CHAPTER 3: Musical Instruments and Ensembles

CHAPTER OUTLINE

Voices and Vocal Ensembles
Basic Vocal Categories
   Female: Soprano
       Mezzo Soprano
       Alto (Contralto)
   Male: Tenor
       Baritone
       Bass

Stringed Instruments
   Plucked Stringed Instruments
       Guitar
       Harp
   Bowed Stringed Instruments
       Violin
       Viola
       Cello
       Double Bass
   Pizzicato
   Legato (Verdi – La Forza…after 45 sec)
   Staccato (Stravinsky – March of the Devil)

Woodwind Instruments
   Flute
   Oboe
   Clarinet
   Bassoon
   Saxophone

Brasses
   Trumpet
   French horn
   (Trombone)
   (Tuba)

Percussion Instruments
   Definite Pitch
       Tympani
       Vibraphone
       Marimba
   Indefinite Pitch
       Bass Drum
       Tom-toms, (Triangle), (Snare Drum)
Keyboard Instruments
  Piano
  Organ
Non-Western Instruments
  Chordophones
    A general term for stringed instruments in world music.
  Aerophones
    A general term for wind instruments in world music.
  Membranophones
    A general term for drums in world music.
Electronic Instruments
  Synthesizer
Instrumental Ensembles
  Chamber ensembles
  The Orchestra
  The Wind Ensemble
The Conductor
OVERVIEW OF CHAPTER 3

This chapter introduces students to the various families of instruments and voice classifications. Beginning with the six basic voice classifications and how choirs are formed, the chapter then presents the various families of instruments that make up the orchestra, wind ensemble, and other groups that students will be encounter in the concert hall. Included in this chapter is a brief mention of non-Western cultures. The scientific names (chordophones, aerophones, idiophones, membranophones) for the four basic instrument groups are mentioned here and offer opportunities for exploring other types of instruments.

QUESTIONS AND TOPICS

1. Although instruments have much wider pitch ranges than the human voice, they are grouped in families according to the SATB ranges they produce. Because of their wider ranges, though, instruments can overlap. The orchestral string family is a good example—each instrument overlaps its higher neighbor. This makes it sometimes difficult to discern whether one is hearing a violin in its low range or a viola in its middle or high range. It also allows composers to develop some wonderful melodic lines connecting from one instrument to the next.

2. A good introduction to the instruments of the orchestra is Benjamin Britten’s “Variations on a Theme by Henry Purcell” better known as “The Young Person’s Guide to the Orchestra.” This eighteen-minute work is well worth spending some time experiencing in class. There are several good videos performances available as well as audio recordings. The CD-ROM for this textbook includes a performance with a listening guide.

3. The distinction between concert music and chamber music is missing in many students’ experience because it is quite common to hear chamber music recitals in large concert halls and because of careless listening habits, and so on. Devote some class time to distinguishing between choral music (the sixth movement from Brahms’s German Requiem, in Chapter 22) and vocal chamber music (“Fair Phyllis” by John Farmer, in Chapter 5) and large ensembles and chamber groups. Short excerpts of a symphony (Beethoven’s Symphony No. 5 for example, in chapter 15) contrasted with a string quartet (one of Beethoven’s op. 57 “Rasoumovsky” quartets) are also good to provide. Likewise, a band composition (the two suites by Gustav Holst are readily available) contrasting with a woodwind quintet (Carl Nielsen’s Quintet, third movement, has cadenzas for all the instruments, and is a good complement to the Holst) will help students become more aware of the difference.

4. The percussion family is a fascinating study. Not only are there culturally defined percussion instruments, but in the twentieth and twenty-first centuries new types of percussion and percussive uses of other instruments have been explored. Henry Cowell’s “Banshee” is a case in point, using a prepared piano; so is John Cage’s Sonata V from his Sonatas and Interludes for Prepared Piano, in Chapter 39.
Steve Reich uses hand clapping and other body percussion sounds in many of his works (see Chapter 41 for his *Tehillim*, Part 4). Other composers call for water jugs, brake drums, and so on for inclusion in the percussion section.

5. Electronic instruments have added a new dimension that needs to be considered. Beginning in the 1940s, with electronically altered natural sounds and moving on to computer-generated tones and then to the synthesizer, composers have created a fascinating world of sound. From the *musique concrète* of Varèse (see Chapter 35) to electronic music of Stockhausen and Babbitt to the experiments of Reich (phase shifting), there is room for much exploration.

**FURTHER TOPICS FOR DISCUSSION**

1. The woodwind instruments can be categorized by the way they produce sounds. Can you list the three different sound-producing mechanisms?
2. The orchestral strings can be bowed in many different styles and also plucked. How does this affect their sound?
3. What is the difference between a string quartet and a chamber orchestra?
4. What are the two basic groups of percussion instruments?
5. How does the spatial organization of an ensemble affect the sound?