Steve Antosca

in every way I remember you

for saxophone and computer

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from the set of works **echo**::MEMORY
composed for the
70th Anniversary of the National Gallery of Art West Building

premiered in the West Building Rotunda
Washington, DC
March 16, 2011

Noah Getz, saxophone
Steve Antosca, computer

in every way I remember you is one of a pair of compositions composed and designed for the National Gallery of Art West Building Rotunda, with its abundant reverberant qualities in mind. The set is titled echo::MEMORY and includes *echoic landscape* for percussion and Buchla lightning wands. echo::MEMORY draws on the complex nature of sound reflections in the space and the personal recollections of many hours spent in the Gallery. There is an interrelationship of the works, as materials – both pitch materials and computer processed materials – from one piece are freely interchanged with materials from the other.

The echo::MEMORY compositions play with the concept of echoic memory, the auditory phenomenon in which there is a brief mental echo that continues to sound after an auditory stimulus has been heard. In the vast reverberant landscape of the Rotunda, rich and complex harmonic and non-harmonic frequencies accumulate at points of silence in the music, combining to form new auditory moments, then quickly fade.

echoic landscape and *in every way I remember you* were premiered on March 16th and 17th, 2011 in the Rotunda of the West Building of the National Gallery of Art, Washington DC, in celebration of the 70th Anniversary of the West Building of the National Gallery of Art.

program notes
Poetic and ambiguous, *in every way I remember you* suggests the multi-dimensional observation of an individual, realized through a performer viewed and heard from varying perspectives.

The perspectives imagined for *in every way* are "*the person you are remembering, the one you envision*," – a close-up, personal, immediate and intimate representation – and the remote perspective of "*someone you are looking upon*," – an external view, from the distant outside.

These perspectives are created through the use of a range of saxophones (one performer) and electronic sounds, and by movement of the performer and sounds, through the Rotunda. During the performance, the saxophonist migrates through stations in the Rotunda to effect the varying perceptions. Through spatialization and pin-point placement of sound, the perspective of the sax and electronic sounds will shift the focus of the viewer/listener's attention.

The electronic part is a reflection and extension of the instrumental part, imaged through real-time computer audio processing of the live performance and pre-recorded, processed audio. The pre-recorded material uses saxophone and percussion samples, recorded in the Rotunda, as its source material and is used to extend the saxophones' sonic capabilities.

At moments, these sonic images echo the sax, and at times they contrast with it. At moments, the solo texture of the sax is enhanced by the intense and extreme reverberant nature of the Rotunda, while at other moments, the raw power of the instrument combines with the electronics to saturate the performance space with an intense texture.

in every way I remember you consists of four tableaus whose titles are taken from text excerpts of *Burnt Norton I* by T. S. Eliot:

i.   *Footfalls echo in the memory*   alto saxophone
      Down the passage which we did not take
      Towards the door we never opened…

ii.   *My words echo...in your mind...*   baritone saxophone

iii. *Other echoes inhabit the garden. Shall we follow…*   tenor saxophone

vi.   *through the vibrant air...*   soprano saxophone

I am indebted to saxophonist Noah Getz, for whom I composed *in every way I remember you*, for his tireless work, contributions and advice. His brilliant saxophone playing created a stunning impact in the National Gallery Rotunda on audience and musicians alike at its premiere.
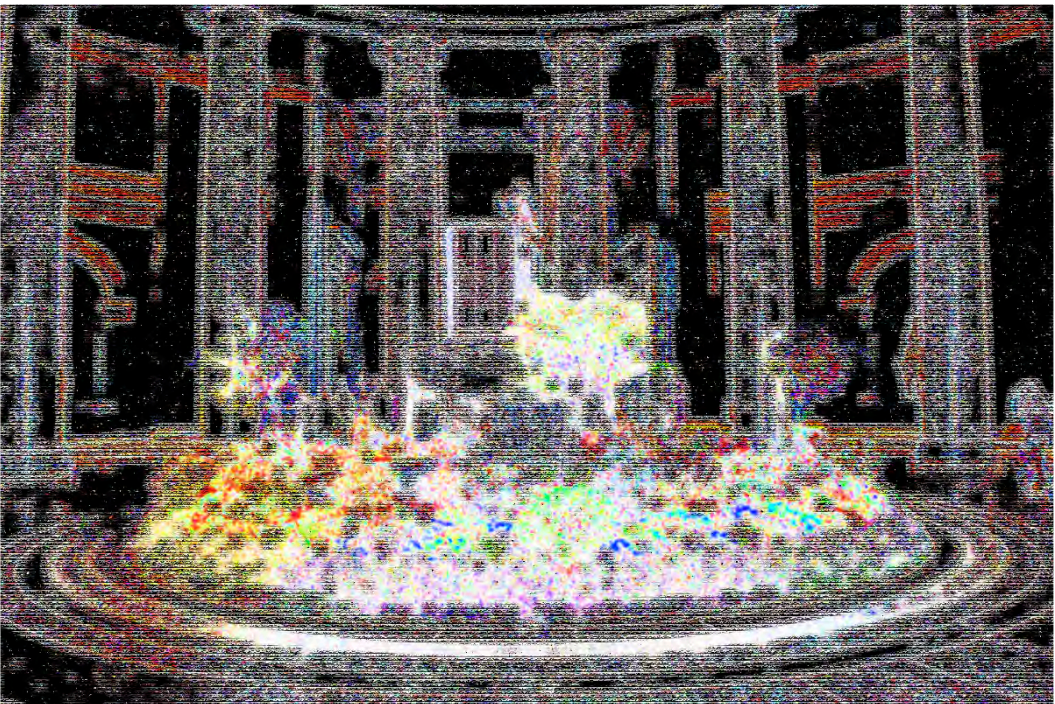
in every way I remember you consists of four tableaus representing four positions in the performance space from which the sax player performs. interspersed with the tableaus are three passages which are transitions, where the sax player moves from one station to the next.

tableau i. – alto saxophone

passage 1 – tingsha bells

tableau ii. – baritone saxophone

passage 2 – spring drum

tableau iii. – tenor saxophone

passage 3 – soprano saxophone

tableau iv. – soprano saxophone

performance layout in the Rotunda
of the National Gallery of Art

saxophones
in every way I remember you requires four saxophones/one sax player performing on alto, baritone, tenor, and soprano. each saxophone should be placed in the appropriate station (listed above) in advance.
the saxophones require one wireless mic which is used for recording and for the real-time computer processing in *passage 3* and *tableau iv*. the mic is switched from one sax to the next before the start of the next tableau.

saxophone stations & performance
tableau i/station 1: the front of the performance space will be considered station 1, where the piece opens with *tableau i*. at the completion of *tableau i*, the sax player picks up the tingsha bells for *passage 1* and moves to station 2, playing the bells along with the audio tracks.

tableau ii/station 2: for baritone sax. at the completion of *tableau ii*, the sax player picks up the thunder tube/spring drum used in *passage 2* and moves to *station 3*.

tableau iii/station 3: for tenor sax. at the completion of *tableau iii*, there is 1 minute of audio to transfer the wireless mic and start *passage 3*, walking toward the stage. at the start of the solo soprano sax portion of *passage 3*, there are no longer pre-recorded electronic sounds. the sax is run through a real-time flange effect and played back into the 6 channel system in the house. (see instructions below).

tableau iv/station 4: continues with soprano sax and real-time computer processing.

from the end of *tableau* 1 (page 3) to the start of the soprano sax solo in *passage 3* (page 6), the saxophone performs along with a multi-channel audio soundtrack. for the most part, the track runs continuously. it is triggered at AUDIO CUE #1 at *tableau* 1, page 3, system 1, and *tableau 3*, page 5, system 3. cues in the score are references indicating points where the sax player should be lined up with the audio. time indications in the score refer to the NGA performance recording from March 17, 2011.

<u>performance notes:</u>
there are several places during *in every way I remember you* where the saxophonist is asked to play a note or phrase and wait for the sound to decay in the space. These passages were designed for the exceptional reverberant environment of the National Gallery of Art West Building Rotunda, where the reverberant sound acts as a sonic bridge or tie between the two notes. The performer is to wait until the sound decays nearly completely and then use the new note or phrase as a sonic elision to merge the phrases together and continue.

tableau ii has definite starting and ending phrases, but the middle material is made up of a set of seven phrases to choose from, which can be played in any order and with no fixed durations or tempos.

in *passage 1,* the performer improvises with tingsha bells and in *passage 2,* a thunder tube, along with the pre-recorded audio.

<u>technology notes</u>
technology required to perform *in every way I remember you* includes:
> an Apple Macintosh Pro desktop computer, preferable a quad core computer
> a digital interface with 8 discreet outputs and 1 input
> 1 wireless mic for all the saxophones
> Max/MSP software with a flange patch OR any plug-in which allows variability of flange parameters during performance
> a Digital Audio Workstation (DAW) such as Digital Performer, Logic, Pro Tools, or REAPER capable of playback of 40 tracks of audio
> a house audio system with the capability to broadcast 6 channels of wireless audio to six speaker systems dispersed throughout the performance space

<u>audio files</u>
a Digital Performer (DP) file with all audio tracks, routing assignments, and mix automation in place is available for performance of the piece.
additionally, there is a REAPER file with a 6 channel mixdown version.
a set of .aif files which are a 6 channel mixdown of the audio and which can be loaded into any standard DAW, is also available.

<u>audio playback</u>
audio tracks in the DP file are labeled for the 6 channel output assignments and should be routed through the digital interface software to the appropriate 6 analogue outputs,
then to the house system for distribution to the 6 speaker areas.

audio cues are labeled in the score and correspond to locations marked in the audio file. most cues are for reference and do not need to be triggered. in other words, the audio file plays continuously while the sax player performs or moves through the performance space. triggered cues occur at two specific points in the score and in the audio file, and are marked as: START AUDIO #1   START AUDIO #2
these occur in *tableau 1* on page 3, system 1 and *tableau 3*, page 5, system 3.

<u>saxophone real-time computer processing</u>
After forty seconds into *passage 3* and for all of *tableau 4* of the piece, there is no pre-recorded computer processed audio played back. it is finished in *passage 3* when the soprano sax begins. at this point, the real-time processing of the soprano saxophone begins. a gentle flange is applied to the soprano sax at the points indicated in the score. this could be a Max/MSP created flange or a commercially available plug-in.
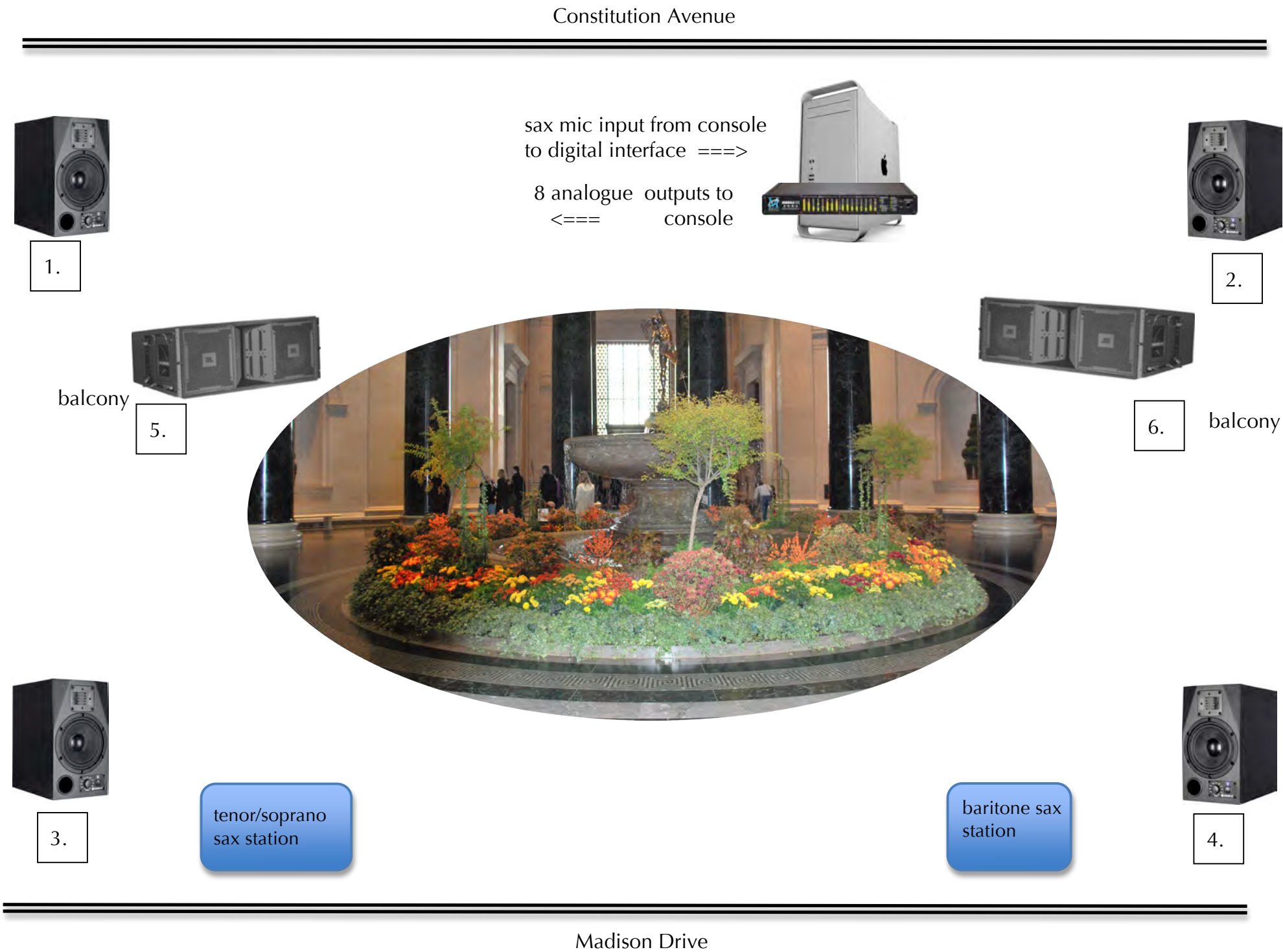
the application of the flange is indicated in the score in *passage 3* and *tableau 4* by sweeping arrows which represent fader control.
the performance of the effect is intuitive and indicated by the sweep, duration and shut-off of the arrows.

the resulting transformation should be a reflective "purring" or "rippling" effect on the sound of the sax,
the result should never overwhelm the live sax sound. the output of the effect should be routed into all 6 channels.
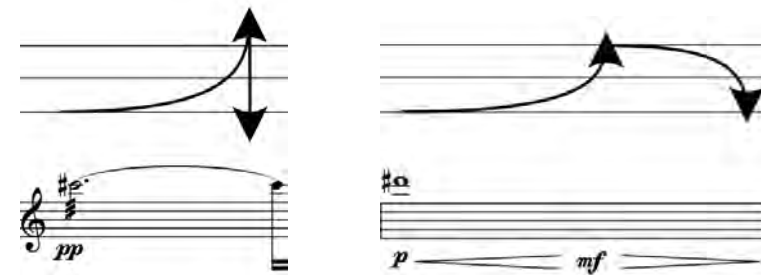
> floor speakers are wireless, and are placed outside the performance area and focused toward the Rotunda fountain.

> the balcony speakers are a wireless, stereo array, focused at the center of the Rotunda floor

> computer AUDIO: 8 channels of audio from computer digital interface to house console, which routes the audio to 6 speakers in the house

> wireless mic on soprano sax into house console, then to digital interface for real-time processing, out 7 & 8 to the console as processed audio, then to 6 speakers in the house

Constitution Avenue

sax mic input from console
to digital interface ===>

8 analogue outputs to
<===   console

1.

2.

balcony

5.

6.   balcony

3.

tenor/soprano
sax station

baritone sax
station

4.

speaker layout for National Gallery of Art Rotunda

Madison Drive

> audio playback from the DAW should be received on 6 channels of the digital interface mixer before being routed to the house system.

> the saxophone mic is routed from the wireless receiver to the house system for recording purposes. the sax mic is routed from the house system to the computer, but the input into the computer is muted for *tableau 1* through *tableau 3*. at *passage 3*, just prior to the start of the soprano sax performance, the mic input is unmuted.

at 40 seconds into *passage 3* and for all of *tableau 4*, the incoming sax signal is intermittently processed by a plug-in in the channel path, or routed via the firewire bus to a Max/MSP patch for real-time processing.
> the returned signal from Max/MSP could use DAW 1 - 6 in the mixer
> the channel path plug-in can be routed to an additional set of outputs 7 & 8, then sent to the house system.

this arrangement allows maximum flexibility in signal routing and level control.

in every way I remember you

Footfalls echo in the memory ~ Down the passage which we did not take ~ Towards the door we never opened...

Steve Antosca
2010

Tableau One

0:00 ♩ = 100 *tempo is variable, based on the location of the performance. the piece should never be sluggish and variations on the tempo throughout the piece may be neccessary for clarity of performance.*

Time
Computer
Audio

TACET

alto

Saxophone

Time
Cmptr
Audio

wait for sound to decay before continuing

Sax

Time
Cmptr
Audio

wait for sound to decay before continuing

Sax

Time
Cmptr
Audio

rough gliss.

wait for sound to decay before continuing

accel.

Sax

Tableau Two *My words echo...in your mind...*

Time	5:10 / 0:00		0:40	1:08	1:22	1:40	6:55 / 1:45
Cmptr / Audio	AUDIO CUE #5 2bells/dissonantSaxPair2		AUDIO CUE #6 bariSwells1&2	AUDIO CUE #7 swell & silence w/saxGrains	AUDIO CUE #8 unSilence	AUDIO CUE #9 pluckedBariSax1 (balcony)	

baritone (circular breathing)

play these phrases in any order you choose. repeat each phrase as desired. play as many or few as you wish during this 1:45 section. they are of no fixed durations or tempos. always play as smoothly as possible.

played with a smooth gliss. between pitches

blossom...

growl...

extremely fast and smooth; repeat as desired

Time	1:45	7:10 / 2:00
Cmptr / Audio		AUDIO CUE #10 pluckedBariSax2 (on floor)

subtone

multiphonic (octaves)

put down baritone sax, pick up spring drum and move to station 3 for Tableau 3 with tenor sax

Passage Two

Time	7:10 / 0:00	0:30	1:05	1:15	8:40 / 1:30
Cmptr / Audio	AUDIO CUE #10 pluckedBariSax2 (on floor)	AUDIO CUE #11 bells	AUDIO CUE #12 pluckedBariSax2 (on floor)	AUDIO CUE #13 pluckedBariSax1 (balcony)	

Perc: *free interplay with percussion* — *sim.* — *to tenor sax*

Tableau Three *Other echoes inhabit the garden. Shall we follow?*

8:50 ♩ = 60

AUDIO CUE #14
pluckedBariSax1 fadeout...

n **TACET**

tenor

wait for sound to decay before continuing

growl...

wait for sound to decay before continuing

growl...

10:25

START AUDIO #2

AUDIO CUE #15
saxSmear

slow and smooth, somewhat mysterious

20 seconds

11:00

AUDIO CUE #16
trill, echoMelody, fadeout

slowly

multiphonic

Pick up soprano for Passgae 3.
Perform as you move to stage
for Tableau 4.

Passage Three

Tableau Four *through the vibrant air...*

in every way I remember you v10

in every way I remember you v10