

Below are some old study materials of mine—hope you find them useful.
Rob

Percussion Timeline

Taken largely from the Blades, Beck and Grout.

- 1616 *The Golden Age Restored*, Jonson A masque in which drums were specified in the stage directions (for a dance), but not in the score.
- 1628 Festival Mass, Orazio Benevoli used timpani in two sets (both at C & G) for the dedication of Salzburg Cathedral.
- 1656 Nicolaus Hasse *Auffzüge 2 Clarinde [und] Heerpauken* The first extant written fragment of music for kettle drums.
- 1675 *Thesee*, Lully Generally credited as the introduction of kettle drums to the orchestra.
- 1680 *Esther* Strunk Introduces cymbals to the opera orchestra (Blades)
- 1680ca Serenade No. 23, Pavel Josef Vejvanovsky Used C&G as a perfect fifth. He also specified the drums at the (p) dynamic marking.
- 1682 Heinrich Biber or Andreas Hofer *Salzburger Festmesse* The first major composition for 2 pairs of kettle drums and two players.
- 1685 *Pieces de Trompettes et Timbales a 2, 3, et 4 Parties*, Andre Philidor The first collection of outdoor court festival music including written parts for kettledrums.
- Also, in this year, the Philidor brothers composed and performed a march for two sets of two timpani. The tuning was unusual in that one pair was tuned to the normal C & G, but the other was to E & G; the latter pair on pitches above the first.
- 1692 *The Fairy Queen*, Henry Purcell this is considered to be the first solo passage for the timpani in the orchestral literature.
- 1733 Johann Sebastian Bach *Cantata No. 214* (“*Tonet ihr Pauken! Erschallet Trompeten!*”) Features an opening kettledrum solo in the first movement; used again in the *Christmas Oratorio*.
- 1743 Concerto Grosso, Francesco Barsanti called on the timpani to perform in three different keys, F, D, and C, within one work.

- 1750 *Symphony No. 99*, Johann Melchior Molter written for five kettle drums (F, G, A, Bb, C), 2 clarini, 2 flutes, viola, and cembalo. Other pieces were being written for virtuosi timpanists at this time as well. This included a Sinfonia by J. W. Hertel (c.1748) for 8 timpani with orchestra; this piece included a full cadenza for the timpanist.
- 1761 *La Cadi dupe*, Gluck bass drum and cymbals are used.
- 1773 W. A. Mozart *Divertimento for 2 Flutes, 5 Horns, and 4 Timpani* Features four drums throughout (G, A, C, D).
- 1779 *Echo and Narcissus*, Gluck first orchestral use of the tamborine.
- 1782 *Il Seraglio*, Mozart bass drum, cymbals and triangle.
- 1785 *La grotta di Trofonio*, Antonio Salieri used the unusual interval of C&Gb followed by a change to D&A which happened in the space of sixteen tacet bars.
- Johann Carl Fischer *Concerto for 8 Timpani Obbligato* The first piece written for one solo performer and eight drums spanning an entire octave.
- 1786 Antonio Sacchini *Oedipe à Colone* An early example of an opera calling for four drums, tuned to B-flat, b-flat, F and f (an early use of octaves).
- 1787 *Tarare*, Antonio Salieri used the interval of Bb&D and the drums are heard in the chords of D, Eb, G minor, and Bb. Antonio Salieri's innovative use of the timpani may have influenced his student, another great innovator of timpani use, Beethoven.
- 1791 Haydn plays timpani in a performance of one of his own symphonies and is applauded by both the audience and the orchestra.
- 1793 *Sappho*, Martini il Tedesco two drums struck simultaneously to produce a chord. This already happened in the music of Bablon (*Marches de Timbales Pour les Gaurdes du Roi*) but this is the first strict orchestral appearance.
- 1794 *Military Symphony No. 100*, Haydn Employs janissary instruments, bass drum, cymbals, and triangle.
- Symphony No. 102 in B flat* Prescribed muffled drums (con sordini) to go along with muted trumpets.
- 1795 Haydn *Sym. No. 103 in Eb* The timpani solo opening the first movement gave this Sym its nickname: *Paukenwirbel* or *Drumroll*.

- 1803 Georg Joseph Vogler *Overture to Samori* The use of three timpani throughout influenced numerous composers, including Vogler's pupil Carl Maria von Weber.
- 1807 Nicholas-Marie Dalayrac *Lina, ou Le Mystère* First known reference in opera to types of sticks called for; in this case, *baguettes garnies* (covered timpani mallets).
- 1810c. Ferdinand Kauer *Sei Varizioni* Possibly the earliest orchestral composition to include the Xylophone
- 1815 Antonín Reicha *Die Harmonie der Sphären* Calls for four timpanists, each playing a pair of drums, as well as for the use of rolled chords to support the chorus, serving as a model for Berlioz.
- 1830 Hector Berlioz *Symphonie Fantastique*
- 1844 Hector Berlioz *Roman Carnival Overture*
- 1875 Georges Bizet *Carmen*
- 1888 Nikolai Rimsky-Korsakov *Scheherazade*
- 1891 Antonín Dvorák *Carnival Overture*
- 1914 Walford Davies *Conversations for Piano and Orchestra* The first known use of a glissandi on the timpani.
- 1918 Igor Stravinsky *L'Histoire du Soldat*
- 1922ca Vibraphone appears--Ludwig and Leedy
- 1923 Stravinsky *Les Noces*
- 1927 Maurice Ravel *Bolero*
- 1928 Carl Nielsen *Concerto for Clarinet and Orchestra*
- 1930 Amadeo Roldán *Ritmica No. 5* and *Ritmica No. 6* Percussion Ensemble
Darius Milhaud *Concerto pour Batterie et Petit Orchestre*
- 1931 Edgard Varèse *Ionisation* Percussion Ensemble
- 1933 William Russell *Three Dance Movements* Percussion Ensemble
- 1934 Sergei Prokofiev *Lt. Kije Suite*

- Henry Cowell *Ostinato Pianissimo* Percussion Ensemble
- 1935 Johanna M. Beyer *Auto Accident* Percussion Ensemble
- 1937 Bela Bartok *Sonata for Two Pianos and Percussion*
- 1939 Henry Cowell *Pulse* Percussion Ensemble
John Cage *First Construction in Metal* Percussion Ensemble
John Cage *Imaginary Landscape* Percussion Ensemble
- 1940 Paul Creston *Concertino for Marimba and Orchestra*
Cage *Living Room Music* Percussion Ensemble
Lou Harrison *Canticle No. 1* Percussion Ensemble
- 1941 Cage *Third Constuction* Percussion Ensemble
Cage/Harrison *Double Music* Percussion Ensemble
- 1942 Carlos Chávez *Toccata* Percussion Ensemble
Alan Hovhaness *October Mountain* Percussion Ensemble
- 1943 Béla Bartók *Concerto for Orchestra*
Harry Partch *US Highball* Percussion Ensemble
Paul Hindemith *Symphonic Metamorphosis of Themes by Carl Maria von Weber*
- 1948 Saul Goodman *Modern Method for Tympani*
- 1949-66 Elliot Carter *Eight Pieces for Four Timpani* Timpani Solo
- 1951 Michael Colgrass *Three Brothers* Percussion Ensemble
- 1952 Henry Brandt *Symphony for Percussion* Percussion Ensemble
- 1953 Jim Irwin, a chemical engineer for the 3M company in St. Paul, Minnesota designs a drumhead from a polyester film. Sonny Greer approves; and, Irwin is granted a patent in 1955.
- 1956 Samuel Barber *Medea's Meditation and Dance*
- 1957 Leonard Bernstein *West Side Story*
- 1964 Warren Benson *Streams* Percussion Ensemble
- 1965 Steve Reich *It's Gonna Rain*
- 1966 Steve Reich *Come Out*

- 1967 Steve Reich *Piano Phase*
- 1968 Minoru Miki *Time* Marimba Solo
- 1969 John Beck *Jazz Variants* Percussion Ensemble
Charles Wourinen *Ringing Changes* Percussion Ensemble
Iannis Xenakis *Persephassa* Percussion Ensemble
- 1971 Steve Reich *Drumming* Percussion Ensemble
- 1972 Steve Reich *Clapping Music*
- 1973 Reich *Music for Pieces of Wood* Percussion Ensemble
- 1974 George Crumb *Music for a Summer Evening* Chamber ensemble with percussion
- 1977 Joseph Schwantner *and the mountains rising nowhere* Band
- 1981 Joseph Schwantner *Music of Amber* Chamber ensemble with percussion
- 1983 Thomas Gauger *Portico* Percussion Ensemble
Toru Takemitsu *Rain Tree* Percussion Ensemble
- 1984 Minoru Miki *Marimba Spiritual* Marimba solo with Percussion Ensemble
- 1985 Steve Reich *Sextet* Percussion Ensemble
- 1986 Lou Harrison *Varied Trio* Chamber ensemble with percussion
- 1988 Christopher Rouse *Bonham* Percussion Ensemble
- 1990 Joseph Schwantner *Velocities* for solo marimba
Dave Hollinden *Cold Pressed* Multi-percussion solo
- 1994 Joseph Schwantner *Concerto for Percussion and Orchestra*
Christopher Rouse *Symphony No. 2*

Some entries from various sources (loosely cited)

Snare Drum

Beck

The Snare Drum can be traced back 250 years to the *Tabor* and *side drum*. These earlier instruments were generally much larger and used exclusively for military purposes. In the 18th and 19th centuries the side drum was incorporated into opera orchestras for military scenes. During the middle of the latter part of the 19th century, the instrument gradually made its way from the opera pit to the concert stage.

The principle difference between the modern instrument and the older ones is the use of tension rods for the heads as opposed to rope tensioning or simple tacked-on heads. This change was first introduced in 1837 by Cornelius Ward. His drum used screw tensioning instead of rope, had a brass shell, and was considerably smaller than earlier drums. The size of the drum was reduced to accommodate its use in non-military events.

Bass Drum

Beck

The Bass Drum was introduced into the western orchestra through the influence of the Turkish Janissary bands of the 17th and 18th centuries. In these bands, the bass drummer used both hands to strike the instrument. One hand held a felt covered wooden mallet and primarily kept the pulse of the music. The other carried a switch that produced a higher pitched sound and played accompanying rhythmic patterns. This style of playing was used until the rise of the French rescue and grand operas in the late 18th and early 19th centuries.

The orchestral bass drum of the middle 18th and early 19th centuries seems to have had two main influences: the Turkish drums mentioned above, and the *long drum*. The long drum was an instrument in which the depth of the shell was greater than the diameter of the heads, hence its name. Indeed, it may have been the long drum that was used by Mozart and Beethoven in their Turkish-inspired music.

Xylophone

Beck

Musicologists have differing opinions on whether the xylophone originated in Africa or Asia. It is generally agreed that the two areas were linked musically, because there are unmistakable parallels in playing techniques, tunings, and even in the music performed. However, most scholars are of the opinion that Asia was the place of the Xylophone's origin, and various types can be found on both the Asian mainland and the archipelago. It is known that around 2000 b.c., there existed in China a wood-harmonicon consisting of sixteen wooden slabs, suspended in two tiers. At about the same period, an instrument resembling the xylophone, called the *ranat*, was used by not only the Chinese, but also by the Siamese and Hindus. However, it is not clear whether the ranat was a wood bar instrument.

The xylophone's use spread throughout Southeast Asia. Reliefs on the temple of Panataran in Java, carved in the 14th century, depict xylophones played by performers (male and female) using "Y" shaped beaters.

It is not clear just when the migration of the xylophone from Asia to Africa occurred, but it was at least before the arrival of the Portuguese. Written and oral historical references from the mid-14th century mention xylophones with resonators in the Niger River area (Mali). In the 16th century, Portuguese missionaries reported the existence of xylophones with gourd and buzzer resonators in Ethiopia.

The xylophone is not distributed throughout all of Africa. Its use is restricted primarily to an area roughly south of 15 degrees north latitude on the west coast and of 5 degrees north latitude on the east coast, down to Angola and Mozambique, and the instrument's use has also been mainly associated with African royalty. Virtually all forms of xylophones can be found.

Musicologists theorize that the xylophone was probably brought to Europe from Indonesia. However, the possibility of its importation into Europe as a result of the Crusades cannot be dismissed totally. The xylophone's first application in Europe was as an organ stop around 1506. It was mentioned as *hültze glechter* ("wooden sticks") in 1511 by the organist Arnold Schlick, in his *Spiegel der Orgelmacher*.

The first known visual representation of a xylophone in Europe is a woodcut by Hans Holbein the Younger entitled "Dance of Death," dating from around 1523. Curiously, the xylophone shown is a one-row frame instrument carried around the neck, more like certain African xylophones than Southeast Asian instruments, except that the bars do not run from the performer's left to right, but rather from near to far, as in the later four-row xylophones of eastern Europe.

In 1810 an instrument called the *triphon* was invented by Wiedner of Faustadt. It was a xylosistrion device consisting of wood bars that were played by stroking them with rosin-coated gloves. This instrument remained a novelty and its use was short lived. By this time the "small ladder" one-row xylophone had been altered into a four-row form, possibly influenced by the arrangement of the beating spots on the Eastern-European hammer-dulcimer (the beaters also resemble dulcimer hammers).

In the late 1830s a Pole by the name of Michael Josef Guzikov popularized a four-row diatonic xylophone with the bars set on straw supports. He had previously studied a Jewish instrument used in Russia called *Jerova a Salamo*. His virtuosity and his selection of repertoire (including transcriptions of works by Paganini) led to his recognition throughout Europe, and he is credited with making the xylophone an instrument accepted both in the concert hall and in stage and variety shows. Other performers (Eben [c. 1839] and Jakubowsky [c. 1866]) followed in Guzikov's path.

Some original music had been composed for the xylophone, including concertante pieces by Ignaz Schwegl (d. 1803). Possibly the earliest orchestral composition to include a xylophone was Ferdinand Kauer's *Sei Varizioni* (c. 1810), which contain solo passages for the instrument.

About 1870 a Frenchman, Charles de Try, who was also a virtuoso of the xylophone, invented the tryphone. It is not known whether this was a two-row or four-row xylophone or whether the instrument was diatonic or chromatic.

In 1886 a xylophone method book by Albert Roth was published by Agence Internationale à Vevey (Switzerland). In this book two systems were presented for arranging the bars: (1) the "Roeser" system--a four-row chromatic system, and (2) the "A. Roth" system--a chromatic two-row piano keyboard system, apparently intended to

played by the performer from the large end instead of from the side, or in other words, with the low bars close to the performer and the high bars away from the performer. Also included in this book are references to published solo pieces for xylophone with piano and orchestra accompaniment.

Bells

Beck

Keyboard percussion instrument made of hard steel bars suspended on soft ropes and played with hard mallets made from brass, hard plastic, or rubber. The resulting high pitches are particularly clear and resonant. This instrument is probably a descendent of the bell lyre used in European military bands in the 19th century. Examples of use in the orchestral repertoire include:

1897	Dukas, Paul	<i>The Sorcerer's Apprentice</i>
1905	Debussy, Claude	<i>La Mer</i>
1911	Stravinsky, Igor	<i>Petrushka</i>
1924	Respighi, Ottorino	<i>Pines of Rome</i>
1927	Kodály, Zoltán	<i>Háry János: Suite</i>

Marimba

Need Grove entry? Mar &

Beck

352 The earliest written account of a marimba was in Guatemala in 1680. The marimba was found in Mexico, Nicaragua, Costa Rica, El Salvador, Columbia and Brazil, and it was widely dispersed among the Indians and used mainly for civil and religious occasions.

In the late 19th century, wood-box resonators were developed to replace the function of gourds, and in 1894 the two-row chromatic bar arrangement was adopted by Sebastian Hurtado of Guatemala. This arrangement of bars differed, however, from the standard piano keyboard arrangement in that the accidental bars were positioned exactly over the ends of the natural bars, instead of between them.

250 Claire Omar Musser is generally credited with introducing the North American marimba to audiences in the US. His own discovery of the marimba came after his father had taken him to hear a touring Honduran marimba ensemble at the 1915 World's Fair in San Francisco.

Marimba Paper for Locke

Vibraphone

Beck

The vibraphone is the most recently developed mallet percussion instrument, yet it can claim more world-renown artists, more abundant recordings, and wider recognition by the general public than any other mallet instrument. Of wholly American origin, it evolved in differing designs under the creative influence of two inventive and prolific German instrument designers employed by competing percussion instrument manufacturers. Development in different stages by separate companies gave rise to a duality in names that still persists. Both “vibraphone” (Leedy) and “vibraharp” (Deagan) are trade names coined by the original manufacturers; the generic “vibes” was adopted by a major manufacturer (Musser) later because of wide currency among players and writers. Variant trade names subsequently used by other firms such as “vibra-bells,” “vibraceleste,” and “harpaphone” were shortlived.

Beginning about 1916, Herman Winterhoff of the Leedy Manufacturing Company in Indianapolis experimented off and on with a variety of motor-mechanical arrangements in his quest for a *vox humana* or tremolo effect from the bars of a three-octave f-f steel marimba, a novelty vaudeville instrument with thin, steel tone bars mounted to the keyboard on tapered felt strips. He succeeded in 1922 by mounting a motor on the frame at the narrow end beneath the bars to drive dual shafts fitted with metal discs centered in the tops of each resonator tube. As the discs (pulsators) revolved in the resonator columns under sounding bars, a tonal phase shift was created resembling a vibrato.

The previous April, in Chicago, the “vibraharp” had been introduced by J. C. Deagan inc., a firm then in its 47th year of development and manufacturer of mallet instruments and organ percussions and the originator of the steel marimba many years earlier. The Deagan Vibraharp was developed by Chief Engineer Henry J. Schluter, who conceived the design as an entirely new mallet instrument, not a modification of an existing design.

Triangle

Beck

The triangle is believed to have descended from the ancient Egyptian sistrum. In its earliest form the triangle had as many as three rings, which rode freely on the lower bar. These rings produced a continuous jingle rather than the solitary note achieved by the modern instrument. Indeed this older version may have been the instrument used in the time of Beethoven’s Ninth! Like the sistrum, the triangle was most often associated with religious ceremonies. The Turkish musicians of the late 16th and early 17th centuries were instrumental in promoting its use in other contexts.

The use of the triangle in the western orchestra dates back to the early 18th century. Its influence came from Turkish Janissary (military) bands. The masters of the Viennese school made frequent use of the triangle, as is evidenced by W.A.Mozart’s Overture to *Die Entführung aus dem Serail* (1782) and Beethoven’s Symphony No. 9 (1824). Throughout the 19th century the triangle became more prominent (as did the rest of the percussion section) and reached solo status in the Piano Concerto in E-flat Major (1855) by Franz Liszt.

Baroque PP Paper (Blades)

For example, in his discussion of the triangle he notes that the triangle used to have three or more rings attached to it and it created a sistrum like sound. These rings were not removed until the nineteenth century. So, when performing Mozart's *Il Seraglio* or Beethoven's *Ninth Symphony*, the triangle was quite a different instrument than it is today. (I, however, would not recommend adding rings to either of these performances in modern times. Conductors live to encounter those moments!)

Cymbals***Beck***

Cymbals are one of the most ancient of all percussion instruments. Their ancestry can be found in the most primitive, idiophonic order of instruments, one that includes rattles, clappers, sticks and castanets. Cymbals were in use in Israel by about 1100 BC, but did not appear in Egypt until approximately 800BC; there they had large central bosses and flat rims. In Europe cymbals appear intermittently from the 13th century on, although they had been imported earlier.

The evolution of cymbals occurred in the Bronze Age. In early Roman civilization, bronze cups used initially to hold vinegar and spices were among the first devices adapted for use on the fingers, thus becoming the finger cymbals known today.

As the metalworking artisans of the Bronze Age improved their techniques of making discs, the cymbals became larger and more resonant. Better methods of casting and the expansion of the market in western Asia prompted the cymbal makers to expand their craft. Armies incorporated cymbals accompanied by large, heavy kettle drums. What the bugle was to American Civil War soldiers, the cymbals were to Near East warriors.

By the dawn of Christianity, most of Asia Minor employed cymbals in its religious ceremonies. Cymbals reached the western world by a slow process of development. Romans were great users of cymbals. Among the ruins of Pompeii was discovered a complete collection of cymbals ranging from finger cymbals to some which were 16 inches in diameter.

Drumset***Beck***

The origin of the modern drumset is generally traced to a period when one drummer began to serve the function that two or three drummers had in the past: the snare drum, bass drum, and accessory/sound effect instruments were all manipulated by one musician.

At the end of the Civil War, many Black musicians began to form groups. These groups played parades and funerals. When they began to play inside, the number of musicians was cut. Also, the sizes of the drums were truncated--the snare drums were smaller and the bass drums were also smaller. The bass drum was played by using a

pedal--the first of which were designed by: George Olney and H. A. Bower; and the young Chicago percussionist William F. Ludwig.

The drumset changed with the music. In 1920, the standard set-up was: Bass Drum with pedal and cymbal attachment; concert snare drum; Turkish cymbal; woodblock and/or temple blocks; camel bell/cowbell; small and/or large Chinese toms; and assorted sound effect instruments.

Percussion Ensemble

Beck

A percussion ensemble is the assemblage of percussionists and percussion instruments to perform music written for them. The percussion ensemble had its beginning in the US on March 6, 1933, in NYC, with a performance of *Ionisation* (1931) by Edgard Varèse (1883-1965), conducted by Nicolas Slonimsky. *Ionisation* requires thirteen performers playing thirty-nine different percussion instruments.