**THE MEDIUM OF MUSIC**

**The Musical Instruments**

The material of music is sound. How sound and its physical properties are organized in musical compositions will be discussed in the next chapter.

Musical sounds – tones; are produced by man-made instruments and by the human voice. We thus have two medium in music; the instrumental medium and the vocal medium.

Most musical instruments have three things in common; a part which vibrates a part which amplifies the sound by bouncing off the vibrations away from the instrument and a system for producing and regulating fixed pitches.

Musical instruments are generally grouped according to their vibratos and their resonators. Each group is often referred to as a family or choir. The groups are:

1. The stringed instruments;
2. The wind instruments which are grouped into two separate choirs:
3. The woodwids, so called because they were originally made of wood, and
4. The brasses, which are usually made of brass or some other metal.
5. The percussion choir, which may be grouped into two types:
6. Those that produce musical tones an have definite pitch, and
7. The noisemakers, which do not have definite pitch.
8. The keyboard instruments.

**The Stringed Instruments**

The string choir consists of the violin, the viola, the violoncello and the double bass. Each of these instrument has a hollow sound box accross which nylon, wire or gut strings are stretched. These strings are made to vibrate by means of a horsehair bow which is rubbed over them. The pitches of the string are set by pressing the fingers of the left hand o the strings at different points on the fingerboard, so that only a part of the string vibrates at a time.

The violin is the smallest of the stringed instruments in the symphony orchestra. It is also the highest pitched among them.

The viola is slightly larger than the violin, and also has longer thicker and heavier strings. Both the viola and the violin are played in the same way; they are tucked under the chin of the musicians who play them.

The cello is much larger than the violin and the viola, and it therefore rests on the floor when it is being played. A large, protruding pin at its base holds it firmly on the floor. The musician props it between his knees as he plays.

**The Woodwinds**

The wind instrument are found behind the string choir in an orchestra. These instruments are sounded by blowing into them, thus setting a column of air vibrating. These are grouped under the woodwind and the brass choirs.

The flute is a slender pipe which used to be made of wood. Today, the flute is made entirely of metal. The flutist holds the instrument sideways and blows across the hole which is found at one end of the tube. The flute is a melody instrument, and os it often plays solo parts in orchestral compositions.

The clarinet is a cylindrical tube which is about tow feet long. It has a very wide range. Like the flute it is a solo instrument. It usually plays the alto part when the flute plays the melody.

The bassoon is considerably longer and larger than the other members of the woodwind choir. It looks like two wooden tubes fastened together. It does not usually play solo passages, but when it does, it often suggests the humorous or the grotesque.

The saxophone is not a regular member of the orchestra. It is considered a woodwind instrument although it is made of brass, because it is equipped with a reed.

**The Brass Instruments**

All brass instruments consists of a cylindrical brass tube of varying length. This tube is either double on itself or coiled and expands into a bell-shaped end.

The player of a brass instrument not only blows into the tube, but also makes his tightly stretched lips to move in a certain way on the mouthpiece. To go from one pitch to another, the musician uses the valves or a slide to lengthens or shorten the length of the tube, varies the pressure of his lips and control his breath.

The trumpet is actually an eight foot long tube, ehich has been coiled up so that it is only abouta foot and a half long. It has a piercing tone and is associated with martial pomp. It frequently appears with modern jazz bands. In these instances, it is muted taht is, a pear-shaped metal or cardboard device is inserted in the bell.

The tuba is the bass of the brass choir. Like the double bass and the contrabassoon, it furnishes the lower tones of the harmony as well as marks the rhythm of the music. It is the largest of the brass instruments and is quite bulky and unwieldy.

Other brass instruments are played in military and outdoor bands. The cornet is a smaller and simpler trumpet, whose tone is not as piercing as that of the trumpet. The bugle has a pwerful tone which carries in the open air. It can however, play only a few tones in the scale.

**The Percussion Instruments**

The word percussion mens the sharp striking of one body against another. The complete percussion section includes almost any instrument that is sounded by striking, shaking or scratching with the hand or with another object. These instruments are used to emphasize the rhythm, generate excitement, and enliven the orchestral sound.

The most important percussion instruments in an orchestra are the kettledrums or tympani. These consist of calfskin stretched accross a bowlshaped coppershell and hel in place by a metal band. Adjustable screws or a pedal machanism enables the player to change the tnesion of the calfskin hed, thus raising or lowering the pitch. Kettledrums are used in sets of three or four.

The xylophone is made of tuned wooden blocks which produce clicking sounds when struck. The marimba is a type of xylophone which is African and South American in origin. It is associated with exotic dance music. Hollow resonators in the marimba and the xylophone increase their volume.

The bass drum has two calfskin heads and gives out deep booms when struck with padded sticks; the snare drum has a set of snares or strings stretched across one of its sides, which produce a buzzing sound when hit with padded sticks. Cymbals consists of two metal plates which are clapped together to climactic portion of the music; they are also sometimes tapped with a drumstick.

**The Keyboard Instruments**

Instruments which are equipped with keyboards occsionally play with the symphony orchestra.

The piano is the most familiar keyboard instrument. It isbasically a stringed instrument. Its strings are struck with small felt happers, which are controlled by levers attached to the keyboard. The instrument was invented in hte 18th century and was called pianoforte to indicate in the range and to distinguish it from its ancestor, the clavichord, which was smaller and which produced very soft tones. The piano is used to accompany solo or choral singing and because of its range, it is indespensable to musicians in studying their scores.

The harpsichord is a stringed instrument whose strings are plucked by plectra made from quills, leather tongues, or brass tongues held in place by wooden jacks attached to the keys.

Some keyboard instruments have fee needs that vibrate back and forth in a slot. The accordion and the concertina are exmples.

**Instrumental Groups**

Musical instruments are played either singly or in groups of various sizes.

A big gathering of instrumentalists having the string section as its nucleus is called an orchestra. It is generally composed of four choirs; strings, woodwinds, brasses and percussions. The number of instrumentalists varies according to the demands of the music.

A band is a smaller in size. It is composed mostly of wind and percussion instruments with only few strings or none at all. A very popular band in our towns performing during fiestas, is themusickong bumbong set consisting of Western-like wind instruments made of bamboo, some brass instruments, and a bamboo-bodied bass drum.

The rondalla is the best known Philippine instrumental grouping today. It is a band made up mostly of stringed instruments: the bandurria, whcih assumes the lead part and plays the melody; the laud and the octavina, which carry the alto and contrapuntal parts; the piccolo, tuned above the bandurria which plays the ornamental passages; and the guitarra and the bajo, which give solidity to the rhythm and support the harmony.

**The Conductor**

As orchestras became larger and more unwidely through the years, it became necessary to assign somebody to keep the members playing together harmoniously. The person entrusted with this tremendous task of controlling some one hundred players at a time is called the conductor of an orchestra.

The conductor ordinarily decides on what is to be played in a performance, unless a soloist is included in the program, in which case the soloist himself decides what he is going to play.

The performance is largely the result of painstaking rehearsals. This is where the leadership of the conductor is put to test. With only two means of communication available to him – gesture and facial expression –he must to borrow Leonard Bernstein’s words. “not only make his orchetra play, he must make them want to play.”

**The Human Voice**

Man is equipped with a most wonderful musical instrument, the human voice. He must have used it to express himself through music long before he ever conceived of making music with instruments of his own invention. The human voice is rather like a wind instrument. When one sings, his vocal chords are subconsciously tightened to a certain tension. A steady stream of air is directed against them from the singer’s lungs, setting them into vibration. The sounds are amplified in the cavities of he larynx, mouth and nose, resonators capable of regulating the force and volume of the output of the vocal cords.

Human voices, like man-made instruments, are classifie according to their range and tone quality. The high-pitched female voice is the *soprano*; the low, the *alto*. The high-pitched male voice is the *tenor*; the low, the *bass*. Most choirs and choruses are made up of these four voices. Two intermediate classifications are the *mezzo-soprano*, a voice combining the attributes of both the *soprano* and the *alto*, and the *baritone*, lying betwee the *tenor* and the *bass*.

**THE MEDIUMS OF THE COMBINED ARTS**

**The Combined Arts**

The dancer uses his body to communicate an idea or feeling to his audience. His movements may involve only parts of his body – his arms, legs or head – or the whole body itself may move from one space to another to the accompaniment of music. He may move rapidly or slowly.

The cinema – motion pictures – is an extension of photography. It makes use of a combination of several shots ech shot made up of a series of pictorial units, or frmes, taken from one point of view. To thsi series is added hich has been recorded of optical or magnetic film and synchronized with the pictures. When projected in rapid succession, these pictures produce an illusion of reality.

What we have considered so fare are the physical materials with which artists communicate their ideas or feelings. These are not to be confused with the intangible qualities that go into the making of works of art, which we will be concerned about next.