

Rondo: The Divisors of Seventy Two

For Two Bass Recorders (with F# keys) and Treble or Glarken

In 'Journey to the Heart of Music' Chapter 13, an example of computational number processing is provided both in the form of computer code and tonal sound. The music below is an attempt to illustrate that the 'dry' chord progressions of this rather theoretical example could be incorporated in to a piece of normal common practice tonal music: thereby exemplifying the contention, that all tonal music is, fundamentally, arithmetic.

poco accel. **Andantino**

The musical score is written for three parts: Treble/Glarken, Bass Rec. I, and Bass Rec. II. The key signature is one sharp (F#) and the time signature is 3/4. The score is divided into three systems. The first system is marked 'poco accel.' and the second and third systems are marked 'Andantino'. The score includes various musical notations such as notes, rests, and accidentals.

19



System 19-24: Treble clef, key of D major. Measures 19-24. The melody in the treble clef features eighth and quarter notes with various accidentals. The bass clef provides a harmonic accompaniment with half and quarter notes, including some beamed eighth notes.

25



System 25-30: Treble clef, key of D major. Measures 25-30. The melody continues with eighth and quarter notes. The bass clef accompaniment includes half notes and beamed eighth notes.

31



System 31-36: Treble clef, key of D major. Measures 31-36. Measures 31-34 show a more complex melody with many accidentals. Measures 35-36 show a simpler melody. The bass clef accompaniment consists of half and quarter notes.

37



System 37-42: Treble clef, key of D major. Measures 37-42. The melody in the treble clef features eighth and quarter notes. The bass clef accompaniment includes half notes and beamed eighth notes.

43

49 **molto rit.** **accel.**

The Cmaj-9th chord in the key of C major expresses the relationship of C-h1 to D-h72.

55 **poco meno Tempo primo**

Loop:1.1-C 1.2-Cmaj 1.3-Gmaj 1.4-Cmaj 1.5-Emaj

61

1.6-Gmaj 1.7-Bbmaj7th

67 **allargando** **molto allargando**

1.8-Cmaj7th 1.9-Dmaj9th, (E-h81 > D-h72) Therefore C-h64 is greatest square less than D-h72

73 **accel.** **Tempo primo**

79

84

89 rit. , poco meno

Musical score for measures 89-94. The system consists of three staves: Treble, Bass, and a lower Bass staff. Measure 89 starts with a treble staff melody of eighth notes and a bass staff accompaniment. Measure 90 has a 'rit.' (ritardando) marking. Measure 91 has a key signature change to one sharp (F#). Measure 92 continues the treble melody. Measure 93 has a 'poco meno' (poco meno mosso) marking. Measure 94 ends with a fermata on the treble staff.

95 (9)

Musical score for measures 95-100. The system consists of three staves. Measure 95 continues the treble melody with a fermata. Measure 96 has a '(9)' marking above the treble staff. Measure 97 continues the treble melody. Measure 98 has a key signature change to one sharp (F#). Measure 99 continues the treble melody. Measure 100 ends with a fermata on the treble staff.

101

Musical score for measures 101-106. The system consists of three staves. Measure 101 continues the treble melody. Measure 102 continues the treble melody. Measure 103 continues the treble melody. Measure 104 continues the treble melody. Measure 105 continues the treble melody. Measure 106 ends with a fermata on the treble staff.

107

Musical score for measures 107-112. The system consists of three staves. Measure 107 continues the treble melody. Measure 108 continues the treble melody. Measure 109 continues the treble melody. Measure 110 continues the treble melody. Measure 111 continues the treble melody. Measure 112 ends with a fermata on the treble staff.

113

119

124

Loop: 2.1-C7th 2.2-Bb7th 2.3-Gmaj

131

2.4-Emaj 2.5-Cmaj 2.6-Gmaj

138 **meno**

2.7-Cmaj 2.8-Cmaj Thus the divisors of seventy-two are:
8×9, 6×12, 4×18, 3×24, 2×36 & 1×72.

144

149 **rit.**

154 **rall.** **molto allargando**