Tuning/Intonation

The Pythagorean scale is a tuning system that produces a sharper, brighter sound and is particularly good for barbershop harmony. Through prolonged exposure, most individuals have developed a mental concept of tuning based on the tempered scale used for tuning keyboard instruments. (A comparison of the Pythagorean scale and the tempered scale can be found in Section III-E, page 2.) Utilizing the Pythagorean scale as a tool in singing will result in a more accurate performance.

In its broadest sense, the term "intonation" covers the problems described in the preceding section on accuracy. In general, intonation deals with the manner in which pitch is produced, including coordination between the listening apparatus and the vocal mechanism.

In the sound category, intonation problems often refer to those errors associated with the physical production of tone or vocal quality. One common intonation problem occurs when vowel production is not uniform and the resulting chord appears to be out of tune. For example, if three voices are singing "luv" while a fourth sings "lahv," the chord may not lock and might sound out of tune. Agreeing on the appropriate vowel sound will usually correct this problem.

Intonation problems can also result from tones that lack focus and clarity. Another definition of intonation refers to the tonal center of the individual tone. When this tonal center is not established by focus and clarity in the voice, intonation problems can occur.

Other problems may result from tension in the jaw or throat, from a closed soft palate or from failure to make maximum use of the resonating cavities. A tone improperly resonated can sound flat. Four improperly resonated tones can seem out of tune, although any one (and perhaps all) may be individually in tune with a piano.

Section/Part Accuracy

Out-of-tune singing occurs in a chorus when voices within a section are not in complete accord on the precise tuning of chord components. For totally in-tune singing to exist, all voices within a section must sing the same frequency and the selected frequency must be in tune with the remaining tones of the chord. (Refer to Section III-E.)

Synchronization

In the sound category synchronization is a necessary element of harmony accuracy, since the sound judge is listening for instant accuracy and total lock-and-ring. The sound judge rewards a performance in which total unit sound exists, i.e., chords are locked from the instant they are sounded. Lack of synchronization affects unit sound because it can mar a blended musical unit, prevent instantly matched vowels and distort a solid barbershop sound.