

POÈME RÉCURSIF

In appreciation György Ligeti and Benoît Mandelbrot

*for 64 pieces of
untuned percussion
(2003)*

TREVOR BAČA

POÈME RÉCURSIF, under the usual interpretation, assigns exactly one player to each of the 64 numbered parts of the piece. Other assignments of players to parts are also possible. An ensemble of, for example, 32 musicians may assign two parts per player and dedicated percussion ensembles even more. The instrumentation of the piece is for 64 pieces of untuned percussion, but exact instrumentation is left to the performing ensemble. Each of the 64 parts may be played on exact copies of the same piece of percussion: 64 identical woodblocks, 64 identical templeblocks or 64 identical pieces of cut wood, brought onstage expressly for the performance, for example. Other professional or adapted percussion instruments, whether woods, skins, metal or of other materials, are also allowed, as the situation of each performance dictates. In all cases, however, instruments must be struck and untuned; instruments with a strong connotation of pitch, such as strings played *col legno battuto*, are discouraged, and sustained tones, whether by bow or by breath, are forbidden.

Whatever the instrumentation chosen for performance, attacks are all to be precise, well-articulated and of exactly equal duration. Make no distinction at all between the attack of a half note and the attack of a sixteenth note. Muffle or mute no sound. The piece can be played either uniformly quietly or uniformly loudly throughout, at the pleasure of the performers. In either case, changes in perceived dynamic are to be effected primarily by the entrance and exit of groups of players, as indicated in the score. Contrast dense sections of the piece considerably with thinner sections and let the massiveness of the patterned, kaleidoscopic transformations between sections vary accordingly. Tempo, once chosen, must remain constant throughout but may vary from performance to performance as indicated.

In all cases, the aural effect is to be that of a cleanly delineated rhythmic network of information in constant transformation, definition and reformation.

POÈME RÉCURSIF projects some 16384 of the binomial coefficients as pointsets in musical time. The structure of the piece is completely determined. Part n , measure m divides the half note equally by a number equal to $\text{Binomial}(255+n-m, n-1) \bmod 8$ and values congruent to 0 $\bmod 8$ take only a rest. The binomial recurrence holds everywhere in this piece and ensures that the number of divisions of each measure equals the sum, $\bmod 8$, of the number of divisions of the measure immediately above and the measure immediately following. The underlying structure yields, therefore, to calculation by hand, even for very large values of n and m , and closely mirrors the grid-like growth and transformation of certain cellular automata.

Preliminary sketches for this piece were written in 1993 in response to the music of Edgar Varèse and György Ligeti and after the exploration of certain two-dimensional recurrences and images from fractal geometry. POÈME RÉCURSIF was finished in August 2003 and is dedicated, with appreciation, to György Ligeti and Benoît Mandelbrot || Austin, 2003.

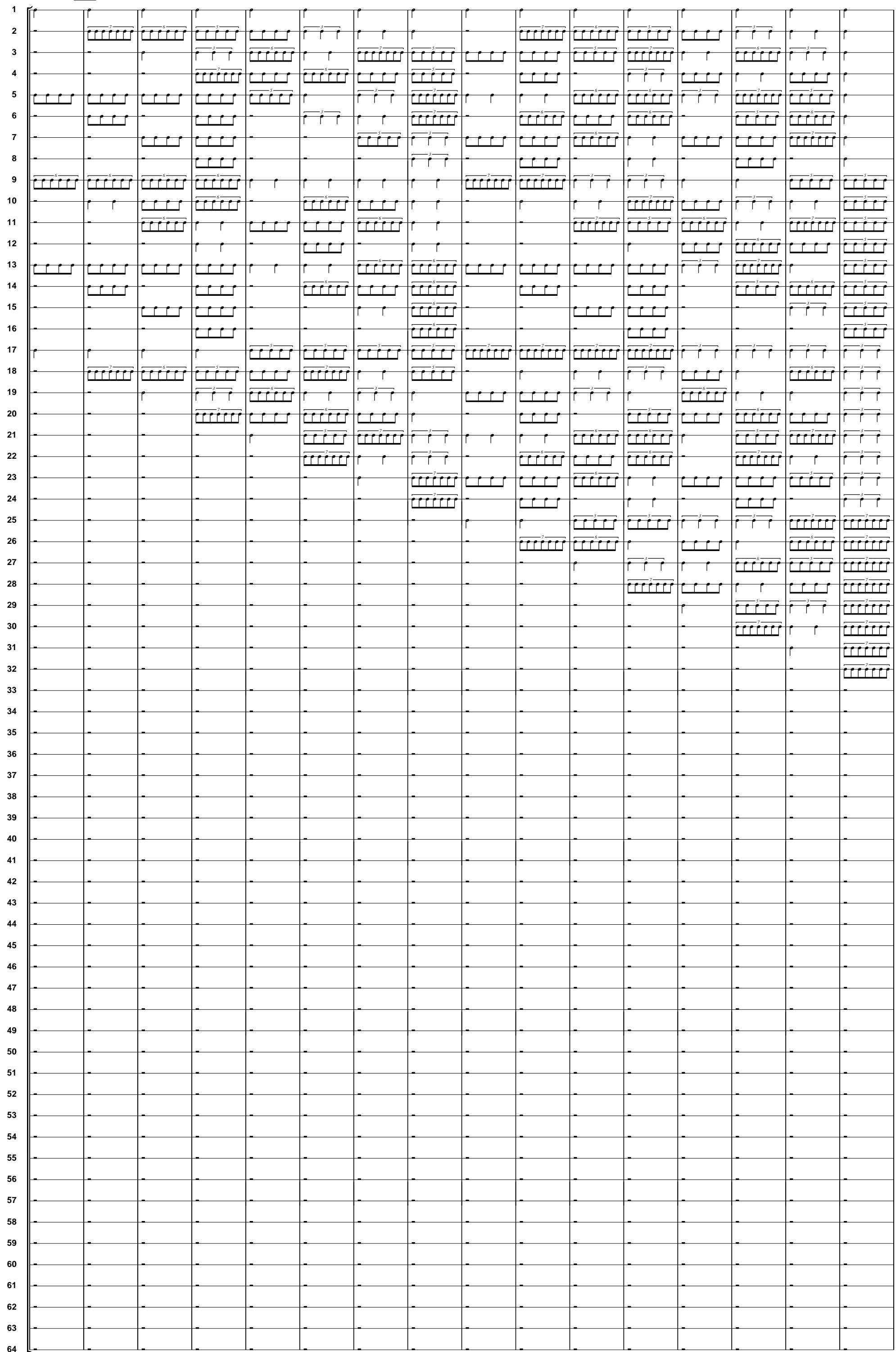
POÈME RÉCURSIF

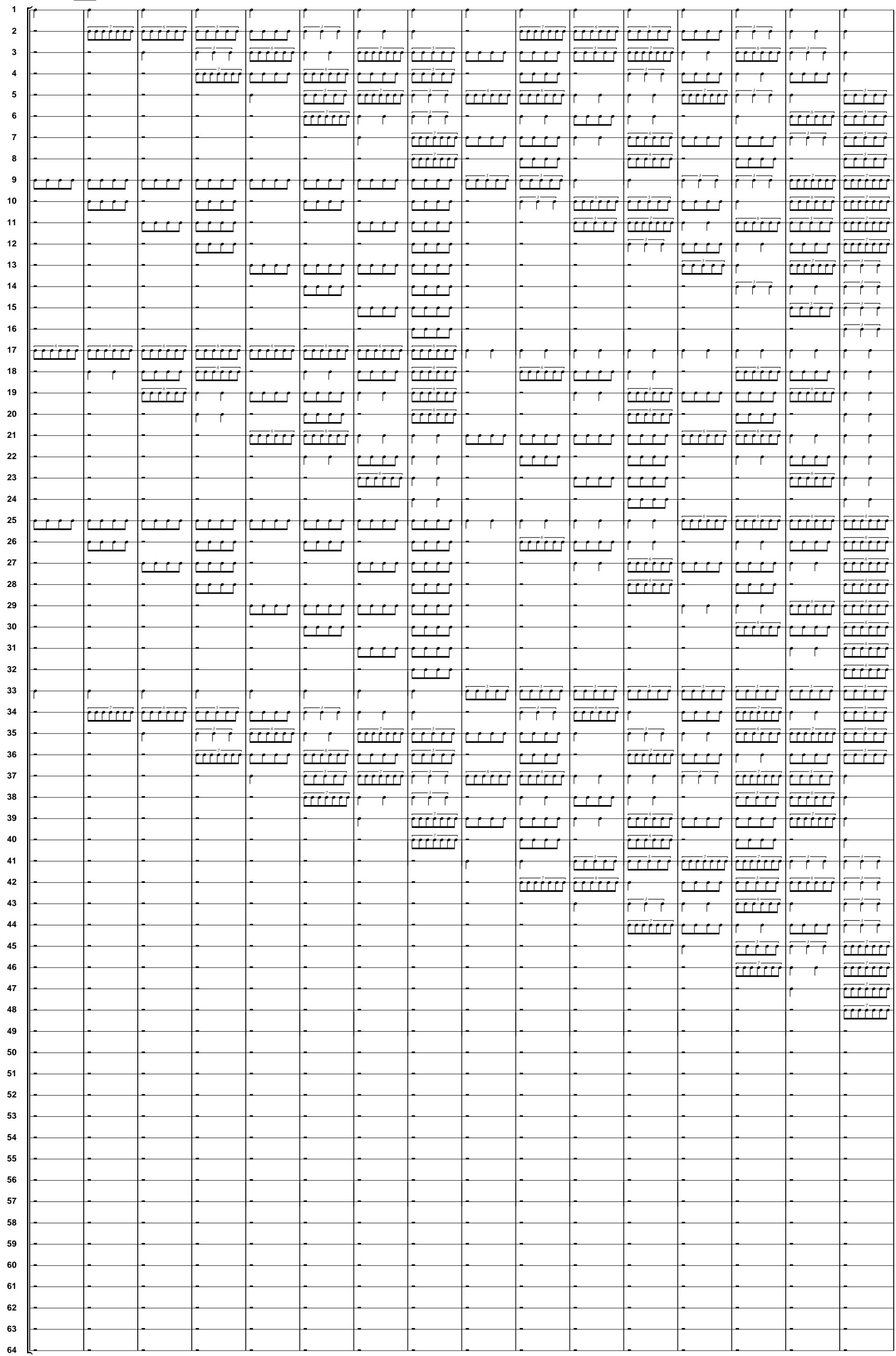
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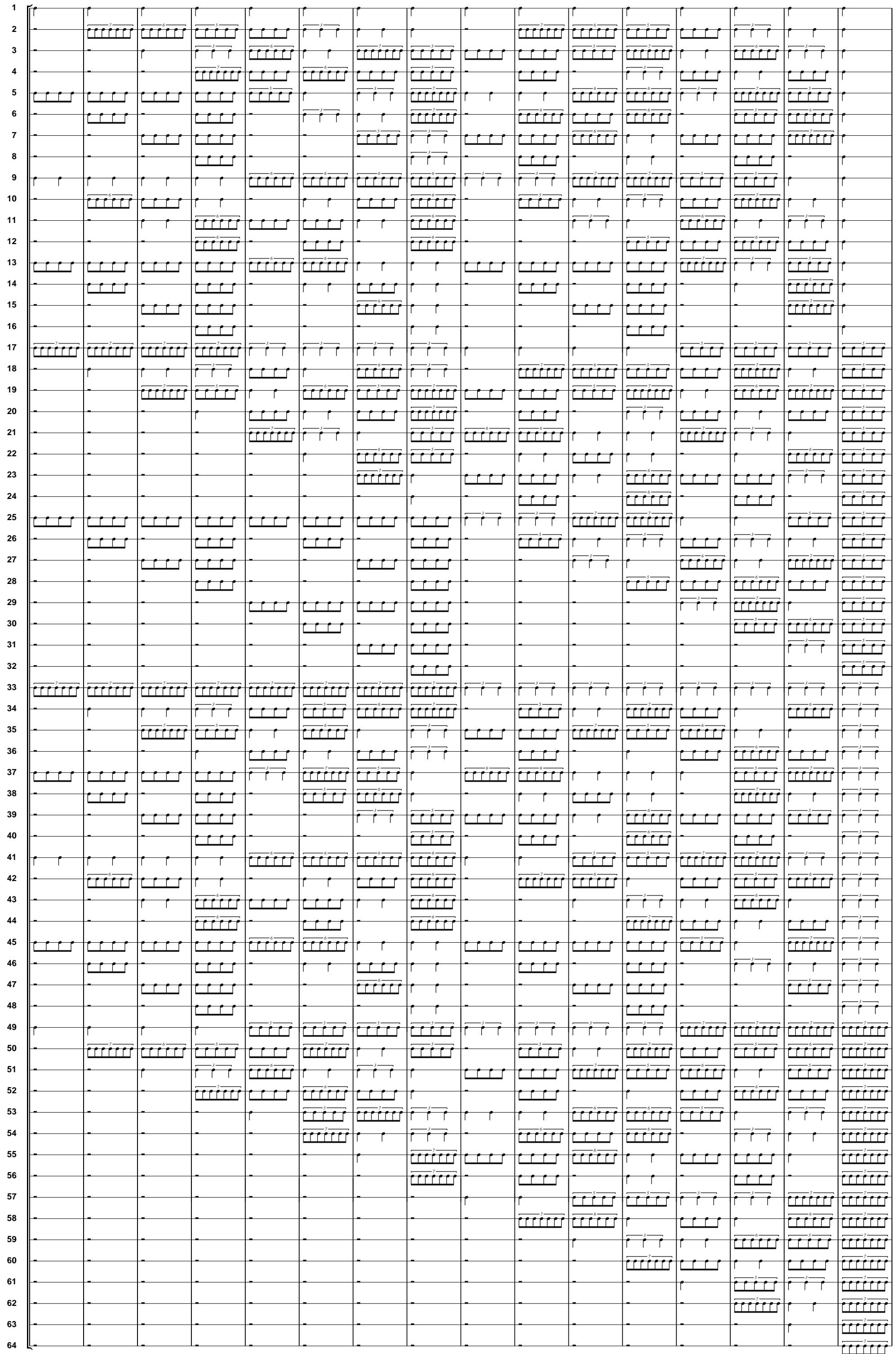
$\text{♩} = 38-44$

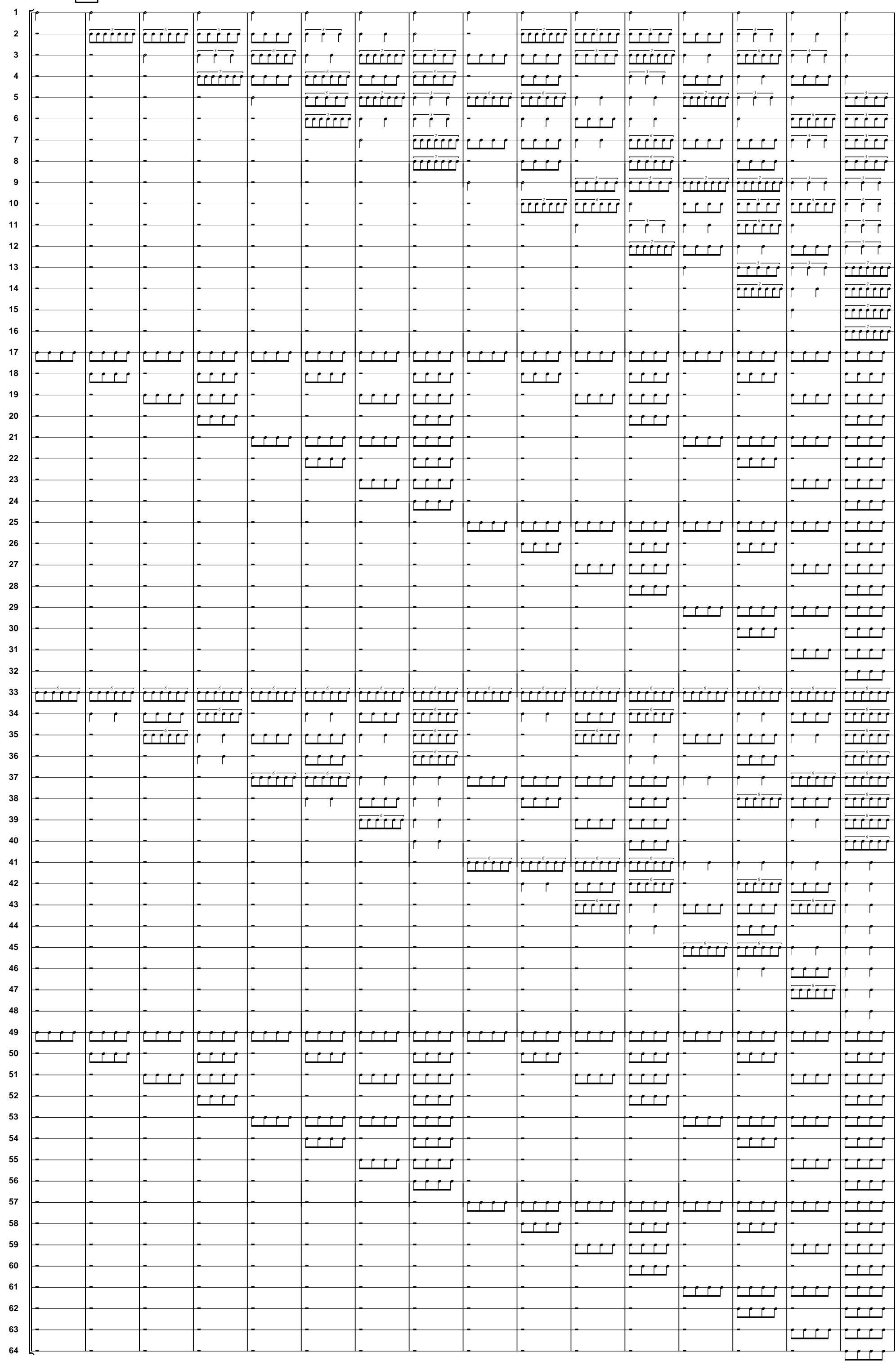
Trevor Bača (*1975)

The musical score for 'Poème Récuratif' is a dense grid of 64 staves, each representing a different part of the ensemble. The parts are numbered 1 through 12 on the left side of the page. The music is primarily composed of eighth-note patterns, with some sixteenth-note patterns. The patterns are highly repetitive and follow a specific sequence across the staves. The tempo is indicated as quarter note = 38-44. The score is attributed to Trevor Bača (*1975) and is dedicated 'In appreciation György Ligeti and Benoît Mandelbrot'.

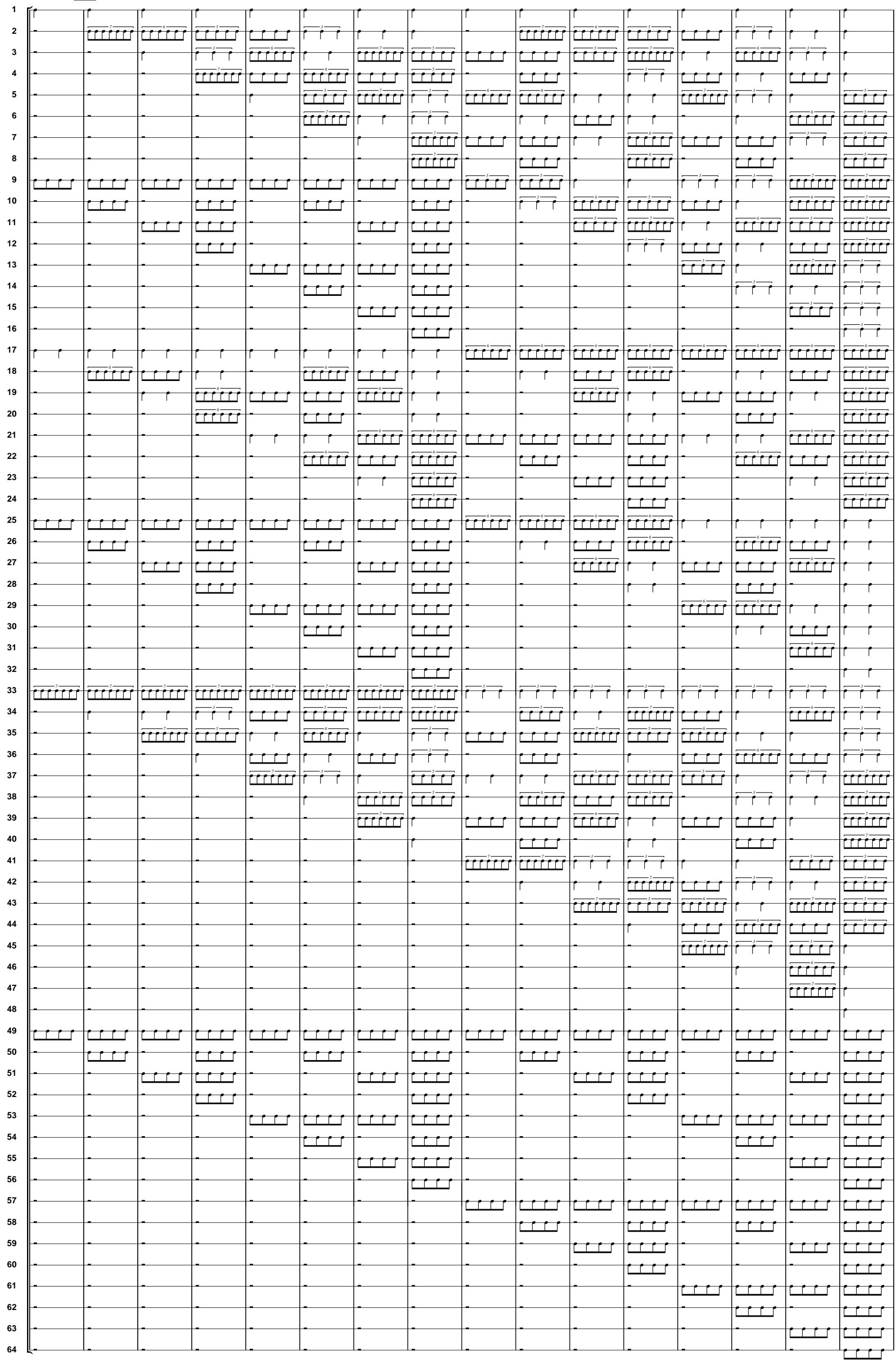




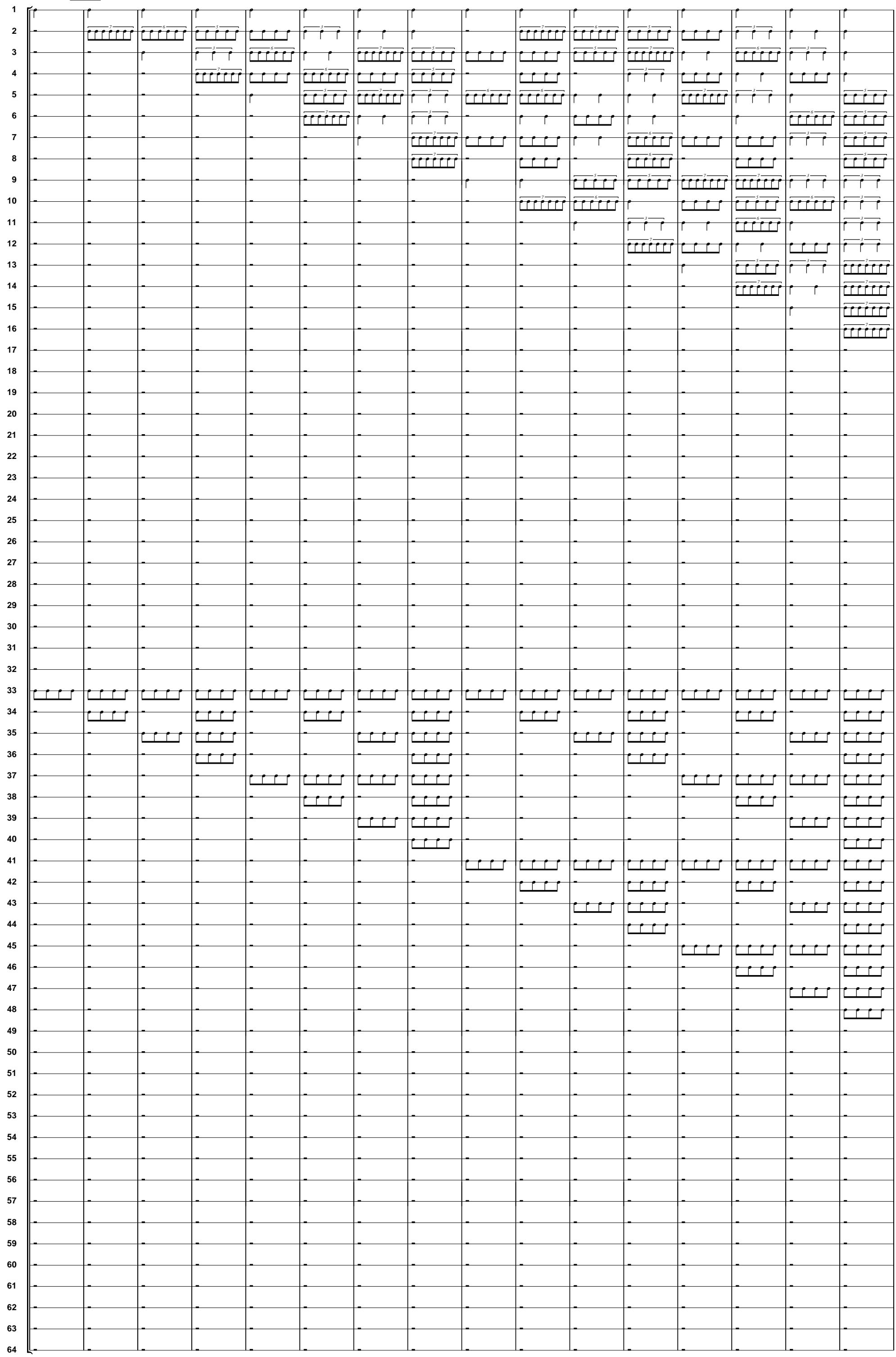


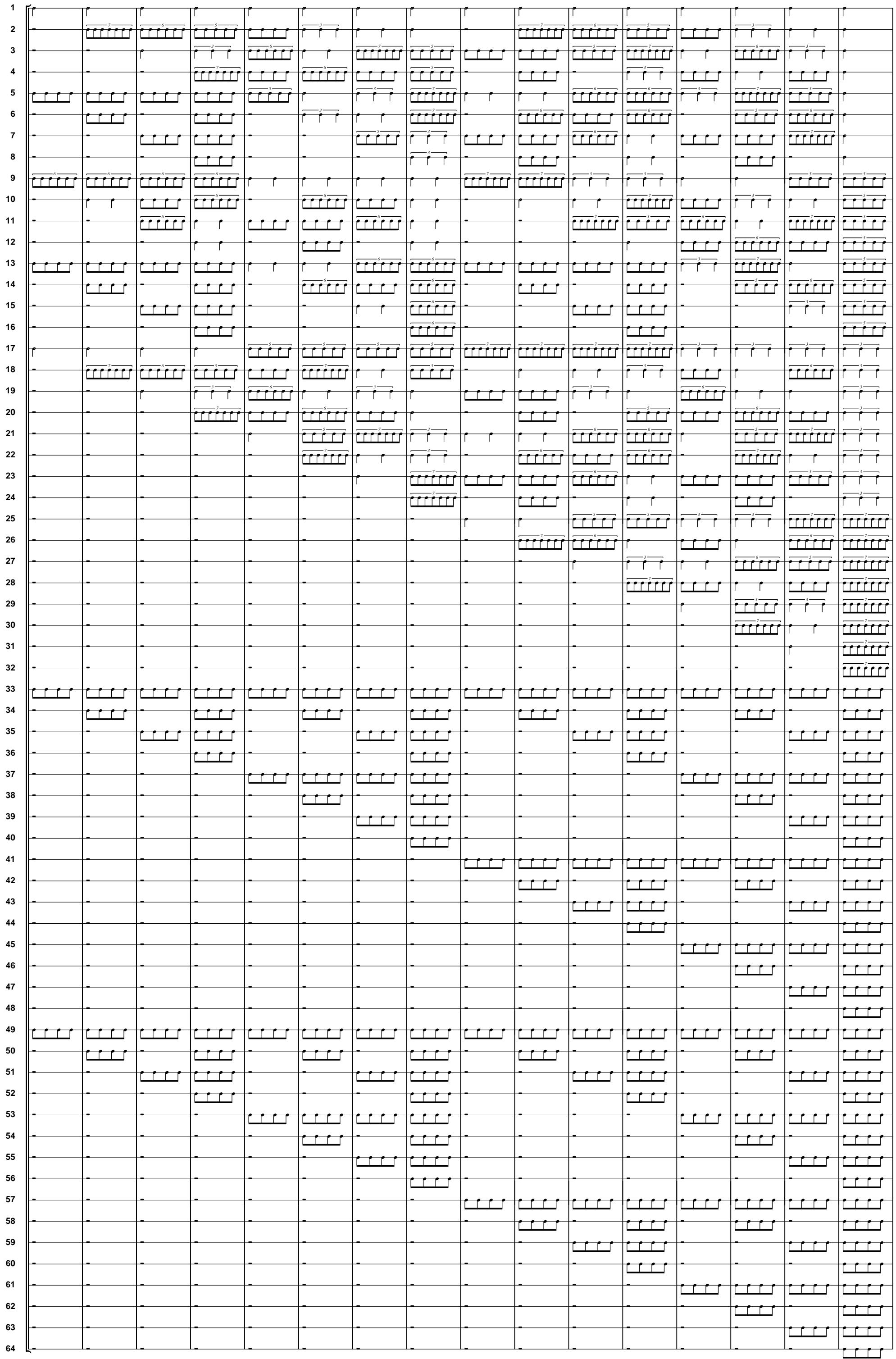


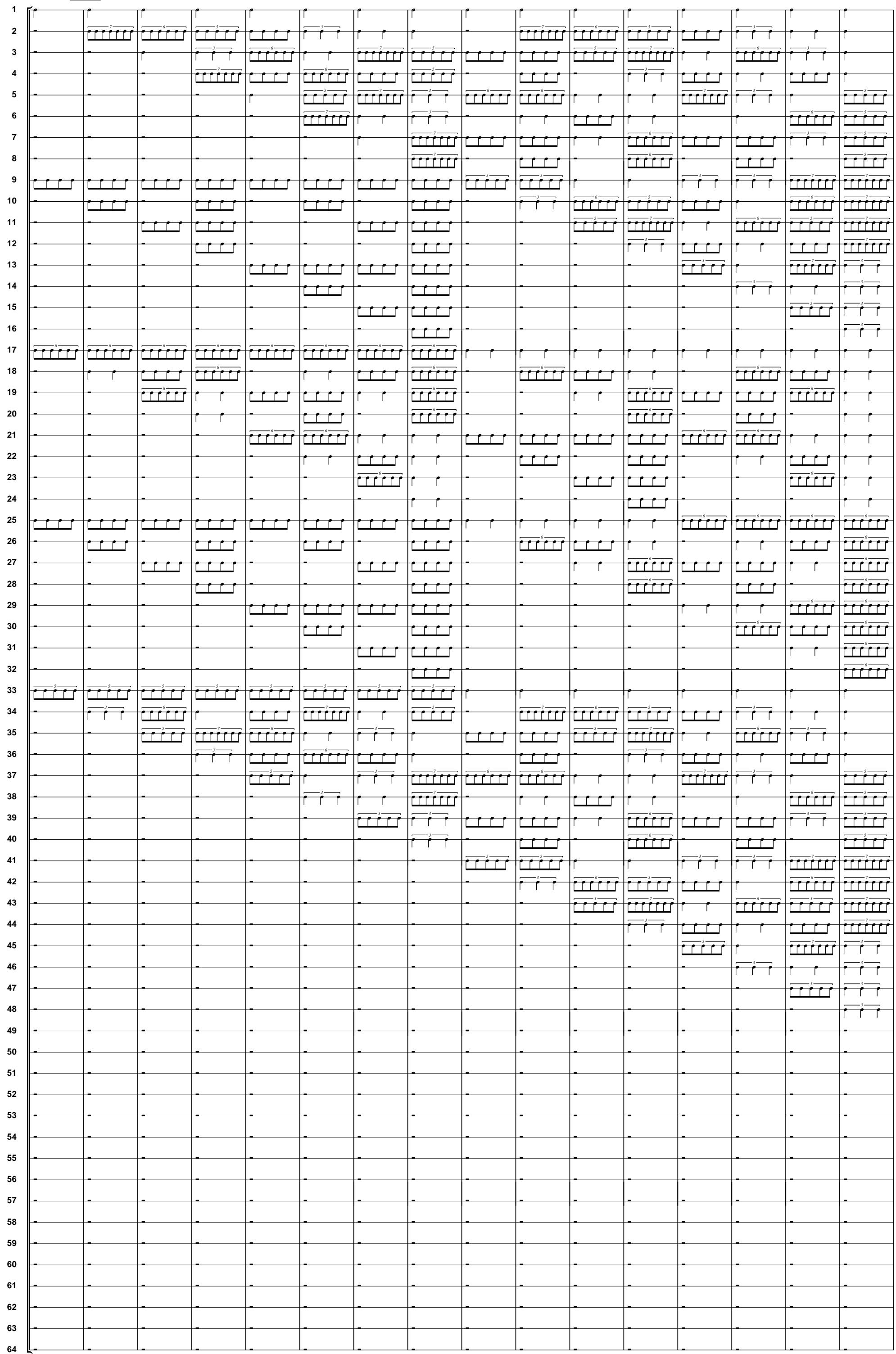
This image shows a 64-page grid of musical patterns for guitar practice. The grid consists of 16 columns and 4 columns of 16 rows each. Each row contains a sequence of vertical bars representing guitar strings, with specific frets indicated by horizontal lines and numbers (e.g., 3, 5, 6, 7). The patterns are designed to help players practice finger placement and timing. The first page is numbered 82 at the top left.



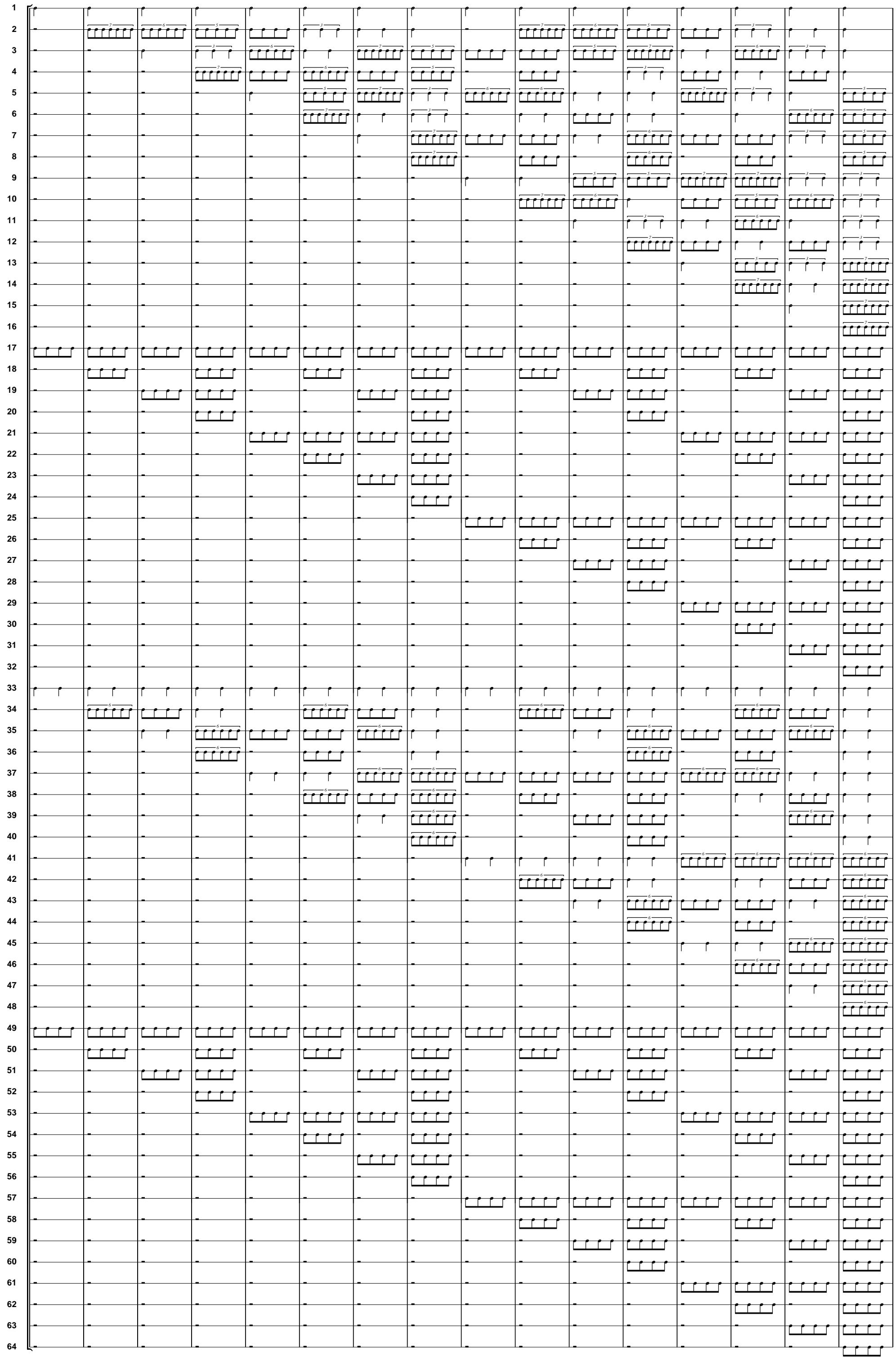
This image shows a 64-page grid of musical patterns for guitar practice. The grid is organized into 8 columns and 8 rows of 8 pages each. Each page contains 12 horizontal staves, representing the six strings of a guitar. The patterns consist of vertical strokes (downbeats) and horizontal dashes (upbeats). Numerical markings (1 through 7) above the staves indicate specific fingerings or stroke types. The first few pages show simple patterns like '1' over all strings, while later pages introduce more complex sequences involving multiple fingers and different stroke types.







This image shows a 64-page grid of musical patterns for guitar practice. Each page contains 12 horizontal rows, each representing a different fret position on a guitar neck. The first row is the highest fret (1) and the last row is the lowest fret (64). The columns represent different string groups or specific fingerings. Each box in the grid contains a unique combination of notes and rests, often with arrows indicating specific fingerings or movement directions. The patterns are designed to help players practice various chord shapes, scales, and fingerings across the entire neck of the guitar.



This image shows a continuous 64-page grid of musical patterns for guitar practice, starting from page 1 at the top and ending at page 64 at the bottom. The grid is organized into 8 columns and 8 rows of 8 measures each. Each measure consists of 4 vertical guitar strings. The patterns involve various note heads (solid black dots) and rests (white spaces). Some notes are connected by horizontal lines, indicating specific fingerings or techniques. The patterns are designed to help players practice different chord progressions and fingerings over an extended period.

A 64-page grid of musical patterns for guitar practice. The grid consists of 16 columns and 4 columns of 4 rows each. Each row contains a sequence of vertical bars representing guitar strings, with specific frets indicated by horizontal dashes. The first few rows show patterns like 7-6-5-3, 7-6-5-3, 7-6-5-3, etc. As the grid progresses, the patterns become more complex, featuring sixteenth-note-like figures and various string combinations. The patterns are designed to help guitarists practice finger placement and timing.

A 64-page grid of musical patterns for a 12-string guitar. Each page contains 12 staves, each with 6 horizontal lines. The patterns consist of vertical columns of dots representing fingerings, with horizontal arrows indicating string numbers (e.g., 3, 5, 6, 7). The first page is numbered 1 at the top left, and the last page is numbered 64 at the bottom left. The patterns are organized into four vertical columns across the staves.

parts available from the composer at www.trevorbaca.com