

December 6, 2022

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SCORE

Alexander Wu

# Rounding Errors

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for percussion duo

Duration: c. 8'

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## Program Note

*Rounding Errors* explores different forms of quantization as well as seemingly failed attempts at quantization. Inspired by breakbeat music and in particular, the often sampled “Amen break” by The Winstons, this piece reimagines acoustic percussion instruments as a physical embodiment of samplers, drum machines, and Euclidean rhythm generators. Through the expansion and contraction of time, stability is constantly disrupted and rebuilt.

## Notation Key

The notation key consists of two staves, Percussion 1 and Percussion 2, each with a double bar line at the beginning. Percussion 1 has six notes: a quarter note on the first line (Toms), a quarter note on the second line with an 'x' above it (L.tom shell\*), a quarter note on the third line (Snare drum), a quarter note on the fourth line with an 'x' above it (S.D. on rim), a quarter note on the fifth line with a '+' above it (Stick click\*\*), and a quarter note on the first space (Bongos). Percussion 2 has five notes: a quarter note on the first line with an 'x' above it (Gong), a quarter note on the second line (Wood blocks), a quarter note on the third line (Crotales\*\*\*), a quarter note on the fourth line with two 'x's above it (Suspended cymbals), and a quarter note on the fifth line (Cymbal bells).

\* L.tom shell: hit the shell of the low tom with a rute

\*\* Stick click: hit one stick with the other

\*\*\* Crotales: any two consecutive high notes



17

*cresc.* *f* *p*

*cresc.* *f* *p*

22

*f* *p*

*f* *p*

27

*p sempre*

*f*

l.tom: rute on shell,

32 S.D.: brush

*p but with some latent ferocity*

*p*

35

*f sub.*

38 switch to stick on S.D.

Musical score for measures 38-40. The top staff features a melody with eighth notes and rests, marked with 'x' symbols. The bottom staff features a rhythmic accompaniment with eighth notes and rests. Dynamics include *f* and *(f sempre)*.

41

Musical score for measures 41-44. The top staff continues the melody with eighth notes and rests. The bottom staff continues the rhythmic accompaniment. Measure 44 shows a change in time signature to 2/4 and 4/4.

45

Musical score for measures 45-48. The top staff features a melody with eighth notes and rests, including triplets and quintuplets. The bottom staff features a rhythmic accompaniment with eighth notes and rests. Dynamics include *p sub.*

49

Musical score for measures 49-53. The top staff features a melody with eighth notes and rests, including triplets and quintuplets. The bottom staff features a rhythmic accompaniment with eighth notes and rests. Dynamics include *f* and *p*.

54

sticks in both hands

Musical score for measures 54-57. The top staff features a melody with eighth notes and rests, including triplets. The bottom staff features a rhythmic accompaniment with eighth notes and rests. Dynamics include *p sub.*, *f*, and *p*.

59

(on rim) (stick click)

*p* sempre

*f* *p* sempre

64

*p* sempre

68

*p* sempre

72

*p* sempre

77

$\text{♩} = 80$

c. 2" (offbeat but even "countoff")

*pp* *f*

*pp*

Suddenly with groove, à la breakbeat

80

Measures 80-81: The top staff features a melodic line with eighth notes and rests, marked with accents and a dashed slur. The bottom staff features a rhythmic accompaniment of eighth notes. Dynamics range from *f sempre* to *f*.

82

Measures 82-83: The top staff continues the melodic line with accents and a dashed slur. The bottom staff continues the rhythmic accompaniment. Dynamics range from *p* to *f*.

85

Measures 84-85: The top staff continues the melodic line with accents and a dashed slur. The bottom staff continues the rhythmic accompaniment. Dynamics range from *p* to *f*.

87

Measures 86-87: The top staff continues the melodic line with accents. The bottom staff continues the rhythmic accompaniment. Dynamics range from *p* to *f* and back to *p*.

89

Measures 88-89: The top staff continues the melodic line with accents. The bottom staff continues the rhythmic accompaniment. Dynamics range from *p* to *f sub.*

92

94

96

98

*ff*  
(l.cym bell)

101

soft mallet

soft mallet back to sticks (l.cym) (mute with hand)

(gong)

\* pause until the gong is almost (but not completely) inaudible *f*



108 back to sticks

*p fpp f*  
*f p sf pp f*

114

*p fpp f pp fpp f f sempre*  
*p sf pp f p sf pp f p f sempre*

119 Suddenly losing the groove \*\*

*fff fff*

3" 3" 2" 4"

122 Slightly faster than the cymbals

*f f*

2" 2" 2" 1" 2"

(do not coordinate the beginning or ending of the phrase)

♩ = c. 100 (roughly tpo 1°)

⊕ wait for cue, then proceed with the same tempo

\* l.v. sempre unless otherwise noted

\*\* the duration in seconds should be treated as a very rough estimate

124 cue

*fff sempre*

*p sub.*

(on cue)

*p* *fff* *fp*

126

*p*

*p*

129

$\text{♩} = 60$  **accel.** repeat with no pause; continue to the next section with no pause and then cue

*f* *p* *cresc.* *f*

3" 10"

**Slightly slower than the tom**

$\text{♩} = \text{c. } 50$  **accel.** repeat with no pause; on cue, continue to the next section with no pause

*cresc.* *f*

130 cue

$\text{♩} = \text{c. } 100$  (roughly tpo 1°) improvise with any combination of the following figures on S.D. and toms with no pause in between, and then move on with no pause

*p* *f*

20"

*poco a poco cresc. with freely fluctuating microdynamics*

on cue

$\text{♩} = \text{c. } 90$  improvise with any combination of the following figures on cymbals (with no pause in between); gradually catch up with the other player's tempo when you hear stick clicks (see the next system)

*p* *f*

20"

*poco a poco cresc. with freely fluctuating microdynamics*

131 (♩ = 100) **Exuberant!**

cue

5" 5"

*f* *poss.*

accel. . . . . ♩ = 100

on cue

*f* *ff*

l.v. sempre

134

136 pick up rute and brush

(wdbl)

*p*

l.tom.: rute on shell,  
S.D.: brush

138

*p* *f* *p*

*f* *p*

141

Musical score for measures 141-143. The top staff features a melodic line with dynamics *p*, *f*, and *p*, and includes two triplet markings. The bottom staff features a rhythmic accompaniment with dynamics *p* and *f*.

144

Musical score for measures 144-148. The top staff includes the instruction "with sticks" and dynamics *pp* and *p poss.*. The bottom staff includes dynamics *p* and *pp*. The right side of the score is labeled "(l.crotale)" and "(h.crotale)".

149

Musical score for measures 149-151. The top staff includes dynamics *molto* and *f*. The bottom staff includes dynamics *(pp)*, *molto*, and *f*, and the instruction "l.v. sempre".

152

Musical score for measures 152-154. Both the top and bottom staves feature dynamics *ff*. The bottom staff includes asterisks (*\**) above the notes.