

*IN THE BEGINNING: ETUDE III*  
*(KEYBOARD & 2 ORANGES)*

DAVID ROSENBOOM

1980

TO GEORGE MANUPELLI

Original version:  
Copyright © David Rosenboom 1980  
Reissued edition with revised formatting:  
Copyright © David Rosenboom 2012  
All rights reserved.

## *IN THE BEGINNING*

(1978-1981)

DAVID ROSENBOOM

### *General Notes on the Series of Works*

The macro-title, *In the Beginning*, refers to a series of works created from 1978 through 1981. These works were written for a variety of large and small instrumental ensembles, computer-aided electronic music instruments, film/video, and synthetic speech. The last of these is, in turn, also a series of pieces, titled, *Future Travel*, documented by an LP record (Street Records) and more recently a CD (New World Records) released under the same name. All of the works focus, among other things, on the development of a unique harmonic, rhythmic and melodic language. This language takes inspiration from research on a model of proportional structures in music and on an evolving, topologically modeled theory of musical “shape” perception. There is programmatic content in the works, which relates to human beings’ propensity to attempt to double themselves in both religion and technology and which develops a scenario for the evolution of human consciousness toward the birth of a macroscopic Earth-organism to which all individual entities contribute.

The *In the Beginning* system of proportions emphasizes sets of irreducible ratios with inversive symmetry and exploits both harmonic (linear) and sub-harmonic (non-linear) relations. These are used to construct cycles of growth and decay, resulting from the natural reinforcement of proportions with each other, moving toward maximum resonance and away from it. Thus, a sense of natural phasing occurs, though all movement takes place through proportional modulation by quantum steps. Additionally, stochastic methods are used to implement smooth transitions from areas where the probability is high that one or more sets of proportions will be predominant in the musical material to areas where others take over.

Many of the horizontal (ex. melodic) forms result from the use of a limited set of prototype shapes or contours. These are applied to the other musical materials (ex. pitch, rhythm, timbre) currently predominant in the space of proportions. Each section of music has its own unique shape determinants and modulation schemes. The contours themselves resulted from physiological analyses of human expressive gestures carried out in preparation for the works.

The compositions mirror nature in the creation of singularities, particles, or differentiated units of perception. They do this by making use of the idea of resonance as a key to creation within an initially smooth medium, like undifferentiated space or the undisturbed surface of a calm lake. Resonance represents the force of drawing together in patterned relationships, which outline natural ontological evolution. The harmonic and rhythmic space is the medium; the composer and performers provide the initiating force; the system of proportions articulates growth when interactions produce reinforcement and decay when they produce collisions.

Recordings for the entire *In the Beginning* series are now documented on CDs (New World Records).

(blank page)

## *IN THE BEGINNING: ETUDE II (KEYBOARD & 2 ORANGES)*

DAVID ROSENBOOM

PIEDMONT, CA 1980

The title, *In the Beginning*, refers to a rhythmic and harmonic construction that is treated as a master structure from which numerous subset realizations can be created to serve the orchestrational demands of specific groups of performers. While these materials are developed extensively in *In the Beginning I, II, III, IV, and V*, the *In the Beginning* etudes explore more selective applications of these materials in shorter pieces.

The master structure is based on a system of proportions that emphasizes irreducible ratios (e.g. 2/11, 3/10, etc.) that are used to construct cycles of growth and decay resulting from natural reinforcement of proportions moving toward maximum resonance and away from it. Thus, a sense of natural phasing occurs, though all movement takes place through proportional modulation by quantum steps.

*In the Beginning: Etude III* is for a keyboard (usually piano) soloist, who precisely articulates continuous glissando “shapes” by rolling two oranges along the keys of the keyboard. The right hand orange plays only white keys, while the left hand orange plays only black keys. Each line or system in the score represents one of seven individual sections ordered from the top to bottom of the page. Markings above the dark line in the center of each system comprise the right hand part, and those below it refer to the left. The curves shown in each system, which comprise melody shapes, are to be realized in this manner. Breaks in the curves require lifting an orange off the keys, and spaces indicate rests. Care should be taken to follow the curves very closely. Each performer will develop technical skills for virtuosic rolling. Using hands and forearms for rolling across wide ranges has proven effective.

The words appearing at the beginning of each line indicate general feeling reference points with which to perform the shapes contained in each section. The performer should hold these in mind while playing and infuse her/his interpretation of these emotions into how he/she executes the glissando/melody shapes. However, avoid over-acting.

Time proportionality numbers at the end of each system give the relative length of the sections. The performer may design the overall length of the piece, but the relative lengths should be maintained for each section. For example, the length of the second section (love) should be twice as long as the first (reverence); the fourth section (humor) should be three times as long as the first, etc.

The dashed lines above and below the dark line in each system indicate the pitch center of the keyboard in use, (approximately middle C on the piano). Relative pitch is notated proportionally above and below the dashed lines. The widest curves in the score should be taken to traverse the entire range of the instrument.

Number pairs appearing in a given section indicate the number of individual melodic gestures that are to be performed by the right and left hands within the same time space. For example the 7 over 2 indication in the first section means that the right hand plays seven melodic gestures in the same time as the left hand plays two gestures. Other

systems are divided into several equal-length sub-sections, each with its own numerical notation.

The entire structure may also be repeated in performance. If that is done, however, the complete cycle (from reverence to reverence) should be performed each time through.

*In the Beginning: Etude III* came about when the composer's close friend and colleague, filmmaker/artist/performer, George Manupelli, asked him for a piece to perform on the piano, even though Manupelli is not a pianist, at least not in the traditional sense. This score was the answer.

[NOTE: The composer realizes that performing this *Etude* with vigor and commitment, while using oranges, can result in creating a rather serious mess on the keyboard. Consequently, it is considered acceptable to use substitutes for oranges in order to avoid besmirching the keyboard in use. The most effective substitutes are usually rubber or plastic balls, similar in size to oranges, and chosen so that their hardness or softness produces the best sound quality. It is expected that the piece will invoke a performance art quality, though there should never be too much acting.]

reverence **1**

2.

love **2**

4. 5. 4. 3.

joy **1**

6. 5.

humor **3**

7. 4. 7. 5. 7. 6. 7.

joy **1**

5. 3.

passion **2**

2. 3. 5. 4.

reverence **1**

2. 3.