

Musical Dice Game - Rondo I

based on

*L'art de composer de la musique sans en connaître les
éléments 2nd Ed. (1802)*

by Antonio Callegari

compiled by I. T. Author

*Cinquième
CAHIER
Série I
POUR
Les Vers de Sept Sylabes
et avec laquelle on peut former des rondeaux
à la polonoise.*

Table pour la première partie des Rondeaux.

| | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII |
|----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|
| 2 | 29 | 29 | 170 | 307 | 272 | | 88 | 288 | 185 | 73 | 113 | 53 |
| 3 | 68 | 303 | 206 | 83 | 244 | 35 | 246 | 48 | 43 | 180 | 248 | 62 |
| 4 | 303 | 210 | | 237 | 238 | 78 | 209 | 261 | 238 | 294 | 250 | 22 |
| 5 | 308 | 218 | 204 | 283 | 210 | 48 | 57 | | 2 | 165 | 91 | 20 |
| 6 | 46 | 246 | 169 | 173 | 268 | 36 | 274 | 269 | 238 | 204 | 72 | 24 |
| 7 | 232 | 145 | 136 | 304 | 228 | 66 | 60 | 77 | 233 | 167 | 44 | 164 |
| 8 | 195 | 217 | 104 | 206 | 141 | 216 | 235 | 86 | 279 | 224 | 188 | 186 |
| 9 | 73 | 14 | 160 | 233 | 297 | 243 | 47 | 64 | 86 | 10 | 149 | 106 |
| 10 | 58 | 63 | 236 | 650 | 127 | 105 | 153 | 203 | 97 | 90 | 123 | 89 |
| 11 | 49 | 30 | 142 | 306 | 171 | 137 | 42 | 81 | 3 | 245 | 263 | 96 |
| 12 | 54 | 203 | 94 | 13 | 302 | 15 | 83 | 144 | 99 | 135 | 65 | 82 |

Musical Dice Game - Rondo I

based on

L'art de composer de la musique sans en connaître les éléments 2nd Ed. (1802)
by Antonio Callegari

Author:
I. T. AUTHOR

Supervisor:
Dr. Communio SANCTORUM

WONDERS OF THE MUSICAL WORLD SERIES 7



Libre Edition Press
May 1, 2025

Contents

| | | |
|----------|--|-----------|
| 1 | Introduction | 3 |
| 2 | <i>L'Art - 5th Cahier</i> | 4 |
| 2.1 | Rules | 4 |
| 2.2 | Table for finding Measure Number from Table of Measure Numbers | 5 |
| 2.3 | Table of Measures | 7 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 1 of measures | 7 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 2 of measures | 8 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 3 of measures | 9 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 4 of measures | 10 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 5 of measures | 11 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 6 of measures | 12 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 7 of measures | 13 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 8 of measures | 14 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 9 of measures | 15 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 10 of measures | 16 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 11 of measures | 17 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 12 of measures | 18 |
| | <i>L'Art - 5th Cahier - Ariettas</i> page 13 of measures | 19 |
| | <i>L'Art - 5th Cahier - Ritornellos</i> page 1 of measures | 20 |
| | <i>L'Art - 5th Cahier - Ritornellos</i> page 2 of measures | 21 |
| | <i>L'Art - 5th Cahier - Ritornellos</i> page 3 of measures | 22 |
| 3 | Related Links | 22 |
| 4 | Acknowledgments | 23 |
| 5 | Twenty (20) Selected Rondos based on <i>L'Art - 5th Cahier</i> | 23 |
| | 10-4-12-9-12-7-6-3-10-8-2-6-4-10-9-10-5-4-4-11-3-12-9-6-4-4-11-2-8-12-6-7 | 23 |
| | 11-8-3-3-4-11-6-3-9-4-6-2-6-3-8-11-5-12-3-4-4-3-10-2-6-8-5-11-8-8-5-2 | 24 |
| | 11-9-6-8-12-12-11-8-2-4-7-5-5-3-4-6-8-4-6-5-12-4-9-4-5-12-12-4-6-4-8-7 | 25 |
| | 12-3-11-4-7-9-10-8-7-11-6-10-4-7-12-8-2-7-2-10-5-2-9-10-8-4-2-12-8-12-8-11 | 26 |
| | 2-2-3-2-3-8-11-10-6-2-3-12-4-6-9-8-9-8-5-4-8-3-6-12-8-7-10-12-3-4-2-12 | 27 |
| | 2-8-10-8-5-8-11-8-2-7-7-6-7-12-11-6-2-2-7-7-10-7-4-3-3-12-10-8-6-6-2-12 | 28 |
| | 3-2-9-9-8-5-12-6-4-8-9-5-2-3-12-4-9-2-8-8-11-5-12-10-2-2-10-11-7-4-6-11 | 29 |
| | 4-12-6-6-9-8-6-8-2-12-6-7-6-8-8-5-2-2-8-5-9-4-3-12-7-10-11-6-10-7-8-9 | 30 |
| | 4-7-11-10-2-4-8-5-4-9-8-5-8-12-9-11-11-4-6-2-2-12-8-12-5-3-3-12-12-6-5 | 31 |
| | 5-12-2-5-8-7-4-10-7-2-10-6-4-8-6-12-5-3-2-8-8-11-7-4-4-8-6-11-6-3-12-11 | 32 |
| | 6-11-2-2-6-12-5-2-11-11-7-5-11-2-6-8-9-12-9-2-5-9-5-12-9-2-7-3-9-10-4-6 | 33 |
| | 6-11-3-7-11-10-9-11-3-9-5-9-2-7-10-12-7-3-10-7-6-5-9-4-11-3-9-8-5-8-12-9 | 34 |
| | 6-12-4-7-10-6-2-6-12-6-4-7-11-4-9-9-7-10-6-11-11-7-8-4-3-7-9-9-4-8-7-12 | 35 |
| | 6-7-2-7-3-12-11-10-9-12-11-9-7-5-8-8-9-2-6-3-10-7-8-2-11-6-9-7-4-8-4 | 36 |
| | 7-12-3-5-6-8-7-3-6-9-7-11-10-9-5-11-4-6-11-7-3-7-4-9-9-12-12-10-9-4-5-8 | 37 |
| | 7-8-3-9-11-10-11-7-4-11-7-8-7-5-2-2-12-10-12-9-12-7-10-9-8-8-12-8-2-4-4-10 | 38 |
| | 8-6-3-10-5-9-5-12-12-4-2-5-12-4-10-11-7-7-6-4-2-9-11-5-10-8-4-3-9-9-8-4 | 39 |
| | 8-7-6-7-11-8-11-8-10-9-4-11-11-5-2-11-9-6-5-4-2-11-8-3-10-12-9-7-5-7-12-4 | 40 |
| | 9-10-7-11-9-5-4-5-12-8-8-4-9-12-10-6-6-5-11-12-4-3-12-12-9-6-12-6-11-5-8-3 | 41 |
| | 9-9-6-4-10-11-5-2-4-2-3-10-9-5-9-12-12-8-2-7-11-5-9-6-12-11-9-7-11-7-7-5 | 42 |
| 6 | License | 44 |

1 Introduction¹

“L’ART de Composer de la Musique
Sans en Connaître les Éléments -
Cinquième CAHIER Serial POUR
Les Vers de Sept Sylabes et
avec la quelle on peut former
des rondeaux a la polonaise. Allegro.”

“The Art of Composing Music
Without Knowledge of the Elements -
Fifth Serial NOTEBOOK FOR
Seven Syllable Verses and
with which one can form
rondeaus in the Polish style. Allegro.”

Thus run the French title and corresponding English translation of the Musical Dice Game (MDG) invented by Antonio Callegari (also Calegari). Rightly and interestingly so, as the Rules provided in the fifth notebook of the published work allow a non-professional musician to generate (“compose”) nearly 453.6 duodecillions (10^{39}) of unique MDG rondos. More precisely, the total number of rondos that the rules of the *L’Art - 5th Cahier*, as we would refer to this MDG from here onward, yield is:

$$11^{32} = 452,592,555,681,759,518,058,893,560,348,969,204,658,401.$$

A *Musikalisches Würfelspiel* (German for “musical dice game” or MDG) is a system for randomly “generating” (e.g., by using a die or two dice) musical compositions from precomposed options and was quite popular throughout Western Europe in the 18th century. The earliest known MDG is Johann Philipp Kirnberger’s *Der allezeit fertige Polonoisen- und Menuettencomponist* (1st ed. 1757; rev. 2nd ed. 1783) (translated from German as “The Ever-Ready Minuet and Polonaise Composer”). Other well-known composers that are known to have composed a MDG are C.P.E. Bach (*Einfall, einen doppelten Contrapunct in der Octave von sechs Tacten zu machen, ohne die Regeln davon zu wissen* (1758); translated from German as “A method for making six bars of double counterpoint at the octave without knowing the rules”), Abbé Maximillian Stadler (*Table pour composer des minuets et des Trios à la infinie; avec deux dez à jouer* (1780); translated from French as “A table for composing minuets and trios to infinity, by playing with two dice”), the latter MDG being also attributed to Franz Joseph Haydn.

Probably the most famous of MDGs is *Musikalisches Würfelspiel K. 516f* (1787). This MDG was first published by J.J. Hummel in 1793 in Berlin and was republished in 1796 by Nikolaus Simrock in Bonn (as K. 294d or K. Anh. C 30.01). Simrock attributed this work to Wolfgang Amadeus Mozart. It is also known under the title of *Anleitung zum Componieren von Walzern so viele man will vermittelst zweier Würfel, ohne etwas von der Musik oder Composition zu verstehen* (German for “Instructions for the composition of as many waltzes as one desires with two dice, without understanding anything about music or composition”) and may have been based on Mozart’s manuscript *K. 516f*, written in 1787, consisting of numerous two-bar fragments of music, that appear to be some kind of game or system for constructing music out of two-bar fragments, but contains no instructions nor hints as to the use of dice. An [online article](#) by Hideo Noguchi offers a possible explanation for this attribution.

For this book, we generate MDG rondos based on the rules given in the second edition of *L’Art - 5th Cahier*. The first edition of this work was published in 1801 under the title *Gioco Pitagorico Musicale, col quale potrà ognuro, anco senza sapere di musica, formarsi una serie quasi infinita di picciole ariette, e duettini, per il tutto coll’accompagnamento del piano forte, o arpa, o altri strumenti* (English translation: *Game of Pythagorean Music, with which anyone, even without knowing music, can compose an almost endless series of small songs and little duets, all with the accompaniment of the pianoforte, or harp, and other instruments*) and contained five different MDGs. The twenty (20) MDG rondos given toward the latter part of this book were generated according to the rules given in *L’Art - 5th Cahier*. The scores of these generated rondos were initially written using the abc environment of Chris Walshaw, then converted to Scalar Vector Graphics (SVG) images (with corresponding MIDIs) using abcm2ps and abcmidi, and then pre-processed with Inkscape to be included in L^AT_EX to produce this book.

¹The information contained in the introduction were culled from the following online resources: [Callegari, Antonio](#), Wikipedia: *Musikalisches Würfelspiel* (2017), <https://opus-infinity.org/>, and [Mozart’s Melody Machine](#) (Peterson, 2001)

2 *L'Art - 5th Cahier*

2.1 Rules

The Rules provided in *L'Art - 5th Cahier* generate rondos almost always consisting of 76 bars/measures (rarely of 74 or 75 bars) that may be divided into four parts (the fourth part is optional), these parts being also called arias, and a refrain. Each of the first three arias contains eight bars (sometimes, but rarely, the first and second part may have only seven bars). The optional fourth part contains 12 (or 11) bars — the eight (or seven) bars of either the second or third part with four additional bars. The first part with a *ritornello* of four measures form the 12-bar (or 11-bar) refrain. The complete rondo is played by first playing the refrain with repeat, then for each part after the first, playing the part with refrain and repeat. All told, a total of $76 \times 2 = 152$ of music is almost always played (rarely, a total of 148 or 150 bars).

The notes for each bar of the rondo are determined by rolling two ordinary six-sided dice 32 times and using the four Tables of Measure Numbers (three tables for the arias and one table for the *ritornellos*) and two Tables of Measures (one for the arias and one for the *ritornellos*) that will be given later.

The following Rules may be followed for generating each rondo (not exactly the same as given in the *L'Art - 5th Cahier*):

1. For the refrain consisting of eight bars of the first part and four bars of the *ritornello*, toss two dice 12 times, then obtain the sum of numbers on the upturned faces (the possible outcomes for each toss are thus from the set $\{2, 3, 4, \dots, 10, 11, 12\}$).
2. The notes for the eight bars for the first part are obtained based on the outcomes of the first eight 2-dice tosses from Step 1. The notes for each bar to be constructed are obtained by first determining the measure number from Table for Measure Numbers 1 (Table 1) corresponding to the number of the bar to be constructed and the toss outcome. The notes corresponding to the bar number obtained from Table for Measure Numbers are then obtained from the Table for Measures (Tables 1 to 13; see also section 2.3 for more details)).

For example, suppose the first 2-dice toss comes up a 2. The Table for Measure Numbers 1 (Table 1) shows that the bar number to be used for the first measure corresponding to an outcome of 2 is 19. We then obtain the notes for bar 19 from the Table for Measures (Table 2.3) for creating the bar 1 of the first part of this rondo. Thus, if the first two-dice outcome is a 2, the Chant Supérieur, Chant Inferieur, and G-clef and F-clef notes for the accompaniment (pianoforte or harp), for the first bar of the part of the first part of the rondo that is being constructed are: AF2 f/e/ d/c/ B/A/, AF2 f/e/ d/c/ B/A/, z[FAc] [FAc] [FAc] [FAc], and [F,,F,]2z2z2 (in abc notation), respectively.

3. Next, one determines the notes for the four bars of the *ritornello* based on the remaining four two-dice tosses from Step 1. Procedures similar to those in Step 2. are undertaken using the Table for Measure Numbers - *Ritornello* (Table 4) and the Tables for Measures - *Ritornello* (Tables 14 to 16).
4. The notes for the eight bars of each of the second and third parts are obtained in a manner similar to Steps 1 and 2 based on the outcomes of eight two-dice tosses for each of these two parts. Note the refrain is played after each of these parts is played. Also, each of this part with the refrain is played with repeat.
5. For the optional fourth part, use the notes of either the second or third part and add four more bars (we will use the notes of the second part for the rondos here). The notes for these latter four bars are obtained by using four additional two-dice tosses, then using the last four columns of Table for Measure Numbers 1 (Table 1) to find the corresponding bars in the Table for Measures (Table 2.3). This fourth part with the refrain is played with a repeat.

6. If we name the four parts of the rondo as systems A, B, C, and D, the *ritornello* as system R, so that the refrain would be system AR, then the entire rondo is played as (AR)2.(BAR)2.(CAR)2.(BDAR)2 or AR.AR.BAR.BAR.CAR.CAR.BDAR.BDAR.

2.2 Table for finding Measure Number from Table of Measure Numbers

The tables given here (Tables 1 to 4) are from *L'Art - 5th Cahier*. The leftmost column contains the possible two-dice toss outcomes (which are precisely the integers from 2 to 12 as we are tossing two ordinary six-sided dice) while the topmost row contains the bar numbers ($12 + 8 + 8 + 4 = 32$ in all) for the MDG rondo to be generated—8 bars each for the first, second, and third parts, 4 bars for the *ritornello*, and the last 4 bars for the optional fourth part.

The bodies of the three tables for arias: Table 1 to 3, include 302 measure numbers, six bar numbers short of the total number of measures that appear in the Table of Measures for the arias (Figures 1 to 13). Bar numbers 31, 32, 131, 132, 191, and 291 from the Table of Measures - Ariettas do not appear in the Table of Measure Numbers.

The body of the table for *ritornellos* (Table 4) contain $11 \times 4 = 44$ bar numbers and this is exactly equal to the number of measures in the Table of Measures - *Ritornellos* (Tables 14 to 16).

Since 32 two-dice tosses determine a unique sequence of 32 bars for a rondo, then the total number of rondos that can be constructed based on the *L'Art - 5th Cahier - Ariettas* Rules in Section 2.1 is

$$11^{32} = 452,592,555,681,759,518,058,893,560,348,969,204,658,401 \approx 452.6 \text{ duodecillions.}$$

Table of Measure Numbers 1 (for Part A/Part D)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| D | 2 | 19 | 79 | 176 | 307 | 272 | | 88 | 138 | 185 | 73 | 118 | 52 | |
| i | 3 | 68 | 303 | 206 | 83 | 244 | 35 | 246 | 48 | 43 | 130 | 248 | 62 | |
| c | 4 | 305 | 219 | | 257 | 251 | 78 | 299 | 261 | 258 | 294 | 250 | 22 | |
| e | 1 | 5 | 308 | 218 | 201 | 283 | 210 | 42 | 57 | | 2 | 165 | 91 | 211 |
| + | 6 | 46 | 240 | 169 | 173 | 268 | 36 | 271 | 259 | 238 | 204 | 72 | 24 | |
| D | 7 | 252 | 145 | 134 | 304 | 228 | 66 | 60 | 77 | 253 | 161 | 44 | 164 | |
| i | 8 | 195 | 217 | 104 | 216 | 141 | 214 | 235 | 84 | 279 | 224 | 188 | 186 | |
| c | 9 | 75 | 14 | 160 | 213 | 297 | 243 | 47 | 64 | 86 | 10 | 149 | 106 | |
| e | 10 | 58 | 63 | 156 | 150 | 127 | 105 | 153 | 233 | 96 | 90 | 125 | 89 | |
| 2 | 11 | 49 | 50 | 142 | 306 | 171 | 137 | 41 | 81 | 3 | 245 | 263 | 116 | |
| | 12 | 54 | 205 | 94 | 13 | 302 | 15 | 85 | 144 | 99 | 135 | 65 | 82 | |

Table 1: This Table of Measure Numbers gives the measure number to be looked-up in the Table of Measures for Arias (see Figures 1 to 9 in Section 2.3) corresponding to each of the two-dice outcome per bar for the eight bars of the first part (Part A) of the rondo and the last four bars of the optional fourth part (Part D).

Table of Measure Numbers 2 (for Part B)

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|----|-----|-----|-----|-----|-----|-----|-----|-----|
| D | 2 | 11 | 9 | 12 | 200 | 17 | 133 | 107 | 40 |
| i | 3 | 212 | 225 | 20 | 182 | 55 | 114 | 110 | 93 |
| c | 4 | 34 | 152 | 67 | 199 | 276 | 296 | 262 | 37 |
| e | 5 | 220 | 154 | 236 | 227 | 300 | 180 | 198 | 168 |
| 1 | 6 | 23 | 231 | 179 | 301 | 289 | 232 | 5 | 177 |
| + | 7 | 119 | 285 | | 18 | 163 | 196 | 92 | 117 |
| D | 8 | 223 | 229 | 288 | 241 | | 166 | 140 | 189 |
| i | 9 | 136 | 270 | 290 | 28 | 146 | 98 | 222 | 274 |
| c | 10 | 267 | 120 | 265 | 247 | 95 | 167 | 76 | 295 |
| e | 11 | 155 | 178 | 293 | 1 | 183 | 87 | 124 | 115 |
| 2 | 12 | 256 | 102 | 226 | | 292 | 8 | 264 | 260 |

Table 2: This Table of Measure Numbers gives the measure number to be looked-up in the Table of Measures for Arias (see Figures 1 to 9 in Section 2.3) corresponding to each of the two-dice outcome per bar for the eight bars of the second part (Part B) of the rondo.

Table of Measure Numbers 3 (for Part C)

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|----|-----|-----|-----|-----|-----|-----|-----|-----|
| D | 2 | 111 | 275 | 21 | 6 | 71 | 70 | 242 | 38 |
| i | 3 | 207 | 112 | 203 | 221 | 126 | 97 | 249 | 143 |
| c | 4 | 187 | 280 | 175 | 172 | 51 | 147 | 284 | 27 |
| e | 5 | 281 | 103 | 184 | 215 | 159 | 45 | 266 | 33 |
| 1 | 6 | 181 | 239 | 59 | 254 | 148 | 298 | 129 | 278 |
| + | 7 | 4 | 53 | 162 | 194 | 56 | 16 | 230 | 25 |
| D | 8 | 39 | 269 | 237 | 128 | 234 | 123 | 282 | 151 |
| i | 9 | 29 | 157 | 202 | 286 | 74 | 209 | 287 | 170 |
| c | 10 | 100 | 208 | 158 | 122 | 197 | 255 | 273 | 30 |
| e | 11 | 101 | 108 | 139 | 277 | 26 | 193 | 113 | 109 |
| 2 | 12 | 190 | 174 | 61 | 192 | 7 | 121 | 69 | 80 |

Table 3: This Table of Measure Numbers gives the measure number to be looked-up in the Table of Measures for Arias (see Figures 1 to 9 in Section 2.3) corresponding to each of the two-dice outcome per bar for the eight bars of the second part (Part C) of the rondo.

Measure Numbers for

Ritornellos

| | | 1 | 2 | 3 | 4 |
|---|----|----|----|----|----|
| D | 2 | 10 | 15 | 21 | 12 |
| i | 3 | 4 | 9 | 16 | 30 |
| c | 4 | 22 | 31 | 33 | 42 |
| e | 5 | 27 | 41 | 1 | 37 |
| 1 | 6 | 26 | 40 | 43 | 17 |
| + | 7 | 18 | 2 | 11 | 28 |
| D | 8 | 23 | 19 | 25 | 36 |
| i | 9 | 44 | 7 | 35 | 38 |
| c | 10 | 6 | 24 | 3 | 29 |
| e | 11 | 5 | 20 | 34 | 14 |
| 2 | 12 | 13 | 8 | 32 | 39 |

Table 4: This Table of Measure Numbers gives the measure number to be looked-up in the Table of Measures for *Ritornellos* (see Figures 10 to 12 in Section 2.3) corresponding to each of the two-dice outcome per bar for the last four bars of the optional fourth part (Part D) of the rondo.

2.3 Table of Measures

The Table of Measures for *L'Art - 5th Cahier - Ariettas* are given in Figures 1 to 13 that follow while the Table of Measures for *L'Art - 5th Cahier - Ritornellos* are given in Figures 14, 15, and Figures 16. These are all based but not exactly identical to those that are given in Antonio Calegaris's *L'Art - 5th Cahier*.

Calegari Ariettas

[from https://s9.imslp.org/files/imglnks/usimg/6/63/IMSLP653334-PMLP1047762-L'Art_de_composer_de_la_-...-Calegari_Antonio_bpt6k9617931c.pdf]

Antonio Calegari

A musical score for four voices (Soprano, Alto, Tenor, Bass) and basso continuo. The tempo is $\text{♩} = 120$. The score consists of 24 numbered measures. The instrumentation includes four vocal parts and a basso continuo part. The vocal parts are arranged in two staves: Soprano and Alto in the top staff, and Tenor and Bass in the bottom staff. The basso continuo part is represented by a single bass staff at the bottom. The score features various time signatures, including common time, 3/4, 2/4, and 7/8. Dynamic markings such as f , mf , and p are present. Measure numbers 1 through 24 are placed above the staff.

Figure 1: Table of Measures - Ariettas (Page 1/13)

A musical score for string instruments (four staves) spanning measures 25 to 48. The score is written in common time, with various time signatures indicated by $\frac{3}{4}$, $\frac{2}{4}$, and $\frac{3}{8}$. Measure numbers are placed above the staves at the beginning of each measure. The music features complex rhythmic patterns, including sixteenth-note figures and eighth-note chords.

Measure 25: $\frac{3}{4}$
Measure 26: $\frac{2}{4}$
Measure 27: $\frac{3}{4}$
Measure 28: $\frac{3}{4}$
Measure 29: $\frac{3}{4}$
Measure 30: $\frac{3}{4}$
Measure 31: $\frac{3}{4}$
Measure 32: $\frac{3}{4}$
Measure 33: $\frac{3}{4}$
Measure 34: $\frac{3}{4}$
Measure 35: $\frac{3}{4}$
Measure 36: $\frac{3}{4}$
Measure 37: $\frac{3}{4}$
Measure 38: $\frac{3}{4}$
Measure 39: $\frac{3}{4}$
Measure 40: $\frac{3}{4}$
Measure 41: $\frac{3}{4}$
Measure 42: $\frac{3}{4}$
Measure 43: $\frac{3}{4}$
Measure 44: $\frac{3}{4}$
Measure 45: $\frac{3}{4}$
Measure 46: $\frac{3}{4}$
Measure 47: $\frac{3}{4}$
Measure 48: $\frac{3}{4}$

Figure 2: Table of Measures - Ariettas (Page 2/13)

A musical score for a string quartet (two violins, viola, cello) and piano. The score consists of five systems of music, each containing four measures. The key signature is mostly B-flat major (two flats), with some changes in measure 59 and 69. The time signature varies between common time (4/4) and 3/4. Measure numbers are indicated above the staff in each system.

Measures 49-56: The first violin plays eighth-note patterns, while the other three instruments provide harmonic support with sustained notes and chords.

Measures 57-64: The first violin continues its eighth-note patterns, and the piano provides harmonic support with sustained notes and chords.

Measures 65-72: The first violin plays eighth-note patterns, and the piano provides harmonic support with sustained notes and chords.

Figure 3: Table of Measures - Ariettas (Page 3/13)

Musical score for Ariettas, showing measures 73 through 96. The score consists of four staves: Violin (top), Viola, Cello, and Double Bass (bottom). The music is in common time, with various key signatures (F major, G major, A major, D major) indicated by sharps and flats. Measures 73-76 feature sixteenth-note patterns in the upper voices. Measures 77-80 show eighth-note patterns. Measures 81-84 continue the eighth-note patterns. Measures 85-88 introduce sixteenth-note patterns. Measures 89-96 conclude the section with sixteenth-note patterns.

Figure 4: Table of Measures - Ariettas (Page 4/13)

97 98 99

100 101 102 103 104

105 106 107 108

109 110 111 112

Figure 5: Table of Measures - Ariettas (Page 5/13)

Measures 113-120: Bassoon and Violin parts show sixteenth-note patterns. Measures 115-118 feature sustained notes with grace notes. Measures 119-120 show eighth-note patterns.

Measures 121-128: Bassoon and Violin parts show sixteenth-note patterns. Measures 123-125 feature sustained notes with grace notes. Measures 126-127 show eighth-note patterns.

Measures 129-136: Bassoon and Violin parts show sixteenth-note patterns. Measures 131-133 feature sustained notes with grace notes. Measures 134-135 show eighth-note patterns.

Measures 137-144: Bassoon and Violin parts show sixteenth-note patterns. Measures 139-141 feature sustained notes with grace notes. Measures 142-144 show eighth-note patterns.

Figure 6: Table of Measures - Ariettas (Page 6/13)

The musical score displays a sequence of measures from a piece titled "Ariettas". The score is arranged for four instruments: Bassoon, Trombone, Violin, and Cello/Bass. The measures shown are numbered 145 through 168. The instrumentation is as follows:

- Bassoon:** Measures 145-152, 153-155, 156-159, 161-163, 165-167.
- Trombone:** Measures 145-152, 153-155, 156-159, 161-163, 165-167.
- Violin:** Measures 145-152, 153-155, 156-159, 161-163, 165-167.
- Cello/Bass:** Measures 145-152, 153-155, 156-159, 161-163, 164-168.

The score features complex rhythmic patterns, including sixteenth-note figures and eighth-note chords. Time signatures vary throughout the measures, notably including 5/8 in measures 151-152 and 164-168. Dynamics such as forte, piano, and accents are used to emphasize specific notes and phrasing.

Figure 7: Table of Measures - Ariettas (Page 7/13)

Musical score for Ariettas, showing measures 169 through 200. The score is for three voices (Soprano, Alto, Bass) and includes a piano part. The score shows a mix of 3/4 and 2/4 time signatures, with measure 176 marking a transition from 3/4 to 2/4. Measures 185-192 show a transition back to 3/4 time.

Figure 8: Table of Measures - Ariettas (Page 8/13)

201 202 203 204

205 206 207 208

209 210 211 212 213 214 215 216

217 218 219

Figure 9: Table of Measures - Ariettas (Page 9/13)

The musical score consists of five systems of four staves each. The top two staves are tenor (C-clef) and bass (F-clef), the middle two are alto (C-clef) and soprano (G-clef), and the bottom staff is basso continuo (F-clef). Measure numbers are placed above the staves. Measure 113 starts with a treble clef and a common time signature. Measures 114-116 transition to a 5/4 time signature. Measures 117-120 return to 4/4. Measures 121-128 are in 3/4. Measures 129-136 are in 2/4. Measures 137-144 are in 3/4.

Figure 10: Table of Measures - Ariettas (Page 10/13)

145 146 147 148 149 150 151 152

153 154 155

156 157 158 159 160

161 162 163 164 165 166 167 168

Figure 11: Table of Measures - Ariettas (Page11/13)

Musical score for Ariettas, showing measures 169 through 200. The score is for three voices (Soprano, Alto, Bass) and includes a piano part. The score shows a mix of 3/4 and 2/4 time signatures, with measure 176 marking a transition from 3/4 to 2/4. Measures 185-192 show a transition back to 3/4 time.

Figure 12: Table of Measures - Ariettas (Page 12/13)

201 202 203 204

205 206 207 208

209 210 211 212 213 214 215 216

217 218 219

Figure 13: Table of Measures - Ariettas (Page 13/13)

Calegari Ritournelles

[from https://s9.imslp.org/files/imglnks/usimg/6/63/IMSLP65334-PMLP1047762-L'Art_de_composer_de_la_-...-Calegari_Antonio_bpt6k9617931c.pdf]

Antonio Calegari

$\text{♩} = 120$

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Figure 14: Table of Measures - Ritornellos (Page 1/3)

Musical score showing measures 17 through 32. The score consists of four staves. Measures 17-19 show rhythmic patterns with eighth and sixteenth notes. Measures 20-24 continue the rhythmic patterns. Measures 25-27 show a change in tempo or style. Measures 28-32 conclude the ritornello section.

Figure 15: Table of Measures - Ritornellos (Page 2/3)



Figure 16: Table of Measures - Ritornellos (Page 3/3)

3 Related Links

The following are very interesting sites in that they allow the online rendering of MDGs:

- [Opus Infinity](#) - Collaborative work of Robbert Harms, Hein Moors, and Suus van Petegem whose goal is to unravel the mystery behind the tables used for generating MDGs. Site visitors can generate MDGs based on works of Kirnberger, Mozart, Stadler/Haydn, Bach, Gerlach, and Callegari (*1st Cahier*). Corresponding audio files (`mid`, `ogg`, and/or `mp3`) and image files (`pdf` or `png`) are also made available for listening, viewing, or downloading.
- [Mozart](#) - A site maintained by John Chuang that allows the site visitor to generate MDGs based on the work of Stadler/Haydn.
- [Mozart](#) - A site maintained by Marian Aldenhövel allows the visitor to generate a MDG (user-specified or randomly-generated) and the corresponding audio (`midi`, `wav`) and image files (`pdf`, `png`) based on *Musikalisches Würferspiel*, K. 516f.
- [mozart.zip](#) - This is a Windows software (© 1995 VisionSoft) by John Chuang and Stephen Goodwin that generates MDG based on input from user and is available for *free* from [Amaranth Publishing](#).
- “[Mozart - Musical Game in C K. 516f](#).” Mozart Studies Online - The site of Hideo Noguchi that offers an explanation linking *Musikalisches Würferspiel*, K. 516f, and K. 294d (K. Anh. C 30.01).

4 Acknowledgments

Special thanks to International Music Score Library Project for *L'art de composer de la musique sans en connaître les éléments 2nd Ed. (1802)*, Opus Infinity for additional related information, and Amaranth Publishing for a copy of `mozart.zip`. My sincerest gratitude to Chris Walshaw et al. for the ABC music notation; Jean-Francois Moine for `abcm2ps` and the accompanying examples, templates, and pointers for the appropriate use of these resources; Guido Gonzato for the ABC Plus Project and the `abcmidi resources` available there, more especially for the ABC resource book *Making Music with ABC 2*; James R. Allwright and Seymour Shlien for `abcmidi` source and binaries; Artifex, Inc. for Ghostscript v.10.00.0 (includes the `ps2pdf` converter); Inkscape v.1.2.2 for the tool for converting SVGs to PDFs for inclusion into L^AT_EX documents; William Schelter for Maxima v.5.47.0—used for computing the permutation number; Google Lens and Google Translate for aiding in producing the English versions of the text of *L'Art - 5th Cahier*; Colomban Wendling et. al for Geany 2.0 IDE; and User:Martin H for his reply to a T_EX / L^AT_EX Stack Exchange question on including SVGs into L^AT_EX documents. Thanks to Ditto to Machtelt Garrels for the book Bash Guide for Beginners, Vivek Gite for the book Linux Script Shell Tutorial, and Steve Parker for the Unix/Linux Shell Cheatsheet. John Fogarty's GitHub Site: Latex CreateSpace BookCover and Peter Wilson's reply in T_EX / L^AT_EX Stack Exchange on designing a book cover, were sources of ideas, information, and materials for creating the book cover and title page, thanks to both of them; LibreOffice Calc for its use in the image creation of the book cover. Many thanks, too, to the Debian Project for the Debian 12 (Bookworm) GNU/Linux OS, TeXLive for providing the T_EX distribution, and GitHub for its generosity in providing space for the project.

5 Twenty (20) Selected Rondos based on *L'Art - 5th Cahier*

This section contains an example of 20 rondos that were generated using the Rules in Section 2.1. As mentioned above in Step 6 of the Rules (see Section 2.1), the parts are played as (AR)2.(BAR)2.(CAR)2.(BDAR)2 or AR.AR.BAR.BAR.CAR.CAR.BDAR.BDAR and that there are a total number of either 74, 75, or 76 bars; when played with repeats, a total of 148, 150, or 152 bars are played for each rondo.

10-4-12-9-12-7-6-3-10-8-2-6-4-10-9-10-5-4-4-11-3-12-9-6-4-4-11-2-8-12-6-7

acg5::58:219:94:213:302:66:271:48:6:19:21:17:34:120:290:247:300:296:262:115:58:219:94:213:302:66:271:48:6:19:21:17:
 :207:174:202:254:51:147:113:38:58:219:94:213:302:66:271:48:6:19:21:17:
 :34:120:290:247:300:296:262:115:279:135:72:164:58:219:94:213:302:66:271:48:6:19:21:17:
 Perm. No.: 34419077886100248820306056272811337391457

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-10-4-12-9-12-7-6-3-10-8-2-6-4-10-9-10-5-4-4-11-3-12-9-6-4-4-11-2-8-12-6-7.mid](#)

11-8-3-3-4-11-6-3-9-4-6-2-6-3-8-11-5-12-3-4-4-3-10-2-6-8-5-11-8-8-5-2

acg5::49:217:206:83:251:137:271:48:44:31:43:12:23:225:288:1:300:8:110:37:49:217:206:83:251:137:271:48:44:31:43:12:
 :187:112:158:6:148:123:266:109:49:217:206:83:251:137:271:48:44:31:43:12:
 :23:225:288:1:300:8:110:37:279:224:91:52:49:217:206:83:251:137:271:48:44:31:43:12:
 Perm. No.: 383690262109488078177276083946019724889082

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-11-8-3-3-4-11-6-3-9-4-6-2-6-3-8-11-5-12-3-4-4-3-10-2-6-8-5-11-8-8-5-2.mid](#)

11-9-6-8-12-12-11-8-2-4-7-5-5-3-4-6-8-4-6-5-12-4-9-4-5-12-12-4-6-4-8-7

acg5::49:14:169:216:302:15:41:84:10:31:11:37:220:225:67:301::296:5:168:49:14:169:216:302:15:41:84:10:31:11:37:
 :190:280:202:172:159:121:69:27:49:14:169:216:302:15:41:84:10:31:11:37:
 :220:225:67:301::296:5:168:238:294:188:164:49:14:169:216:302:15:41:84:10:31:11:37:

Perm. No.: 123194508978175638652360918404630596481074

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-11-9-6-8-12-12-11-8-2-4-7-5-5-3-4-6-8-4-6-5-12-4-9-4-5-12-12-4-6-4-8-7.mid](#)

12-3-11-4-7-9-10-8-7-11-6-10-4-7-12-8-2-7-2-10-5-2-9-10-8-4-2-12-8-12-8-11
 acg5::54:303:142:257:228:243:153:84:18:20:43:29:34:285:226:241:17:196:107:295:54:303:142:257:228:243:153:84:18:20:43:29:
 :281:275:202:122:234:147:242:80:54:303:142:257:228:243:153:84:18:20:43:29:
 :34:285:226:241:17:196:107:295:279:135:188:116:54:303:142:257:228:243:153:84:18:20:43:29:
 Perm. No.: 412337611188362684795073186064210436841601

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

The musical score consists of five systems of music for four parts: A, R, D, B, and C. Each system is in common time (indicated by '♩ = 120') and includes four staves (treble, alto, bass, and tenor). The parts are labeled above their respective staves. The score features various musical elements such as sixteenth-note patterns, eighth-note chords, and sixteenth-note chords. Measure numbers are present at the beginning of each system.

For audio (midi): [acg5-12-3-11-4-7-9-10-8-7-11-6-10-4-7-12-8-2-7-2-10-5-2-9-10-8-4-2-12-8-12-8-11.mid](#)

2-2-3-2-3-8-11-10-6-2-3-12-4-6-9-8-5-4-8-3-6-12-8-7-10-12-3-4-2-12

acg5::19:79:206:307:244:214:41:233:26:15:16:39:34:231:290:241:146:166:198:37:19:79:206:307:244:214:41:233:26:15:16:39:
 :39:112:59:192:234:16:273:80:19:79:206:307:244:214:41:233:26:15:16:39:
 :34:231:290:241:146:166:198:37:43:294:118:82:19:79:206:307:244:214:41:233:26:15:16:39:
 Perm. No.: 443286088335472339250536450110787735424288

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♪} = 120$

A

R

D

B

C

For audio (midi): [acg5-2-2-3-2-3-8-11-10-6-2-3-12-4-6-9-8-5-4-8-3-6-12-8-7-10-12-3-4-2-12.mid](#)

2-8-10-8-5-8-11-8-2-7-7-6-7-12-11-6-2-2-7-7-10-7-4-3-3-12-10-8-6-6-2-12
 acg5::19:217:156:216:210:214:41:84:10:2:11:17:119:102:293:301:17:133:92:117:19:217:156:216:210:214:41:84:10:2:11:17:
 :100:53:175:221:126:121:273:151:19:217:156:216:210:214:41:84:10:2:11:17:
 :119:102:293:301:17:133:92:117:238:204:118:82:19:217:156:216:210:214:41:84:10:2:11:17:
 Perm. No.: 280226904107390516805443668096188382229826

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-2-8-10-8-5-8-11-8-2-7-7-6-7-12-11-6-2-2-7-7-10-7-4-3-3-12-10-8-6-6-2-12.mid](#)

3-2-9-9-8-5-12-6-4-8-9-5-2-3-12-4-9-2-8-8-11-5-12-10-2-2-10-11-7-4-6-11
 acg5::68:79:160:213:141:42:85:259:22:19:35:37:11:225:226:199:146:133:140:189:68:79:160:213:141:42:85:259:22:19:35:37:
 :101:103:61:122:71:70:273:109:68:79:160:213:141:42:85:259:22:19:35:37:
 :11:225:226:199:146:133:140:189:253:294:72:116:68:79:160:213:141:42:85:259:22:19:35:37:
 Perm. No.: 400251600961250683694441563751769155806182

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♪} = 120$

A

R

D

B

C

For audio (midi): [acg5-3-2-9-9-8-5-12-6-4-8-9-5-2-3-12-4-9-2-8-8-11-5-12-10-2-2-10-11-7-4-6-11.mid](#)

4-12-6-6-9-8-6-8-2-12-6-7-6-8-5-2-2-8-5-9-4-3-12-7-10-11-6-10-7-8-9

acg5::305:205:169:173:297:214:271:84:10:8:43:28:23:229:288:227:17:133:140:168:305:205:169:173:297:214:271:84:10:8:43:28:
 :29:280:203:192:56:255:113:278:305:205:169:173:297:214:271:84:10:8:43:28:
 :23:229:288:227:17:133:140:168:96:161:188:106:305:205:169:173:297:214:271:84:10:8:43:28:
 Perm. No.: 201146319735817817788993471956876309111059

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R D

B

C

For audio (midi): [acg5-4-12-6-6-9-8-6-8-2-12-6-7-6-8-5-2-2-8-5-9-4-3-12-7-10-11-6-10-7-8-9.mid](#)

4-7-11-10-2-4-8-5-4-9-8-5-8-12-9-11-11-4-6-2-2-12-8-12-5-3-3-12-12-6-5

acg5::305:145:142:150:272:78:235::22:7:25:37:223:102:290:1:183:296:5:40:305:145:142:150:272:78:235::22:7:25:37:
 :111:174:237:192:159:97:249:143:305:145:142:150:272:78:235::22:7:25:37:
 :223:102:290:1:183:296:5:40:99:135:72:211:305:145:142:150:272:78:235::22:7:25:37:
 Perm. No.: 45347857901738360761202937439893947507016

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-4-7-11-10-2-4-8-5-4-9-8-5-8-12-9-11-11-4-6-2-2-12-8-12-5-3-3-12-12-6-5.mid](#)

5-12-2-5-8-7-4-10-7-2-10-6-4-8-6-12-5-3-2-8-8-11-7-4-4-8-6-11-6-3-12-11
 acg5::308:205:176:283:141:66:299:233:18:15:3:17:34:229:179::300:114:107:189:308:205:176:283:141:66:299:233:18:15:3:17:
 :39:108:162:172:51:123:129:109:308:205:176:283:141:66:299:233:18:15:3:17:
 :34:229:179::300:114:107:189:238:130:65:116:308:205:176:283:141:66:299:233:18:15:3:17:
 Perm. No.: 387373920231118766526283211889362350194314

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

The musical score consists of five systems of music for four parts: A, R, D, B, and C. Each system is in common time (indicated by '8'). The parts are arranged vertically: A at the top, followed by R, D, B, and C at the bottom. The score includes various musical elements such as eighth-note patterns, sixteenth-note patterns, rests, and dynamic markings like 'f' (fortissimo) and 'p' (pianissimo). Measure numbers are present above the staves.

For audio (midi): [acg5-5-12-2-5-8-7-4-10-7-2-10-6-4-8-6-12-5-3-2-8-8-11-7-4-4-8-6-11-6-3-12-11.mid](#)

6-11-2-2-6-12-5-2-11-11-7-5-11-2-6-8-9-12-9-2-5-9-5-12-9-2-7-3-9-10-4-6

acg5::46:50:176:307:268:15:57:138:5:20:11:37:155:9:179:241:146:8:222:40:46:50:176:307:268:15:57:138:5:20:11:37:
 :281:157:184:192:74:70:230:143:46:50:176:307:268:15:57:138:5:20:11:37:
 :155:9:179:241:146:8:222:40:86:90:250:24:46:50:176:307:268:15:57:138:5:20:11:37:
 Perm. No.: 60092376731182258006064760844144356643392

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-6-11-2-2-6-12-5-2-11-11-7-5-11-2-6-8-9-12-9-2-5-9-5-12-9-2-7-3-9-10-4-6.mid](#)

6-11-3-7-11-10-9-11-3-9-5-9-2-7-10-12-7-3-10-7-6-5-9-4-11-3-9-8-5-8-12-9

acg5::46:50:206:304:171:105:47:81:4:7:1:38:11:285:265::163:114:76:117:46:50:206:304:171:105:47:81:4:7:1:38:
 :181:103:202:172:26:97:287:151:46:50:206:304:171:105:47:81:4:7:1:38:
 :11:285:265::163:114:76:117:2:224:65:106:46:50:206:304:171:105:47:81:4:7:1:38:
 Perm. No.: 273677449110065816109645995912470005155412

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-6-11-3-7-11-10-9-11-3-9-5-9-2-7-10-12-7-3-10-7-6-5-9-4-11-3-9-8-5-8-12-9.mid](#)

6-12-4-7-10-6-2-6-12-6-4-7-11-4-9-9-7-10-6-11-11-7-8-4-3-7-9-9-4-8-7-12

acg5::46:205::304:127:36:88:259:13:40:33:28:155:152:290:28:163:167:5:115:46:205::304:127:36:88:259:13:40:33:28:
 :101:53:237:172:126:16:287:170:46:205::304:127:36:88:259:13:40:33:28:
 :155:152:290:28:163:167:5:115:258:224:44:82:46:205::304:127:36:88:259:13:40:33:28:
 Perm. No.: 315934884524126992794195879270091422812140

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-6-12-4-7-10-6-2-6-12-6-4-7-11-4-9-9-7-10-6-11-11-7-8-4-3-7-9-9-4-8-7-12.mid](#)

6-7-2-7-3-12-11-10-9-12-11-9-7-5-8-8-9-2-6-3-10-7-8-2-11-6-9-7-4-8-4

acg5::46:145:176:304:244:15:41:233:44:8:34:38:119:154:288:241::98:107:177:46:145:176:304:244:15:41:233:44:8:34:38:
 :207:208:162:128:71:193:129:170:46:145:176:304:244:15:41:233:44:8:34:38:
 :119:154:288:241::98:107:177:253:294:188:22:46:145:176:304:244:15:41:233:44:8:34:38:
 Perm. No.: 306053865551272486907571082000392103341548

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-6-7-2-7-3-12-11-10-9-12-11-9-7-5-8-8-9-2-6-3-10-7-8-2-11-6-9-7-4-8-4.mid](#)

7-12-3-5-6-8-7-3-6-9-7-11-10-9-5-11-4-6-11-7-3-7-4-9-9-12-12-10-9-4-5-8
 acg5::252:205:206:283:268:214:60:48:26:7:11:14:267:270:236:1:276:232:124:117:252:205:206:283:268:214:60:48:26:7:11:14:
 :207:53:175:286:74:121:69:30:252:205:206:283:268:214:60:48:26:7:11:14:
 :267:270:236:1:276:232:124:117:86:294:91:186:252:205:206:283:268:214:60:48:26:7:11:14:
 Perm. No.: 370199652103905563489737107634317654086328

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-7-12-3-5-6-8-7-3-6-9-7-11-10-9-5-11-4-6-11-7-3-7-4-9-9-12-12-10-9-4-5-8.mid](#)

7-8-3-9-11-10-11-7-4-11-7-8-7-5-2-2-12-10-12-9-12-7-10-9-8-8-12-8-2-4-4-10
 acg5::252:217:206:213:171:105:41:77:22:20:11:36:119:154:12:200:292:167:264:274:252:217:206:213:171:105:41:77:22:20:11:36:
 :190:53:158:286:234:123:69:151:252:217:206:213:171:105:41:77:22:20:11:36:
 :119:154:12:200:292:167:264:274:185:294:250:89:252:217:206:213:171:105:41:77:22:20:11:36:
 Perm. No.: 286520577191126836668896299685665157191006

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-7-8-3-9-11-10-11-7-4-11-7-8-7-5-2-2-12-10-12-9-12-7-10-9-8-8-12-8-2-4-4-10.mid](#)

8-6-3-10-5-9-5-12-12-4-2-5-12-4-10-11-7-7-6-4-2-9-11-5-10-8-4-3-9-9-8-4
 acg5::195:240:206:150:210:243:57:144:13:31:21:37:256:152:265:1:163:196:5:37:195:240:206:150:210:243:57:144:13:31:21:37:
 :111:157:139:215:197:123:284:143:195:240:206:150:210:243:57:144:13:31:21:37:
 :256:152:265:1:163:196:5:37:86:10:188:22:195:240:206:150:210:243:57:144:13:31:21:37:
 Perm. No.: 50924078015641388693751491937016083763466

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-8-6-3-10-5-9-5-12-12-4-2-5-12-4-10-11-7-7-6-4-2-9-11-5-10-8-4-3-9-9-8-4.mid](#)

8-7-6-7-11-8-11-8-10-9-4-11-11-5-2-11-9-6-5-4-2-11-8-3-10-12-9-7-5-7-12-4

acg5::195:145:169:304:171:214:41:84:6:7:33:14:155:154:12:1:146:232:198:37:195:145:169:304:171:214:41:84:6:7:33:14:
 :111:108:237:221:197:121:287:25:195:145:169:304:171:214:41:84:6:7:33:14:
 :155:154:12:1:146:232:198:37:2:161:65:22:195:145:169:304:171:214:41:84:6:7:33:14:
 Perm. No.: 235559179565478427118731142047906694265946

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-8-7-6-7-11-8-11-8-10-9-4-11-11-5-2-11-9-6-5-4-2-11-8-3-10-12-9-7-5-7-12-4.mid](#)

9-10-7-11-9-5-4-5-12-8-8-4-9-12-10-6-6-5-11-12-4-3-12-12-9-6-12-6-11-5-8-3

acg5::75:63:134:306:297:42:299::13:19:25:42:136:102:265:301:289:180:124:260:75:63:134:306:297:42:299::13:19:25:42:
 :187:112:61:192:74:298:69:278:75:63:134:306:297:42:299::13:19:25:42:
 :136:102:265:301:289:180:124:260:3:165:188:62:75:63:134:306:297:42:299::13:19:25:42:
 Perm. No.: 203590686460282734981536823925002044808240

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{♩} = 120$

A

R

D

B

C

For audio (midi): [acg5-9-10-7-11-9-5-4-5-12-8-8-4-9-12-10-6-6-5-11-12-4-3-12-12-9-6-12-6-11-5-8-3.mid](#)

9-9-6-4-10-11-5-2-4-2-3-10-9-5-9-12-12-8-2-7-11-5-9-6-12-11-9-7-11-7-7-5
 acg5::75:14:169:257:127:137:57:138:22:15:16:29:136:154:290::292:166:107:117:75:14:169:257:127:137:57:138:22:15:16:29:
 :101:103:202:254:7:193:287:25:75:14:169:257:127:137:57:138:22:15:16:29:
 :136:154:290::292:166:107:117:3:161:44:211:75:14:169:257:127:137:57:138:22:15:16:29:
 Perm. No.: 235289531078460430321951679329705279186175

Order for Playing Parts: (AR)2.(BAR)2.(CAR)2.(BDAR)2

$\text{J} = 120$

A

R

D

B

C

For audio (midi): [acg5-9-9-6-4-10-11-5-2-4-2-3-10-9-5-9-12-12-8-2-7-11-5-9-6-12-11-9-7-11-7-7-5.mid](#)

6 License

This work by I Am The Author, based on work of J.L.A. Uro at <https://github.com/justineuro/mdgBookSVG7Kit>, is licensed under a Creative Commons Public Domain International License.

References

- Callegari, Antonio. *L'art de composer de la musique sans en connaître les éléments* 2nd Ed. (1802). URL https://s9.imslp.net/files/imglnks/usimg/6/63/IMSLP653334-PMLP1047762-L'Art_de_composer_de_la_----Calegari_Antonio_bpt6k9617931c.pdf. Retrieved Thursday, 13 September, 2024 12:00.
- Ivars Peterson. Mozart's Melody Machine, 2001. URL <https://www.sciencenews.org/article/mozarts-melody-machine-0>. Retrieved Tuesday, 08 August, 2017 11:36:00 AM +08.
- Wikipedia: *Musikalisches Würferspiel*. Wikipedia, The Free Encyclopedia, 2017. URL https://en.wikipedia.org/w/index.php?title=Musikalisches_W%C3%BCrfelspiel&oldid=787418377. Retrieved Tuesday, 08 August, 2017 12:56:17 AM +08.