong transcriptions into his music. His innovative use of colour, his conception of the relationship between time and music, and his use of birdsong are among the features that make Messiaen's music distinctive.

Messiaen was born December 10, 1908 in Avignon, France, into a literary family. He was the elder of two sons of Cécile Sauvage, a poet, and Pierre Messiaen, a teacher of English who translated the plays of William Shakespeare into French.

At the outbreak of World War II, Messiaen was drafted into the French army. Due to poor eyesight, he was enlisted as a medical auxiliary rather than an active combatant. He was captured at Verdun and taken to Görlitz in May 1940, and was imprisoned at Stalag VIII-A. He met a violinist, a cellist and a clarinettist among his fellow prisoners. He wrote a trio for them, which he gradually incorporated into his *Quatuor pour la fin du temps* ("Quartet for the End of Time"). The Quartet was first performed in January 1941 to an audience of prisoners and prison guards, with the composer playing a poorly maintained upright piano in freezing conditions. Thus the enforced introspection and reflection of camp life bore fruit in one of 20th-century European classical music's acknowledged masterpieces. The title's "end of time" alludes to the Apocalypse, and also to the way in which Messiaen, through rhythm and harmony, used time in a manner completely different from his predecessors and contemporaries.

Shortly after his release from Görlitz in May 1941, Messiaen was appointed a professor of harmony at the Paris Conservatoire, where he taught until his retirement in 1978. He compiled his *Technique de mon langage musical* ("Technique of my musical language") published in 1944, in which he quotes many examples from his music, particularly the Quartet.

In 1943, Messiaen wrote *Visions de l'Amen* ("Visions of the Amen") for two pianos for Yvonne Loriod and himself to perform. Shortly thereafter he composed the enormous solo piano cycle *Vingt regards sur l'enfant-Jésus* ("Twenty gazes upon the child Jesus") for her. Two years after *Visions de l'Amen*, Messiaen composed the song cycle *Harawi*, the first of three works inspired by the legend of Tristan and Isolde. The second of these works about human (as opposed to divine) love was the result of a commission from Serge Koussevitzky. This was the ten-movement *Turangalîla-Symphonie*. It is not a conventional symphony, but rather an extended meditation on the joy of human union and love. It does not contain the sexual guilt inherent in Richard Wagner's *Tristan und Isolde* because Messiaen believed that sexual love is a divine gift. The third piece inspired by the *Tristan* myth was *Cinq rechants* for twelve unaccompanied singers, described by Messiaen as influenced by the alba of the troubadours. Messiaen visited the United States in 1949,

where his music was conducted by Koussevitsky and Leopold Stokowski. His *Turangalîla-Symphonie* was first performed in the US in 1949, conducted by Leonard Bernstein.

While he did not employ the twelve-tone technique, after three years teaching analysis of twelve-tone scores, including works by Arnold Schoenberg, he experimented with ways of making scales of other elements (including duration, articulation and dynamics) analogous to the chromatic pitch scale. The results of these innovations was the "Mode de valeurs et d'intensités" for piano (from the *Quatre études de rythme*) which has been misleadingly described as the first work of total serialism. It had a large influence on the earliest European serial composers including Pierre Boulez and Karlheinz Stockhausen. During this period he also experimented with musique concrète, music for recorded sounds.

When in 1952 Messiaen was asked to provide a test piece for flautists wishing to enter the Paris Conservatoire, he composed the piece *Le merle noir* for flute and piano. While he had long been fascinated by birdsong, and birds had made appearances in several of his earlier works (for example *La Nativité*, *Quatuor* and *Vingt regards*), the flute piece was based entirely on the song of the blackbird. He took this development to a new level with his 1953 orchestral work *Réveil des oiseaux*—its material consists almost entirely of the birdsong one might hear between midnight and noon in the Jura. From this period onwards, Messiaen incorporated birdsong into all of his compositions and composed several works for which birds provide both the title and subject matter (for example the collection of thirteen pieces for piano *Catalogue d'oiseaux* completed in 1958, and *La fauvette des jardins* of 1971).

Messiaen's music was by this time championed by, among others, Pierre Boulez, who programmed first performances at his Domaine musical concerts and the Donaueschingen festival. Works performed included *Réveil des oiseaux*, *Chronochromie* (commissioned for the 1960 festival) and *Couleurs de la cité céleste*. The latter piece was the result of a commission for a composition for three trombones and three xylophones; Messiaen added to this more brass, wind, percussion and piano, and specified a xylophone, xylorimba and marimba rather than three xylophones.

Messiaen's next work was the large-scale *La Transfiguration de Notre Seigneur Jésus-Christ*. The composition occupied him from 1965 to 1969 and the musicians employed include a 100-voice ten-part choir, seven solo instruments and large orchestra. Its fourteen movements are a meditation on the story of Christ's Transfiguration. Shortly after its completion, Messiaen received a commission from Alice Tully for a work to celebrate the U.S. bicentennial. He arranged a visit to the US in spring 1972, and was inspired by Bryce Canyon in Utah, where he observed the canyon's distinctive colours and birdsong. The twelve-movement orchestral piece *Des canyons aux étoiles...* was the result, first performed in 1974 in New York. In 1971, he was asked to compose a piece for the Paris Opéra. While reluctant to undertake such a major project, he was persuaded in 1975 to accept the commission and began work on his *Saint-François d'Assise*. The composition was intensive (he also wrote his own libretto) and occupied him from 1975 to 1979; the orchestration was carried out from 1979 until 1983. Messiaen preferred to describe the final work as a "spectacle" rather than an opera. It was first performed in 1983. Some commentators at the time

thought that the opera would be his valediction (at times Messiaen himself believed so), but he continued to compose.

In the summer of 1978, Messiaen retired from teaching at the Conservatoire. Although in considerable pain near the end of his life (requiring repeated surgery on his back) he was able to fulfil a commission from the New York Philharmonic Orchestra, *Éclairs sur l'au-delà...*, which was premièred six months after his death. He died in Paris on April 27, 1992.

Messiaen's music has been described as outside the western musical tradition, although growing out of that tradition and being influenced by it. Much of his output denies the western conventions of forward motion, development and diatonic harmonic resolution. This is partly due to the symmetries of his technique—for instance the modes of limited transposition do not admit the conventional cadences found in western classical music. His youthful love for the fairy-tale element in Shakespeare prefigured his later expressions of Catholic liturgy. Messiaen was not interested in depicting aspects of theology such as sin; rather he concentrated on the theology of joy, divine love and redemption. Messiaen continually evolved new composition techniques, always integrating them into his existing musical style; his final works still retain the use of modes of limited transposition.

As well as discovering new techniques, Messiaen found and absorbed exotic music, including Ancient Greek rhythms, Hindu rhythms (he encountered Śārṅgadeva's list of 120 rhythmic units, the deçî-tâlas), Balinese and Javanese Gamelan, birdsong, and Japanese music.

Developments in modern French music were a major influence on Messiaen, particularly the music of Claude Debussy and his use of the whole-tone scale (which Messiaen called *Mode 1* in his modes of limited transposition). Messiaen very rarely used the whole-tone scale in his compositions because, he said, after Debussy and Dukas there was "nothing to add", but the modes he did use are all similarly symmetrical. Messiaen had a great admiration for the music of Igor Stravinsky, particularly the use of rhythm in earlier works such as *The Rite of Spring*, and his use of colour. He was further influenced by the orchestral brilliance of Heitor Villa-Lobos, who lived in Paris in the 1920s and gave acclaimed concerts there. Among composers for the keyboard, Messiaen singled out Jean-Philippe Rameau, Domenico Scarlatti, Frédéric Chopin, Debussy and Isaac Albéniz. He loved the music of Modest Mussorgsky and incorporated varied modifications of what he called the "M-shaped" melodic motif from Mussorgsky's *Boris Godunov*. Messiaen was further influenced by Surrealism, as may be seen from the titles of some of the piano *Préludes* (*Un reflet dans le vent...*, "A reflection in the wind") and in some of the imagery of his poetry (he published poems as prefaces to certain works, for example *Les offrandes oubliées*).

Colour lies at the heart of Messiaen's music. He believed that terms such as "tonal", "modal" and "serial" are misleading analytical conveniences. For him there were no modal, tonal or serial compositions, only music with or without colour. He said that Claudio Monteverdi, Mozart, Chopin, Richard Wagner, Mussorgsky and Stravinsky all wrote strongly coloured music. In certain of Messiaen's scores, he notated the colours in the music (notably in *Couleurs de la cité céleste* and *Des canyons aux étoiles...*)—the purpose being to aid the conductor in interpretation rather than to

specify which colours the listener should experience. The importance of colour is linked to Messiaen's synaesthesia, which he said caused him to experience colours when he heard or imagined music (he said that he did not perceive the colours visually). In his multi-volume music theory treatise *Traité de rythme, de couleur, et d'ornithologie* ("Treatise of Rhythm, Colour and Birdsong"), Messiaen wrote descriptions of the colours of certain chords. His descriptions range from the simple ("gold and brown") to the highly detailed ("blue-violet rocks, speckled with little grey cubes, cobalt blue, deep Prussian blue, highlighted by a bit of violet-purple, gold, red, ruby, and stars of mauve, black and white. Blue-violet is dominant").

Birdsong fascinated Messiaen from an early age, and in this he found encouragement from his teacher Dukas, who reportedly urged his pupils to "listen to the birds". Messiaen included stylised birdsong in some of his early compositions (including *L'abîme d'oiseaux* from the *Quatuor pour la fin du temps*), integrating it into his sound-world by techniques like the modes of limited transposition and chord colouration. His evocations of birdsong became increasingly sophisticated, and with *Le réveil des oiseaux* this process reached maturity, the whole piece being built from birdsong: in effect it is a dawn chorus for orchestra. The same can be said for "Epode", the five-minute sixth movement of "Chronochromie", which is scored for eighteen violins, each one playing a different birdsong. Messiaen notated the bird species with the music in the score (examples 1 and 4). The pieces are not simple transcriptions; even the works with purely bird-inspired titles, such as *Catalogue d'oiseaux* and *Fauvette des jardins*, are tone poems evoking the landscape, its colours and atmosphere.

For some compositions, Messiaen created scales for duration, attack and timbre analogous to the chromatic pitch scale. He expressed annoyance at the historical importance given to one of these works, *Mode de valeurs et d'intensités*, by musicologists intent on crediting him with the invention of "total serialism". Messiaen later introduced what he called a "communicable language", a "musical alphabet" to encode sentences. He first used this technique in his *Méditations sur le mystère de la Sainte Trinité* for organ; where the "alphabet" includes motifs for the concepts *to have*, *to be* and *God*, while the sentences encoded feature sections from the writings of St. Thomas Aquinas.

Olivier Messiaen (December 10, 1908 – April 27, 1992) was a French composer, organist and ornithologist, one of the major composers of the 20th century. His music is rhythmically complex; harmonically and melodically it often uses *modes of limited transposition*, which he abstracted from his early compositions and improvisations. Messiaen also drew on his Roman Catholic faith for his pieces. For a short period Messiaen experimented with "total serialism", in which field he is often cited as an innovator.

He was appointed professor of harmony in 1941 and professor of composition in 1966 at the Paris Conservatoire, positions he held until his retirement in 1978. His many distinguished pupils included Pierre Boulez, Karlheinz Stockhausen, Quincy Jones and Yvonne Loriod. Beginning in summer 1949 he taught in the new music summer school classes at Darmstadt. While he did not employ the twelve-tone technique, after three years teaching analysis of twelve-tone scores,

including works by Arnold Schoenberg, he experimented with ways of making scales of other elements (including duration, articulation and dynamics) analogous to the chromatic pitch scale. The results of these innovations was the "Mode de valeurs et d'intensités" for piano (from the *Quatre études de rythme*) which has been misleadingly described as the first work of total serialism. It had a large influence on the earliest European serial composers including Pierre Boulez and Karlheinz Stockhausen. During this period he also experimented with musique concrète, music for recorded sounds.

Darmstadt School refers to a loose group of compositional styles created by composers who attended the Darmstadt International Summer Courses for New Music in Germany from the early 1950s to the early 1960s. Coined by Luigi Nono in his 1958 lecture "Die Entwicklung der Reihentechnik," Darmstadt School describes the uncompromisingly serial music written by composers such as Pierre Boulez, Bruno Maderna, Karlheinz Stockhausen and many others. Two years later the Darmstadt School effectively dissolved due to musical differences. Although he was only at Darmstadt before 1950, Olivier Messiaen is also sometimes included because of the influence his music had on the later Darmstadt composers. Key influences on the Darmstadt School were the works of Webern and Varèse—who visited Darmstadt only once, in 1950, when Nono met him—and Olivier Messiaen's *Mode de valeurs et d'intensités* (from the *Quatre études de rythme*).

Almost from the outset, the phrase Darmstadt School was used as a belittling term by commentators like Dr. Kurt Honolka to describe any music written in an uncompromising style. Composer Hans Werner Henze, whose music was regularly performed at Darmstadt in the 1950s, reacted against the Darmstadt School ideologies, particularly the way in which (according to him) young composers were forced either to write in total dodecaphony or be ridiculed or ignored. In his collected writings, Henze recalls student composers rewriting their works on the train to Darmstadt in order to comply with Boulez's expectations. One of the leading figures of the Darmstadt School itself, Franco Evangelisti, was also outspoken in his criticism of the dogmatic "orthodoxy" of certain zealot disciples, labelling them the "Dodecaphonic police."

Bruno Maderna (21 April 1920–13 November 1973) was an Italian conductor and composer. For the last ten years of his life he lived in Germany and eventually became a citizen of that country. Maderna was born in Venice. At the age of four he was taught violin in Chioggia, and his grandfather recognised the child's brilliance. He continued his studies in Milan (1935), Venice (1939) and in Rome (1940), where he finally took his degree in composition and musicology at the Accademia Nazionale di Santa Cecilia.

During World War II he was drafted into the army, but soon after he voluntarily joined the antifascist Partisan Resistance. After the War, 1947–1950, he taught composition at the Venice Conservatory at the invitation of Malipiero. In those years he taught a large class which included Luigi Nono, who had previously studied law. In 1948 he met Hermann Scherchen, and Maderna and Luigi Nono both attended a course of instruction with him at Venice. Scherchen set Maderna's direction towards dodecaphonic method. He was invited to conduct at the (1951) Internationale

Ferienkurse für Neue Musik in Darmstadt, where he took a founding initiative in the Internationales Kranichsteiner Kammer-Ensemble, a chamber-group which was newly re-convened every year as an ad-hoc-Ensemble. Here he met (among others) Boulez, Messiaen, Stockhausen, Cage, Pousseur and the most important performers of the *Neue Musik*, who inspired him to compose new pieces. In 1948 he composed his first serial work, the *Tre liriche greche*. The *Quartetto per archi in due tempi* (of 1955) is an even more intensively serial piece.

In 1963 he relocated to Darmstadt in the then West Germany and afterward became a German citizen. He died in 1973 at Darmstadt, when he was about to rehearse Debussy's *Pelléas et Mélisande* and during rehearsals for his own opera, *Satyricon*. Pierre Boulez wrote his *Rituel in memoriam Bruno Maderna* the following year, Luciano Berio wrote *Calmo* for voice and orchestra in homage to his friend, and Earle Brown dedicated his work *Centering* to the memory of Bruno Maderna, which ends with a quotation from Maderna's First Oboe Concerto.

Luigi Nono (29 January 1924–8 May 1990) was an Italian avant-garde composer of classical music and remains one of the most prominent composers of the 20th century. Born in Venice, Nono was a member of a wealthy artistic family and his grandfather was a notable painter. Nono began music lessons at the Venice Conservatory where he acquired knowledge of Renaissance madrigal tradition, among other styles. After graduating with a degree in law from the University of Padua, he was given encouragement in composition by Bruno Maderna.

Of the three major composers who dominated the European avant-garde in the 1950s (Boulez, Stockhausen and Nono), Nono alone believed Serialism was compatible with revolutionary politics. Even in Nono's earliest works, such as the *Variazioni canoniche* (1950), his Marxist/humanist ideology is allied to the formality of serialist technique, tempered by a characteristically Italian lyricism. He was also the first experimental composer to tackle opera, a genre that many of his colleagues despised. Nono adopted Schoenberg's serialism but always regarded it as a servant to political radicalism, to which ends he also deployed chance methods, musique concrete and electronics. His first opera, *Intollerancza* (1960), was an attack on racism, capitalism and colonialism. The 1960s saw him turn to electronics and in the 1970s his music underwent a huge stylistic change: he became more introspective in language of poetic meditations. Nono and Stockhausen fell out over the word-setting of Nono's *IL canto sospeso* (1955-56) and did not speak for decades. The pieces he wrote in the last 15 years of his career were filled with musical richness. Few composers have wanted their music to say, mean and be about something more than Nono. His true legacy was drawing attention to the act of listening itself to sound out ourselves and our relationship with the word.

A number of Nono's early works were first performed at Darmstadt including: *Tre epitaffi per Federico García Lorca* (1951–53), *La Victoire de Guernica* (1954)—modeled like Picasso's painting as an indictment of the war-time atrocity —and *Incontri* (1955). The *Liebeslied* (1954) was written for Nono's wife-to-be, Nuria Schoenberg (daughter of Arnold Schoenberg), whom he met at the 1953 world première of *Moses und Aron* in Hamburg. They married in 1955.

Luigi Nono's music was never going to change the world. There's a cliche that the Italian composer's trenchant political convictions and the stream of pieces he wrote with avowedly protesting or politically radical titles and messages are narrow-minded pieces of agitprop that beat their audiences over the head with superficial sloganising and alternately despairing or utopian imagery.

The music theatre pieces *Intolleranza* (which caused a partisan riot at its premiere in 1961 at La Fenice in Venice) - *Al gran sole carico d'amore* (his anti-fascist orchestral and choral masterpiece from the mid-50s) - Il canto sospeso (his experimental anti-capitalist cantata for soprano and tape) - *La fabbrica illuminata* - or the violent expressionism of the partly improvised *A floresta è jovem e cheja de vida*.

Nono took a musical and ideological hard line with composers who didn't fit his vision of musical progress, whether Henze or Stravinsky. But when you hear his own music of the period now, it's the lyricism and delicacy of his breakthrough piece, the *Canonical Variations* on Schoenberg's tone-row from his *Ode to Napoleon* that's so striking, or the limpidity of the instrumental music from *Il canto sospeso*.

1) *Intolleranza* (1961) – is a one-act opera in two parts (*azione scenica in due tempi*), dedicated to his father-in-law, Arnold Schoenberg. The Italian libretto was written by Nono from an idea by Angelo Maria Ripellino, using documentary texts and poetry by Julius Fučík, Henri Alleg, Jean-Paul Sartre, Paul Eluard, Vladimir Mayakovsky and Bertolt Brecht. The plot concerns a migrant, who travels from Southern Italy looking for work. Along the way, he encounters protests, arrests and torture. He ends up in a concentration camp, where he experiences the gamut of human emotions. He reaches a river and realises that everywhere is his home. It it is basically a work of agit-prop (a Marxist-Leninist term for agitation and propaganda) and is rather two-dimensional. A refugee, working abroad as a miner, wants to go back to his repressive home country. He ends up in the universal demonstration of 1960 against both “discrimination” and “la sale guerre” and he shouts “Morte al fascismo!” He is arrested, tortured. Sartre himself is, with his original voice, is “outraged.” The struggle continues. “The yearning for my homeland changes into the desire for freedom.” In the second part, the story is transported to a higher level of abstraction: the present consists of absurd bureaucracy and the empty prattle of the culture industry. But the refugee has found a companion. Pictures of the great political crimes of the century plague the couple and on the land, they get caught up in a natural catastrophe (the flooding of the Po Valley) with a background of ecological crime. Everything goes under, a Brecht poem gives dry comfort.

   The opera was Nono's first work for the opera stage and is a flaming protest against intolerance and oppression and the violation of human dignity. The year in the title refers to the time of the work's origin. Nono himself said of this work that it "did mark a beginning for me, but in no sense did it constitute a *tabula rasa* or in response to 'divine inspiration.'" The 1961 premiere was disrupted by neo-fascists, who shouted "Viva la polizia" during the torture scene. Nono's opponents accused him of poisoning Italian music.

Fabrice Fitch has commented that this work has "no plot as such," but rather consists of a series of scenes that illustrate aspects of intolerance. Nono himself interpreted the testimony of his work as follows:

> Intolleranza 1960" is the awakening of human awareness in a man who has rebelled against the demands of necessity - an emigrant miner - and searches for a reason and a "human" base for life. After several experiences of intolerance and domination, he is beginning to rediscover human relations, between himself and others, when he is swept away in a flood with other people. There remains his certainty in "a time when one wants to be a help to you". Symbol? Report? Fantasy? All three, in a story of our time.

It is a departure from standard opera in at least two respects. First, at only 54'35 it is only the length of the first act of a standard opera. Second, Nono did not call it an opera, but rather "aziona scenica," no doubt to distance his work from the expectations of the regular opera crowd. This is a militant political work, in uncompromising serialist language. Nono was intensely critical of his fellow "Darmstadt School" composers (including Boulez, Stockhausen, Berio, and others) for their lack of engagement and he was no hypocritical in his stance.

2) *...sorrerte onde serene...* (1976) - for piano and tape. This music from the mid-70's marked a different world of sonic exploration with very slow and even static time and silence. The composition " ... sofferte onde serene ..." (" ... serene waves endured ... ") was written on the occasion of deaths both in Nono's family and that of his friend the pianist Maurizio Pollini for whom this piece and others were originally composed. The taped piano sounds, played with sustaining pedal always down, resonate like the sounds of bells reverberating over the lagoon and the sea near Nono's house. The interior of the piano is played with hand-muted strings and the striking of the other pedals to (re-)create natural environment-like timbres. The overall impression of the piece is that life goes on and one necessarily endures at the "equilibrium of the profound interior."

3) *Fragmente - Stille, An Diotima* (1980) – Nono's only string quartet, marked a turning point in his work. At this time, he found a need to renew his approach and his interest turned more toward introversion and reflection, silence and listening, rather than outward statement and protest. As he said:

> Listening is very difficult. Difficult to listen to others in the silence…When one comes to listen, one often tries to rediscover oneself in others. To rediscover one's own mechanisms, system, rationalism in the others. Instead of hearing the silence, instead of hearing the others, one often hopes to hear oneself. That is an academic, conservative, and reactionary repetition…Perhaps one can change the rituals; perhaps it is possible to try to wake up the ear. To wake up the ear, the eyes, human thinking, intelligence, the most exposed inwardness.

Fragmente-Stille, an Diotima consists of 52 musical sections, which are linked to 53 fragments of text from either Friedrich Hölderlin's novel Hyperion or his poems to Diotima. Diotima, a

character in Hyperion, is surmised to represent a woman with whom Hölderlin was in love (and also is a figure in Plato's Symposium). In this quartet, Nono stipulates that the text not be read aloud or presented to the audience in any way, but that the fragments be thought silently, or "sung inwardly," by performers as they play through the piece. Meanwhile the music progresses haltingly with numerous fermatas, sometimes on held tones but often in silence and for long spans. Thus the fermatas allow time to think on and internalize the text and for listeners fully to experience the silence or stillness.

In the musical sounds, Nono sought to explore varied, nuanced sound qualities, inspired by Schoenberg's idea of Klangfarben. The players are asked for many different kinds of timbres, attacks and dynamics, often at quiet volume. There are a few places where material returns in the piece, perhaps in relation to subtle links in the text. Nono developed some material from Giuseppe Verdi's scala enigmata, a scale that Nono employed in other works. Other musical references here are his use of Ockeghem's "Maleur me bat" in the viola at section 48 (perhaps a homage to Nono's teacher Bruno Maderna who used it as a harmonization exercise) and his use of a marking from Beethoven's quartet Op. 132 – "mit innigster Empfindung" – at section 26, exactly halfway through the piece. That section is notable for the anomalous absence of fermatas.

4) *Il canto sospeso* (1955–56) ("The Song Suspended") for solo voices, chorus and orchestra. This is one of the masterpieces of postwar serialim and it brought Nono international recognition and acknowledgment as a successor to Webern. Reviewers noted with amazement that Nono's *canto sospeso* achieved a synthesis—to a degree hardly thought possible—between an uncompromisingly avant-garde style of composition and emotional, moral expression. It is an experimental anti-capitalism cantata for soprano and tape.

5) *Promoeteo* (1984/5) - Considered by some to be his best piece. He called it a "tragedy of listening." This is a gigantic sonic installation that is both a vocal of objectivity on the minutiae of individual voices, textures and sound and an exploration of the inner world of individual imaginations and ways of hearing. This features groups of singers and instrumentalists station around the hall and audience, all projected and manipulated with live electronics. It was the music that Nono wrote from the mid-70s that marked a different world of sonic exploration, often involving electronics and new kinds of very slow or even static time, and silence. The effect of these pieces, from the clangorous, lamenting … sofferte onde serene … for piano and tape in 1976 to Prometeo, his gigantic sonic installation for Venice in 1984/5 is both to focus objectively on the minutiae of individual voices, textures and sounds and to explore the inner world of our own imaginations and ways of hearing. *Prometeo* is Nono's magnum opus, a piece he calls a "tragedy of listening," involving a set up that seems theatrical on the face of it, with groups of singers and instrumentalists stationed around the hall and the audience, all projected and manipulated with live electronics. The experience of the piece is resonantly mythic and resolutely contemporary; over more than two hours it becomes less a drama about Promethean ideas and more a dramatisation of what it means to listen, to find your place in the slowly yet suddenly changing soundscape projected around you, what it means to find the work's elusive

meaning from the textures of mysterious vocalisation you hear throughout the piece. Along with the *Hay que caminar* pieces, Prometeo is Nono's most ambitious, immersive and, for many his most important work.

6) *Tre Voci* (1985) - among the most beautiful minutes of music Nono ever wrote, like an infinitely subtle and surreal refraction of 17th-century madrigals heard through a halo of electronics and amplification. Maybe it's music that does have the power to change the world after all, through the subtlest but most powerful medium of all – our ears. The pulse is slow and its electronic effects include a whispered acidic rattle resembling labored breathing through an intercom. *Tre voci a* delivers forceful rolling blankets of soaring voices over slowly spreading electronic pedals similar to the looped onslaughts in *Quando stanno morendo*. Repeated listening doesn't increase familiarity.

7) *"Hay que caminar" sonado* (1989) – for 2 violins; his last piece. This is music of shimmering spaces, disturbed silences, shape-edged fragments and dream-like unpredictability. It is like a dream-journey of moving through a landscape that is at once still and violent. It represents a motto that inspired him: "traveler, there is no way to travel; only traveling."

Pierre Boulez (born 26 March 1925) is a French composer, conductor, writer, and pianist. In his early career, Boulez played a key role in the development of integral serialism, controlled chance and electronic music. This, coupled with his highly polemical views on the evolution of music, gained him the image of an *enfant terrible*. Boulez is also a prolific writer on music and a former head of IRCAM.

Boulez was born in Montbrison, Loire, France. His grueling schedule in Catholic school instilled in him an iron discipline but, for him, "the Catholic God was the God that Failed." Boulez grew up in Nazi-occupied France. He was 20 when the Second World War ended. As a child, he began piano lessons and demonstrated aptitude in both music and mathematics. He studied the latter at Lyon before pursuing music at the Paris Conservatoire under Olivier Messiaen. His studies there often ran into difficulties, as he was rapidly developing revolutionary -- "Praise be to amnesia" -- attitudes towards all things traditional. But two decisive influences during those years helped to shape his musical personality. The first was Messiaen's famous analysis course; the other was René Leibowitz, who introduced him to serial music, where Boulez found "a harmonic and contrapuntal richness and a capacity for development an extension of a kind I have never found anywhere else."

A work which soon gave Boulez public notice was his Second Piano Sonata (1948), following a much publicized concert in Darmstadt in 1952 by Yvonne Loriod, Messiaen's wife. The piece from the 1950s that sealed his reputation was Le Marteau sans Maître from 1954 (revised in 1955), for singer and chamber ensemble. The instrumentation gives prominence to exotic percussion, extended vocal techniques and textures that are often brittle but also lyrical. Rigorously organized, Le Marteau nonetheless goes beyond strict serialism to a more personal style. During the latter 1950s he began allowing greater freedom for the performer in works like Improvisations sur Mallarmé for soprano and chamber ensemble. In his Third Piano Sonata (1957), the pianist can

reorder the five movements in a variety of ways and certain passages within the movements offer alternate paths, thereby making the artist select which to play and which to omit. Boulez is also known for withdrawing and rewriting his compositions, making nearly everything he writes "a work in progress." For instance, ...explosante-fixe..., first sketched in 1971 has engendered a number of works and transitory phases over approximately twenty five years, including a 1996 version for Solo MIDI Flute and Chamber Ensemble.

Through Messiaen, Boulez discovered twelve-tone technique and went on to write atonal music in a post-Webernian serial style. The first fruits of this were his cantatas *Le visage nuptial* and *Le soleil des eaux* for female voices and orchestra, both composed in the late 1940s and revised several times since, as well as the *Second Piano Sonata* of 1948, a well-received 32-minute work that Boulez composed at the age of 23. Thereafter, Boulez was influenced by Messiaen's research to extend twelve-tone technique beyond the realm of pitch organization, serialising durations, dynamics, mode of attack, and so on. This technique became known as integral (total) serialism (a tedhnique first developed by Milton Babbitt).

It was Messiaen's uncharacteristically austere *Mode de valeurs et d'intensites* which showed how, by systematically ordering pitch, rhythm and dynamics in strict numerical sequences, one could write "automatic" music. And it was Boulez who produced, in *Structures I* for two pianos, the classical work of total serialism, absolute abstraction and pure process. Repudiating all the compromises with tradition which, he claimed, marred the work even of composers as progressive as Schoenberg and Stravinsky, Boulez set about creating a brave new musical works, untouched by sentiments or retrospection – as fearlessly complex and nerve-jangling dissonant Piano Sonata No. 2, which expresses an exuberance bordering on almost rage, making clear Boulez's determination.

As a polemicist he gave post-war music some of its best aphorisms - "anyone who has not felt… the necessity of the dodecaphonic [12-tone] language is OF NO USE", that the best solution to the problem of opera would be to blow up the opera houses, that some contemporary composition amounted to frenetic arithmetical masturbation", and dozens of others. The first thing to do when thinking about Boulez's music is to appraise it apart from the phenomenon of Boulez the man's power, influence, and personality. One misconception of his output is that there really isn't that much of it, admittedly, after two decades of non-stop composing up to when he was in his early 40s, Boulez's actual rate of musical production does seem to have slowed down dramatically. There are precious few new pieces from the 1970s and 80s, and still fewer in more recent decades. That's exactly when his conducting career took off (in the 1970s, he was simultaneously in charge of the BBC Symphony and the New York Phil) and setting up IRCAM. Was he then, and is he now, simply conducting too much to have any time to compose? He has been saying for the last 10 years that he wants to find more time to write.

Boulez quickly became one of the philosophical leaders of the post-war movement in the arts towards greater abstraction and experimentation. Many composers of Boulez's generation taught at the so-called Darmstadt School in Germany where the composers were instrumental in creating a style that, for a time, existed as an "antidote" to music of nationalist fervor; an international, even cosmopolitan style, a style that could not be 'co-opted' as propaganda in the way that the Nazis

used, for example, the music of Ludwig van Beethoven. Boulez was in contact with many composers who would become influential, including Luciano Berio, John Cage, Luigi Nono, Bruno Maderna, and Karlheinz Stockhausen.

Boulez's totally serialized works consist of: *Polyphonie X* (1950–51; withdrawn) for 18 instruments, the two musique-concrète *Études* (1951–52), and *Structures, book I* for two pianos. *Structures* was also a turning point for Boulez. As one of the most visible totally serialized works, it became a lightning rod for various kinds of criticism. These criticisms, combined with what Boulez felt was a lack of expressive flexibility in the language, as he outlined in his essay "At the Limit of Fertile Land..." had already led Boulez to refine his compositional language. He loosened the strictness of his total serialism into a more supple and strongly gestural music, and did not publicly reveal much about these techniques, which limited further discussion.

Boulez's strongest achievement in this method is *Le marteau sans maître* (*The Hammer without a Master*) for ensemble and voice, from 1953 to 1957, a "keystone of 20th-century music." *Le marteau* was a surprising and revolutionary synthesis of many different streams in modern music, as well as seeming to encompass the sound worlds of modern jazz, the Balinese Gamelan, as well as traditional African and Japanese musics. As the 1950s and 1960s progressed, Boulez effortless creative confidence seemed to evaporate, though there was no slackening in his protean intellectual speculations. He flirted with electronics in Poesie pur pouroir, 1958 recording for tape and 3 orchastras.

Today, Boulez remains one of the leading exponents of 20th-century music. His compositions have made a contribution to musical culture and his advocacy of modern and postmodern music has been decisive for many.

Boulez is also a conductor, known for having directed most of the world's leading symphony orchestras and ensembles since the late fifties. Perhaps he found conducting a surrogate outlet for his increasingly stifled compositional urges. He served as music director of the New York Philharmonic from 1971 to 1977. Clarity, precision, rhythmic agility and a respect for the composers' intentions as notated in the musical score are the hallmarks of his conducting style. In 1984, he collaborated with Frank Zappa and conducted the Ensemble Intercontemporain, who performed three of Zappa's pieces. During his tenure as music director of the New York Philharmonic, he was criticized, even by members of the orchestra, for his concentration on modern repertoire. Nonetheless, Boulez's controversial "Rug" concerts of contemporary music with members of the New York Philharmonic played a significant role in "bridging" the widening gap between the New York downtown music scene with concerts of "uptown" music, directed primarily at Columbia University by a former classmate at the Paris Conservatoire and a pupil of Leibowitz, Jacques-Louis Monod. Boulez has also conducted opera productions and made several recordings of opera.

Boulez is also one of the twentieth century's most influential conductors, known for extraordinarily precise performances of contemporary works by Bartok, Ligeti, Messiaen, and Varése, among many others. In 1968 he was named Music Director of both the BBC Symphony

Orchestra and New York Philharmonic. In 1969, the Cleveland Orchestra named him Principal Guest Conductor. In 1970 French President Pompidou announced the experimental electronic music institute, Institut de Recherche et de Coordination Acoustique/Musique (IRCAM) to be under Boulez's administration, eventually causing him to withdraw from the BBC and New York posts. In the history of music only Wagner previously had been able to command patronage on this scale and expectations were high. In 1975, he formed the Ensemble Inter Contemporain, an ensemble devoted entirely to the performance of new music, including his own Repons (1980). Repons was to be Berlouz's last major original undertaking using the IRCAM set-up. He was also appointed Principal Guest Conductor of the Chicago Symphony Orchestra in 1995.

Other works of the past two decades of the 20th century have included exquisitely miniatures such as Derive 1 & 2 and further revisions of perviouis works which have made clear just how far Boulez's earlier theoretical postures were at variance with his natural leanings towards the sumptuous, the sensuous and the quintessentially French.

1) *Structures, book I* (1952) and *Structures, book II* (1961) - Two related works for two pianos. Boulez met John Cage for the first time in 1949. Though their approaches to composing were utterly different, each admired what the other had achieved and they struck up an unlikely friendship, which left an imprint on Boulez's music when he introduced elements of controlled chance into his compositions. The first, from 1952, was Boulez's last score to use serial techniques to determine every aspect of the composition – pitch, duration, dynamics, attacks – while the second book, composed nine years later, revisits the same material, but gives the players a limited choice in what to select and when. In comparison with the rigor and hard edges of its predecessor, the piano writing in Structures Book 2 is thrillingly brilliant and it makes a wonderful contrast to the cool discontinuities of Cage's pieces, with their plucked and strummed notes, percussive knockings and muffled chords.

2) *Le marteau sans maître* (*The Hammer without a Master*) (1957) - It sets the surrealist poetry of René Char for contralto and six instrumentalists. Before *Le Marteau*, Boulez had established a reputation as the composer of modernist and serialist works such as *Structures I*, *Polyphonie X*, as well as his infamously "unplayable" *Second Piano Sonata* (1989). What's most obviously novel about the music is it's scoring, featuring contralto, alto flute, viola, guitar, vibraphone, xyloriba and unpitched percussion – creating a percussive, strangely hypnotic soundworld which sometimes suggests the influence of African music. Boulez, notorious for considering his works to be always "in progress", made further, smaller revisions to *Le Marteau* in 1957. In the years that have followed, it has become Pierre Boulez's most famous and influential work. It is also a piece that could not have been written without Schoenberg's Pierrot Lunaire, four decades earlier of Webern's chamber music, or Debutty's late sonatas.

1) *Incises* (1994/2001) and *Sur Incises* (1996/1998) are two related works and Boulez's first work for solo piano since his third piano sonata of 1955–57/63. Originally written in 1994 as a test piece for the Umberto Micheli Piano Competition, it has been revised twice, most recently in 2001. It plays with contrasts of gestures and textures, for instance, repeated pitches or chords

in an even tempo interrupted by violent melodic arcs, or sparse chordal interjections without discernible rhythm over long held sonorities. *Sur Incises* followed a few years later as a two-movement work based on the material of *Incises*. This work is for 3 pianos, 3 harps, and 3 percussion parts (covering a variety of tuned percussion instruments: vibraphone, marimba, glockenspiel, steel drums, tubular bells, and crotales). Here the sounds of the piano are broken into component parts played by the harps and percussion and stretched across space as well by having the three groups spread apart in the performance space.

2) *Derive 1* (1984) *& 2* (1988, 2001 and 2006) - The origins of Dérive 1 and 2 also go back to the 1970s, to a piece that Boulez composed to mark the 70th birthday of the Swiss conductor and musical benefactor Paul Sacher. Material from that work had already formed the basis of Répons, Boulez's early 1980s foray into real-time electronics, but both Dérive pieces are purely instrumental. Dérive 1 from 1984 is a brief quintet, in which the piano leads the way, but Dérive 2, for 11 instruments, is much more substantial; Boulez has expanded it several times over the last two decades, so that the current version, completed in 2006, lasts 50 minutes. Experienced live it can seem too long, but it's a revelation in the superb performance under Daniel Kawka; the recording is close and vivid, making the music's proliferating lines and abrupt changes of direction seem all-encompassing and the ebb and flow of their inner tensions and resolutions are constantly involving.

Karlheinz Stockhausen (22 August 1928–5 December 2007) was a German composer, widely acknowledged by critics as one of the most important but also controversial composers of the 20th and early 21st centuries. Stockhausen has arguably done more to transform 20th- and 21st-century music than any other single composer: from serialism to electronic music, from aleatory to musical spatialization, from consciousness-expanding musical happenings to cycles of pieces for every day of the week and every hour of the day, from a musical mantra to some hallucinogenic Cosmic Pulses. But with Stockhausen (as Wagner and possibly Beethoven) you're dealing with a blending of myth and reality. First, there's the caricature of his music, from those who either haven't heard it or who are ideologically opposed to it. Then there's the apparent eccentricity of the man: those orange jumpers; his life with his two muses/life partners; his apparently obsessive control of his publishing rights; and not forgetting the small matter of his claims to come not from Earth but from the star Sirius – a statement that made many see him as a kind of musical-mystical crank.

Stockhausen provides more gnarly theory to get stuck in than with anyone else in music history, thanks to his own writings and the mini-industry of Stockhausen arcana and analysis. But much more than the theory or the admittedly teeming intellectual ideas, Stockhausen's music is about experience and intuition. It's about the way it feels in parts of your brain and body, parts that you may not realise you had – until you've swum in the ritualised pool of sound that is *Stimmung*, or crashed headlong into the chaotic cosmos of *Momente*, or been frazzled and transformed by any of the operas from the *Licht* cycle, which is the grandest statement of Stockhausen's cosmology.

Stockhausen wrote 370 individual works and approximately half include electronic elements. His works, composed over a period of nearly sixty years, often depart radically from musical tradition and his work is influenced by Olivier Messiaen, Edgard Varèse, and Anton Webern, as well as by film and by painters such as Piet Mondrian and Paul Klee. In addition to electronic music—both with and without live performers—his output ranged from miniatures for musical boxes through works for solo instruments, songs, chamber music, choral and orchestral music, to a cycle of seven full-length operas. His theoretical and other writings comprise ten large volumes.

His father was a schoolteacher and his mother was the daughter of a prosperous family of farmers. She played the piano and accompanied her own singing but, after three pregnancies in as many years, experienced a mental breakdown and was institutionalized in 1932 when Stockhausen was 4 years old. She died, along with 89 other people, gassed by the Nazis in May of 1941. It was generally understood that she had been a victim of the Nazi policy of killing "useless eaters." In February 1945, he saw his father for the last time, when Stockhausen was 17. His father was on military leave from the front, told his son, "I'm not coming back. Look after things." His father was was killed in action in Hungary. When his mother died, Stockhausen was 13 and when his father died he was 17. Stockhausen himself was conscripted to serve as a stretcher bearer in 1944 to service victims of the allied fire bombings. This eposed him to the brutal carnage and many times he brushed against death, himself. By the war's end, he had become a devout Christian and played jazz piano for American GI's' s to finance is schooling.

From 1947 to 1951, Stockhausen studied music and piano at the Cologne Conservatory of Music and at the University of Cologne. In 1951, Stockhausen met Belgian composer Karel Goeyvaerts at the Darmstädter School (in the Frankfort metropolitan region). Goeyvaerts had just completed studies with Olivier Messiaen in Paris and Stockhausen resolved to do likewise. He arrived in Paris in January, 1952 and began attending Messiaen's courses in aesthetics and analysis and continued with Messiaen, privately, for another year. After lecturing at the Darmstadt School (Internationale Ferienkurse für Neue Musik at Darmstadt) starting in 1953, Stockhausen gave lectures and concerts in Europe, North America, and Asia.

Performances of his music at Darmstadt were greeting mostly with shock and dismay, as audiences struggled with music that lacked any discernible melodic or rhythmic sense. Nonetheless, his early pieces, born in a climate which regarded recent history so tainted that even its art had to be rejected, were significant steps in the development of postwar music.

In August 1951, just after his first Darmstadt visit, Stockhausen began working with a form of athematic serial composition that rejected the twelve-tone technique of Schoenberg. Athematic (the literal antonym of 'thematic') meaning that each part, while indispensable to the whole, is meaningless when divorced from its context. Athematic serialism was initiated by Webern as an adaptation of Schönberg's serial technique. Still fascinated by Messiaen and Webern, Stockhausen (like Boulez) went on to advocate total serialism, although he did not long adhere to this strict doctrine. He characterized many of these earliest compositions as *punktuelle* ("punctual" or "pointist" music, commonly mistranslated as "pointillist") *Musik.* Compositions from this phase include *Kreuzspiel* (1951), the *Klavierstücke I–IV*. In many of his works, elements are played off

against one another, simultaneously and successively as in *Kontra-Punkte* ("Against Points", 1952–53). In *Gruppen* (1955–57), fanfares and passages of varying speed are occasionally flung between three full orchestras, giving the impression of movement in space. In his *Kontakte* for electronic sounds (optionally with piano and percussion) (1958–60), he achieved for the first time an isomorphism of the four parameters of pitch, duration, dynamics and timbre. However, several works from these same years show Stockhausen formulating his "first really ground-breaking contribution to the theory and, above all, practice of composition," that of "group composition." This was found in Stockhausen's works as early as 1952 and continuing throughout his compositional career. Stockhausen's unique approach is well illustrated by *Gruppen* [groups] (1957); in this piece, three separate orchestras, each with its own conductor, play simultaneously; sometimes their music coincides; sometimes they play against one another; sometimes they play antiphonally.

In the 1950s and early 1960s, Stockhausen published a series of articles that established his importance in the area of music theory. Although these include analyses of music by other composers (especially Webern) the items on compositional theory directly related to his own work are regarded as the most important. His most celebrated article is "... wie die Zeit vergeht ..." (". . . How Time Passes . . ."), first published in the third volume of *Die Reihe* (1957). In it, he expounds a number of temporal conceptions underlying his instrumental compositions *Zeitmaße*, *Gruppen*, and *Klavierstück XI*. Also in this period through to the 1970s, Stockhausen developed music concrete, electronic tape music and space music. Also see the detailed discussion of these categories under the Electoinic Music section. In the 1970s he also initiated music called New Simplicity, details of which are discussed in the New Simplicity section.

In 1968, Stockhausen composed the vocal sextet *Stimmung*, an hour-long work based entirely on the overtones of a low B-flat. In the following year, he created *Fresco* for four orchestral groups, a *Wandelmusik* ("foyer music") composition. This was intended to be played for about five hours in the foyers and grounds of the Beethovenhalle auditorium complex in Bonn, before, after, and during a group of concerts of his music. The overall project was given the title *Musik für die Beethovenhalle*.

Between 1977 and 2003, Stockhausen composed seven operas in a cycle titled *Licht: Die sieben Tage der Woche* ("Light: The Seven Days of the Week"). This apotheosis of Stockhausen's inexhaustible ambition came in 1977 when he announced this genesis of the 20th century's closest equivalent to the gigantic musical projects of Wagner. The first section was completed in 1980, with the final touches added to the final day more than twenty years later in 2002. The *Licht* cycle deals with the traits associated in various historical traditions with each weekday (Monday = birth and fertility, Tuesday = conflict and war, Wednesday = reconciliation and cooperation, Thursday = traveling and learning, etc.) and with the relationships between three archetypal characters: Michael, Lucifer, and Eve. Each of these characters dominates one of the operas (*Donnerstag* [Thursday], *Samstag* [Saturday], and *Montag* [Monday], respectively), the three possible pairings are foregrounded in three others, and the equal combination of all three is featured in *Mittwoch* (Wednesday).

After completing *Licht*, Stockhausen embarked on a new cycle of compositions from 2003 until his death in 2007. These were based on the hours of the day, entitled *Klang* ("Sound"). Twenty-one of these pieces were completed before the composer's death. The first four works from this cycle are First Hour: *Himmelfahrt* (Ascension), for organ or synthesizer, soprano and tenor (2004–2005); Second Hour: *Freude* (Joy) for two harps (2005); Third Hour: *Natürliche Dauern* (Natural Durations) for piano (2005–2006); and Fourth Hour: *Himmels-Tür* (Heaven's Door) for a percussionist and a little girl (2005). The Fifth Hour, *Harmonien* (Harmonies), is a solo in three versions for flute, bass clarinet, and trumpet (2006). The Sixth through Twelfth hours are chamber-music works based on the material from the Fifth Hour. The Thirteenth Hour, *Cosmic Pulses*, is an electronic work made by superimposing 24 layers of sound, each having its own spatial motion, among eight loudspeakers placed around the concert hall. Hours 14 through 21 are solo pieces for bass voice, baritone voice, basset-horn, horn, tenor voice, soprano voice, soprano saxophone, and flute, respectively, each with electronic accompaniment.

Stockhausen's two early *Electronic Studies* (especially the second) had a powerful influence on the subsequent development of electronic music in the 1950s and 1960s. The influence of his *Kontra-Punkte*, *Zeitmasse* and *Gruppen* may be seen in the work of many composers, including Igor Stravinsky's *Threni* (1957–58) and *Movements* for piano and orchestra (1958–59) and other works up to the *Variations: Aldous Huxley In Memoriam* (1963–64), whose rhythms "are likely to have been inspired, at least in part, by certain passages from Stockhausen's *Gruppen.*"

Jazz musicians such as Miles Davis, Cecil Taylor, Charles Mingus, Herbie Hancock, Yusef Lateef, and Anthony Braxton cite Stockhausen as an influence. Stockhausen, along with John Cage, was influential within pop and rock music as well. Frank Zappa acknowledges Stockhausen in the liner notes of *Freak Out!*, his 1966 debut with The Mothers of Invention. On the back of The Who's second LP released in the US, "Happy Jack", their primary composer and guitarist Pete Townshend, is said to have "an interest in Stockhausen." Rick Wright and Roger Waters of Pink Floyd also acknowledge Stockhausen as an influence. San Francisco psychedelic groups Jefferson Airplane and the Grateful Dead are said to have done the same; Stockhausen himself says the former band included students of Luciano Berio, and the Grateful Dead were "well orientated toward new music." The Beatles included his face on the cover of *Sgt. Pepper's Lonely Hearts Club Band*. This reflects his influence on the band's own avant-garde experiments as well as the general fame and notoriety he had achieved by that time (1967). In particular, "A Day in the Life" (1967) and "Revolution 9" (1968).

Robin Maconie finds that, "Compared to the work of his contemporaries, Stockhausen's music has a depth and rational integrity that is quite outstanding." Maconie also compares Stockhausen to Beethoven: "If a genius is someone whose ideas survive all attempts at explanation, then by that definition Stockhausen is the nearest thing to Beethoven this century has produced," and "As Stravinsky said, one never thinks of Beethoven as a superb orchestrator because the quality of invention transcends mere craftsmanship. It is the same with Stockhausen: the intensity of imagination gives rise to musical impressions of an elemental and seemingly unfathomable beauty, arising from necessity rather than conscious design."

Throughout his career, Stockhausen excited controversy. One reason for this is that his music displays high expectations about "shaping and transforming the world, about the truth of life and of reality, about the creative departure into a future determined by spirit," so that Stockhausen's work "like no other in the history of new music, has a polarizing effect, arouses passion, and provokes drastic opposition, even hatred."

- Another reason was acknowledged by Stockhausen himself in a reply to a question during an interview on the Bavarian Radio in 1960:

  I have often been reproached—especially recently—for being too candid, and through this making not a few enemies for myself—being undiplomatic.

- After student revolts in 1968, musical life in Germany became highly politicized and Stockhausen found himself a target for criticism, especially from the leftist camp who wanted music "in the service of the class struggle."

- Another controversy surrounded some of his commentary around the attack on the World Trade Center on 9-11:

  "At the press conference in Hamburg, I was asked if Michael, Eve and Lucifer were historical figures of the past and I answered that they exist now, for example Lucifer in New York. In my work, I have defined Lucifer as the cosmic spirit of rebellion, of anarchy. He uses his high degree of intelligence to destroy creation. He does not know love. After further questions about the events in America, I said that such a plan appeared to be Lucifer's greatest work of art. Of course I used the designation "work of art" to mean the work of destruction personified in Lucifer. In the context of my other comments this was unequivocal."

- He was quoted in a German newspaper as having said once: "I was educated at Sirius and want to return there, although I am still living near Cologne."

1) *Klavierstücke* (1952) constitute a series of nineteen compositions for piano. Originating as a set of four small pieces, Stockhausen later formulated a plan for a large cycle of 21 *Klavierstücke*, in sets of 4 + 6 + 1 + 5 + 3 + 2 pieces. Beginning in 1979, he resumed composing and finished eight more (for a toal of 19) but abandoned the plan for a set of 21 pieces. The pieces from 15 onward are for the synthesizer or similar electronic instruments, which Stockhausen had come to regard as the natural successor to the piano. They comprise music indicative of Stockhausen's own musical development. Composed in the order: 3, 2, 4, 1; the first four reflect his transition from "point music" (or "pointillism", where musical structure was determined atomistically, from not to note) to "group" composition, where thematic identity depends on aggregations of notes. Numbers 5 to 10 were written with what Stockhausen called "variable form" (implies greater attention to the physical act of "attacking" the notes; to such subjective playing instructions as "as fast as possible" where the player's actual style at that moment is prioritized over notation. Number 6, at nearly half an hour, is by far the longest of the *Stücke* (numbers 1, 2, 3, 4, 5, 6 and 8 are no longer than between 32 seconds and six minutes;

Klavierstück 10 is almost 28 minutes and 9 just over eleven minutes in length). *Klavierstück 11* is famously written in mobile, or polyvalent structure where the components are laid out to be played in the order chosen by the performer.

2) *Kontra-Punkte* (Counter-Points, or Against-Points) (1953) - is a composition for ten instruments which resolves contrasts among six instrumental timbres, as well as extremes of note values and dynamic levels, into a homogeneous ending texture. Stockhausen described it: "Counter-Points: a series of the most concealed and also the most conspicuous transformations and renewals—with no predictable end. The same thing is never heard twice." The first, untitled version, written in 1952–53, was a sparse-textured, "punctual" composition. This score was almost immediately rejected by the composer, who created a new version in the spring of 1953 for flute, clarinet in A, bass clarinet, bassoon, trumpet, trombone, piano (one player), harp, violin, and cello. The hyphenated title signifies a "counter-action" against the punctual style currently in vogue in the early 1950s, an action embodied in the composition itself as a process of transforming dissociated "points" into cohesive "groups" of notes and therefore from an essentially static condition to an audibly dynamic one. The title also implies a criticism of Stockhausen's own earlier composition *Punkte*, as well as of his friend Pierre Boulez's 1951 work *Polyphonie X*—a criticism for which Boulez seems to have forgiven Stockhausen.

   A 'punctual' ensemble style using ten soloists divided into six sound groups ((1) flute-bassoon, (2) clarinet–bass clarinet, (3) trumpet-trombone, (4) piano, (5) harp, (6) violin-violoncello) is transformed irregularly but steadily into a soloistic style articulated by 'groups', gradually focussing on the piano part. This version adds progressively longer insertions of denser note groups, often in single instruments, while at the same time gradually replacing more and more long notes with groups of rapid, shorter ones. This unidirectional process has been compared on the one hand to that of Maurice Ravel's *Boléro* and on the other to Haydn's "Farewell" Symphony.

   Kontra-Punkte follows in the tradition of the postwar serialist composers who adopted the sparse, sometimes austere esthetic of Anton Webern. However, Stockhausen here combines a colorful Webernian pointillistic tapestry with focused thematic development, creating a work that, while indeed "punctual," is not monotonous. The title suggests two of the work's most important elements: not only its contrapuntal texture, but also the composer's stance against (i.e., counter to) his own Punkte. The piano's part, which dominates throughout, is particularly intense; indeed, Stravinsky is said to have been fond of this work. While Kontra-Punkte is now acknowledged as having an important place in twentieth century music, its initial reception was not favorable. Stockhausen immediately earned a reputation for being hyper-intellectual, for composing music that was difficult to listen to and hard to understand. His own attempts to explain the musical and philosophical foundations for the work only served to further obscure it, and it wasn't until the 1970s that Kontra-Punkte was widely recognized for its intrinsic musical value.

3) *Gruppen* (1955/57) - for three orchestras is among the best-known compositions of Stockhausen is considered "a landmark in 20th-century music . . . probably the first work of the post-war generation of composers in which technique and imagination combine on the highest level to produce an undisputable masterpiece." A large orchestra of 109 players is divided into three orchestral units, each with its own conductor. The units are deployed in a horseshoe shape to the left, front, and right of the audience. The spatial separation was principally motivated by the compositional requirement of keeping simultaneously played yet musically separate passages distinct from one another. It also leads to some orgiastic passages in which a single musical process passes from one orchestra to another. The title refers to the work's construction in 174 units, mainly composed in what Stockhausen terms "groups"—cohesive groupings of notes unified through one or more common characteristics (dynamics, instrumental color, register, etc.). The various groups in a composition have various proportional features but they are interrelated in that the properties of one group may only be understood by comparing them in degree of relationship with the other groups. This grouping is contrasted with the "punctual" style of early Darmstadt serialism, which nevertheless also occurs in *Gruppen*, along with a third category of "collective" swarms, too dense for the listener to be able to accurately distinguish individual notes or their order of succession. Consequently, the importance of individual notes is relatively low, so that sonority, density, speed, dynamics, and direction of movement become the main features for the listener.

4) *Zyklus für einen Schlagzeuger* (Cycle for a Percussionist) (1959) - was composed as a test piece for a percussion competition at the Darmstadt Summer Courses. It quickly became the most frequently played solo percussion work, and “inspired a wave of writing for percussion.” The title of *Zyklus* is reflected in its form, which is circular and without a set starting point. The score is spiral-bound and there is no "right-side up"—it may be read with either edge at the top. The performer is free to start at any point and plays through the work either left to right, or right to left, stopping when the first stroke is reached again. In this way, it is an example of what Stockhausen calls "polyvalent" form. The instruments are arranged in a circle around the performer, in the order they are used in the score. In principle, the percussionist decides on the starting point and direction of the score only at the moment of commencing a performance (in practice this is almost universally worked out well in advance).

5) *Mikrophonie I* (1964) - *Mikrophonie* is the title given by Stockhausen to two of his compositions, written in 1964 and 1965, in which “normally inaudible vibrations . . . are made audible by an active process of sound detection; the microphone is used actively as a musical instrument, in contrast to its former passive function of reproducing sounds as faithfully as possible.” Together with Stockhausen’s immediately preceding work *Mixtur*, for 5 orchestra groups, 4 sine-wave generators, 4 ring modulators, they form a tryptych of live-electronic works, where electronic transformations are accomplished during the performance. Similar to a group of three of the composer’s works from the previous decade, *Gruppen*, *Zeitmaße*, and *Gesang der Jünglinge*, there is one work each for orchestral, chamber, and vocal forces. *Mikrophonie I*, for tamtam, 2 microphones, 2 filters, and controllers, is an example of moment form, polyvalent form, variable form, and process composition. It consists of 33 structural units, or "moments",

which can be ordered in a number of different ways, according to a "connection scheme." After an initial attempt to notate proved impractically complicated, Stockhausen decided to categorize the sounds according to their perceived qualities: "groaning, " "trumpeting, " "whirring, " "hooting," "roaring," "grating, " "chattering, " "wailing, " "sawing, " "ringing, " "choking, " "cawing, " "clacking, " "snorting, " "chirping, " "hissing, " "grunting, " "crunching, " "clinking, " "tromboning, " "scraping, " etc. Through this emphasis on subjectively perceived qualities, "For the first time a perceptual equivalent to totally organized structure has been discovered. This successful fusion of abstract theory and expression makes *Mikrophonie I* a work of singular importance."

6) *Stimmung* (1968) - for six vocalists and six microphones. It is a tonal and yet also a serial composition. The German word *Stimmung* has several meanings, including "tuning" and "mood." The word is the noun formed from the verb *stimmen*, which means "to harmonize, to be correct" and related to *Stimme* (voice). The primary sense of the title "implies not only the outward tuning of voices or instruments, but also the inward tuning of one's soul." *Stimmung* is in just intonation. It is composed using what the composer calls moment form and consists of 51 sections (called "moments"). It is "the first major Western composition to be based entirely on the production of vocal harmonics. An additional innovation is "the unique kind of rhythmic polyphony which arises from the gradual transformation/assimilation of rhythmic models." In 29 of the sections, 'magic names' are called out. These are the names of gods and goddesses from many cultures—Aztec, aboriginal and Ancient Greek, for instance—and have to be incorporated into the character of the model. The order of the rhythmic models and the distribution of the poems and "magic names" are decided by the performers, but the sequence of pitches in the 51 moments is fixed. Stockhausen himself attributes a month spent walking among ruins in Mexico as his primary influence, *Stimmung* recreating that 'magic' space. On the other hand, he also describes the snow on frozen Long Island Sound in as "the only landscape I really saw during the composition of the piece." Some writers have seen the possible influence of Stockhausen's student La Monte Young and his mid-1960s drone music.

7) *Aus den sieben Tagen* (From the Seven Days) (1968) - is a collection of 15 text compositions by Stockhausen, in reaction to a personal crisis and characterized as "Intuitive music"—music produced primarily from the intuition rather than the intellect of the performer(s). Often regarded as meditation exercises or prayers, all but two of these texts nonetheless describe in words specific musical events. Despite the manner of notation, Stockhausen's approach remains essentially serial.

   In his cycle, Stockhausen attempts to find *musical* answers to such fundamental questions regarding the conditions of a harmonious interplay of spirit and matter, which correspond to his serial process thinking and to the maxims of the experimental production of the sound material by composing temporally ordered pulses. As a composer he wants to mediate between the extremes rather than to just follow the preconception of a linear development from the fragmentary and dissonant to the whole and harmonious. Each text focuses on one or several of Stockhausen's main artistic concerns, such as extending the listener's perceptions of

time and pitch, reconciling opposing tendencies, or shifting awareness from one perceptual area to another.

8) *Inori* (1973/74) Adorations for One or Two Soloists with Orchestra*. Inori* is a meditative work. The word *inori* (祈り) in Japanese means "prayer, invocation, adoration." It is like an opera with only one character and no singing, only thoughts visible as gesture and audible as reciprocally modulated sound. The solo part is composed as a melody and is theoretically performable by a melody instrument; however the relationship between solo gesture and orchestra response is so complete that the solo melody is invariably interpreted in silence by a dancer-mime, employing a vocabulary of gestures drawn from a variety of religious practices. Although the score specifies that the soloist part may be performed in any number of ways, including any kind of melodic instrument, to date this has always been performed by mimes, using a set of prayer gestures. Because audiences at early performances were mistakenly perceiving the soloist as improvising to the music, Stockhausen decided to use two parallel soloists in order to make it obvious that the gestures are fully composed.

9) *Licht* (Light) (1977 and 2003) - subtitled "The Seven Days of the Week," is a cycle of seven operas. The composer described the work as an "eternal spiral" because "there is neither end nor beginning to the week." *Licht* consists of 29 hours of music. The *Licht* opera project, originally titled *Hikari* (光 , Japanese for "light"), originated with a piece for dancers and Gagaku orchestra commissioned by the National Theatre in Tokyo. The cycle also draws on elements from the Judeo-Christian and Vedic traditions. The title of *Licht* owes something to Sri Aurobindo's theory of "Agni" (the Hindu and Vedic fire deity), developed from two basic premises of nuclear physics, and Stockhausen's conception of the *Licht* superformula also owes a great deal to Sri Aurobindo's category of the "supramental." It is centered around three main characters, Michael, Eve, and Lucifer. Many of the events in the opera refer to *The Urantia Book*, which Stockhausen purchased in New York during his New York Philharmonic concert in 1971. In his analysis of the cycle, Gregg Wager states that "There can be little doubt … that Stockhausen's first and foremost inspiration for Lucifer's rebellion … originated from *the Urantia Book* … specific terms such as "Local System", "Planetary Princes" or Paradise Sons" can only be from *the Urantia Book.*"

According to Stockhausen biographer Michael Kurtz, "Michael, Lucifer and Eve are, for Stockhausen, more than theatrical figures. They are the expression of a world beyond, to which terrestrial eyes are blind, but which is given concrete form by *The Urantia Book* and other sources." The musical structure of the cycle is based on three counterpointed main melodies (or "formulas"), each associated with a central character. Each of the three central characters is also associated with an instrument: Michael with the trumpet, Eve with the basset horn, and Lucifer with the trombone.

Stockhausen's conception of opera is more akin to the tableaux of the Renaissance masque and its hermetic cosmology than to traditional dramatic and climactic structures typical of the past two centuries. Because of its circular structure, in which the seven days of the week must be

passed through again and again, a moral critique is rendered impossible, since the themes of the days perpetually return as permanent features of reality. *Licht* is not therefore primarily about the conflict between good and evil, but rather is a drama of latent tensions concerning a dispute about different conceptions of reality. The cycle is constructed modularly. Not only is each of the seven operas a self-sufficient work, but so are the individual acts, scenes, and—in some cases—portions of scenes. There are seven operas, each named for a day of the week, whose subject matter reflects attributes associated in traditional mythologies with each day. These attributes in turn rest on the seven planets of Antiquity (and their associated deities) from which the day-names are derived. The cycle has neither a "beginning" nor an "ending"; like the days of the week, each opera leads to the next one, so that the conflict of Tuesday is followed by the reconciliation of Wednesday and the mystical union of Sunday prepares the way for the new life of Monday. In this way there is neither end nor beginning to the week. It is an eternal spiral.

- **Socialist Realism**

  Russian music has undergone significant alterations in technique, style, instrumentation, as well as their accompanying ideologies during the socialist realist period. These changes involved political interests to empower music as a tool for enhancing and encouraging nationalism. Particularly, the ways in which the USSR utilized music to disseminate their ideologies is not only complex, but incredible. Composers of this time, particularly Rachmaninoff, Prokofiev, Shostakovich, and Stravinsky have all contributed to both a nationalistic foundation as well as a facilitating the rise of the proletariat in Soviet Russia for nearly sixty years. Throughout this period, political turmoil and the threat of German invasion loomed undoubtedly in Russian society. Coupled with the anxiety of German invasion, Russia's dictator Joseph Stalin (in office from 1922-1953) reinforced the complete leveling of class structure and attempted to defragment social hierarchies in a radical fashion. During his reign, he manifested and spread Russian ideals and nationalisms through the country promoting Russian history, national heroes, as well as language in order to establish a strong nationalistic front. This fixation on nationalism led to radical cultural changes influencing music, art, and literature. The goal of cultural mediums (art, music, and literature) was the furtherance of Soviet ideologies. Before Stalin came to power, a movement in Russia known as "formalism" had a significant impact during 1915 until the end of 1930. Composers during this period were focused on the abstract, expressionistic styles in order to convey surreal concepts and ideas.

  Once the decree had passed to eliminate any traces of formalism in Russian music, several proletarian organizations arose to serve the nations' new goals. One of these organizations were called the Russian Association of Proletarian Musicians (RAPM). Established in 1922, the RAPM's goal was simply to publish compositions that "satisfied the demands of mass, amateur musical activities [and were] conducive not only to political agitation, but to general activization of […] human energy with the aim of utilizing it for the needs of Soviet Construction." Their manifesto consisted of simply one goal "strive above all to reflect the rich, full-blooded psychology of the proleteriat in their music." The concept of socialist Realism was developed by the Congress of Soviet Writers in 1934, which was subsequently approved by Stalin and his policy-makers. Stalin

essentially demanded that all art must showcase an individual's struggle toward socialism in order to achieve a satisfactory life. In order to achieve this goal, art was meant to provide direct, straight-forward messages of optimism and realism intent on establishing a socialist order as a beneficial aspect in an individual's life. Unfortunately, the consequence of such totalitarian policy included the abolishment of avant-garde, surrealistic, and abstract art including literature that did not meet the requirements of the Congress. Those who did not conform to these socialist realist policies were either executed or forced to work to death in Stalin's labour camps.

Praised as the forerunner of socialist realism in 1934, *Lady Macbeth of Mtsensk* composed by Dmitri Shostakovich was, two years later, accused of "enjoying success with the borgeoisie audiences abroad" and later condemned for his formalist compositions. Shostakovich was so deeply upset by Pravda's review that he stopped composing operas and ballet's altogether. In addition to this, Stalin's Great Terror also occurred during this period in which Stalin's regime would systematically eliminate all possible resistance fronts in an attempt to silence opposition. As a result, some of Shostakovich's friends and composers were forced to work in labour camps or were executed. Shostakovich's compositional career grew steadfastly complicated once he was denounced for formalism. Despite these complications, Shostakovich, fearing for his life, continued to make social realist compositions in order to secure the lives of those he loved. Shostakovich's work revealed exceptional use of atonality and chromaticism. Unfortunately, Shostakovich's work began to take an aire of conservativism following his two condemnations for his formalist techniques. Another composer who suffered the same fate is Sergei Prokofiev. Prokofiev lived a great deal of his life abroad in order to avoid the revolutions and radical governmental revisions that would soon make life in Russia unbearable. After achieving recognition throughout the world as one of the leading composers, he returned back to Russia in 1935 despite the movement of political and cultural policies to more rigorous and almost extreme state. Much like the fate that Shostakovich fell under, so did Prokofiev for exercising "formalist tendencies." The result was either a forced adaptation to socialist realist methods and musical composition or death. Knowing that his survival meant cooperating with Soviet policies, Prokofiev created piano sonatas #6, 7, 8 including operas #82-44 with war themes that are now known as "War Sonatas." Hidden metaphorical and illusionary ways, Prokofiev embedded anti-Soviet material carefully such that Stalin would not realize.

- **Spectral Music**

  Spectral music (or spectralism) is a compositional technique developed in the 1970s, using computer analysis of the quality of timbre in music. The spectral approach originated in France in the early 1970s and techniques were developed, and later refined, primarily at IRCAM, Paris, with the Ensemble l'Itinéraire, by composers such as Gerard Grisey and Tristan Murail. Murail has described spectral music as an aesthetic rather than a style, not so much a set of techniques as an attitude – that "music is ultimately sound evolving in time." The term "spectral music" was coined by Hugues Dufourt in an article written in 1979 and first published two years later. Dufourt, a trained philosopher and composer, was the author of several important articles on spectral music.

The "panoply of methods and techniques" used are secondary, being only "the means of achieving a sonic end." The composition of spectral music is concerned with timbral structures, especially when decisions about timbre are mathematically informed by Fourier analysis using the computer-efficient fast Fourier transform (FFT). FFTs can be run to provide graphs that illustrate details about the timbral structure of a sound which might not be initially apparent to the ear. Also, when creating sounds with computers, FFTs can be used to transform the timbre of a sound in various ways, such as by generating hybrid timbres through a collection of processes known as cross-synthesis, or applying a room reverberation to a sound by means of convolution. If the music is to be performed by live musicians (as opposed to being played electronically via computer through speakers), then these novel effects must be translated into an extended traditional notation that can be read and executed by a human being with some additional training. The fine gradations of pitch are usually rounded off to the nearest quarter-tone or even eighth-tone—dividing the octave into 24 or 48 discrete pitches, instead of the usual twelve of Western music. Temporal aspects and dynamics are subject to similarly fine controls, creating additional notational hurdles.

Gérard Grisey (June 17, 1946 – November 11, 1998) was a French composer of contemporary music, born in Belfort, France. He studied at the Trossingen Conservatory in Germany from 1963 to 1965 before entering the Conservatoire de Paris, where he studied with Olivier Messiaen from 1965–67 and again from 1968–72, working with Henri Dutilleux at the Ecole Normale in 1968. He also studied electroacoustics with Jean-Etienne Marie in 1969, composition with Iannis Xenakis and György Ligeti at the Darmstädter Ferienkurse in 1972 and acoustics with Emile Leipp at the Faculté des Sciences in 1974. Other studies were undertaken in the summer of 1969 at the Accademia Chigiana in Siena and in Darmstadt with Karlheinz Stockhausen. After several academic appointments in Euope, he left for the University of California, Berkeley, where he was appointed professor of theory and composition (1982-1986). Grisey died at the age of 52 in Paris on 11 November 1998 due to a ruptured aneurysm.

Among his works, most of which were commissioned by famous institutions and international instrumental groups, are *Dérives* 1974, *Jour, contre-jour* 1979, *Tempus ex machina* 1979, *Les chants de l'amour* 1984, *Talea* 1986, *Le temps et l'écume* 1989, *Le noir de l'etoile* 1990, *L'icône paradoxale* 1994, *Les espaces acoustiques* (a cycle consisting of six pieces), *Vortex temporum* 1995 and *Quatre chants pour franchir le seuil* 1998.

Grisey's music is often considered to belong to the genre of spectral music, which he is credited with founding along with fellow composer Tristan Murail, although he later disowned the label in interviews and writings. Nonetheless, he spent much of his career exploring the spectrum of tone colour between harmonic overtones and noise. In addition, he was fascinated by musical processes which unfold slowly and he made musical time a major element of many of his pieces. He expressed the opinion that: "We are musicians and our model is sound not literature, sound not mathematics, sound not theatre, visual arts, quantum physics, geology, astrology or acupuncture."

The 1999 premiere of French composer *Gérard Grisey's Quatre Chants pour Franchir le Seuil* – Four Songs for Crossing the Threshold – was one of those concerts that went straight into the history books of contemporary music. The performance, by the London Sinfonietta, conducted by Grisey's

friend George Benjamin, was never supposed to be a memorial for Grisey, but his sudden death at the age of 52 the previous November meant that these death-haunted songs would be his last completed work, music that imaginatively explores the existential inter-zone between life and death. There are apocalyptic visions (listen to the start of the fourth song, The Death of Humanity, to hear the world implode in a black hole of percussion writing), reflective resignation and spectral stasis in these songs. But more than anything, you're left with a sense of benign acceptance. That's true above all in the ethereal intertwining of the flute melody and the soprano voice in the final Berceuse movement, music which realises the post-cataclysmic serenity of a passage from the Epic of Gilgamesh, with its open-ended final words, "I looked at the sea's horizon, the world …"

Terrible coincidence as it was, the sense of expressive catharsis in that performance of *Quatre Chants* was only partly to do with Grisey's own death; much more, it was down to the astonishing musical space that this piece conjured in its unflinching exploration of existence. For Grisey, every single sound was a living, breathing entity; it was only logical that he should want to explore what happens at the end of the sonic life-cycle as well as the start. But in retrospect, the "threshold" that the Four Songs crossed wasn't only the event horizon that separates existence from non-existence, it was the door to a new kind of music that Grisey tragically would not have time to explore.

The principles of spectralism are easy to describe, and like all good musical cliches, there's more than a grain of truth in the term. The essential idea is the creation of a new way of structuring the parameters of music by exploring the harmonic series, the overtones that are part of every musical note. If you analyse the complexity of the harmonic series of a single note played on a particular instrument – say a low E on a trombone – you find a teeming world of musical possibility. For Grisey, the possibilities of this approach were microscopic yet infinite. By atomising sounds in this way, he could structure large pieces of music and spans of time, such as *Partiels*, that were based on an intense process of listening to an individual sound, exploding the smallest of sonic phenomena, a single note, on to the largest possible scale. The harmonic implications of the overtone series also allowed Grisey to create a hierarchy within his micro-tonally enriched musical world, which gives his music a monumental dynamism. So much for a decidedly spectral sketch of the theory, but let's get stuck into what Grisey wanted us to get stuck into, which is the stuff of sound, the sounds his music makes.

An important part of Grisey's music is that he can slow down time so that you feel you're inside, say, a stretched-out gong stroke for 20 minutes and he can also speed it up with surreal velocity. (Grisey himself spoke of the difference between the sort of super-slow time experienced by whales as opposed to the frenetic time-scale of insects.) Listen to the opening of *Vortex Temporum* and the way in which flourishes of notes in the ensemble spin out of the orbit of the piano music. Or, for another kind of mobile time, hear how Grisey makes a solo contrabass clarinet swing, slide and stride with mythic abandon in his evocation of *Anubis-Nout*, a piece written for the Canadian composer Claude Vivier, who was murdered in 1983. Or, for another surreal manipulation of musical time, listen to the funereal bass drums of *Stèle*, a piece for percussion that manages to be almost anti-rhythmic with its slides, scrapes and tollings.

Grisey's mastery of a gigantic spectrum of sound, texture and feeling makes his music some of the most special of the late 20th century. *Le Temps et l'Écume*, scored for chamber orchestra, percussionists and synthesisers, is a transcendence of the Grisey archetypes of scintillating harmony and orchestral colour and it gives you that disturbing-but-seductive sensation of going through a mirror, the way it seems to connect the small scale of its details and surfaces – a skirl of woodwind sound, a trumpet solo – with an all-encompassing dimension of cosmic, coruscating chords and orchestral textures. It's not just those *Quatre Chants*: Grisey's music is always crossing thresholds of sound and space, of slowness and speed, of time at its grandest and most fleeting. To hear Grisey's music is to have adventures in the stuff of sound that will change your ears for ever.

1) *Partiels* (1975) is a defining piece of Spectral music by Grisey whose opening is derived from an electronic sonogram analysis of the attack of a low E2 on a trombone. This spectrum is orchestrally synthesized through the assignation of different instruments to each partial in such a way as to harmonically and gesturally model the dynamic temporal evolution of the attack. Many second and third generation spectral composers cite *Partiels* as causing their initial interest in the spectral outlook. Thus the opening features the successive entrance of lower partials with the fifth and ninth partials being louder than lower ones, including the fundamental and all higher partials gradually trailing off in amplitude. Each partial is approximated to the nearest quarter tone. A low bass reinforces the fundamental an octave lower on the open E1 string which is central to *Les Espaces Acoustiques* cycle of which *Partiels* is a part. The piece also makes use of sum and difference tones to create harmonies.

2) *Transitoires* (1981) – (part of the six cycle piece called: *Les espaces acoustiques)* was a significant event for anyone in the country interested in contemporary music. Its music takes place on a grand scale and the work is one that first announced Grisey as a figure of no small significance and in the possession of an extraordinary imagination. The (*Les espaces acoustiques)* work is a cycle of six pieces, composed over an eleven year period from 1974 to 1985. To the fore throughout the work – as the title suggests – is an exploration of sound in its different physical attributes, an exploration achieved through the innovative combination of acoustic technique and aural effect. For example, the opening of the third piece in the cycle – *Partiels* for 18 players (discussed above) – has the ensemble simulate the low E note of a trombone, by having each instrument in the ensemble playing one of the frequencies of that note's natural harmonic spectrum (those frequencies that go together to make up the character of its sound). The result, become a justly famous moment in contemporary music, is a strange and beautiful harmony, one that characterises much of the sonority of *Les espaces acoustiques*. It typifies Grisey's approach of 'no longer composing with notes but with sounds', an approach that, although meticulously theoretical in genesis, is instinctively understandable to the ear as producing a sonority of great depth and originality.

   The slow, winding crescendo at the beginning of the colossal *Transitoires* leads to a gradually expanding drone being built up by the players. The orchestration is awesome, striking rich and giant chords that range across its total breadth and which were prompted by the repeated notes of a lone double bass, the orchestral mass emphatically simulating the harmonic sound of

the double bass's being plucked and bowed. One has the impression here of a work scaling the heights of anything that might previously have issued from the classical symphonic tradition and doing so in a daring and innovative way with its unique approach to harmony and process.

3) *Le Temps oe l"Ecume* (1989) for chamber orchestra - Grisey's work displays an approach to music and its compositional material that is primarily marked by the twin consideration of time and duration. These factors, implicit to all sonic material, were previously left out of those systems fashioned by the dominant compositional schools of thought in Europe coming after the dissolution of common practice tonality. The renewed focus on harmonic structure in spectral music brings with it a return to those factors of consonance and dissonance, of tension and relaxation, that were the defining features of tonal form. *Les Temps et l'Écume* ('Time and Foam') begins with low, ominous repetitions in the bass instruments and trembling in the percussion, repeated waves of which building up, their expansion then drawing out the other higher instrumental sounds, extending in scope until the waves they describe begin to cohere into sharp, harsh harmonies, the impression made being of slow, elongated motion underwater, or as shown to the senses through a film of fog. The 'foam' that is produced on these waves is harmonically based and sears through the bass rumblings that precede and produce it. The process enacted here is easily observable and provides the formal definition of the piece, the patient description of an object in sound, a sound object. Melody intrudes around nine minutes in with smaller waves occurring, the same wave at a higher tempo. The overall timbral mastery on display in this composition particularly impresses, the chamber orchestra cohering in a rich and complex formal tableau, enabling the presentation of that process in which harmonies and melodic fragments act as figures and forces, swept along in a tide. Debussy, mentioned in Grisey's programme notes, is a natural reference here, in the structuring use of timbre. Varèse is another, and around thirteen minutes in on the recording there is what appears to be a deliberate homage – a series of fractured, repeated same-pitch interjections swapped between different instruments before another introduction of swirling chords kicks in, this time parallax to some upward-climbing clarinets in a faster tempo. The object throughout this work is the concurrence of different times and tempi.

4) *Vortex Temporum* (1996) For piano and strings – As described by Grisey, himself: The title *Vortex Temporum* indicates the beginning of the system of rotation, repeated arpeggios and their metamorphosis in various transient passages. The problem here is to enter the depths of my recent research on the use of the same material at different times. The three basic forms are the original event - a sinusoidal wave - and two continuous events, an attack with or without resonance as well as a sound held with or without crescendo. There are three various spectra: harmonics, 'stretched disharmonics' and 'compressed disharmonics'; three different tempos: basic, more or less expanded, and more or less contracted. The piano used in the work is tuned a quarter tone lower, which changes the sound of the instrument, at the same time facilitating the integration within microintervals, which are essential in this work. In *Vortex Temporum* the three archetypes described above revolve around one fragment and the other in temporary intervals, differing among themselves as among people (the tempo of speech and breathing), whales (spectral time of sleeping rhythms) and birds or insects (extremely

contracted time, whose contours become obliterated). Thanks to this imagined microscope, the notes become sound, a chord becomes a spectral complex, and rhythm transforms into a wave of unexpected duration. Treating waiting time this way, linking the time of the audience with the time of the work, refers to some of my earlier works, for example Dérives, Partiels or Jour, Contrejour. Overthrowing the material in favor of pure endurance is a dream, which I have been carrying out for many years. *Vortex Temporum* is perhaps only a history of the arpeggio in time and space - from the point of view of our ears.

Quarte Chants pour Franchir le Seuil (1998) for soprano and 15 insturments. "Four chants to cross the threshold" is a 41-minute set of five songs, featuring soprano voice. It was Grisey's last composition before his untimely death at the age of 52. The music slides woozily, using microtones and the exotic sounding instruments. A description of Grisey's spectralist method: "[b]iomorphous composition means: sound not as a rigid, parametrical, classifiable object, but as a living microorganism whose own momentum becomes the model of musical creation in all dimensions." It is important though, that with Grisey, his music does not fall prey to labelling. Grisey in an interview, speaks of how it was taken over by a few musicologists, reviewers and musicians, as a label. "Spectralism is not a system. It's not a system like serial music or even tonal music. It's an attitude. It considers sounds.." says Grisey. Grisey is not restricted by any system.

This piece is literally and figuratively a haunting. The texts are reinforced by the shadowy orchestration, the subtle spectral techniques, the decay of the sound of the voice and especially in the final piece with its references to music of the past, this makes a haunting elegy to Grisey as a meditation on his crossing of the threshold. The relationship between the text and the linearity (or non-linearity) of musical progression is most absorbing, the orchestration is equisite and his musical ideas are always developing, reappearing and becoming "one" with the listener. As with the best music, the variety of expression Grisey evokes is admirable. In lots of music, one can often find the expression lies either side of the barrier between violent and peaceable, or other such contrasts. However, Grisey, like Bach, always provides an elusive yet utterly idiosyncratic answer, finding the balance to reconcile such differences, into an immutable force.

The lyrics for the four songs include: First, "Death of the angel," using a poem by Christian Guez-Ricord; Second, "Death of civilization," uses fragments from Egyptian sarcophagi of the Middle Empire; Third, "Death of the voice," uses a short passage from the Greek poetess Erinna, who lived around 350 B.C., and died at age 19; and Fourth, "Death of mankind," uses a longer passage from "The Epic of Gilgamesh," an apocalyptic scenario that results in "all mankind [being] returned to clay." The first movement typifies right off all that is so great about Grisey's music. As it opens, the instrumentalists play a tempo canon, but one with a suppleness beyond anything in neoclassicism. The soprano then enters, intoning a text after Guez Ricord's "Les heures a la nuit." When the soprano approaches the climactic word "mort," the ensemble then imitates the voice, as Grisey has distributed its spectrum among the instruments. The second movement is a slow one with a sparse scoring, where the soprano reads from a catalogue of

Egyptian tomb inscriptions, not only highlighting how death has been a perennial human concern, but revealing with haunting effect that time has erased most of these inscriptions. The third movement is short, containing only a few lines from Erinna. The fourth song, the longest, sets an extract from Gilgamesh, but here the writing for percussion takes center stage for much of the movement. Between the songs there are brief interludes consisting of silence, noise (rustling of papers), or low-dynamic tones which offer some respite from the intense texts.

This is a moving piece, one that is sure to make the listener confront his own mortality. While the spectralists succeeded in returning the avant-garde to richer harmonies, there is often the stereotype that they were still bespectacled labrats. Grisey's work here shows that bold acoustic explorations can be matched to a devasting emotional impact.

Tristan Murail (born March 11, 1947 in Le Havre, France) is a French composer associated with the "spectral" technique of composition. Following early studies in economics and classical and North African Arabic, Murail studied composition with Olivier Messiaen at the Paris Conservatoire from 1967 to 1972. He taught computer music at the Paris Conservatoire and composition at IRCAM in Paris, where he assisted in the development of the Patchwork composition software. In 1973 he was a founding member of the *Ensemble l'Itinéraire*. Since 1997 he has been a professor of composition at Columbia University in New York City until 2011. Murail is associated with the "spectral" technique of composition, which involves the use of the fundamental properties of sound as a basis for harmony, as well as the use of spectral analysis, FM, RM, and AM synthesis as a method of deriving polyphony. Major pieces by Murail include large orchestral pieces such as *Gondwana*, *Time and Again* and, more recently, *Serendib* and *L'esprit des dunes*. Other pieces include his *Désintégrations* for 17 instruments and tape, *Mémoire/Erosion* for French horn and nine instruments *Ethers* for flute and ensemble, *Winter Fragments*, for flute, clarinet, piano, violin, cello and electronics as well as *Vampyr!* for electric guitar. Murail also composed a set of solo pieces for various instruments in his cycle *Random Access Memory*, of which the sixth, *Vampyr!*, is a rare classical piece for electric guitar. *Vampyr!* is one of several works in Murail's catalogue that do not employ spectral techniques. Rather, in the performance notes, the composer asks the performer to play the piece in the manner of guitarists in the popular and rock traditions, such as Carlos Santana and Eric Clapton.

- **Tape Loop**
  In music, tape loops are loops of magnetic tape used to create repetitive, rhythmic musical patterns or dense layers of sound. Contemporary composers such as Halim El-Dabh, Steve Reich, Terry Riley, Pierre Schaeffer, and Karlheinz Stockhausen used tape loops to create phase patterns, rhythms, textures, and timbres. In a tape loop, sound is recorded on a section of magnetic tape and this tape is cut and spliced end-to-end, creating a circle or loop which can be played continuously, usually on a reel-to-reel machine. By accelerating the speed of a loop to a sufficient degree (e.g., 1,280 times faster), a sequence of events originally perceived as a rhythm becomes heard as a pitch, and variation of the rhythm in the original succession of events produces different timbres in the accelerated sound. Simultaneous playing of tape loops to create phrase patterns and rhythms was developed and initially used by musique concrète and tape music composers, and was most

extensively utilized by Steve Reich for his "phasing" pieces such as "Come Out" (1966) and "It's Gonna Rain" (1965), and by Karlheinz Stockhausen in *Gesang der Jünglinge* (1955–56) and *Kontakte* (1958–60). Stockhausen also used the technique for live performance in *Solo* (1965–66). In the late 1940s, Pierre Schaeffer used special phonograph discs with a *sillon fermé* (closed groove) to repeat segments of sounds in his *musique concrète* studio in Paris. When magnetic tape technology became available, he replaced this technique with tape loops, where such segments could either be simply repeated, or could undergo electronic transformation during repetition.

- **Totalism**

  Totalism is a term for a style of art music that arose in the 1980s and 1990s as a developing response to minimalism—parallel to postminimalism, but generally among a slightly younger generation, born in the 1950s. In the early 1980s, many young composers began writing music within the static confines of minimalism, but using greater rhythmic complexity, often with two or more tempos (or implied tempos) audible at once. The style acquired a name around 1990, when it became evident to composers working in New York City that a number of them—John Luther Adams, Glenn Branca, Rhys Chatham, Kyle Gann, Michael Gordon, Arthur Jarvinen, Diana Meckley, Ben Neill, Larry Polansky, Mikel Rouse, Evan Ziporyn, among others—were employing similar types of global tempo structures in their music.

  The term *totalist* refers to the aims of the music, in trying to have enough surface rhythmic energy, but also to contain enough background complexity. There is also an echo in the term of serialism's "total organization," here drawn not from the 12-tone row, but from Henry Cowell's theories about using the same structuring devices for rhythm that have been traditionally used for pitch. For instance, the traditional ratio between frequencies of a major second interval is 9:8, and 9-against-8 is an important tempo contrast in many totalist pieces, achieved by having some instruments play dotted eighth-notes while others play triplet half-notes. In practice, totalist music can either be consonant, dissonant, or both, but generally restricts itself to a small number of sonorities within a given piece.

  Mikel Rouse (born **Michael Rouse** in Saint Louis, Missouri, United States, January 26, 1957) is an American composer. He has been associated with a Downtown New York movement known as totalism, and is best known for his operas, including *Dennis Cleveland*, about a television talk show host, which Rouse wrote and starred in.

  Rouse writes music that is idiomatically and stylistically indebted to popular music, yet he uses complex rhythmic techniques derived from world music, the avant-garde and minimalism, including a technique he calls "counterpoetry" in which separate lines of a song sung by separate characters or groups are set to phrases of differing lengths (such as 9 and 10 beats) and often played over a background time signature of 4/4. Metric sleight of hand, simple in concept but often complex in perception, is common. One of the basic rhythms of Rouse's opera *Failing Kansas* is a five-beat isorhythm (rhythmic ostinato) against which either the harmony or drum pattern often reinforces the four- or eight-beat meter.

The son of a Missouri state trooper, Rouse grew up in Poplar Bluff, in the state's Bootheel region. He studied painting and film at the Kansas City Art Institute as well as music at the University of Missouri–Kansas City. When the avant-garde rock band Talking Heads played in Kansas City in 1978, Rouse's band Tirez Tirez was the only local band progressive enough to open for them. Tirez Tirez relocated to New York City in 1979 and continued performing until 1987. Meanwhile, Rouse absorbed African rhythmic techniques from A. M. Jones's *Studies in African Music*, and studied Schillinger technique with Jerome Walman, one of the few "Certified" Schillinger Teachers in America; both influences came to inform his music. In addition to Tirez Tirez he formed a new ensemble, Mikel Rouse Broken Consort, to work out his new rhythmic language in the context of rock-based instrumentation, making him one of the first composers to notate intricate music for rock group. Rouse's association with Ben Neill and Kyle Gann in New York in the early 1990s led to the recognition of a new rhythmic complexity in minimalist-based music that came to be referred to as totalism.

Frustrated by the lack of institutional support for Downtown music, Rouse has made an ambitious bid for composer self-sufficiency. In 1995 he premiered a one-man "opera" *Failing Kansas*, based on the same story as Truman Capote's *In Cold Blood*, and in 2000 he produced an entire film with music by himself, rather pointedly titled *Funding*. In an opposite direction, he premiered a technologically innovative opera called *Dennis Cleveland* at the Kitchen in 1996, based on a talk show format and with some of the singers/actors spread out among the audience, though with a dense libretto drawn from John Ralston Saul's critique of Western society in the latter's book *Voltaire's Bastards*.

- **Total Serialism**

The revolution which swept through Western classical music in the aftermath of WWII is inextricably associated with the small German town of Darmstadt, whose summer music school acted for a few years during the 1950s as the ideological headquarters of the new avant-garde movement, the so-called Darmstadt School. Darmstadt's leading protagonists were Pierre Boulez, Karlheinz Stockenhausen and Luigi Nono, three composers who – despite the different musical paths they would subsequently follow – found themselves briefly united in their common search of a musical language which would break decisively with the past, establishing a fresh method and aesthetic.

The groups point of departure was Arnold Schoenberg's system of 12-note composition, though their guiding inspiration was not Schoenberg (whose music they regarded as being too bound up with the essentially retrospective German tradition) but the austere work of his pupil Anton Webern, in whose pared-down musical language and obsessive quest for forms of quasi-mathematical purity they saw the germ of a new aesthetic. The 12-note system took as its starting point the idea that a piece of music could be based on a fixed sequence of musical pitches, obviating the need to work with traditional harmonies. Taking up a suggestion first suggested by Messiaen in his piano piece *Mode de valeurs et d'intensities*, Boulez argued that just as pitch could be numerically ordered, so too could every other compositional element, including rhythm, dynamics and register – this producing a kind of automatic music which would permanently break free from then European musical inheritance. Boulez went on to expound this method, know as total

serialism, in his seminal *Structures* for two pianos (1951), whose fist movement represents the style at its purest, while Stockenhausen, in works such as *Kontrapunkt* and *Zeitmasse* and Nono in Il *Conato Sospese*, followed his lead.

In fact, total serialism proved to be more a gateway into a new way of writing and thinking about music than an end in itself. Boulez himself immediately tired of the robotic automatism of Structures, while both Stockenhausen and Nono soon began to explore highly idiosyncratic paths in which electronics, politics and utopian world music became the major themes. Even so, serialsm of one kind or another remained the dominant aesthetic of the 1950s and 1960s – even elderly Igor Stravinsky, so long the figurehead of the anti-Schoenberg forces, converted to the serial cause (and produced in works such as Movements and the Requiem Canticles, some of its most successful compositions). And although few of the erudite and abstruse works of the period have found much favor with the concert-going public, the serial idea – with its belief that music is not only an art but a kind of science – has continued to influence the work of many younger composers, not least the alumni of Boulez's own musical research center IRCAM, among them Kaija Saariaho and Magnus Lingberg.

One short comment about Milton Babbitt's contribution to the postwar serialism movement: many feel he was unjustly slighted by his European counterparts in the Darmstadt School. After having established the theoretical foundations in his **1946** "dissertation" *The Function of the Set Structure in the Twelve-Tone System,* Babbitt composed *Three Compositions for Piano* in **1947**. There the duration was already "serially" controlled. In **1948** he turned his attention to other elements of music in *Composition for Four Instruments*. In Darmstadt, the first totally-serial work, Olivier Messiaen's *Mode de valeurs et d'intensités* was composed in the summer of **1949**, while Boulez's *Structures* for two pianos and Karlheinz Stockhausen's *Kreuzspiel* did not appear until **1951** or after.

Milton Byron Babbitt (May 10, 1916 – January 29, 2011) was an American composer, music theorist, and teacher. He is particularly noted for his serial and electronic music. Babbitt was born in Philadelphia and was Jewish. He was raised in Jackson, Mississippi and began studying the violin when he was four but soon switched to clarinet and saxophone. Early in his life he was attracted to jazz and theater music. He was making his own arrangements of popular songs at seven and, when he was thirteen, he won a local songwriting contest. Babbitt's father was a mathematician and it was mathematics that Babbitt intended to study when he entered the University of Pennsylvania in 1931. However, he soon left and went to New York University instead, where he became interested in the music of the composers of the Second Viennese School and went on to write a number of articles on twelve tone music, including the first description of combinatoriality and a serial "time-point" technique. After receiving his bachelor of arts degree from New York University College of Arts and Science in 1935 he studied under Roger Sessions, first privately and then later at Princeton University. At the university, he joined the music faculty in 1938 and received one of Princeton's first Master of Fine Arts degrees in 1942. During the Second World War, Babbitt divided his time between mathematical research in Washington, D.C., and Princeton, where he became a member of the mathematics faculty from 1943 to 1945.

In 1948, Babbitt returned to Princeton University's music faculty and in 1973 became a member of the faculty at the Juilliard School in New York. In 1958, Babbitt achieved unsought notoriety through an article in the popular magazine *High Fidelity*. Babbitt said his own title for the article was "The Composer as Specialist" (but "The editor, without my knowledge and—therefore—my consent or assent, replaced my title by the more 'provocative' one: 'Who Cares if You Listen?' a title which reflects little of the letter and nothing of the spirit of the article"). More than 30 years later, he commented: "For all that the true source of that offensively vulgar title has been revealed many times, in many ways, even—eventually—by the offending journal itself, I still am far more likely to be known as the author of 'Who Cares if You Listen?' than as the composer of music to which you may or may not care to listen."

Babbitt later became interested in electronic music. He was hired by RCA as consultant composer to work with their RCA Mark II Synthesizer at the Columbia-Princeton Electronic Music Center (known since 1996 as the Columbia University Computer Music Center) and in 1961 produced his *Composition for Synthesizer*. Babbitt was less interested in producing new timbres than in the rhythmic precision he could achieve using the Mark II synthesizer, a degree of precision previously unobtainable in live performances. Although he would eventually shift his focus away from electronic music, the genre that first gained for him public notice, by the 1980s, Babbitt wrote both electronic music and music for conventional musical instruments, often combining the two. *Philomel* (1964), for example, was written for soprano and a synthesized accompaniment (including the recorded and manipulated voice of Bethany Beardslee, for whom the piece was composed) stored on magnetic tape.

Babbitt, an influential composer, theorist and teacher, wrote music that was intensely rational and for many listeners impenetrably abstruse. He had a lively sense of humor despite the reputation for severity that his music fostered, sometimes referred to himself as a maximalist to stress the musical and philosophical distance between his style and the simpler, more direct style of younger contemporaries like Philip Glass, Steve Reich and other Minimalist composers. It was an apt description. Although he dabbled early in his career with theater music, his *Composition for Orchestra* (1940) ushered in a structurally complex, profoundly organized style that was rooted in Arnold Schoenberg's serial method.

But Mr. Babbitt expanded on Mr. Schoenberg's approach. In Mr. Schoenberg's system, a composer begins by arranging the 12 notes of the Western scale in a particular order called a tone row, or series, on which the work is based. Mr. Babbitt was the first to use this serial ordering not only with pitches but also with dynamics, timbre, duration, registration and other elements. His methods became the basis of the "total serialism" championed in the 1950s by Pierre Boulez, Luigi Nono and other European composers.

Mr. Babbitt began exploring this path in *Three Compositions for Piano* (1947) and *Composition for Four Instruments* (1948), and adhered to it through his entire career. He composed prolifically for chamber ensembles and instrumental soloists and created a substantial and varied catalog of vocal works. He also composed a compact but vital group of orchestral pieces and an enduring series of works for synthesizer, often in combination with voices or acoustic instruments. Mr. Babbitt liked

to give his pieces colorful titles, often with puns ("The Joy of More Sextets," for example), and said that in selecting titles he tried to avoid both the stale and the obscure. Yet when Mr. Babbitt explained his compositional approach in essays, lectures and program notes, they could be as difficult to understand as his music. He often said in interviews that every note in a contemporary composition should be so thoroughly justified that the alteration of a tone color or a dynamic would ruin the work's structure. And although colleagues who worked in atonal music objected when their music was described as cerebral or academic, Mr. Babbitt embraced both terms and came to be regarded as the standard-bearer of the ultrarational extreme in American composition.

That reputation was based in part on the High Fidelity article in February 1958, "Who Cares if You Listen?" The headline was often cited as evidence of contemporary composers' disregard for the public's sensibilities and Mr. Babbitt objected that it had been added by an editor, without his permission. But whatever his objections, the article did argue that contemporary composition was a business for specialists, on both the composing and listening end of the transaction and that the general public's objections were irrelevant. "Why refuse to recognize the possibility that contemporary music has reached a stage long since attained by other forms of activity?" Mr. Babbitt wrote. "The time has passed when the normally well-educated man without special preparation could understand the most advanced work in, for example, mathematics, philosophy and physics. Advanced music, to the extent that it reflects the knowledge and originality of the informed composer, scarcely can be expected to appear more intelligible than these arts and sciences to the person whose musical education usually has been even less extensive than his background in other fields."

Listeners who overlooked Mr. Babbitt's philosophical abstractions and thorny analyses — who simply sat back and listened, rather than trying to understand his harmonies and structural processes — often discovered works of great expressive variety. These range from the intense emotionality of *"A Solo Requiem"* (1976) to the shimmering surfaces and eerie pictorialism of *"Philomel"* (1964) and the poetic flow of some of the solo piano works, which have the spirit of advanced jazz improvisations. Indeed, in his *"All Set"* (1957), for winds, brasses and percussion, he achieved a freely improvisatory feeling within an atonal harmonic context.

Although the music he went on to write rejected the easily assimilated tonal language of popular music, Mr. Babbitt retained a fondness for theater songs all his life and was said to have an encyclopedic knowledge of the style. "If you know anybody who knows more popular music of the '20s or '30s than I do, I want to know who it is," he said in an Internet interview with the New Music Box in 2001. "I grew up playing every kind of music in the world, and I know more pop music from the '20s and '30s, it's because of where I grew up. We had to imitate Jan Garber one night; we had to imitate Jean Goldkette the next night. We heard everything from the radio; we had to do it all by ear. We took down their arrangements; we stole their arrangements; we transcribed them, approximately. We played them for a country club dance one night and for a high school dance the next." In 1946, Mr. Babbitt tried his hand at a musical, a collaboration with Richard Koch and Richard S. Childs called "Fabulous Voyage." The work was not produced, but in 1982 Mr.

Babbitt published three of its songs, which showed a firm command of the idiom and considerable charm.

But Mr. Babbitt set his course toward serious avant-garde composition in 1932, when he played through the scores of some Schoenberg piano music that an uncle had brought home from Europe. In 1938, Sessions invited Mr. Babbitt to join the Princeton composition faculty, and Mr. Babbitt succeeded him as the William Shubael Conant Professor of Music in 1965. Mr. Babbitt was also on the faculty of the Juilliard School, where he began teaching in 1973, as well as at the Salzburg Seminar in American Studies; the Berkshire Music Center at Tanglewood; the new-music academy at Darmstadt, Germany; and the New England Conservatory in Boston. A series of six lectures he gave at the University of Wisconsin was published as "Words About Music" in 1987. Mr. Babbitt's articles about music were published as "The Collected Essays of Milton Babbitt" by Princeton University Press in 2003.

During World War II, Mr. Babbitt taught mathematics at Princeton and undertook secret research in Washington. He also evolved his extended form of serialism during these years. But immediately after the war he pursued a split musical path, exploring his rigorous serial style in his abstract concert works, on one hand, and completing "Fabulous Voyage" and a film score, "Into the Good Ground" (1949). In the 1950s Mr. Babbitt was hired as a consultant by RCA, which was developing the most sophisticated electronic-music instrument of the time, the Mark II synthesizer. The Mark II became the centerpiece of the new Columbia-Princeton Electronic Music Center in 1959. Mr. Babbitt was one of the center's first directors, along with Sessions, Vladimir Ussachevsky and Otto Luening. Mr. Babbitt's earliest electronic pieces, *Composition for Synthesizer* (1961) and *Ensembles for Synthesizer* (1964), were as intensely organized as his instrumental music had been. Indeed, he saw the synthesizer as a kind of liberation from the physical limitations of living performers. "The medium provides a kind of full satisfaction for the composer," he said in a 1969 interview with The New York Times. "I love going to the studio with my work in my head, realizing it while I am there and walking out with the tape under my arm. I can then send it anywhere in the world, knowing exactly how it will sound." The early synthesizer pieces have become classics, but Mr. Babbitt quickly moved forward, writing works in which electronic soundtracks accompanied live performers. Particularly striking are the vocal works *"Vision and Prayer"* (1961) and *"Philomel,"* and *"Reflections"* (1975) for piano and tape. He stopped composing music with an electronic component in 1976, when the Columbia-Princeton studio was vandalized, and it was decided that restoring it would be too expensive.

Mr. Babbitt's orchestral music is so exceedingly complex that both the New York Philharmonic, in 1969, and the Philadelphia Orchestra, in 1989, postponed premieres when the available rehearsal time proved insufficient. He did, however, have champions among top-flight conductors, the most notable being James Levine, who in 1967, as a 24-year-old fledgling conductor, led the premiere of Mr. Babbitt's "*Correspondences*." Mr. Levine later recorded Mr. Babbitt's music with the Chicago Symphony Orchestra and commissioned his *Second Piano Concerto* for the Met Orchestra and Mr. Taub in 1998. He regularly included Mr. Babbitt's chamber works on his Met Chamber Ensemble

programs, and in 2004 Mr. Babbitt dedicated his *Concerti for Orchestra* to Mr. Levine and the Boston Symphony Orchestra, which commissioned it.

1) *Composition for Orchestra* (1940)
2) *Three Compositions for Piano* (1947)
3) *Composition for Four Instruments* (1948)
4) *All Set* (1957),
5) *Composition for Synthesizer* (1961)
6) *Vision and Prayer* (1961)
7) *Philomel* (1964)
8) *Ensembles for Synthesizer* (1964),
9) *Correspondences* (1967)
10) *Reflections* (1975)
11) *A Solo Requiem* (1976)
12) *Second Piano Concerto* (1998)
13) *Concerti for Orchestra* (2004)

- **"World Music" influence**

World music is a musical category encompassing many different styles of music from around the world, including traditional music, neotraditional music and music where more than one cultural tradition intermingle. World music's inclusive nature and elasticity as a musical category pose obstacles to a universal definition, but its ethic of interest in the culturally exotic is encapsulated in *Roots* magazine's description of the genre as "local music from out there". The term was popularized in the 1980s as a marketing category for non-Western traditional music. Globalization has facilitated the expansion of world music's audiences and scope. It has grown to include hybrid subgenres such as world fusion, global fusion, ethnic fusion and worldbeat. The term has been credited to ethnomusicologist Robert E. Brown, who coined it in the early 1960s at Wesleyan University in Connecticut, where he developed undergraduate through the doctoral programs in the discipline. To enhance the process of learning, he invited more than a dozen visiting performers from Africa and Asia and began a world music concert series. The term became current in the 1980s as a marketing/classificatory device in the media and the music industry. There are several conflicting definitions for world music. One is that it consists of "all the music in the world", though such a broad definition renders the word virtually meaningless. The term also is taken as a classification of music that combines Western popular music styles with one of many genres of non-Western music that are also described as folk music or ethnic music. However, world music is not exclusively traditional folk music. It may include cutting edge pop music styles as well. Succinctly, it can be described as "local music from out there", or "someone else's local music." It is a very nebulous term with an increasing number of genres that fall under the umbrella of world music to capture musical trends of combined ethnic style and texture, including Western elements.

World music may incorporate distinctive non-Western scales, modes and/or musical inflections, and often features distinctive traditional ethnic instruments, such as the kora (West African harp), the steel drum, the sitar or the didgeridoo.

Music from around the world exerts wide cross-cultural influence as styles naturally influence one another and in recent years world music has also been marketed as a successful genre in itself. Academic study of world music, as well as the musical genres and individual artists associated with it appear in such disciplines as anthropology, folkloristics, performance studies and ethnomusicology.

Examples of popular forms of world music include the various forms of non-European classical music (e.g. Japanese and chinese koto music, Indian raga music, Tibetan chants), Eastern European folk music (e.g. the village music of the Balkans), Nordic folk music and the many forms of folk and tribal music of the Middle East, Africa, Asia, Oceania, Central and South America and Indonesian music. The Breton musician Alan Stivell pioneered the connection between traditional folk music, modern rock music and world music with his 1972 album *Renaissance of the Celtic Harp*.

The broad category of world music includes isolated forms of ethnic music from diverse geographical regions. These dissimilar strains of ethnic music are commonly categorized together by virtue of their indigenous roots. Over the 20th century, the invention of sound recording, low-cost international air travel and common access to global communication among artists and the general public has given rise to a related phenomenon called "crossover" music. Musicians from diverse cultures and locations could readily access recorded music from around the world, see and hear visiting musicians from other cultures and visit other countries to play their own music, creating a melting pot of stylistic influences.

While communication technology allows greater access to obscure forms of music, the pressures of commercialization also present the risk of increasing musical homogeneity, the blurring of regional identities and the gradual extinction of traditional local music-making practices.

Toru Takemitsu (October 8, 1930 – February 20, 1996) was a Japanese composer and writer on aesthetics and music theory. Largely self-taught, Takemitsu possessed consummate skill in the subtle manipulation of instrumental and orchestral timbre. He is famed for combining elements of oriental and occident philosophy to create a sound uniquely his own and for fusing opposites together such as sound with silence and tradition with innovation. He composed several hundred independent works of music, scored more than ninety films and published twenty books.

Takemitsu was born in Tokyo on October 8, 1930; a month later his family moved to Dalian in the Chinese province of Liaoning. He returned to Japan to attend elementary school, but his education was cut short by military conscription in 1944 (at the age of 14). Takemitsu described his experience of military service at such a young age, under the Japanese Nationalist government, as "... extremely bitter." Takemitsu first became conscious of Western classical music (which was banned in Japan during the war) during his military service, in the form of a popular French Song ("Parlez-moi d'amour") which he listened to with colleagues in secret, played on a gramophone

with a makeshift needle fashioned from bamboo. During the post-war U.S. occupation of Japan, Takemitsu worked for the U.S. Armed Forces, but was ill for a long period. Hospitalised and bed-ridden, he took the opportunity to listen to as much Western music as he could on the U.S. Armed Forces network. While deeply affected by these experiences of Western music, he simultaneously felt a need to distance himself from the traditional music of his native Japan. He explained much later, that for him, Japanese traditional music "always recalled the bitter memories of war." His dislike for Japanese music became associated with militaristic and nationalistic cultural ideals. Nevertheless, Takemitsu incorporated some idiomatic elements of Japanese music in his very earliest works, perhaps unconsciously. One unpublished set of pieces, *Kakehi* ("Conduit"), written at the age of 17, incorporates the *ryō*, *ritsu* and *insen* scales throughout. When Takemitsu discovered that these "nationalist" elements had somehow found their way into his music, he was so alarmed that he later destroyed the works.

Despite an almost complete lack of musical training and by taking inspiration from what little Western music he had heard, Takemitsu began to compose in earnest at the age of 16: "... I began [writing] music attracted to music itself as one human being. Being in music I found my raison d'être as a man. After the war, music was the *only* thing. Choosing to be in music clarified my identity."

In 1948, Takemitsu conceived the idea of electronic music technology, or in his own words: to "bring noise into tempered musical tones inside a busy small tube." During the 1950s, Takemitsu had learned that in 1948: "a French [engineer] Pierre Schaeffer invented the method(s) of *musique concrète* based on the same idea as mine. I was pleased with this coincidence." In 1951, Takemitsu was a founding member of the anti-academic *Jikken Kōbō* (*"experimental workshop"*): an artistic group established for multidisciplinary collaboration on mixed-media projects, who sought to avoid Japanese artistic tradition. The performances and works undertaken by the group introduced several contemporary Western composers to Japanese audiences.

In the late 1950s, chance brought Takemitsu international attention: his *Requiem* for string orchestra, was heard by Igor Stravinsky in 1958 during his visit to Japan. (The Japanese broadcasting network, NHK, had organised opportunities for Stravinsky to listen to some of the latest Japanese music; when Takemitsu's work was put on by mistake, Stravinsky insisted on hearing it to the end.) At a press conference later, Stravinsky expressed his admiration for the work, praising its "sincerity" and "passionate" writing. Stravinsky subsequently invited Takemitsu to lunch for whom it was an "unforgettable" experience. Soon after Stravinsky returned to the U.S., Takemitsu received a commission from the Koussevitsky Foundation which, he assumed, had come as a suggestion from Stravinsky to Aaron Copland. For this he composed *Dorian Horizon*, (1966), which was premièred by the San Francisco Symphony Orchestra, conducted by Copland.

During his time with Jikken Kōbō, Takemitsu came into contact with the experimental work of John Cage. When the composer Toshi Ichiyanagi returned from studies in America in 1961, he gave the first Japanese performance of Cage's *Concert for Piano and Orchestra*. This left a "deep impression" on Takemitsu and encouraged him to use indeterminate procedures and graphic-score notation. In these works each performer is presented with cards printed with coloured circular patterns which

are freely arranged by the performer to create "the score." Takemitsu was also quite enamored with the music of the Vienese School composers.

Cage's influence of indeterminacy, in which performers are given a degree of choice in what to perform, was particularly used in works such as *November Steps*, in which musicians playing traditional Japanese instruments were able to play in an orchestral setting with a certain degree of improvisational freedom. However, he also employed a technique that is sometimes called "aleatory counterpoint" in his well-known orchestral work *A Flock Descends Into the Pentagonal Garden* and in the score of *Arc II: i Textures* (1964) for piano and orchestra, in which sections of the orchestra are divided into groups and required to repeat short passages of music at will. In these passages the overall sequence of events is, however, controlled by the conductor, who is instructed about the approximate durations for each section, and who indicates to the orchestra when to move from one section to next.

Although the immediate influence of Cage's procedures did not last in Takemitsu's music—*Coral Island*, for example for soprano and orchestra (1962) shows significant departures from indeterminate procedures partly as a result of Takemitsu's renewed interest in the music of Anton Webern—certain similarities between Cage's philosophies and Takemitsu's thought remained. For example, Cage's emphasis on timbres within individual sound-events and his notion of silence "as plenum rather than vacuum," can be aligned with Takemitsu's interest in *ma*. Furthermore, Cage's interest in Zen practice seems to have resulted in a renewed interest in the East in general and ultimately alerted Takemitsu to the potential for incorporating elements drawn from Japanese traditional music into his composition:

> I must express my deep and sincere gratitude to John Cage. The reason for this is that in my own life, in my own development, for a long period I struggled to avoid being "Japanese," to avoid "Japanese" qualities. It was largely through my contact with John Cage that I came to recognize the value of my own tradition.

For Takemitsu, as he explained later in a lecture in 1988, one performance of Japanese traditional music stood out:

> One day I chanced to see a performance of the Bunraku puppet theater and was very surprised by it. It was in the tone quality, the timbre, of the futazao shamisen, the wide-necked shamisen used in Bunraku, that I first recognized the splendor of traditional Japanese music. I was very moved by it and I wondered why my attention had never been captured before by this Japanese music.

When, from the early 1960s, Takemitsu began to "consciously apprehend" the sounds of traditional Japanese music, he found that: "the logic of my compositional thought[,] was torn apart", and nevertheless, "hogaku [traditional Japanese music ...] seized my heart and refuses to release it". In particular, Takemitsu perceived the sound of a single stroke of the biwa or single pitch breathed through the shakuhachi, could "so transport our reason because they are of extreme complexity ... already complete in themselves."

Thereafter, he resolved to study all types of traditional Japanese music, paying special attention to the differences between Eastern and Western musical traditions, in an attempt to "bring forth the sensibilities of Japanese music that had always been within [him]." This was no easy task, since in the years following the war, traditional Japanese music was largely overlooked and ignored: only one or two "masters" continued to keep their art alive, often meeting with public indifference.

From the 60s on, Takemitsu's musical project would be to combine elements of Japanese music with the western modernism he loved so much. The blend is apparent in pieces such as *November Steps*, composed for biwa (the Japanese lute he studied intensively), shakuhachi and orchestra. The effect is more profound than a fuzzy fusion of styles; Takemitsu uses the timbre and texture of the two Japanese instruments to make the whole orchestra breathe and glow with gossamer lightness.

The real substance of Takemitsu's Japanese heritage can't be reduced to an instrument, a color or even a harmony. There's something more fundamental about his understanding of music; something that informs his work whether he's writing for solo piano, a film score (he wrote music for more than 100 movies), a string quartet or a concerto. It's something expressed by the Japanese word "ma", which suggests the concept of a void that isn't empty, an absence that is really a presence, a space between things that is full of energy. It's a principle that underpins Japanese gardens, with which Takemitsu often compared his music. "My music is like a garden, and I am the gardener. Listening to my music can be compared with walking through a garden and experiencing the changes in light, pattern and texture." And yet it's also a way of thinking that is by no means exclusive to Takemitsu in contemporary music; it suggests the same circular, non-hierarchical sense of structure and time that composers from Anton Webern to Pierre Boulez, György Ligeti to Steve Reich have explored. Takemitsu explains:

> Just one sound can be complete in itself, for its complexity lies in the formulation of *ma*, an unquantifiable metaphysical space (duration) of dynamically tensed absence of sound. For example, in the performance of *nō*, the *ma* of sound and silence does not have an organic relation for the purpose of artistic expression. Rather, these two elements contrast sharply with one another in an immaterial balance.

The idea of a meaningful void is worth keeping in mind when listening to music Takemitsu wrote in the last two decades of his life. His pieces are rarely long (*From Me Flows What You Call Time* is among the longest, at around half an hour), they are seldom fast and rarely overtly demonstrative – but they do weird things with time. Listen to his piano concerto, *Riverrun,* or *Quatrain* or his violin concerto *Far Calls*.

In 1967, Takemitsu received a commission from the New York Philharmonic Orchestra, to commemorate the orchestra's 125th anniversary, for which he wrote *November Steps* for *biwa*, *shakuhachi*, and orchestra. Initially, Takemitsu had great difficulty in uniting these instruments from such different musical cultures in one work. *Eclipse* for biwa and shakuhachi (1966) illustrates Takemitsu's attempts to find a viable notational system for these instruments, which in normal circumstances neither sound together nor are used in works notated in any system of Western staff notation. The first performance of *November Steps* was given in 1967, under Seiji

Ozawa. Despite the trials of writing such an ambitious work, Takemitsu maintained: "that making the attempt was very worthwhile because what resulted somehow liberated music from a certain stagnation and brought to music something distinctly new and different." The work was distributed widely in the West when it was coupled as the fourth side of an LP release of Messiaen's *Turangalîla Symphony*.

In 1972, Takemitsu, accompanied by Iannis Xenakis, Betsy Jolas, and others, heard Balinese gamelan music in Bali. The experience influenced him on a largely philosophical and theological level. For those accompanying Takemitsu on the expedition, who: "... could not keep their composure as I did before this music - it was too foreign for them to be able to assess the resulting discrepancies with their logic," the experience was without precedent. For Takemitsu, however, by now quite familiar with his own native musical tradition, there was a relationship between: "the sounds of the gamelan, the tone of the *kapachi*, the unique scales and rhythms by which they are formed and Japanese traditional music which had shaped such a large part of my sensitivity." In his solo piano work *For Away,* a single, complex line is distributed between the pianist's hands, which reflects the interlocking patterns between the metallophones of a gamelan orchestra.

A year later, Takemitsu returned to the instrumental combination of shakuhachi, biwa and orchestra, in the less well known work *Autumn* (1973). The significance of this work is revealed in its far greater integration of the traditional Japanese instruments into the orchestral discourse; whereas in *November Steps*, the two contrasting instrumental ensembles perform largely in alternation, with only a few moments of contact. Takemitsu expressed this change in attitude:

> But now my attitude is getting to be a little different, I think. Now my concern is mostly to find out what there is in common ... *Autumn* was written after *November Steps*. I really wanted to do something which I hadn't done in *November Steps*, not to blend the instruments, but to integrate them.

By this time, Takemitsu's incorporation of traditional Japanese (and other Eastern) musical traditions with his Western style had become much more integrated. Takemitsu commented, "There is no doubt ... the various countries and cultures of the world have begun a journey toward the geographic and historic unity of all peoples ... The old and new exist within me with equal weight."

By 1970, Takemitsu's reputation as a leading member of avant-garde community was well established and during his involvement with Expo '70 in Osaka, he was able to meet more of his Western colleagues, including Karlheinz Stockhausen.

Critical examination of the complex instrumental works written during this period for the new generation of "contemporary soloists" reveals the level of his high-profile engagement with the Western avant-garde, in works such as *Voice* for solo flute (1971), *Waves* for clarinet, horn, two trombones and bass drum (1976), *Quatrain* for clarinet, violin, cello, piano and orchestra (1977). Experiments and works that incorporated traditional Japanese musical ideas and language continued to appear in his output and an increased interest in the traditional Japanese garden

began to reflect itself in works such as *In an Autumn Garden* for gagaku orchestra (1973) and *A Flock Descends into the Pentagonal Garden* for orchestra (1977).

The influence of Olivier Messiaen on Takemitsu was already apparent in some of Takemitsu's earliest published works. By the time he composed *Lento in Due Movimenti*, (1950), Takemitsu had already come into possession of a copy of Messiaen's *8 Préludes* (through Toshi Ichiyanagi) and the influence of Messiaen is clearly visible in the work, in the use of modes, the suspension of regular metre, and sensitivity to timbre. Throughout his career Takemitsu often made use of modes from which he derived his musical material, both melodic and harmonic among which Messiaen's modes of limited transposition to appear with some frequency. In 1975, Takemitsu met Messiaen in New York, and during "what was to be a one-hour 'lesson' [but which] lasted three hours ... Messiaen played his *Quartet for the End of Time* for Takemitsu at the piano", which, Takemitsu recalled, was like listening to an orchestral performance. Takemitsu responded to this with his homage to the French composer, *Quatrain*, for which he asked Messiaen's permission to use the same instrumental combination for the main quartet, cello, violin, clarinet and piano (which is accompanied by orchestra). As well as the obvious similarity of instrumentation, Takemitsu employs several melodic figures that appear to "mimic" certain musical examples given by Messiaen in his *Technique de mon langage musical.*

Takemitsu frequently expressed his indebtedness to Claude Debussy, referring to the French composer as his "great mentor". As Arnold Whittall puts it:

> Given the enthusiasm for the exotic and the Orient in these [Debussy and Messiaen] and other French composers, it is understandable that Takemitsu should have been attracted to the expressive and formal qualities of music in which flexibility of rhythm and richness of harmony count for so much.

For Takemitsu, Debussy's "greatest contribution was his unique orchestration which emphasizes colour, light and shadow ... the orchestration of Debussy has many musical focuses." He was fully aware of Debussy's own interest in Japanese art, (the cover of the first edition of *La mer*, for example, was famously adorned by Hokusai's *The Great Wave off Kanagawa*). For Takemitsu, this interest in Japanese culture, combined with his unique personality and perhaps most importantly, his lineage as a composer of the French musical tradition running from Rameau and Lully through Berlioz in which colour is given special attention, gave Debussy his unique style and sense of orchestration.

During the composition of *Green* (*November Steps II*, for orchestra, 1967: "steeped in the sound-color world of the orchestral music of Claude Debussy") Takemitsu said he had taken the scores of Debussy's *Prélude à l'Après-midi d'un Faune* and *Jeux* to the mountain villa where both this work and *November Steps I* were composed. For Oliver Knussen, "the final appearance of the main theme irresistibly prompts the thought that Takemitsu may, quite unconsciously, have been attempting a latterday Japanese *Après-midi d'un Faune*". Details of orchestration in *Green*, such as the prominent use of antique cymbals and *tremolandi* harmonies in the strings, clearly point to the influence of Takemitsu's compositional mentor, and of these works in particular.

Takemitsu's changing stylistic trends from the late 1970s into the 1980s, have been described as "an increased use of diatonic material [... with] references to tertian harmony and jazz voicing," which do not, however, project a sense of "large-scale tonality." Many of the works from this period have titles that include a reference to water: *Toward the Sea* (1981), *Rain Tree* and *Rain Coming* (1982), *riverrun* and *I Hear the Water Dreaming* (1987). Takemitsu wrote in his notes for the score of *Rain Coming* that "... the complete collection [is] entitled "Waterscape" ... it was the composer's intention to create a series of works, which like their subject, pass through various metamorphoses, culminating in a sea of tonality." Throughout these works, the S-E-A motive features prominently and points to an increased emphasis on the melodic element in Takemitsu's music that began during this later period.

Pedal notes played an increasingly prominent role in Takemitsu's music during this period, as in *A Flock Descends into the Pentagonal Garden*. In *Dream/Window*, (orchestra, 1985) a pedal D serves as anchor point, holding together statements of a striking four-note motivic gesture which recurs in various instrumental and rhythmic guises throughout. Very occasionally, fully fledged references to diatonic tonality can be found, often in harmonic allusions to early- and pre-20th-century composers—for example, *Folios* for guitar (1974), which quotes from J. S. Bach's *St Matthew Passion*, and *Family Tree* for narrator and orchestra (1984), which invokes the musical language of Maurice Ravel and American popular song. (He revered the *St Matthew Passion*, and would play through it on the piano before commencing a new work, as a form of "purificatory ritual".)

Toward the end of his life, Takemitsu had planned to complete an opera, a collaboration with the novelist Barry Gifford and the director Daniel Schmid, commissioned by the Opéra National de Lyon in France. He was in the process of publishing a plan of its musical and dramatic structure but was prevented from completing it by his death at 65. He died of pneumonia on February 20, 1996, while undergoing treatment for bladder cancer .

In a memorial issue of *Contemporary Music Review*, Jō Kondō wrote: "Needless to say, Takemitsu is among the most important composers in Japanese music history. He was also the first Japanese composer fully recognized in the west and remained the guiding light for the younger generations of Japanese composers." In the foreword to a selection of Takemitsu's writings in English, conductor Seiji Ozawa writes: "I am very proud of my friend Toru Takemitsu. He is the first Japanese composer to write for a world audience and achieve international recognition."

1) *November Steps* (1967) – For Soloist and orchestra - is a musical composition for the traditional Japanese musical instruments, shakuhachi and biwa, and western orchestra. The work was commissioned by the New York Philharmonic on the occasion of its 125th anniversary and premiered in November 1967 by the orchestra under the direction of Seiji Ozawa. In his early career, Takemitsu had been reluctant to make use of traditional Japanese music in his compositions, as he said this music "always recalled the bitter memories of war." He began experimenting with traditional Japanese instruments in the early 1960s. Takemitsu's first concert composition for traditional Japanese musical instruments was *Eclipse* (1966). When Seiji Ozawa

played Leonard Bernstein a tape of *Eclipse*, Bernstein suggested combining the instruments in a composition with the western orchestra. Of the title to *November Steps*, Takemitsu offered two explanations. Taking a literal view of the title, he wrote, "It was performed in November and to me that project represented a new step: thus, I titled the work *November Steps*." He further explained, "In Japanese music, *danmono* are the equivalent of western variations and the word *dan* means step. My 'November Steps' are a set of eleven variations."

During the composition of *November Steps*, Takemitsu secluded himself to a mountain villa, taking with him the scores to Debussy's *Prelude to the Afternoon of a Faun* (1894) and *Jeux* (1912). At first intending unite the Japanese and the western musical instruments in the composition, he came to the decision early on that the differences between the two musical traditions were too vast to overcome. On the brink of abandoning the project, he instead decided to make the difference between the two traditions a theme of the work. Takemitsu later wrote, "It might well be that as a composition it would fail, but I completed the work in order to show as great a difference between the two traditions without blending them." Following this line of thought, Takemitsu stated that he did not attempt to integrate the Japanese and western sounds, but to display them in juxtaposition to one another, thereby emphasizing their differences. Nevertheless, the work does present correspondences between the two sounds. The plucking of the biwa with the plectrum is echoed in the orchestra by percussive effects on the strings. The shakuhachi's breath effects are echoed by clusters and glissandi in the strings. In this way, Takemitsu creates a harmony between the two instrumental bodies while maintaining their unique sound characteristics.

The performers of the New York Philharmonic were openly skeptical of playing with the two Japanese instruments, however, after hearing the first extended passage for the biwa and shakuhachi, concerns began to wane. Shouts of "Bravo!" came from the orchestra after the end of the first rehearsal. The first performance received compliments from Leonard Bernstein, Krzysztof Penderecki, Aaron Copland and other prominent musicians. Takemitsu expressed the view the positive reception of the work was proof that if a sound has value it will appeal to all people, not just to particular nationalities. In 1970 *November Steps* also had the distinction of being the only Japanese-composed music performed at Expo '70 when Ozawa conducted it in Suita, Osaka, Japan.

The process of writing *November Steps* and its success, resulted in a new direction for Takemitsu's music. Takemitsu wrote that the effort in writing the piece, "somehow liberated music from a certain stagnation and brought to music something distinctly new and different." One of the ways in which the work changed Takemitsu's music was in a less traditional approach to musical form, which was replaced with a "stream of sound." *Green* (1967), composed for orchestra at the same time as *November Steps*, is more conventional, shows the influence of the two Debussy scores in a more direct way than does *November Steps*. In contrast, *November Steps* does not adhere to traditional western concepts of musical form, but takes the view that each sound is the focus of attention.

2) *A Flock Descends into the Pentagonal Garden* (1977) For orchestra - This beautifully titled composition for orchestra was inspired by a dream in which the composer saw a flock of white

birds, led by a single black bird swirling around and then descending into a pentagonal or star-shaped garden. The garden, however, turned out to be the star on the back of artist Marcel Duchamp's head in the famous photograph by Man Ray. In Takemitsu's musical encoding or symbolism, the black bird leader is represented by the tone F sharp. The other birds are represented in pentatonic scales generated from each tone of the initial F sharp pentatonic: thus there is one five-note scale each on A flat, on B flat, C sharp, and E flat. The relationship between these scales (often presented as woodwind chords sounding like the ancient Japanese mouth organ called the sho) is original, like branches of branches on a tree, or successive ripples within ripples in a pond. The further the scale notes diverge from the initial F sharp, the greater is the activity in the writing to get them to gravitate back to that initial tone. Takemitsu described the F sharp sounding out "constantly in the manner of a drone." A whimsical wind solo (bird theme) against a lovely sustained cluster opens the work; then a deeply ominous chord builds up to a frightening level. Lushly harmonized, lyrical melodies (bird and garden themes) float like clouds. Silvery glissandi whistle by. Booming bass tones create a surreal storm. The flight of the birds is again depicted by sensuous melodies surrounded by trilling figures and cries from the winds. Steely non-vibrato chords suggest a metallic garden, while bell-like textures and hard plucked harp strings and multiple airy glissandi are added in. The sequence of playful clarinet (bird theme) to rich strings (garden theme) to deep bass accents is repeated, and begun again; the harmonic series is reminiscent of passages in Alban Berg's opera Lulu. On the next repetition, the series resolves to an exquisite chord across the full range of the orchestra.

3) *Riverrun* (1984) - For Soloist and orchestra commissioned by the Los Angeles Philharmonic. *"Riverrun, past Eve and Adam's, from swerve of shore to bend of bay, brings us by a* commodius vicus *of recirculation back to Howth Castle and Environs."* So opens the hermetically closed novel *Finnegans Wake* by James Joyce, a work that was to have a large influence on several of the post-World War II generation from Europe to Japan, especially Toru Takemitsu. Takemitsu used other word phrases from this treasure trove of neologism to title three other works of a Joycean inspiration to form a tetrad of "Wakean" works. At the time of its composition *riverrun* was a product of Takemitsu's contemplation of water as a compositional metaphor for a more porous harmonic river able to carry with its current not only the inevitable famous mid-20th-century 'dissonances' just able to keep their heads above swirling waters, but also earlier modalities and textures largely attributable to Debussy and Olivier Messiaen, which increasingly manifested themselves in his work from this point until his death. "The music flows in the form of a musical tributary derived from a certain main current, wending its way through the scenery of night towards the sea of tonality," Takemitsu wrote. "The motif, and the intervals of a major seventh and a minor third, almost like simple symbols, gradually disperse and always give birth to a variety of melodic sub-species. While they sometimes do confront one another, they do not necessarily represent a dialectic development, but continually keep occurring, disappearing and recurring."

4) *From Me Flows What You Call Time* (1990) For soloist and orchestra - It was a stroke of luck for Takemitsu the day Igor Stravinsky accidentally played the wrong side of a phonograph record and was struck by the 25-year-old's intense *Requiem for Strings* (1957). International attention (and prizes) quickly ensued and the career of a giant in late-20th-century music was born. Initially

rebelling against the music of his homeland, Takemitsu fell in love with "music of the West" during his time as a soldier in World War II. It seems he gained a real appreciation of traditional Japanese music (as well as philosophy) through his friendship with American composer John Cage, whose use of Zen principles and "roll of the dice" methods of composition Takemitsu would incorporate into his own work. In fact, Takemitsu's heritage was ever-present in his music. Works as varied as the James Joyce-inspired *riverrun* (1981), *In an Autumn Garden* (1979) for traditional *gagaku* orchestra and his lauded score for Akira Kurosawa's film *Ran* (1985) clearly come from the same steady hand and are as expressive and well-crafted as a bonsai garden. Commissioned by Carnegie Hall for the Boston Symphony Orchestra and its music director Seiji Ozawa, *From me flows what you call Time* is a perfect example of Takemitsu's particular blend of East and West. Performed on the occasion of Carnegie Hall's centenary, the work is meant to spiritually reflect the century of music that has "flowed" through the venue. Takemitsu took the evocative title from a poem "Clear Blue Water" by his friend, Japanese poet Makoto Ooka. For Takemitsu, each of the five orchestra members was made to represent an aspect of the Tibetan Buddhist principle of "Wind Horse," an image conjured from the notion of the enlightened human being "riding" Nature. At the premiere performance on October 19, 1990, five colored ribbons, representing the five natural phenomena of water (blue), fire (red), earth (yellow), wind (green), and sky (white) linked the performers to bells placed about the theater. This effect, as well as the huge array of world percussion (including Japanese temple bowls placed cleverly on top of timpani drums, Indonesian wooden *angklungs*, and Pakistani Noah bells, to name a few) infuse the work with deep solemnity and an atmosphere of ritual.

A solo flute intones a delicate phrase whose initial 5-note motive becomes an *idée fixe* as it is passed between instruments throughout the work. This opening phrase, named in the score "A Breath of Air," turns out to be an invocation, inviting the soloists to enter the hall. Once the players have reached their positions, tremolo cellos and basses emote a "Premonition." A chorus of Caribbean steel drums bring a brief "Plateau," and a repeating marimba figure gives way to a section curiously titled "Curved Horizon." "The Wind Blows" sets harps into wispy glissandos and an active, quasi-Arabic solo cello theme portrays a momentary desert "Mirage." As the piece proceeds, there are several opportunities for the percussionists to improvise around a loosely grouped series of notes. One of these extended improvisations, featuring hollowed-out log drums, gives way to an expansive statement portentously titled "The Promised Land." The seldom-heard oboe d'amore (imported from the Baroque era) leads us into "Life's Joys and Sorrows," in which desperately Romantic gestures disappear into thin air as quickly as they arrived. Another improvisatory section featuring a Turkish *darabukkah* drum and tom-toms leads to a simple "Prayer" for the closing moments of the work whose sound takes on an unexpectedly three-dimensional perspective.

5) *Archipelago S* (1993) For chamber orchestra – This is a rarely performed work by Takemitsu (the soprano part of the marvelous "Coral Island" is very difficult, for example, and the "Archipelago S" is for an unusual ensemble of instruments). The title of "Archipelago S." for 21 players describes an imaginary archipelago made up of five real islands widely separated in the natural world, each island's name beginning with an "S": islands in Stockholm, Seattle, and the Seto Inland Sea of Japan.

The composer imagined the islands "calling out to each other across the great distance separating them...experienced as a metaphor for the "universe." The orchestra is divided into five sections and dispersed throughout the concert hall: three ensembles and two independent clarinets on the left and right sides of the space. Each of the five sections describes the five islands: "I mentally sketched the beautiful scenes of each island until gradually a clear musical theme took shape." Although this is one of the most soloistically melodic of Takemitsu's concert pieces, with single lines often containing several unusual and expressive ways of playing the instrument, many of the timbres suggest icy or at least barren landscapes. But there lurk some signs (and lovely ones at that) of life amongst this quiescent landscape: in brief moments the separate groups sing together in unison and there are also a few moments of rich string writing when one can imagine sunlight suddenly illuminating the scene and all of the "islands" join in glorious full orchestral passages. *Archipelago S* is music that has paradoxical qualities: it seems to be in a permanent state of ethereal evanescence, shimmering and suggesting rather than stating directly, and yet its impact is absolute, definite and unforgettable. It is music that sounds strangely similar to Debussy and Olivier Messiaen in its harmonies and textures, yet very different in its effect. Instead of Debussy's sensuality, there is something crystalline and objective in the way Takemitsu's music unfolds; instead of Messiaen's visionary spirituality, there is a sense of space and detachment in Takemitsu's pieces, even if some of his musical language sounded similar.

- **Developments by medium**

  - Notable composers of operas since 1975 include:
    - Mark Adamo
    - John Adams
    - Thomas Adès
    - Bruce Adolphe
    - Robert Ashley
    - George Benjamin
    - Luciano Berio
    - Stefano Vagnini
    - Harrison Birtwistle
    - John Cage
    - Roberto Carnevale
    - Elliott Carter
    - Daniel Catán
    - Azio Corghi
    - Michael Daugherty
    - Peter Maxwell Davies
    - John Eaton
    - Péter Eötvös
    - Mohammed Fairouz
    - Brian Ferneyhough
    - Lorenzo Ferrero
    - Bern Herbolsheimer
    - York Höller
    - André Laporte
    - György Ligeti
    - Liza Lim
    - David T. Little
    - Luca Lombardi
    - Missy Mazzoli
    - Richard Meale
    - Olivier Messiaen
    - Robert Moran
    - Nico Muhly
    - Olga Neuwirth
    - Luigi Nono
    - Per Nørgård
    - Michael Nyman
    - Michael Obst
    - Einojuhani Rautavaara
    - Kaija Saariaho
    - Aulis Sallinen
    - Carol Sams

- Luca Francesconi
- Philip Glass
- Elliot Goldenthal
- Ricky Ian Gordon
- Daron Hagen
- Hans Werner Henze
- Howard Shore
- Louis Siciliano
- Karlheinz Stockhausen
- Somtow Sucharitkul
- Josef Tal
- Judith Weir

➢ **Chamber**

- See also List of contemporary classical ensembles

➢ **Choral**

Notable choral composers include Karl Jenkins, James MacMillan, Morten Lauridsen, Nico Muhly, Arvo Pärt, John Rutter, Veljo Tormis, Paul Mealor, John Tavener and Eric Whitacre.

➢ **Concert band**

Composers such as Daniel Bukvich, Mark Camphouse, Jack Stamp, Samuel Hazo, Michael Colgrass, Michael Daugherty, David Del Tredici, David Gillingham, Julie Giroux, Donald Grantham, Karel Husa, David Maslanka, Olivier Messiaen, Alfred Reed, Joseph Schwantner, Robert W. Smith, Karlheinz Stockhausen, Frank Ticheli, and Eric Whitacre have composed notable works for concert band in recent years.

➢ **Cinema**

Contemporary classical music can be heard in film scores such as Stanley Kubrick's *2001: A Space Odyssey* (1968) and *Eyes Wide Shut* (1999), both of which used concert music by György Ligeti, and also in Kubrick's *The Shining* (1980) which used music by both Ligeti and Krzysztof Penderecki. Jean-Luc Godard, in *La Chinoise* (1967), Nicolas Roeg in *Walkabout* (1971), and the Brothers Quay in *In Absentia* (2000) used music by Karlheinz Stockhausen.

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