Title
Trinity (for Expanded Orchestra)

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Publication Date
2011

Supplemental Material
https://escholarship.org/uc/item/8qs9w41r#supplemental

Peer reviewed|Thesis/dissertation
UNIVERSITY OF CALIFORNIA
RIVERSIDE

Trinity
(for expanded orchestra)

A Dissertation submitted in partial satisfaction
of the requirements for the degree of

Doctor of Philosophy

in

Music

by

Robert Michael Winokur

June 2011

Dissertation Committee:
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Acknowledgements

My deepest thanks and respect to my committee: David Borgo, Leonora Saavedra, and especially Tim Labor – my teacher, mentor, and friend: when I grow up, I want to be just like you.
Dedication

This dissertation, and the associated degree, would not have been possible were it not for the support, understanding, and love of my wife and children: Beth, Woody, Miles and Moonlily.

It is to them that this piece is dedicated.
ABSTRACT OF THE DISSERTATION

Trinity
(for expanded orchestra)

by

Robert Michael Winokur

Doctor of Philosophy, Graduate Program in Music
University of California, Riverside, June 2011
Dr. Tim Labor, Chairperson

Trinity is a large-scale piece of program music for a symphony orchestra expanded to include two electric guitars (doubling on acoustic guitar), piano (doubling on Fender Rhodes Electric Piano), electric bass guitar and drumset. The main philosophical impetus for this piece is the programmatic depiction (in the manner of a tone poem) of a concept which is based on and combines archetypal characters drawn primarily from literary sources. This dissertation is titled Trinity and uses the thesis that the three chosen archetypes, The Architect, The Leper and the Gunslinger, are three aspects of the same über-archetype which is representative of both humanity the human individual – this concept being a composite of Ayn Rand’s “Fountainhead,” Friedrich Nietzsche’s Übermensch and god (as a human construct). The description of the trinity is – in a similar manner to Christian belief – the description of an individual through the lens of three contrasting, complementary and singular personalities, which is both god and human; it is a deified version of the Übermensch as represented by the Architect, Leper and Gunslinger.

This piece utilizes symmetrical and asymmetrical synthetic scales (and their associated aggregates), multiple and simultaneous tonal centers, drone and repetition/sequencing and looping and a rhythmic concept which uses the employment of multiple and simultaneous rhythmic cells in various meters and subdivisions (of the meter) in a manner reminiscent of melodic counterpoint. Trinity is five movements long and arranged similar to a Romantic-era symphony– an introduction, followed by three movements – one for each archetype, then a
finale. The five movements are bookended by related music intended to function in a musical analogue to “Once upon a time…” and “…happily ever after.”

Included with the musical score is a prose document – which explicates the philosophical and metaphorical construct and associated personal implications and which details the compositional techniques used – and a folder containing audio files of the entire score. The audio files were created using live musicians and MIDI-realizations.
Contents:

Abstract of the Dissertation

Performance notes

_Trinity:_

Invocation c. 90 seconds

Movement 1: The Path to Power c. 16 minutes

Movement 2: The Architect c. 05 minutes

Movement 3: The Leper c. 10 minutes

Movement 4: The Gunslinger c. 10 minutes

Movement 5: Man as God c. 16 minutes

Benediction c. 90 seconds

Total Duration: c. 60 minutes

Supporting Materials:

Of _Trinity_: A Musical and Philosophical Analysis

Audio
Performance Notes

Score in Concert Pitch
(Glockenspiel 15mb, Piccolo 8va, Electric Bass Guitar, Guitars and Contrabass 8vb)

Conductor
As the presentation of an orchestra with embedded electric instruments and drumset involves issues of dynamic balance, the composer suggests that the stage volume be balanced by the orchestral instruments raising their base dynamic level to match the drums and electric instruments and by the drumset and electric instruments lowering their louder dynamic levels to match the orchestral instruments. This might be facilitated by the use of smaller amplifiers for guitars and a clear Plexiglass isolation booth for the drumset; however, the orchestral instruments should not be amplified in any way. Additionally, the electric instruments should be amplified by onstage amplifiers – not routed through the “house.”

Dynamic symbols should be treated as absolute across all instruments, both electric and acoustic – so that a marking of mf, for example, will be the same sound-pressure level in the acoustic instruments as in the electric instruments. This will require the acoustic instruments to, on average, play louder than what their normal dynamic markings would indicate.

As regards stage organization, the composer suggests that the regular members of the orchestra be arranged in a semicircle with the opening facing the conductor and the electric instruments inside the aperture.

All Performers
- In this score, the English language is used (almost) exclusively. Notable exceptions include the terms pizz (for pizzicato or “plucked”), arco (bow), gliss. or glissando (to slide) and a few others.
- Tempo indications are arithmetically related to each other and should be considered absolute.
- Trinity uses a system of dynamic notation where occasionally there are different dynamics in multiple parts. For example:

Trinity movement 1, mms 8-12 (reduced score)
In the above passage, flute 1 and violin I are acting as reverb for the glockenspiel, as is the tuba for the piano. This is why the “reverb instruments” are one dynamic-level lower than the main instruments. Additionally in this same passage, the viola is providing a sustained voice (a “pad” or “pedal”) as a background for the other instruments to interact over.

- This is a frequent effect which happens throughout *Trinity* and, while in this case, only two layers of “one-lower” dynamics are in use, *Trinity* frequently employs more.
- Tempo indications are arithmetically related to each other and should be considered absolute.
- Dashed slurs indicate phrasing; solid slurs indicate standard usage according to the particular instrument.

**Woodwinds**
- Oboe 2 doubles on English horn in movements 3 and 5.
- The marking "z" indicates fluttertongue. For example:

  ![Fluttertongue Example](image)

**Guitars**
- Both guitars double on acoustic, but never at the same time. It is recommended that they share a single acoustic guitar to minimize stage clutter.
- Guitar 1 is tuned to E♭ standard [E♭, A♭, D♭, G♭, B♭, E♭] for all of movement 1. After which it moves to traditional tuning. It is suggested that guitar 1 uses two similar guitars in different tunings to facilitate this switch.
- Guitar 1 uses a capo in movement 1.
- It is expected that all sounds are plucked with a guitar pick except when specifically noted otherwise. For example in movement three when guitar 2 receives the direction [fingerstyle: no pick].
- Slurs indicate phrases – not picking.
- Fingerings are indicated by string and fret. For example, [G:5] indicates the G-string at the 5th fret.
- The indication “roll-off volume” means to lower the overall volume level of the guitar and should not be taken as an indication to change the sound of the guitar. An optical volume pedal would work in the intended way.
- P.M. indicates Palm-Muting where the picking hand rests on the strings in front of the bridge and both shortens the decay of the notes and emphasizes the lower frequencies.
- Distortion is indicated by the marking [distortion: ON] and should be taken to mean a harmonically-rich, sine-wave type distortion with the middle frequencies attenuated and the lower and high frequencies boosted (a “scooped-crunch” sound).
- Overdrive, as opposed to distortion, is indicated by the marking [overdrive: ON].
- The markings [CLEAN channel] and [distortion: OFF] indicates that the distortion is turned off. The resulting sound should be a distortion free, harmonically rich sound (tube amp preferred) and equalized sound with a small amount of reverb.
- Phase modulation (phaser) and chorus are called for in movement one. They are indicated with the markings [phaser: ON] and [chorus: ON]. These effects should be used sparingly.
Electric bass guitar

- The electric bass guitar is required to frequently play below {E}, the lowest pitch on a four-string bass guitar. A five or six-string bass should be used (or one with a comparative range).
- Fingerings are indicated by string and fret. For example, [G:5] indicates the G-string at the 5th fret.
- Distortion is indicated by the marking [distortion: ON]. A bass-specific distortion which separates the signal into “clean” and “dirty” signal which can then be balanced – such as the BOSS ODB-3 – is recommended.
- Phase modulation (phaser) is called for in movement five. It is indicated with the marking [phaser: ON]. This effect should be used sparingly.
- Slap-bass technique is called for in movement 5 – this requires the musician to hammer the string with the plucking-hand thumb (indicated “T”) and “pop” the string with the index and middle fingers (indicated “P”).
- The indication

Trinity movement 3, mms 87-9 (e.b.)

indicates a less-than-staccato sound (à la Tony Levin); a staccato attack which is allowed to ring into the next note.

Drumset

- Drum key:

- Cymbal key:

and

- Ghost notes are notated in the following manner:

Trinity movement 5, m209 (drumset)
Strings:

- Movement 5 requires the bassist to play to \{B\} below \{E\}. If this pitch is unavailable, it should be performed 8va.
- In movement 5, the strings are asked to perform “‘guitar-like’ pizz.” a technique which is less like traditional pizzicato and more similar to the way a guitarist strums a chord. One quick strumming motion with the thumb will achieve the desired effect.

For example:

*Trinity* movement 5, m106-8 (cello and bass)

Types of harmonics:

- Harmonics in this score are notated in two ways; at pitch (except for when an octave-change marking (8va/8vb) is used) with the fingering indicated in stemless notes below.

For example:

*Trinity* movement 1, m207-9 (violin II)

and, when the harmonic is the first overtone – the octave.

For example:

*Trinity* movement 4, m204-7 (violin I)

The sounding pitch is always notated, regardless of the version used.
Trinity: Invocation

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Movement 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
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Trinity Mvmt. 1: The Path of Power

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Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power

Picc.
Fls.
Obs.
B-Clts.
Bass.
P. Horns
B-Tpts.
Tbn.
Tba.
Glk.
Vib.
Gtr. 1
Gtr. 2
E.B.
D. S.
Vln. I
Vln. II
Vla.
Vc.
Bs.
F Horns
Bb Tpts.
Tbns.
Pno.
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power

\[ \text{Plts.} \]
\[ \text{Fls.} \]
\[ \text{Obs.} \]
\[ \text{B. Chs.} \]
\[ \text{Tbn.} \]
\[ \text{Tba.} \]
\[ \text{Bsns.} \]
\[ \text{Pno.} \]
\[ \text{E.B.} \]
\[ \text{Vib.} \]
\[ \text{Glk.} \]
\[ \text{Vla.} \]
\[ \text{Fls.} \]
\[ \text{Vc.} \]
\[ \text{Bs.} \]

\[ \text{Picc.} \]
\[ \text{Obs.} \]
\[ \text{Cls.} \]

\[ \text{CLEAN channel} \]
\[ <\text{Rhodes}> \]
\[ \text{[distortion: ON]} \]

\[ \text{[Trinity Mvmt. 1: The Path of Power]} \]

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Trinity Mvmt. 1: The Path of Power

Pizz.

Fls.

Ob.

B. Cls.

Bass.

Brass.

F Horns

B. Tpts.

Tbn.

Tuba

Gbl.

Vib.

Pno.

Gtr. 1

Gtr. 2

E. B.

D. S.

Vla. 1

Vla. II

Vla.

Vc.

Vs.

Bx.

pp

f

ff

f

pp

pp

pp

pp

pp

pp

pp

pp

pp

pp

pp

pp

pp

pp

p
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power

Picc.
Fls.
Obs.
B-Cls.
Bass.

358

F Horns

358

B-TPs.

358

Tbn.

Tba.

Glh.

Vib.

358

Pno.

Gtr.

Glhr.

Vln.

Vla.

Vc.

Bs.

358

E.B.

D. S.

358

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Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
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Trinity Mvmt. 1: The Path of Power
Trinity Mvmt. 1: The Path of Power
Mvmt. 2: The Architect

Piccolo

Flutes

Oboes

B-Clarinets

Bassoons

F Horns

Bb Trumpets

Trombones

Tuba

Glockenspiel

Vibraphone

Piano

Guitar 1

Guitar 2

Electric Bass Guitar

Drum Set

Violin I

Violin II

Viola

Cello

Bass
Trinity Mvmt. 2: The Architect
Trinity Mvmt. 2: The Architect
Trinity Mvmt. 2: The Architect
Trinity Mvmt. 2: The Architect
Trinity Mvmt. 2: The Architect
Trinity Mvmt. 2: The Architect

F Horns
B Bns.
Vln. II
Gtr. 2
Tpts.
Ds.
Cls.
Pno.
Vla.
Vc.
Bs.
Tba.

F

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Trinity Mvmt. 2: The Architect

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Movement 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper
Trinity Mvmt. 3: The Leper

Perc.

Violns.

Obs.

B.Cle.

Basso.

F Horns

B-Tpts.

Tbars.

Vib.

Pos.

Gtr. 1

Gtr. 2

E.B.

D. S.

Vla. 1

Vla. II

Vla

Vc.

Bsn.

Picc.

Obs.

Cls.

Pno.

E.B.

Vib.

Glk.

Vla.

Fls.

Vc.

Bs.

Tpt.

Bsns.

D. S.

Tuba.

Brass.

Strings.

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Trinity Mvmt. 3: The Leper

Vln. II

Vln. I

Gtr. 2

Tpts.

Tbns.

Bsns.

Obs.

Cls.

Pno.

E.B.

Vib.

Glk.

Fls.

Vc.

Tba.

184

Pz.

F Horns

B-Tpts.

Tbn.

Tba.

Glb.

Vib.

Pno.

Gtr. 1

Gtr. 2

S. D.

Vla. 1

Vla. II

Vla.

Vc.

Bsn.

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Movement 4: The Gunslinger
Trinity Mvmt. 4: The Gunslinger

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Trinity Mvmt. 4: The Gunslinger

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Trinity Mvmt. 4: The Gunslinger

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Trinity Mvmt. 4: The Gunslinger

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Trinity Mvmt. 4: The Gunslinger

Picc.  
Fls.  
Obs.  
B-Clv.  
Bass.  
P trem.  
P Horns  
B-Tp.  
Tbn.  
Gb.  
Vib.  
Pno.  
Tbns.  
F Horns  
Bb Tpts.  
E-B.  
D. S.  
Vln. I  
Vln. II  
Vla.  
Vc.  
Bs.  

F Horns
Bb Tpts.
E-B.
D. S.
Trinity Mvmt. 4: The Gunslinger


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Trinity Mvmt. 4: The Gunslinger
Trinity Mvmt. 4: The Gunsinger

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Trinity Mvmt. 4: The Gunslinger
Trinity Mvmt. 4: The Gunslinger

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Trinity Mvmt. 4: The Gunslinger

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Trinity Mvmt. 4: The Gunslinger

Pizz.

Pno.

E.B.

Glk.

Perc.

Picc.

Obs.

Vln. I

Vln. II

Vib.

Vc.

Tba.

Tpt.

Bsns.

Tbn.

Gtr. 1

Gtr. 2

D.S.

Vla.

Vla. II

Vla. I

Bsn.

Vv.

allow guitar to feedback

(**for guitar only**)

allow guitar to feedback

(`overdrive: off`)
Trinity Mvmt. 4: The Gunslinger
Trinity Mvmt. 4: The Gunslinger
Trinity Mvmt. 4: The Gunslinger
Movement 5: "Man as God"
Trinity Mvmt. 5: "Man as God"
Trinity Mvmt. 5: "Man as God"
Trinity Mvmt. 5: "Man as God"
Trinity Mvmt. 5: "Man as God"
Trinity Mvmt. 5: "Man as God"
Trinity Mvmt. 5: "Man as God"
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Benediction