



IN THEIR OWN WORDS

Franco of Cologne, *Art of Measured Song* (c1280)

We know little about the life of Franco of Cologne, only that he came from that city and studied and taught in Paris toward the end of the thirteenth century. In his writings Franco chronicles the transition from modal notation to mensural notation (from rhythmic patterns signified by groups of ligatures to individual, sign-specific durational values). A legacy of the rhythmic modes persists here, one that sometimes complicates the discussion; for example, breves are said to be of two types, proper and altered, an arrangement left over from the old rhythmic modes 3 and 4. But the important innovation in Franco's treatise is its clear explanation of the nature of independent signs (the long, breve, and semibreve) to specify duration, in place of, as mentioned, ligatures that mandated a particular rhythmic pattern. The basic unit of time in this new system is called the *tempus*, which is equal in duration to one proper breve.

But Franco is not only among the first to discuss symbols that indicate the duration of sound; he posits symbols for the *absence* of sound as well. In thirteenth century Paris the existence, or lack thereof, of the rest became a matter of philosophical debate: how does one, and should one, measure the absence of a quantity (remember, there is no zero in the Roman numerals then in use). Measuring precisely the absence of sound made possible a new musical genre, the *hocket*, the very existence of which depended on carefully measured rests.

Notice that in Franco's discussion of rhythm, all meter is triple, and all subdivisions are likewise triple. Franco is one of the few to say explicitly that this system based on units of three is a reflection of the Trinity, to which the word *triple* is related.

Finally, Franco's careful grouping of topics into sets and subsets—a hallmark of thirteenth-century scholastic thinking—extended not only to the classification of temporal units of sound and the absence of sound but also to consonance and dissonance. Franco codified consonance and dissonance into a tidy, hierarchical system. His taxonomy is somewhat surprising in that it characterizes thirds as imperfect consonants, but sixths as either perfect or imperfect dissonances. The factor determining the degree of dissonance here was the proximity of the interval to the consonance of a fifth or an octave (or unison); if only a semitone away from the succeeding consonance, then the dissonance was thought to be very dissonant, indeed a perfect dissonance.

Art of Measured Song

Because certain philosophers have sufficiently treated the subject of plainsong and have explained it to us—specifically, the theoretical issues by Boethius and the practical ones by Guido [of Arezzo] the monk [see Chapters 1, 2, and 4], and church music especially by blessed [Pope] Gregory—we can devote ourselves to the subject of measured music, the study of which plainsong precedes, just as the primary thing precedes a subsequent one. . . .

A Definition of Measured Music and About Its Types

Measured music is song measured by long and short durations. Pursuing this definition further, we should see what measured means and what the “tempus” is. Measured is qualitative appearance expressed in longs and shorts that manifests itself as measurable song. I say measurable, because plainsong cannot be measured in such a fashion. Tempus is a unit of duration of an existing pitch as well as its opposite, the absence of

sound, which is commonly called a rest. I say, however, the rest is measurable in time, because if this were not true, two diverse melodies, one of which is supplied with rests and the other not, could not be proportionally fitted to one another.

Measured music is of two types: fully measured music and partly measured music. Fully measured music is exemplified by discant, because its time can be measured in each of its parts. Partly measured music is exemplified by organum, because not all of its parts are measured. . . .

About the Note Shapes and Signs of Measured Music

A note shape (*figura*) is a representation of pitch placed in one of the rhythmic modes. From which it is evident that the note shapes signify the modes and not vice versa, as certain people posit. Some are individual note shapes and others composite, that is, arranged as ligatures. There are three types of individual note shapes: the long, the breve, and the semibreve. The long has two durations: one of three units of time that is called a perfect long, and the other of two units of time that is called an imperfect long.

First, the perfect long, for in it, all other durations are encompassed, and all others can be reduced to it. It is called perfect because it contains three units of measure—for the number three is the most perfect number because it reflects the Holy Trinity, which is true and pure and from which the name “three” derives. The note shape of the long is a square with a tail descending down the right side [see Ex. 10-1].

The imperfect long has the name note shape as the perfect, but it signifies only two units of time. It is called imperfect because it is not found without a perfecting breve before it or after it [perfection comes only with a complete unit of three]. It follows therefore that those who call it “proper” are wrong because something that is proper can stand by itself.

The duplex long is formed in this way [a rectangle with a stem descending to the right; see Ex. 10-1], and it signifies two longs that are joined together within the body of one sign; otherwise, the plainsong in the tenor line would have to be broken up into individual notes.

The breve [short] exists in two forms, proper [one unit of time] and altered [two units of time]. It is shaped like a square but has no descending stem [see Ex. 10-1].

The semibreve moreover is said to be of two kinds, major and minor [two thirds and one third of a proper breve, respectively]. Both, however, have the same shape, that is, of a diamond [see Ex. 10-1].

About Rests . . .

Having talked about signs that signify duration of pitch, we should explore rests, or those signs that stand for the absence of sound. A rest is the omission of a proper amount of sound as found in one of the rhythmic modes. There are six types of rests: the long rest, imperfect long rest (which is the equivalent of the altered breve rest), the breve rest, the major semibreve rest [two-thirds of a breve rest], the minor semibreve rest [one-third of a breve rest], and the end-of-a-section rest. The perfect long rest is an absence of sound equivalent to three units of time. The imperfect rest is imperfect because it consists of the equivalent of two units of time or two breves. A breve rest is the absence of sound equal to one proper breve consisting of one unit of time. The major semibreve rest is the omission of sound equal to two-thirds of a proper breve, while the minor is equal to one-third. The end-of-a-section rest [double bar rest] is called unmeasurable because it also is found in plainchant. It also makes the penultimate note a long in whatever mode it occurs, even though it would otherwise be a breve if not overridden by force of this penultimate position. Moreover, these six rests are designated by six subtle lines, which are likewise called rests. [The basic signs for the rests are given in Ex. 10-2.]

About Consonance and Dissonance

Having discussed note shapes and those of the rests, it is time to discuss discant and how it is to be made [*fieri*] and of what kinds there are. But because every discant is regulated by the consonances, it is necessary to consider the consonances and dissonances that sound simultaneously in difference voices.

Consonance is said to occur when two or more simultaneously sounding pitches are perceived by the listener to be compatible. Dissonance is said to be the opposite of this, specifically when two pitches are joined that the listener perceives to be discordant.

There are three types of consonances, specifically, perfect, imperfect, and intermediate. Perfect consonances are those that occur when several pitches are joined in a way that one can scarcely be perceived as being different from another owing to their concordance. And there are two of these, namely, the unison and the octave.

Imperfect consonances are said to be those that occur when two pitches are perceived by the listener to be greatly different. And there are two of these, namely, the major third and the minor third.

Intermediate consonances moreover are said to be those that occur when two pitches are joined that sound better than the preceding [imperfect] consonances but not as good as the perfect consonances. And there are two of these, namely the fourth and the fifth.

As to why one consonance is more concordant than another, this issue is treated with the topic of plainsong.

There are two types of dissonance, perfect and imperfect. Perfect dissonance is said to be that which occurs when two pitches are so conjoined that the listener perceives them to be incompatible. And there are four of these, namely, the semitone, tritone, major seventh, and minor sixth.

Imperfect dissonance is said to be that which occurs when two pitches are so conjoined that the listener perceives them to be compatible, yet discordant. And there are three of these, namely, the tone, major sixth, and minor seventh.

And note that both consonances and dissonances can be multiplied endlessly. The fifth, for example, can be combined with the octave, the fourth with the octave, and so on with the double octave and triple octave, if such pitches were possible. Moreover, note that imperfect dissonances sound good before a consonance.