In the Beginning: Etude II (Keyboards-Plucked Strings)

David Rosenboom

1980

to James Tenney

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 inversional 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).

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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.). It exploits both harmonic and sub-harmonic relationships. These 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 II may be performed with a variety of keyboards (including mallet instruments) and plucked strings. (Other possibilities might also be envisioned.) Performers and instruments must be grouped into pairs. Any two parts, which have the same letter name in the score, (ex. A1 and A2) are considered a pair, which together articulate a continuous line in the score. Any pair may be performed alone or in combination with other pairs. For example, two keyboardists could play parts A1, B1, A2, and B2; four keyboardists or eight single line instruments could play all parts in the score. Parts may also be doubled, if more players are added, as long as all lines are equally balanced.

A performance proceeds through a series of cells, separated in the score by double bar lines and arrows. Each cell, except the last one, contains a set of sub-cells, marked off by single bar lines. Both sub-cells and cells contain patterns to be repeated continuously. The number of repeats for each sub-cell and each cell may be chosen by the performers; however, they must coordinate this in groups. The A-lettered parts must be synchronized with the B-lettered parts, forming an A:B group, and C with D, forming a C:D group. A1 and B1 players will be alternating with A2 and B2 players, possibly in an antiphonal arrangement, as will C1 and D1 with C2 and D2 players. A:B patterns, however, may not have the same lengths as C:D patterns and will, therefor, cycle around each other. All parts are played with a common pulse.

To make a performance, begin with the first sub-cell within the first cell and repeat it. At will, but synchronized properly with other appropriate parts, add the second sub-cell to the first. This lengthens the overall pattern. Repeat this longer pattern until ready to add the next cell to make a still longer pattern, and so on. Continue in this additive manner until the pattern has been lengthened to include the entire cell. The A:B group may proceed through sub-cells independently from the C:D group. On a prearranged cue, <u>all</u> players, both A:B and C:D groups, move to the next cell and build it up in the same additive manner. Proceed like this through each cell and its sub-cells until reaching the last cell, which contains no sub-cells. Play the last cell all together and stop after repeating it a few times.

The average dynamic level should move from mezzo forte at the beginning to forte at the end with a range to be chosen by the performers. The tempo should be quite rapid and constant. A good tempo is quarter note MM = 82, sixteenth notes then being at MM = 328.

The up and down musical “shapes” heard in the lines in each cell are derived from analyses of forms that commonly appear in the expression of human emotions, in gestures, biological patterns, and artistic works. The specific shapes used in this etude are also explored in *In the Beginning: Etude III* and *In the Beginning IV (Electronic)*.

The harmonic and rhythmic structure of *In the Beginning: Etude II* was imagined with my close friend and colleague, James Tenney, in mind.

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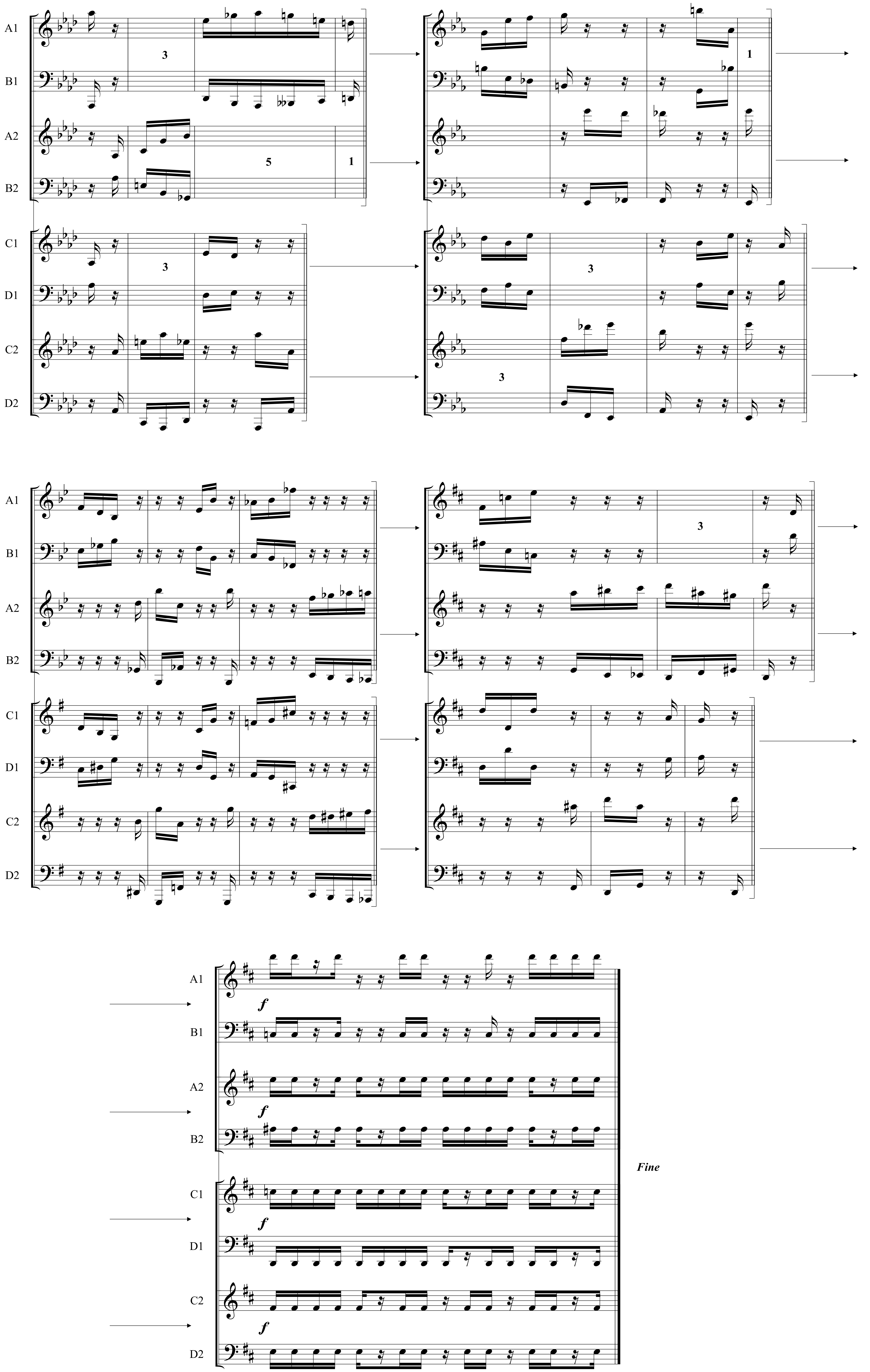
Score

In the Beginning: Etude II

David Rosenboom

A1
B1
A2
B2
C1
D1
C2
D2


A1
B1
A2
B2
C1
D1
C2
D2
3
5
1
f
Fine