For the convenience of concertgoers
the Garden Café remains open until 6:00 pm.

The use of cameras or recording equipment during the
performance is not allowed. Please be sure that cell phones,
pagers, and other electronic devices are turned off.

Please note that late entry or reentry of
the West Building after 6:30 pm is not permitted.

Music Department
National Gallery of Art
Sixth Street and Constitution Avenue NW
Washington, DC

Mailing address
2000B South Club Drive
Landover, MD 20785

www.nga.gov

The Sixty-eighth Season of
The William Nelson Cromwell and F. Lammot Belin
Concerts

National Gallery of Art
2,774th Concert

National Gallery of Art New Music Ensemble
Roger Reynolds, composer
Steve Antosca, composer and computer musician

CHANGES: SEASONS

Presented in honor of
The Robert and Jane Meyerhoff Collection: Selected Works

March 7, 2010
Sunday evening, 6:30 pm
East Building Atrium

Admission free
Pre-concert talk

Performed without intermission

Iannis Xenakis (1922–2001)

1. Mikka (1971)

2. Roger Reynolds
   Of Life and Spring
   Understand: Nothing*
   With Awe and Tenderness*
   A Mind of Winter

3. Xenakis
   Mikka S (1976)

4. Edgard Varèse (1883–1965)
   Poème électronique (1957–1958)
   Restored version by Kees Tazelaar (2009)

5. Steve Antosca
   One becomes Two (2007)

This concert is made possible in part by grants from Meet the Composer (funded in part through the MetLife Creative Connections program), the Randy Hostetler Living Room Fund, and the University of California-Washington Center.

Some of the audio equipment used in this concert was provided by VARK audio of Cabin John, Maryland.

*World Premiere Performance

The Composers

ROGER REYNOLDS

Born and educated in the Midwest, Roger Reynolds left the United States in the early 1960s upon completing an education that included both engineering and music. After seven years in Germany, France, Italy, and Japan, he took a position in the newly established music department at the University of California, San Diego (UCSD), where he founded the Center for Music Experiment with a major grant from the Rockefeller Foundation. He collaborated with other composers to mount international events such as The Pacific Ring Festival (featuring music of John Cage, John Chowning, Henry Cowell, Conlon Nancarrow, Nam Jun Paik, Harry Partch, Toru Takemitsu, and Joji Yuasa), and combined music with technology during summers at Stanford's Center for Computer Research in Music and Acoustics. Reynolds is currently engaged in a revival of the legendary ONCE Festivals of new music as artistic advisor for ONCE MORE, a festival scheduled to be presented by the University of Michigan in November.

As composer-in-residence at the California Institute for Telecommunications and Information Technologies at UCSD, he continues to explore text and voice, and the innovative use of the spaces in which his music is performed. Mark Swed, writing in the Los Angeles Times, described Reynolds as an "all-around sonic visionary." Reynolds' work is published exclusively by C. F. Peters Corporation, and is widely available on CDs. His oeuvre is the subject of a special collection at the Library of Congress.

In August 2009 Reynolds was appointed University Professor — the highest honor that can be bestowed on a University of California faculty member — by the University of California Board of Regents. He is only the thirty-sixth person and the first composer to be so honored. He is currently artist-in-residence at the University of California’s Washington, DC, Center.
STEVE ANTOSCA

Steve Antosca integrates musical instruments with computers for real-time processing and pre-recorded audio processing. Through the realization of scores that juxtapose elements of non-determinacy with traditional notation, his work enables musicians to craft a sonically rich performance environment. Antosca is artistic director, composer, and performer for the VERGE ensemble, the modern music ensemble-in-residence at the Corcoran Gallery of Art. In 2007 he received a National Endowment for the Arts grant for his work with VERGE. He has a master’s degree in computer music composition from the Peabody Conservatory of Johns Hopkins University.

In 2007 Antosca was awarded a McKim commission from the Library of Congress. His work, chamber set - threads for ensemble and computer, was also supported by the Argosy Foundation Contemporary Music Fund and was premiered last June in Buffalo, New York. He received a Fromm commission from Harvard University to compose elements = five transfigurations for cello and computer. He has also received grants from the United States Department of Education, and has been guest composer at the Southeastern Composer’s League 1997 Festival of New Music and Radford University’s New Horizons 2002 and 2005 festivals. His work shadowland is represented in the MIT publication The Csound Book. Antosca has been a guest lecturer at American University, Cleveland State University, Escuela Superior de Musica in Mexico City, the Library of Congress, the Peabody Conservatory, the University of Maryland, and the University of Virginia.

CHANGES: SEASONS is part of crossingPOInt, an unfolding series of collaborative projects that Antosca has generated in Washington, connecting music with technology, architecture, and the visual arts. More information about the composer is available at www.steveantosca.com.

EDGARD VARÈSE

Born in Paris on December 22, 1883, Edgard Varèse spent his early years in Paris and Burgundy. When he was nine years old, his father moved the family to Turin, Italy. Varèse struggled to learn music against the wishes of his father, who was intent upon preparing him for a career in engineering. He studied music and composed on his own until he reached the age of seventeen, when he was taken on as a pupil by Giovanni Bolzoni and became a percussionist in the Turin Opera Orchestra, where he also had his first opportunity to conduct. Two years later, he returned to Paris to pursue his musical studies without further interference from his father.

At the Schola Cantorum and the Paris Conservatory, Varèse resisted the conservative doctrines of Vincent d’Indy (1851–1931) and Gabriel Fauré (1845–1924), finally leaving to pursue his own independent development. In 1907 he left Paris for Berlin, but his burgeoning career as a conductor was cut short by the outbreak of World War I. In late 1915, after being discharged from the French Army because of poor health, Varèse left Europe for America. He completed his first work in his new country in 1922 and titled it Amériques, because it represented discoveries, adventures, the unknown, and “new worlds...in the minds of man.”

Varèse struggled throughout his entire career to find adequate means and instruments to represent the sonic landscapes he heard in his mind. His realization of these concepts in an electronic medium had to wait until the late 1940s and 1950s, when he created two masterpieces: Deserts (1949–1954) and Poème électronique (1957–1958). He spoke of his work with electronic music as “composing with living sounds...[thinking] of musical space as open rather than bounded.” Toward the end of his life, Varèse received the accolades he richly deserved for his visionary achievement. In a 1965 interview Varèse spoke of his motivation to compose: “I want to be in the material, part of the acoustical vibration....I care about reaching certain musical-acoustical phenomena, in other words, to disturb the atmosphere.” Edgard Varèse died in New York City on November 6, 1965.
IANNIS XENAKIS

Iannis Xenakis was born in 1922 in Romania and by 1932 his family had settled in Greece. His formal studies at the Polytechnic Institute in Athens began in 1940, and he joined the Greek resistance movement shortly thereafter. Even after sustaining a life-threatening injury during a protest demonstration in 1945, Xenakis completed his degree in Athens. He then left Greece, and was given a death sentence in absentia for his activities as a political resistance figure. He went to France, where in 1947 he found work as a draftsman in the studio of famed architect Le Corbusier. Xenakis' most notorious work from this period was his collaboration with Le Corbusier and Edgard Varèse in the realization of the Philips Pavilion at the Brussels World's Fair in 1958. His radical approach involved the creation of curved surfaces utilizing ruled parabolas. This concept derived from an earlier musical work, Metastasis 1953–54, in which surfaces of sound were evoked by configurations of carefully plotted string glissandi.

From 1967 through 1978, Xenakis created a series of Polytopes—events that unified physical, auditory, and visual space for performance. These included the Polytope de Montréal, Polytope de Persépolis, the Polytope de Cluny, and in 1978, his Polytope de Mycènes, marking a triumphant return to Greece as a hero after years in exile. Xenakis died in Paris on February 4, 2001.

The Musicians

CHANGES: SEASONS features an exceptional complement of international specialists in contemporary music performance and the real-time computer processing and spatialization of sound. Performers will be placed strategically at different levels throughout the Atrium of the East Building of the National Gallery of Art. Their placement, coordinated with technology developed for the concert, will respond to the sonic—as well as the visual—uniqueness of I. M. Pei's architecture.

Members of the National Gallery of Art New Music Ensemble performing in this evening's inaugural concert are:

Lina Bahn, violin
(University of Colorado at Boulder, VERGE ensemble)

Lisa Celia, flute
(University of Maryland, Baltimore County)

Alexis Descharmes, violoncello
(Ensemble Court-Circuit, National Opera Orchestra, Paris)

Bill Kalinkos, bass clarinet
(Alarm Will Sound, New York, NY)

Ross Karre, percussionist
(red fish blue fish, Ensemble XII, and University of California, San Diego)

Steve Antosca, computer musician
(VERGE ensemble)

Jaime Oliver, computer musician
(Lima, Peru, and University of California, San Diego)
Program Notes

**CHANGES: SEASONS** is a series of events that address current and historical trends in the use of technology in music and the role that performance spaces play in the dissemination of music, art, and technology. **CHANGES: SEASONS** events are presented through a partnership between the National Gallery of Art and the University of California Washington Center (UCDC), with the additional collaboration of the California Institute for Telecommunications and Information Technologies (Calit2), University of Maryland, Peabody Conservatory of the Johns Hopkins University, American University, La Maison Française/Embassy of France, the Library of Congress, and the Contemporary Music Forum. Tonight's concert is the culmination of the series and will include a preconcert panel focusing on art, architecture, music, and technology.

*Mikka* and *Mikka S* are seminal works by Iannis Xenakis. They emphasize an insight that this musical architect saw as his primary contribution to music: the realization that all the dimensions of musical sound can be opened to continuous variation. In the late 1960s Xenakis began to use Markov chains to suggest branching structures he referred to as “arboresences.” Normally tempered pitches served only as anchors. He asks the violinist to alter pitch constantly, sometimes as subtle inflections, but at other times as wildly careening wailings that require the left hand to slide up and down the fingerboard rapidly. Written in 1971, *Mikka* opens this terrain, utilizing a single line in constant flux. Written five years later, *Mikka S* requires two moving lines. The performer must somehow evoke the simultaneous meandering of two interwoven voices.

Roger Reynolds’ **SEASONS** is a collection of nine shorter works: two cycles of four plus a culminating ensemble work. Their subject is change and consistency through the four stages of human life (infancy, youth, maturity, old age) and the four stages of weather during a year (spring, summer, autumn, winter). Poetic fragments from Wallace Stevens, Czeslaw Milosz, and other writers offer a variety of perspectives on both seasonal cycles. For example, old age entails urgency, grotesquity, grieving, and resolution. Each movement references both sets of stages; for example, *Of Life and Spring* includes infancy and spring.

Both cyclical and progressive influences are present, providing connectivity and flexibility, while insuring shifting perspectives. Each movement involves an instrumental trio and a “mediator” that offers connectivity and commentary on the activities of the members of the trio. In the first cycle, mediation is provided by a musician controlling real-time computer processing from a multi-channel sound system, whereas in the second cycle a soprano and oboe duo move between the remaining instrumentalists. The computer musician is armed with a set of transformative algorithms, the soprano with actual poetic phrases. Two of the cycles receive their premiere performance on this evening’s program. The entire collection will be presented in future seasons by the adventurous New York ensemble Alarm Will Sound, under the direction of Alan Pierson.

In the late 1950s, Edgard Varèse collaborated with the architect Le Corbusier (1887–1965) and his then associate, composer-designer Iannis Xenakis, to create a unique architectural space, the prototype “polytope,” the Philips Pavilion. Xenakis later used polytope (“many”+“sites”) to describe a series of projects that involved music, light, and custom-designed spaces. Although the pavilion was designed primarily by Xenakis and utilized visual projections conceived by Le Corbusier, it featured Varèse’s first grappling with the imaginative dimensions of electroacoustic sound as conceived for a surround experience: *Poème électronique*. This work is a visionary montage, incorporating many of the thematic images that had arisen in Varèse’s earlier work: sirens, expressive keening, organ-like sounds, dramatic low-register gestures, rhythmic pulsing, and the human voice, all in startling accumulations. **CHANGES: SEASONS** will present a version of this pathbreaking work newly restored by Kees Tazelaar at the Institute of Sonology of the Royal Conservatory of Music in the Netherlands.
The inspiration for Steve Antosca’s *One becomes Two* comes from a passage from Carl Jung’s (1875–1961) writings, symbolically describing a process of transformation:

…when the bud unfolds and from the lesser the greater emerges, then
*One becomes Two* and the greater figure, which one always was but which remained invisible, appears with the force of a revelation.

Here the expansion of bud into flower is represented by two characteristics. First, the piece provides two paths between which the performer must choose. Within them, each passage also has a distinct set of non-determinate performance alternatives. At the end of the “path section” the performer must choose among four personalities: joy, passion, duality, and enduring spirit, each with its own unique performance requirements. The second characteristic is the use of the computer for the transformation of the violin sound in an interactive, real-time manner. The instrument is connected to a computer running a composer-created Max/MSP patch utilizing feedback, flange, pitch shifting, delay and tap delay to generate flowing reflections of the violin source.

*One becomes Two* was premiered by violinist Lina Bahn at the Phillips Collection in Washington, DC, in March 2007. Two months later she gave its European premiere in Paris at the Festival de Musique Américaine. *One becomes Two* has been performed throughout China, Europe, and the United States. In 2009 it was chosen as a selected winner in the “electroacoustic music with instruments” category of the Thirty-sixth Bourges International Competitions and was performed as part of the International ElectroAcoustic Music Festival in Rome. A graphic page from the score for *One becomes Two* was published in *Notations 21*, a compendium and anthology of illustrated contemporary scores.

Program notes and composer biographies by Roger Reynolds and Steve Antosca
National Gallery of Art - East Building Atrium, Washington, DC  
March 7, 2010  
The inaugural concert of the National Gallery of Art New Music Ensemble

Pre-concert panel, East Building Atrium - 6:30 PM

**concert program**

**Mikka** (1971)  
solo violin, some amplification

**Iannis Xenakis**  
3:15

**Seasons: Cycle I (2009-10)**  
Roger Reynolds  
flute, bass clarinet, violin, violoncello, percussion, real-time computer sound processing  
*Of Life and Spring* – flute, violoncello, percussion, computer musician  
17:00

*Understand: Nothing* – violin, bass clarinet, percussion, computer musician  
10:00

*With Awe and Tenderness* – violin, bass clarinet, percussion, computer musician  
10:00

*A Mind of Winter* – flute, violoncello, percussion, computer musician  
17:00

**Mikka S** (1976)  
solo violin, click track from computer, audio from computer

**Iannis Xenakis**  
3:30

**Poème électronique** (1958-2009)  
Edgard Varèse  
8 tracks of audio only from computer  
8:00

**One becomes Two** (2007)  
Steve Antosca  
vioin and computer musician, violin into computer, 8 tracks of audio from computer  
11:00

ALL TIMES ARE CLOSE APPROXIMATIONS