

Chapter One:

Sound Envelopes and the Notational Grid

Sound Description

Notational symbols, when properly applied, describe complex musical sounds in the simplest, most concise manner possible. In order to achieve this, the music notator must fully consider each and every definable parameter of a sound's *envelope*. The term *envelope* refers to the contour of a sound's growth and decay over time. The definable parameters of any sound envelope are duration, pitch, dynamic, and timbre.

All musical sounds begin and end at specific points in time. The exact moment of initiation and termination of a sound constitute its *duration*. Notationally, duration is described by tempo markings as in metronome settings, terminology such as *allegro* or *largo*, time signatures; $\frac{4}{4}$, $\frac{12}{8}$, $\frac{2}{2}$, etc., and the durational values of note-heads and rests; half notes, quarter notes, flags, augmentation dots, eighth rests, whole rests, and the like.

Pitch is described by the location of notes placed on the staff. Clefs, key signatures, accidentals, and pitch altering ornaments such as bends and trills are all notational describers of pitch.

The amplitude or loudness as well as the emotional intensity of a sound is referred to as its *dynamics*. *mf*, *p*, *ff*, are all examples of notated dynamic levels. Dynamic terminology such as *crescendo* and *diminuendo* describes changes in the level of loudness.

The final parameter that must be considered is the *timbre* of the sound to be notated. The particular instrument or group of instruments for which the sound is "scored" will most obviously determine its timbral quality, but other