FROM THE EDITOR

Do you ever wish you could mosey over to your handy-dandy replicator and make something? While there’s not much we can offer by way of synthesizing your favorite panini, we can help with 3D printing a crumhorn! Join long-time early music enthusiast Charlie Jackson as we explore “3D Printing for Early Woodwinds.”

How are you going to repair the key that broke on your instrument—the key that can’t be fixed at the repair shop but that needs to work for your upcoming performance? 3D printing, that’s how! David Levy gives an encore performance with his tale of “A Puzzle, a Missing Piece, and a Problem Solved.”

Laurence Vittes brings us another wonderful interview, this month with Laurence Equilbey, founder of the period-instrument Insula Orchestra and the chamber choir accentus. If you like Beethoven, this is a “must read.”

Free tickets to the Jouyssance Angelic Twelfth Night Concerts!
Jouyssance Early Music Ensemble has generously donated two free tickets for their upcoming Angelic Twelfth Night Concerts to SCEMN readers. The concerts will take place on January 5, 2019 in Westwood and January 6, 2019 in Monrovia. E-mail calendar@earlymusicla.org for details on how to be the lucky winner!

Be sure to check “Things to Come” for upcoming events outside Southern California and the “Concert Calendar” and the SCEMS on-line calendars https://www.earlymusicla.org/calendar for more information on performances right here that you won’t want to miss.

Thank you for your support of early music in Southern California!

Sincerely,
John L. Robinson
Editor-in-Chief, Southern California Early Music News
newsletter@earlymusicla.org
The year 2020 marks the 250th anniversary of Beethoven’s birth in 1770. In a preview of how rich the year will be for period instrument aficionados, Erato has released a new recording of Beethoven’s Fourth and Fifth Piano Concertos.

Nicholas Angelich plays an 1892 Pleyel along with Laurence Equilbey’s period-instrument Insula Orchestra. The recording shows just how beautifully moving and provocative Beethoven can be—just what Beethoven intended—when it is based on a deep knowledge of performance practice and a heart of soul and poetry.

Founded in 2012, Insula’s artistic projects focus both on repertoire from the Classical and Romantic eras on period instruments, and on adapting its sound to suit large auditoriums. As modern groups do these days, Insula continually re-examines the formats and codes of classical music with the aim of attracting new audiences and creating an ongoing dialogue between symphonic music, the spatial dimension of the venue, and the stage. In addition to recording more Beethoven (see below), Equilbey is currently working on a Mozart CD and a complete recording of Carl Maria von Weber’s Der Freischütz.

I caught up with Equilbey before an extraordinary new season which would begin with the complete incidental music to Mendelssohn’s A Midsummer Night’s Dream with Insula in Paris and the Scottish Chamber Orchestra in Edinburgh and Glasgow. It will go on to include Beethoven’s Fifth Symphony in Berlin, Freischütz in Caen and Aix-en-Provence, and Bach’s St. John Passion, Mozart’s Requiem, and a program of the music of Sofia Gubaidulina and Pascal Dusapin at the Salzburg Festival.

LV: How did this Beethoven recording come about?

Laurence Equilbey: A few years ago, Insula and I performed Beethoven’s Fourth Concerto with Nicholas Angelich, and we really got along artistically. We wanted to collaborate again, and that led to recording both the Fourth and the Fifth Concertos.

LV: Among the hundreds of recordings of Beethoven piano concertos, there is only a handful on period instruments and pianos. What kind of difference does using these old instruments make?

Laurence Equilbey: We—Nicholas Angelich, the orchestra and I—decided to compromise by using a Pleyel piano from 1892 in this recording. It is one of the first modern pianos, and yet still has a sonority closely matching the pianoforte’s poetic character. It also works exceptionally well with period instruments and even at times blends completely with
the orchestral sound. It gives the impression of one integrated entity, as with the organ. I especially appreciate the crystalline sound of the Pleyel’s upper registers and the intensity of its fortes. These sonorities really correspond to Beethoven’s language.

LV: Why did you choose a late-nineteenth-century piano and not a fortepiano from Beethoven’s time?

Laurence Equilbey: We thought that the 1892 Pleyel piano was a happy medium between a pianoforte like a Conrad Graf—perfect for recordings, but less adapted to the current big concert halls—and a current Steinway, which I think is very far from Beethoven’s universe in terms of sound. Pianos like the Pleyel allow us to rediscover a range of sonorities forgotten in the twentieth century, the result of technical progress and the need to project.

LV: How does Insula navigate between authentic and modern styles and audiences?

Laurence Equilbey: In these recordings, we paid close attention both to respecting the musical language, sonorities, and spirit of Beethoven’s period, and to providing a breadth of musical experience that will appeal to current audiences. Our approach is based on poetry, timbral blends, a natural and vital outpouring of dramatic energy and light, and the improvisatory style so important in these concertos.

LV: What does recording Beethoven mean to Insula?

Laurence Equilbey: Beethoven is really important for Insula Orchestra. His music is at the heart of its repertoire. The Fourth and Fifth Concertos are the two last pieces that Beethoven wrote for his favorite instrument. They represent an artistic height that would not be equaled in the decades following Beethoven’s death. Recording these two concertos was an important experience for an ensemble like Insula Orchestra not only for the quality of these masterpieces but also because it allows the orchestra to accompany a soloist—and a great one!

LV: What considerations were given to other recording venues, perhaps more historical ones?

Laurence Equilbey: Actually, there are no longer real historical venues. Even the halls in Vienna are very different from the venues of Beethoven’s time. That’s why we decided to record this disc in our new concert hall, La Seine Musicale, which has wonderful acoustics. The acoustician Yasuhisa Toyota worked on this project. (He was also chief acoustician for the Hamburg Elbphilharmonie and the Paris Philharmonie.) Since we performed the concertos during concerts at La Seine Musicale, that’s where and when we recorded them live. Very exciting!

LV: Will you and Insula be recording more Beethoven?

Laurence Equilbey: Yes! In March 2019, Warner Classics–Erato will release a new Beethoven CD including the *Triple Concerto* with Alexandra Conunova, Natalie Klein, and David Kadouch, and the *Choral Fantasy* with my choir, accentus, and wonderful soloists.

LV: What do you learn from playing music written during the crossover time from Bach to Beethoven?

Laurence Equilbey: We regularly play the works of Carl Philipp Emanuel Bach and those of Joseph Haydn. You can hear the crossover point more often in the sacred repertoire, in which counterpoint remained popular into and during the Classical period. We find this contrapuntal writing in Mozart’s symphonies,
and later in Beethoven’s symphonies; but this period clearly shows musical style adapting and transforming itself from the Baroque to the Classical. Musical speech becomes more vertical, harmony evolves, and lines of counterpoint begin to lighten.

**LV:** When you formed Insula did you have to build an audience for period instrument orchestras, or were you entering an already competitive field?

**Laurence Equilbey:** In France, the sound of period instruments and their style of playing are well-known and appreciated. We knew we were entering a competitive field, so we decided to explore repertoire of the Classical and pre-Romantic eras in particular; a bit neglected by period instrument ensembles.

**LV:** How is it that there are so many period-instrument orchestras in Europe?

**Laurence Equilbey:** The Baroque movement was born in the 1960s in Austria and the Netherlands, led by pioneers like Nikolaus Harnoncourt, with whom I studied in Vienna, and Gustav Leonhardt. France immediately followed that with research on period instruments, helped by the discoveries concerning the seventeenth-century French music in Versailles.

In fact, France is one of the leaders in what are called “specialized” ensembles. Based on their own historical research, these musicians want to be close to the principles of the past centuries, with the understanding that compromises might be necessary. This movement has benefited from public and private financial support since the beginning, which has turned out to be a great decision on so many levels.

**LV:** How is that each of these period instrument orchestras seemingly has its own individual character?

**Laurence Equilbey:** Perhaps each orchestra is trying to find a specific time and space that they relate to, while also embracing certain general principles they share with other musicians. After all, many musicians play in multiple orchestras. With our Insula Orchestra, we work on the Age of Enlightenment, looking for rare repertoire: the work of female composers such as Louise Farrenc and Clara Schumann, for instance. We also strive to be open and innovative. That is why we develop staged productions, as we did of Haydn’s *The Creation* recently with the Catalan experimental theatrical troop La Fura dels Baus.

**LV:** You studied conducting with Denise Ham. Please tell us a little about her.

**Laurence Equilbey:** Denise Ham is an excellent teacher for orchestra conducting. She has taught at the Royal Academy of Music in London for a long time. Her teaching is derived from the technique of Léon Barzin, who was a student of Toscanini. Denise knows the great symphonic repertoire extremely well, and her advice was of valuable help for me.

**LV:** How did your training as a flutist influence your musical persona?

**Laurence Equilbey:** Both playing the flute and singing are very useful for all issues linked to respiration and intonation; and in order to become a conductor, you need to know several instruments. In my case I also play the piano and viola.
3D Printing for Early Woodwinds

Charles M. Jackson, Ph.D.

Introduction

It is not known how long humans have been making musical instruments. Some have been found that date back 9,000 years (figure 1). Neanderthal bone flutes have been found dating back 40,000 years.¹ Each generation develops instruments that use the common technologies of their time. Today, 3D printing has become available to make musical instruments out of nylon or acrylonitrile butadiene styrene (ABS) plastic. This article will describe how 3D printing can be used to make early woodwinds.

Figure 1: Nine thousand-year-old flutes from China. Photograph courtesy Brookhaven National Laboratory.

3D printing facilitates the customization of instruments (e.g., making “left-handed” instruments) and can take advantage of intensive design, either by trial and error or by optimization.²

To take advantage of 3D printing, I used a woodwind design program to design a cornettino.³ A 3D computer-aided design (CAD) program drew the instrument. After sending the file (and money) to a 3D printing company, I had, a few weeks later, a working and playable cornettino!

You don’t need to buy your own 3D printer to make things, but you will need to use a 3D CAD program. I used OpenSCAD⁴, but there are a number of free programs that are available. TinkerCAD⁵ is popular.

Today’s 3D printers use a wide range of methods to add material step-by-step to create an object. This process is called additive manufacturing and stands in contrast to subtractive manufacturing, in which a drill, lathe, or mill is used to cut away material and make an object. One method of additive manufacturing uses a bath of liquid plastic and a laser beam that scans the bath back and forth to solidify a single layer. Another method uses a laser that heats powdered nylon or metal point by point, causing the nylon or metal to solidify into an object. (A third method can make chocolate sculptures by squeezing little drops of chocolate onto a complex shape, like a miniature robotic cake frosting bag!)

Early Woodwinds & 3D Printing

3D printing has been applied to the manufacture of a cornettino (figure 2), crumhorn (figure 3), fife (figure 4), and recorder (figure 5).

A soprano recorder can be 3D printed for $45 using Shapeways Strong and Flexible, Nylon Plastic, PA12, Polyamide.⁶,⁷ (A mass-produced plastic soprano costs about $10.) An alto


recorder can be 3D printed for about $100. (A mass-produced plastic alto costs between $30 and $50—Ed.) A crumhorn can be 3D printed for $100. (See http://www.renwks.com/products/crumhorn/crumhorn.htm for examples of crumhorn prices.—Ed.)

3D printing can provide affordable instruments of good quality suitable for introducing high school students to early music. The technique can be used to manufacture low-cost instruments pitched at A=415 for which there are no mass-produced alternatives. (This is an example where extensive modelling can be applied to a specific design that would not be warranted for a mass-produced, broad market product.) With success on the low-cost, entry-level 3D-printed instrument, the student can progress to a better instrument.

3D printing can also be used to make higher quality and more unusual instruments. Folk instrument shawms have been made, as well as great bass and contrabass recorders based on 3D printed keys (see also “A Puzzle, a Missing Piece, and a Problem Solved” in the December 2018 edition of SCEN—Ed.) and PVC pipe. New instruments are also being developed. Researchers are working on microtonal instruments made possible by the accuracy of 3D printing and their design equations.8

Figure 2: Historic reproduction of a cornettino and a 3D-printed version.

Charlie’s first musical instrument was a Song Flute http://www.mewzik.com/research/fitchhorn/index.php, a plastic flute for elementary school children that was an engineering oddity at the time because it was made to be low cost with plastic. He started learning about Renaissance and Baroque music when he picked up his sister’s recorder. He later started playing the French Horn and performed in groups until he graduated from UCLA. His interest in designing flutes eventually led to a career in microwave engineering (which pays much better than designing woodwind musical instruments).

Charlie Jackson has been active in a broad range of microwave and millimeter-wave technologies. After receiving his doctorate in Solid State Physics at UCLA, he worked at Hughes, TRW, Ditrans, Raytheon, and Northrop Grumman. He is an active participant in and Fellow of the IEEE https://www.ieee.org, has five patents, and has published more than 30 articles.

While recovering from cancer, Charlie pursued a lifelong dream of designing and measuring the acoustical properties of woodwind musical instruments. He now uses 3D printing to make them.

Charlie is active in the Southern California Recorder Society and the Orange County Recorder Society.
A Puzzle, a Missing Piece, and a Problem Solved

David A. Levy

Recently, while visiting Southern California, I had occasion to play Baroque music in Santa Monica with some friends whose instruments are pitched at A=415. All of my instruments, recorders included, are pitched at A=440. I borrowed an alto recorder at A=415. Problem solved...well, not quite.

With me on this trip, and for the soirée musicale, was our exchange student, a clarinetist from Germany. We wanted him to participate in the music making, but how can a modern clarinet at A=440 play with other instruments pitched at A=415?

One answer is to use a clarinet in A (rather than the more frequently used clarinet in Bb). The clarinet in A at A=440 can play with A=415 instruments using music transposed into keys that are much more “player friendly” than those a clarinet in Bb would require. (415 Hz is the pitch B on a clarinet in A; it is A on a low-pitched Baroque instrument.—Ed.) Unfortunately, our exchange student didn’t have a clarinet in A, but I did. I had purchased a clarinet in A several years ago, an instrument made in 1921 by Conn, but had neglected to have it put into playing condition.

An interesting feature of my Conn clarinet in A is that it uses the Albert keywork and fingering system. This is a clarinet keywork system that was used on instruments commonly played in the United States prior to the 1930’s. While the Albert system is unlike the Boehm keywork system used by clarinets commonly played in the United States today, it is like the Oehler keywork system used on clarinets commonly played now in Germany. This means that the fingerings on my Albert system clarinet in A would be very similar to the fingerings our German exchange student would use on his Oehler system clarinet in Bb. Thus, a clarinet in A with (almost) German fingerings was found!

With about a week to go before the soirée musicale, I took my Conn clarinet in A to our local music store here in Texas for repairs. In the process of adjusting the mechanism, a part of the keywork was broken. On a modern instrument, soldering the broken key to repair it would have been relatively easy. However, in the 1920’s Conn used a cast alloy for their clarinet keys that cannot be soldered. That avenue for repair was not available. Lacking a suitable instrument, it appeared that we would be without a clarinet player that evening.

Jokingly, I suggested to Jared Chapman, master repairman at Sam Gibbs Music in Wichita Falls, that he just 3D print a key—I really only needed the clarinet to play for one evening. Much to my surprise, I received a call from him saying that he had fashioned a replacement component using a 3D printer to connect the broken parts (figure A).

![Figure A: 3D-printed replacement key component (right).](image)

The clarinet played wonderfully for our Santa Monica get-together and should be good for another 97 years. Problem solved!

David Levy contributed the feature article for the July 2018 edition of SCEMN, “Recorder Doubling for the Working Musician.”—Ed.
Sustainability

Jamie Savan and Ricardo Simian are making high-quality, historical cornetti using 3D printing. While these instruments may require some post machining to get the precision that is needed, the ability to make multiple copies of a basic design will reduce costs that may be passed on to the buyer in the form of lower instrument prices.

3D printing should enable the manufacture of low-cost or high-quality early woodwinds that can enhance the early music movement. Some of these instruments will be isolated, one-time items; but others will be sustainable.

Addendum

On a personal note, 3D printing enabled my dream of building early woodwinds and designing them with equations. I started this journey years ago with a desire to design instruments from scratch. I had no idea that I would be able to sell the instruments on a website.

Shapeways supports webpages to sell 3D printed products, hosting my site, “SyntagmaMusicum.” All proceeds will go to the American Recorder Society. So far, about $100 has been contributed, more than I ever thought possible! This provides me with the motivation to make more such instruments available.

Acknowledgments

I want to thank Rotem Gilbert, Adam Gilbert, Jeff Holt, Elaine Kramer, Kate Budlong, Miranda Manners, Brenda Bittner, and other members of the Los Angeles Recorder Orchestra (LARO)
for discussions on the design and performance of these woodwinds. I also want to thank my many colleagues at Northrop Grumman for their insights.

**Footnotes**


4 OpenSCAD can be found at [http://www.openscad.org](http://www.openscad.org).

5 TinkercAD can be found at [https://www.tinkercad.com](https://www.tinkercad.com).

6 See [https://www.shapeways.com/materials/versatile-plastic](https://www.shapeways.com/materials/versatile-plastic) for information on this material.—Ed.

7 Other materials will have different costs. The printing cost does not include any markup.


10 Note also that sometimes, when the instrument is first delivered from the printer, it may still have powder in the main bore. One must gently remove the unwanted material.

11 “The goal of SyntagmaMusicum is to offer designs of Renaissance woodwinds using 3D printing. All of the designs we developed using transmission line theory to calculate the hole positions and sizes. Hopefully these instruments will inspire people to learn to play and perform on historical copies of these instruments” [https://www.shapeways.com/shops/SyntagmaMusicum](https://www.shapeways.com/shops/SyntagmaMusicum).

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**Publication Submission Guidelines**

For complete submission information, consult: [www.earlymusicla.org](http://www.earlymusicla.org). All items should be received by the appropriate editor by the 1st of the month, one month prior to the issue month. Issues are monthly, September through June, subject to change. Calendar listings are free, but restricted to early music relevant events. For information on advertising (reservation deadlines, pricing and requirements), please call 310-358-5967 or email ads@earlymusicla.org. Please do not mail any submissions to the SCEMS P.O. Box.

**Southern California Early Music News** is a monthly publication of Southern California Early Music Society, a nonprofit, all-volunteer organization which supports the study, performance, and enjoyment of Medieval, Renaissance, Baroque and Classical music. Subscription is free. To subscribe or join SCEMS online, visit our website [www.earlymusicla.org](http://www.earlymusicla.org). For an annual membership in the Society, you may also mail your name and address with a $10 cheque payable to SCEMS to: SCEMS, Post Office Box 41832, Los Angeles, CA 90041-0832. Members, if you move, please send your new address to SCEMS or submit online at [www.earlymusicla.org](http://www.earlymusicla.org).
**Concert Calendar**

**Monday, December 10, 7 p.m.**
*Jouyssance Early Music Ensemble: Early Carol Singalong*

Join members of Jouyssance and fellow music lovers in what has become a beloved tradition: the Jouyssance Early Carol Singalong. Sing familiar holiday hits and rarities from the Medieval, Renaissance and early Baroque eras under the baton of Dr. Nicole Baker. A holiday reception with treats and libations will follow the singing. Advance registration required—check back soon for a registration link. Admission at the door will be $15 (print your own scores at home, files provided) or $20 (receive printed scores at the door). Free admission for all students with ID.

St. Philip the Apostle Church
151 S. Hill Ave., Pasadena

**Wednesday, December 11, 8 p.m.**
*(repeats Dec 13, 14 in Los Angeles)*
*Los Angeles Chamber Orchestra: Avi Avital & The Four Seasons*

The Orchestra’s signature baroque series explores the genesis of orchestral repertoire from early baroque through the pre-classical period.

Featuring: Avi Avital mandolin; Margaret Batjer violin; Tereza Stanislav violin; Josefina Vergara violin; Sarah Thornblade violin

Program: Vivaldi, Concerto for Two Violins in G Minor; Vivaldi, Concerto for Two Violins in A Minor; Vivaldi, The Four Seasons.

Concert is FREE, with RSVP.

The Granada Theatre
1214 State St, Santa Barbara, CA
More info: [https://www.laco.org/events/the-four-seasons](https://www.laco.org/events/the-four-seasons)

**Thursday, December 13, 7:30 p.m.**
*(repeats Dec 11,14)*
*Los Angeles Chamber Orchestra: Avi Avital & The Four Seasons*

See Dec. 11 listing for concert info

Pre-concert program: Join us for a pre-concert reception, beginning at 6:30 pm, free to all ticket holders. Tickets: $52

Zipper Concert Hall,
200 S Grand Avenue, Los Angeles, CA
More info: https://www.laco.org/events/the-four-seasons/

**FRIDAY, DECEMBER 14, 7:30PM (repeats Dec 11,13)**
Los Angeles Chamber Orchestra: Avi Avital & The Four Seasons
See Dec. 11 listing for concert info; Tickets: $52
St. Monica Catholic Church
701 California Ave., Santa Monica, CA
More info: https://www.laco.org/events/the-four-seasons/

**FRIDAY, DECEMBER 14 (repeats Dec. 15 in San Diego area)**
Bach Collegium San Diego: J.S. BACH, Christmas Oratorio BWV 248
Perhaps nothing conveys the sheer joy of Christmas better than Bach’s Christmas Oratorio composed for Leipzig’s Christmas season of 1734. Opening with an exhilarating timpani fanfare, what ensues is a euphoric crescendo leading to the outburst, Jauchzet, frohlocket!, leaving no doubt that the festival of Christmas has arrived. The Christmas Oratorio carries the listener through the Christmas narrative as seen through the eyes of the angels, shepherds, and magi, and includes some of Bach’s most sublime music.

Don’t miss BCSD’s first foray into this inimitable work as presented by our supreme lineup of musicians.
Soloists: Melanie Russell, Soprano; Janelle DeStefano, Mezzo-Soprano; Jay Carter, Countertenor; Jason McStoots, Tenor; Paul Max Tipton, Baritone

First United Methodist Church
Mission Valley (San Diego area)
More info: http://bachcollegiumsd.org/concerts2

**SATURDAY, DECEMBER 15, 7 PM**
Messiah Sing-Along
Pasadena’s favorite singalong Messiah returns for the 23rd year! Director Duane Funderburk leads audience members in Handel’s masterpiece, assisted by soloists Tiffany Rivette, Dianne Harmel, Landon Shaw II, Eric Carampana, and a 100+ voice choir and Chamber Symphony. FREE No tickets needed; a freewill offering will be taken. Childcare will not be available.
Lake Avenue Church
393 N Lake Ave, Pasadena, California
https://www.facebook.com/events/2237665809834628/

**SATURDAY, DECEMBER 15 (repeats Dec 14)**
Bach Collegium San Diego: J.S. BACH: Christmas Oratorio BWV 248
See Dec 14 for concert info
Sts. Constantine and Helen Greek Orthodox Church, Cardiff (San Diego area)

**SUNDAY, DECEMBER 16, 3, 5 & 7 PM**
The Da Camera Society: Chamber Music in Historic Sites, presents Christmas at the Bradbury with KITKA: Wintersongs
Celebrate the longest nights of the year with seasonal music ranging from rousing Slavic folk carols, to pre-Christian incantations, and lush meditative Eastern Orthodox choral works.
Exploiting the acoustics of The Bradbury’s majestic five-story atrium, the nine women of KITKA will move about the building to perform seasonal music from a wide variety of Eastern European and Eurasian traditions. KITKA’s “eloquent and translucent singing [with] multiple voices resounding as one” inspired the SF Weekly to conjure up “Gabriel’s trumpet howling from the highest mountaintop.” Kitka is an American women’s vocal arts ensemble inspired by traditional songs and vocal techniques from Eastern Europe. More than just a concert, an evening with Kitka unites vibrant music, enhanced by a subtly changing stage picture, compelling song introductions, and each singer’s warm rapport with the audience. Listeners are transported by a continuous unfolding of music that flows seamlessly from ethereal, contemplative pieces to rousing earthy rhythms.

This is powerful music by accomplished musicians who offer more than just exquisite execution—these women clearly share a passion for what they do. Kitka: joyful voices uniquely blended in exquisite dissonance and harmony. Tickets: $65.00

Bradbury Building, Downtown LA

**SUNDAY, DECEMBER 16, 7 PM**
**Los Angeles Master Chorale: Handel’s Messiah**

Simply one of the greatest choral works of all time, Handel’s Messiah, as sung by the Los Angeles Master Chorale under the joyful baton of Artistic Director Grant Gershon.

Tickets $29–$129

Walt Disney Concert Hall
More info: http://www.lamasterchorale.org/handel-messiah

**MONDAY, DECEMBER 17, 8 PM**
**Monday Evening Concerts: Léonin, Perotin, Reich ‘How Small A Thought It Takes’**

The MEC Early Music Ensemble (including Joel Nesvadba) and the ECHOI Ensemble, directed and conceived by Jonathan Hepfer, perform music of Léonin—(ca. 12th century), Pérotin—(ca. 12th/13th century), and Steve Reich—MUSIC FOR 18 MUSICIANS (1974–76).

In his 1968 essay Music as a Gradual Process, Steve Reich compares listening to one of his pieces to “placing your feet in the sand by the ocean’s edge and watching, feeling, and listening to the waves gradually bury them.” In his Music for 18 Musicians, a simple pulse imperceptibly transforms into an almost impossibly vibrant polyphony.

In a sense, it is this same process that distinguishes two composers of the 12th century Notre Dame school of polyphony, Léonin and Pérotin, who were two of the earliest composers to transform monophonic musical forms into polyphonic ones.

It is this obsession with transforming the simple into the complex that links these composers in spite of nearly eight centuries of historical distance.

Despite the myriad surface differences in these respective works, we hope to show that there is something common deeply embedded in their DNA. Experiencing an art form across a span of several centuries demonstrates how it is both constantly evolving and timeless. This concert gives a new meaning to the phrase “music as a gradual process.”

Zipper Concert Hall at the Colburn School
200 South Grand Avenue, Los Angeles, CA
More info: www.mondayeveningconcerts.org

**Monday, December 17, 7:30 PM**
**Los Angeles Master Chorale: Messiah Sing-Along**
Our popular do-it-yourself version of Handel’s Messiah, where the audience is the chorus, returns! This will be the 38th annual Messiah Sing-Along and is sure to pack the house. Bring your own score or purchase one in the lobby. A limited number of VIP onstage tickets are available to bring you closer to the musical action. Hallelujah!

Tickets $25-$85, VIP $150

**Wednesday, December 19, 8 PM**
**Chanticleer: A Chanticleer Christmas**
The Grammy®-winning chorus makes its triumphant Walt Disney Concert Hall return. The much-celebrated, Grammy®-winning, 12-man chorus makes its return for a classic holiday program of a cappella choral music, presented with stunning clarity, precision, and excellence. This program will be presented without intermission. Arrive early and visit our Winter Wonderland in BP Hall! Post-Concert Meet & Greet

Disney Hall, 111 South Grand Ave.
Los Angeles, CA 90012
More info: https://www.laphil.com/events/performances/312/2018-12-19/a-chanticleer-christmas/?j=165056&sfmc_sub=16946728&l=430_HTML&u=3167382&mid=10000359&jb=35&utm_source=MarketingCloud&utm_medium=HTMLEmail&utm_campaign=181030_WDCH_Targeted_Deck_The_Hall&&&

**Sunday, December 23, 1:30 PM & 4 PM**
**Annual Messiah Community Singalong: Handel’s Messiah**
Jennifer Lindsay, soprano; Elizabeth Anderson, mezzo-soprano; Tenor TBA; Roberto Perlas Gomez, baritone

Bridges Hall of Music, Pomona College
150 E 4th St, Claremont, CA
www.claremontso.org/current-season.html

**January 2019**

**Saturday, January 5, 8 PM**
**(repeats Sunday, January 6, 4 pm)**
**Jouyssance Early Music Ensemble: an angelic twelfth night**
Angels descend on Westwood and Monrovia as Jouyssance presents its signature Twelfth Night concert. Cherubim and Seraphim will gather to the sounds of Palestrina, Byrd, Lasso, Victoria and more. Audience members will be invited to honor their own special angels! Free receptions to follow at both venues. Tickets $15-$25

St. Paul the Apostle Catholic Church
10750 Ohio Avenue, Westwood
More info: www.jouyssance.org

**Sunday, January 6, 4 PM**
**(repeats January 5)**
**Jouyssance Early Music Ensemble: an angelic twelfth night**
See Saturday, January 5 for concert info

St. Luke’s Episcopal Church, 122 S. California Ave. Monrovia
More info: www.jouyssance.org
**Calendar Online**

The Early Music Around Town online calendar features the very latest listings with updates and additions at http://www.earlymusicla.org. Report listing corrections and any errors to the Calendar Editor at calendar@earlymusicla.org.

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Free for all early music events!

In one step, submit a listing to the online SCEMS calendar at calendar@earlymusicla.org. Mail season brochures to: SCEMS, PO Box 41832, Los Angeles, CA 90041-0832.

**Ticket Discounts**

For SCEMS Members Only! The following ensembles are among those offering special pricing for members of the Southern California Early Music Society for selected performances: Con Gioia • Jouyssance • LA Master Chorale • LA Opera • Los Angeles Baroque Players • Musica Angelica • Tesseræ

For additional information on special pricing for selected performances, please consult the SCEMS calendar or contact SCEMS at info@earlymusicla.org or www.earlymusicla.org.

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**Things to Come**

**EMAT Calendar** www.earlymusicla.org/calendar, a monthly shortlist of local early music concerts and events.

**Current Master Calendar** www.earlymusicla.org/2017-2018-calendar, a list of the entire season of concerts and events.

**The Boston Early Music Festival** has announced its 2018–2019 season. For more information, please go to www.bemf.org.

**The San Francisco Early Music Society** has announced its 2018-2019 Concert Season: Voices Shaping Time. For more information, please go to http://sfems.org/?page_id=13416.

**The Amherst Early Music Winter Weekend Workshop** will be held from January 18th to 21st, 2019 at Rutgers University, Camden, NJ. For more information, please go to https://www.amherstearlymusic.org/www.


**The Portland Recorder Society’s Columbia Gorge Early Music Retreat** will be held from March 15th to 18th, 2019 at the Menucha Retreat and Conference Center, Corbett, OR. For more information, please go to https://portlandrecordersociety.wordpress.com.

**The Hawaii 2019 Recorder Workshop** will be held from March 29th to 30th, 2019 at the Queen Emma Community Center, Kealakekua, HI. For more information, please go to http://earlymusichawaii.com/?page_id=10.
An Angelic Twelfth Night

Join Jouyssance in honoring our early music angels! Cherubim and Seraphim will gather to the sounds ofPalestrina, Byrd, Lasso, Victoria and more. Free receptions to follow at both venues.

Tickets: $25 / $20 seniors & SCEMS members / $15 students

FOR MORE INFO OR TO PURCHASE ADVANCE TICKETS:
WWW.JOUYSSANCE.ORG OR
213 533 9922

Saturday, January 5, 2019
8 p.m.
St. Paul the Apostle
10750 Ohio Avenue
Westwood

Sunday, January 6, 2019
4 p.m.
St. Luke’s Episcopal Church
112 S. California Avenue
Monrovia