

אלה תולדות

(E'leh Tol'd'ot)

(These are the generations...)
(Cantillation Study #3)

for William Winant

for 4 marimbas
—and—
optional computer commentary

Larry Polansky
1985–86
rev. 2017

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אלה תולדות is the third in a set of four works based on Masoretic Torah cantillation melodies (Shabbat morning). The other pieces in the series are: בראשית (*B'rey'sheet*) (*In the beginning...*) (Cantillation Study #1) for voice and computer (1986); ולמשל (*V'leem'shol*) (*And to rule...*) (Cantillation Study #2) for 5 flutes (1984); and Snakey Snake (Cantillation #4) for haegum (or any melody instrument) and computer (2017).

The optional computer commentary should be based on “listening” to Marimba 1 by computer in real-time. The details of the live computer part, and its software, are left to the programmer/performer who realizes this part, but certain important ideas should be adhered to. First, the computer commentary should be based on the pitch material of Marimba 1 only. Second, there must be some kind of “morphogenetic trajectory” over the course of the piece, via some formal algorithm, which parallels the piece itself. That trajectory should begin with a high degree of computer-generated morphological (and/or sonic, harmonic) of the marimba part, and end by following it as closely as possible (little or no transformation). This is analogous to the way the other marimba parts related to the cantillation melody

(in Marimba 1) over the course of the piece. The work begins in maximal development, and continuously moves to minimal development.

The piece may also be played without a computer commentary, by four marimbas.

The entire work may be preceded by an unaccompanied singing of the 17 Torah verses used in this piece — B'req'sheet II.4 thru III.20, beginning with "E'leh tol'd'ot..." and ending with the verse beginning "Va'qi'kra ha'adam..."). If possible, the singer should be female.

Thanks to Dan Steffey and Jon Myers for their assistance in preparing the new (2017) version of the score.

Larry Polansky
Oakland, CA, 12/86
revised: Santa Cruz, CA, 2017

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I.

Marimba I

Marimba II

Marimba III

Marimba IV

Mar. 1

Mar. 2

Mar. 3

Mar. 4

Polansky

ossia

ossia sim.

ff

f

mp

loud, wild

sub. f

precise

mf

f

pp

cresc

II.

Mar. 1
2

Mar. 2

Mar. 3

Mar. 4

9

f (*cresc.*) *ff* *sub. mp* *sub. f* *ff* *mp* *mf*

(cresc.) *ff* *sub. mp* *precise* *pp* *mf* *ff*

(cresc.) *ff* *sub. mp* *pp* *mf* *ff*

Mar. 1

Mar.

Mar. 2

Mar. 3

Mar. 4

13

f *mp* *mf* *sub. mp* *f* *sub. mf* *f* *ff*

ff *sub. f* *sub. mf* *f* *p* *ff* *p*

mf *f* *mp* *f* *p* *f* *mp* *mf* *ff* *p* *p*

Mar. 1 17 *ff* *(f > <)* *(f > <)* *mf* *f* *ff* *sub. pp*

Mar. 2 *f* *ff* *mf* *p* *sub. f* *ff*

Mar. 3 *ff* *f* *pp* *ff*

Mar. 4

Mar. 1 21 *f* *static* *f* *sub. pp*

Mar. 2 *sub. pp* *f* *f* *static* *f*

Mar. 3 *sub. pp* *f* *f* *static* *f* *p*

Mar. 4

25

Mar. 1

4

6:5
ossia

p

p *f*

sub. p

p *f*

Mar. 2

sub. mp *pp* *mf* *pp* *mf*

mf *f* *ff*

p *f*

Mar. 3

mf *mp* *mf* *pp* *mp*

(mp)

Mar. 4

29

Mar. 1

III

mp *mf* *pp*

Mar.

Mar. 2

mp *mf* *pp*

Mar. 3

p *f* *mp* *mf* *pp*

Mar. 4

mp

IV.

33

Mar. 1 *mf* *f* not very staccato, slight ring *p* *mf* *f*

Mar. 2 *mf* *f* not very staccato, slight ring *mf* *p* (*mf*) *mp* *f*

Mar. 3 *mf* *f* not very staccato, slight ring *p* *mp* damped *mp* *mf*

Mar. 4

37

Mar. 1 *mf* (*mf*) *f*

Mar. 2 *mf*

Mar. 3 *mp - mf* *mf*

Mar. 4

41

Mar. 1
6

Mar. 2

Mar. 3

Mar. 4

p *mf* *f* *ff* *f* *sub. mf* *cut off!*

mp *mf* *f* *mp* *mf* *cut off!*

mf *(mf)* *sub. mp* *cut off!*

cut off!

(out of sync. with III)

7:4

V.

45

Mar. 1

Mar. 2

Mar. 3

Mar. 4

f *p* *poco* *(very fast trill)* *p* *poco* *p* *poco* *p* *always poco*

f *p* *poco* *p* *poco* *pp* *p* *poco* *f* *p* *always poco*

p *p* *f* *p* *poco* *(damped)* *f* *poco* *p* *always poco*

(don't get softer)

49

Mar. 1

Mar. 2

Mar. 3

Mar. 4

VI.

53

Mar. 1

Mar. 2

Mar. 3

Mar. 4

57

8Mar. 1

Mar. 2

Mar. 3

Mar. 4

61

Mar. 1

Mar. 2

Mar. 3

Mar. 4

VII.

Musical score for four maracas (Mar. 1-4) from measure 65 to 78. The score includes various musical notations such as triplets, sixteenth notes, and dynamic markings like *mp* and *f*.

VIII.

Musical score for four maracas (Mar. 1-4) from measure 69 to 82. The score includes various musical notations such as triplets, sixteenth notes, and dynamic markings like *mf*, *ff*, *f*, and *mp*.

73 IX.

Mar. 1

Mar. 2

Mar. 3

Mar. 4

77 X.

Mar. 1

Mar. 2

Mar. 3

Mar. 4

f (cresc - ⁶decresc ad lib)

f (cresc - ⁶decresc ad lib)

f (cresc - ⁶decresc ad lib)

81 ^{8^{va}} **XI. loc.**

Mar. 1
Mar. 2
Mar. 3
Mar. 4

85

Mar. 1
Mar. 2
Mar. 3
Mar. 4

XII.

89

Mar. 1
12

Mar. 2

Mar. 3

Mar. 4

fff

sub. mp, legato but not overlapping

mp

mp

mp

attaca

XIII.

93

Mar. 1

Mar. 2

Mar. 3

Mar. 4

mp

mf low notes ossia

mf

mf

XV. Chorale

105

Mar. 1
14
a little louder (mp)
mp - mf (ad lib)

Mar. 2
a little louder (mp)
mp - mf (ad lib)

Mar. 3

Mar. 4

XVI. Chorale

109

Mar. 1
quieter

Mar. 2
low Eb's ossia
(as one apreggio)
quieter

Mar. 3
quieter

Mar. 4

113

Mar. 1 *steady, quiet* *even* *still quiet*

Mar. 2 *steady, quiet* *even* *still quiet*

Mar. 3 *steady, quiet* *still quiet*

Mar. 4

Measures 113-116. Marimbas 1-3 play chords with triplets. Marimba 4 plays a melodic line. Dynamics include *steady, quiet*, *even*, and *still quiet*. There are various articulation marks like accents and slurs.

Marimba III: On a five octave marimba
* these two notes should be
doubled at the lower octave.

117

Mar. 1 *p bring out* *(p)* *(roll if necessary)*

Mar. 2 *inner voice, hold back* *(p)* *(inner voice)*

Mar. 3 *quiet* *p bring out* *p*

Mar. 4

Measures 117-120. Marimbas 1-3 play chords with triplets. Marimba 4 plays a melodic line. Dynamics include *quiet*, *p bring out*, *(p)*, and *(roll if necessary)*. There are various articulation marks like accents and slurs.

XVII. a bit slower

121

Mar. 1
16

Mar. 2

Mar. 3

Mar. 4

p

quiet and gentle

soft

low notes ossia

(light)

ossia

(one-handed roll)

p

soft

(light)

l.v

126

Mar. 1

Mar. 2

Mar. 3

Mar. 4

mp - mf
static

legato to end

damp

mp - mf
static

legato to end

damp

mp - mf
static

legato to end

mp - mf
static

mp - mf

static, *mp - mf*

(legato)

static, *mp - mf*

(legato)

static, *mp - mf*

(legato)

static, *mp - mf*

(no tr)

(no tr)

(all parts)
slight rit.

quiet

quiet

quiet

quiet

129