

## **A Reconsideration of the Medieval Theory of the Musical Intervals: The Evolution of Musical Theory as Reflected in the Transition of the Meaning of *Consonantia***

**NASU Teruhiko**

According to the 13<sup>th</sup>-century theorist Grocheio, the principles of music lie in *consonantia* and *concordantia*. The former denotes a simultaneous sounding of two tones consisting of the three perfect intervals, whereas the latter refers, despite the implication of some sort of concord, to seven successive intervals from the unison to the octave. How did these two separate ways of categorizing the intervals evolve side by side?

The vertical *consonantia* tradition derived from ancient Greek theories transmitted through Boethius's *De institutione musicae* (c.500), in which, based on simple numerical ratios, five intervals are counted as *consonantia*: the octave, the octave plus the fifth, the double octaves, the perfect fifth, and the perfect fourth. According to Boethius, the *consonantia* governs all the *modulatio musicae*, the primary significance of which appears to be the measurement of sounding-pitch.

After the Carolingian 'Renaissance', cantors and scholars, tasked with integrating the ancient abstract theory with their actual experience of plainchant singing while still treating the inherited theory of *consonantia* as an authority, began to set out the successive intervals from the unison up to the major sixth at the widest. The reason the major sixth constituted the widest interval was simply that wider intervals hardly ever appeared in the repertoire. Grocheio's establishment of the vertical *consonantia* and successive *concordantia* in parallel as the principles of music stems from this tradition.

From the 11<sup>th</sup> century, side by side with the transition of the meaning of *modulatio* from 'measurement' to the more practical 'construction of melody', the word *consonantia* began to be applied to the successive intervals used in plainchant. As mensural polyphony developed in the 13<sup>th</sup> century, some theorists began to use the word *consonantia* to refer to all diatonic intervals, whether vertical or successive. We should, therefore, refrain from applying the adjective 'consonant' to the *consonantia/concordantia* in the successive or broad senses mentioned above.