



Sō Percussion



Wednesday, April 19, 11am

Zellerbach Hall, University of California, Berkeley

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Cal Performances' Education Department Staff:

Rica Anderson, Manager, Education & Community Programs
Mina Girgis, Director of Education, Campus & Community Engagement

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How to use this Engagement Guide

If you have photos or lesson plans connected to this performance, please share them with us at: eduprograms@calperformances.org.

This engagement guide is organized around 4 key artistic practices (as identified by the [National Coalition for Core Arts Standards](#).)

Creating: Conceiving, exploring, and developing new artistic ideas and work, making artistic choices with a work of art in mind.

Performing/Presenting/Producing: Realizing artistic ideas and work through interpretation and presentation.

Responding: Understanding and evaluating how the arts convey meaning.

Connecting: Relating artistic ideas and work with personal meaning and external context. Reflecting on both process and product and making connections to other aspects of life and study.

This Engagement Guide invites exploration before and after the performance, giving each student tools to make personal and meaningful connections during the show. You'll be able to link to specific subjects that you or your students may want more information about. We've included pre-performance engagement activities and post-performance activities for artistic practice and reflection. By no means should you feel limited by these suggestions! Go, make art, learn more...and share your experiences where you can.

Arts Engagement: More than learning basic information about a performance, we think real arts engagement starts with having the skills and knowledge to connect meaningfully with works of art. When students engage in the arts they come to understand that every artist draws from a core set of concepts skillfully chosen and applied in performance to create a work of art both unique to the artist, and connected to other works of art.

Through these guides, we aim to give you and your students a glimpse into the artistic process, and the opportunity to work on the same kinds of challenges the artists strive to solve creatively. We hope the next time you see a performance you'll use the insights you gained exploring the artist's process to connect with a work of art, and thus deepen your experience as an audience member.

And along the way, we hope that students of all ages – and their teachers and adult mentors – will be inspired to experiment with artistic decision-making and creativity themselves.

Enjoy the show!

Your ★ STARRING Role in the Theater



As an audience member, you are a STAR, too! You play an important role in the performance community. The artists need YOU in order to give you their best work.

S.T.A.R. Audiences

S = Support the artists by being attentive and focusing on the performers.

T = Tune in: listen and watch for understanding (and for Sō Percussion, notice how the musicians create rhythms with each other as well as their percussion robots, and how they communicate ideas and emotions to us through their performance.)

A = Appreciate the performers by clapping at the right time. For example, when a scene or dance ends, or when the stage lights fade to dark.

R = Respect the performers and other audience members. At a performance, you, the others in the audience and the artists are sharing this experience together and are part of a performance community. Think about ways you can best support the community's performance experience.

We know you will be a STAR today and will help your classmates shine too!

About Sō Percussion

For 20 years and counting, Sō Percussion has redefined chamber music for the 21st century through an “exhilarating blend of precision and anarchy, rigor and bedlam” (*The New Yorker*). Sō Percussion includes musicians Eric Cha-Beach, Josh Quilen, Adam Sliwinski, and Jason Treuting. The group is celebrated by audiences and presenters for a dazzling range of work: for live performances in which “telepathic powers of communication” (*The New York Times*) bring to life the vibrant percussion repertoire; for an extravagant array of collaborations in classical music, pop, indie rock, contemporary dance, and theater; and for its work in education and community building, creating opportunities and platforms for music and artists that explore the immense possibilities of art in our time.



Recent highlights have included performances at the Elbphilharmonie, Big Ears 2022, where the group played *Amid the Noise*, premiered a new work by Angélica Negrón with the Kronos Quartet, and performed its Nonesuch album with Caroline Shaw, *Let the Soil Play Its Simple Part*; and a return to Carnegie Hall, where it performed new collaborations with Nathalie Joachim, and Dominic Shodekeh Talifero. Narrow Sea, the group’s Nonesuch recording with Caroline Shaw, Dawn Upshaw, and Gilbert Kalish, won the 2022 Grammy Award for Best Composition. Other albums include *A Record Of...* on Brassland Music with Buke and Gase, and an acclaimed version of Julius Eastman’s *Stay On It* on the new imprint Sō Percussion Editions. This adds to a catalogue of more than 25 albums featuring landmark recordings of works by David Lang, Steve Reich, Steve Mackey, and many others.

Rooted in the belief that music is an elemental form of human communication, and galvanized by forces for social change in recent years, Sō enthusiastically pursues a range of social and community outreach through its nonprofit organization, including partnerships with local ensembles including Pan in Motion and Castle of Our Skins; the group’s Brooklyn Bound concert series; a studio residency program in Brooklyn; and the Sō Percussion Summer Institute, an intensive two-week chamber music seminar for percussionists and composers.

www.sopercussion.com.

About the SchoolTime Performance of Sō Percussion

The following compositions will be included in the April 19, 11am performance:

- Angélica Negrón (born 1981) [*gone*](#) (2018) and *go back* (2022)
- Nathalie Joachim (born 1983) *Note to Self* (2021)
Much More
Maybe
Motivated
- Pauline Oliveros (1932–2016) [*Rolling Meditation*](#) (1974)

About the Art Form & Performance

by Adam Sliwinski, member of Sō Percussion

Although percussion itself is an ancient art form, in western classical music ensembles percussion instruments have only been active for about one hundred years. Composers like Edgard Varese and John Cage wrote pioneering new works for percussion that inspired many other composers to follow suit.



Sō Percussion often plays John Cage's "Third Construction," an astonishing piece written in 1941 for percussion quartets. Before pieces like this, a composer would have needed to include melodies, harmonies, and key signatures for their work to be considered legitimate. Cage throws all of that out the window and writes for tin cans, rattles, drums, and other wild sounds: <https://youtu.be/j27UldYJZ0o>

To Cage's noises, we have added many melodic instruments, such as the steel drums from Trinidad and Tobago, marimbas, vibraphones, piano, and Fender Rhodes.

About the Sō Percussion performance

For many years, composers have experimented with percussion and new technology together. There are two main kinds of technology that we interact with in these pieces:

- **SPD controllers:** these are small units with drum pads on them. Hitting the pads triggers whatever samples we have loaded into them. In the case of Joachim's *Note to Self*, all of the samples are of her voice. She sang longer melodies and chopped them up into short samples. When the audience hears her voice in the performance, it is always us playing them on the pads with drumsticks.
- **Robots!** In Negrón's piece, the Bricolo robots are controlled by a software program which uses MIDI information to play them. We are performing alongside the robots by following a click track (metronome) in our headphones. The robots play on containers filled with water and also pots and pans from Angélica's kitchen.

Both Negrón's and Joachim's pieces use technology and percussion to explore deep feelings and impressions, while Oliveros's piece uses the idea of a meditation to quiet and focus the mind.

The Composers on Their Works

ANGÉLICA NEGRÓN

Puerto Rican-born composer and multi-instrumentalist Angélica Negrón writes music for accordions, robotic instruments, toys, and electronics as well as for chamber ensembles, orchestras, choir, and film. Her music has been described as “wistfully idiosyncratic and contemplative” (WQXR/Q2) while The New York Times noted her “capacity to surprise.”

Angélica Negrón on her compositions *gone* and *go back*
Commissioned for Sō Percussion



gone and *go back* are two short pieces written for Sō Percussion as part of a three-part series inspired by things I deeply care about but am sometimes afraid to confront. Each piece in the series focuses on the quartet’s interactions with a series of mechanical instruments built by Brooklyn-based artist and engineer Nick Yulman. Yulman’s sound machines (called the Bricolo Mechanical Music System) consist of a variety of mechanical modules that users can attach to acoustic instruments or physical objects, allowing digital music makers to incorporate robotics into their performance and recording setups. Each piece requires the performers to interact with the modular music devices in different ways.

The first piece in this series, *gone*, was written in 2018 and explores the visceral physical feelings of emptiness and absence while at the same time searching for connections and meaning in those things and the people who are left. The second piece, *go back*, written in 2022, confronts the anxiety and internal conflict I have around the idea of returning to my home of Puerto Rico. I’ve been living in New York for the past 15 years and though I’m constantly traveling back to the island to visit family and friends, for the past few years there seems to be a growing pressure and almost impulsive need to return home. Parents getting older, close friends returning to the island and raising their new families, as well as a new wave of young Diasporicans returning to contribute to rebuilding the island after many recent natural disasters and social and political crises (including disaster capitalism). Circular migration has long been a part of the Puerto Rican narrative and over the past few years, I’ve been struggling constantly with my desire to come back to the island, a growing sense of duty to participate in the local “fight,” my increasing yearning to be close to my loved ones, and the difficult realization that this might not be the best decision for me at this point in my career and life. *go back* uses cacerolas and calderos (pots and pans) in Nick’s mechanical modular devices to evoke the domestic sounds of my childhood, as well as the sounds of resilience and resistance that characterize many of the protests on the island and in the diaspora—creating a particular form of sonic protest known as “cacerolazo.”

—Angélica Negrón

NATHALIE JOACHIM

Nathalie Joachim is a Grammy-nominated performer and composer. The Haitian-American artist is hailed for being “a fresh and invigorating cross-cultural voice”. (*The Nation*). Her creative practice centers an authentic commitment to storytelling and human connectivity while advocating for social change and cultural awareness, gaining her the reputation of being “powerful and unpretentious.” (*The New York Times*)

Nathalie Joachim on her composition *Note to Self*

Co-commissioned for Sō Percussion by Andrew W. Siegel and Carnegie Hall.



Though I’ve spent much of my life trying to quiet my inner voice, for this work, I chose to focus on and explore the thoughts that occupy my headspace as a result of my chronic anxiety.

Note to Self, for percussion quartet and recorded samples of my voice, takes the listener through different phases of cyclical thoughts and states of being that I experience regularly. Composed in three short movements—Much More, Maybe, and Motivated—this work examines the notion of having my inner voice embodied elsewhere, in an attempt to create new space for processing emotion. It also plays with repetition as an opportunity to bring new meaning, understanding, and perhaps some levity to the language itself. Each movement is a reimagining of vocal incantations that, driven by imaginative, virtuosic, and whimsical percussion scoring, re-center and re-purpose my voice as a tool for healing. —*Nathalie Joachim*



PAULINE OLIVEROS

"Through Pauline Oliveros and Deep Listening I finally know what harmony is... It's about the pleasure of making music."
-John Cage (1989)

Pauline Oliveros' life as a composer, performer and humanitarian was about opening her own and others' sensibilities to the universe and facets of sounds. Her career spanned fifty years of boundary-dissolving music-making. In the 1950's she was part of a circle of iconoclastic composers, artists, and poets gathered together in San Francisco. In the 1960's she influenced American music profoundly through her work with improvisation, meditation, electronic music, myth and ritual.

Oliveros was Distinguished Research Professor of Music at Rensselaer Polytechnic Institute, Troy, NY, and Darius Milhaud Artist-in-Residence at Mills College. She founded "Deep Listening®," which came from her childhood fascination with sounds and from her works in concert music with composition, improvisation and electro-acoustics. She described Deep Listening as a way of listening in every possible way to everything possible to hear no matter what you are doing. Such intense listening includes the sounds of daily life, of nature, of one's own thoughts as well as musical sounds. "Deep Listening is my life practice," Oliveros explained, simply. Oliveros founded Deep Listening Institute, formerly Pauline Oliveros Foundation, now the [Center For Deep Listening at Rensselaer](#), Troy, NY.

Pauline Oliveros on her composition *Meditations*

“Listening is still a mysterious process that takes place in the brain after the ear hears and delivers waveforms transformed into electrical impulses that activate collections or networks of neurons. Networks are formed by neurons that fire together. My interest in this process led me to create Sonic Meditations, my first algorithmic compositions/improvisations.

Sonic Meditations allowed me to include and mix trained and non-trained musicians. Simple instructions could lead to quite complex musical structures. I used Sonic Meditations in my classes at the University of California San Diego from 1970 to 1981. Students with no musical training were able to participate effectively-sometimes better than trained musicians.

These pieces focus on directing attention rather than reading notes and practicing until the notes are learned.

Listening practice develops skills at another level.

This radical approach to music-making through listening attention and attention to listening has been a rewarding process.

Listening is what shapes the musical mind.” —*Pauline Oliveros*



Engagement Activities

Engagement Activity #1 (Pre-Performance)

WHAT IS PERCUSSION? WHAT IS RHYTHM? WHAT IS MUSIC?

Guiding Questions:

When do sounds shift from being noise to becoming rhythm or music?
When does the sound of striking or scraping against something become percussion?
What “cues” do we receive that music is being made?



Step 1 Group Brainstorm

- 1) Conduct a group brainstorm, grappling with the question “What is music?”
- 2) Ask, “When does the sound of striking or scraping against something (percussion) become rhythm?” (How do you know when you’re creating rhythms? What makes it different from just making sounds?)
- 3) What elements in a piece of music signal its musicality? (Repetition, rhythm, melody, etc.)
- 4) Capture ideas and thoughts on a board or large chart paper.
- 5) Encourage concepts such as patterns that repeat, rhythms, organization/composition, and intentionality (the sounds are not accidental).

Step 2 Deep Listening Guided Meditation

Listening is an essential skill for musicians. In order to play music, to compose, and even to hear and understand what is being performed we first need to listen.

In your seats, sitting up straight with our hands on our laps, eyes closed, take a few minutes to:

- a) Listen to the sounds around you
- b) Listen to the sounds your body is making
- c) Listen to your breath (on specific counts).

What did you hear? What was it like to listen in such an attentive way?

Reflection: Where do you hear repeated or rhythmic sounds in nature, in machines? How do different rhythms make you feel?

Gather examples of repeated or rhythmic sounds students hear – in nature (bird calls, a woodpecker hammering wood, squirrels chattering) and through machines (on iphones– ringing, the pinging of notices, etc.)

- 1) If you played some of these sounds on a loop, what kinds of beats or energy do the sounds have? What effect would it have if you speeded up the repeated sounds, if you slowed them

down? What about if the pitch (the high or low quality of a sound) changed? What emotional qualities are evoked by faster or higher sounds? By slower and lower ones?

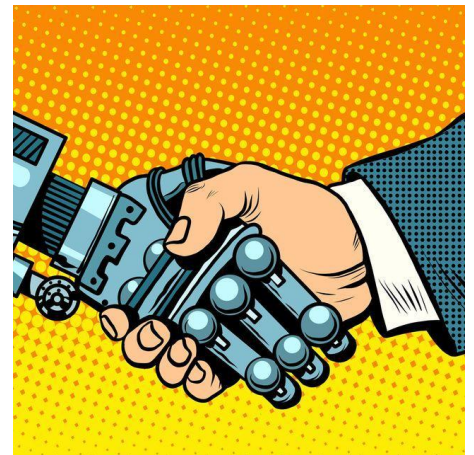
- 2) Now, try experimenting with making patterns of sound on your desk with your hands or fingernails (gently, please!) Or with your pencil or pen on paper, or even on scrunching up and unscrunching a piece of paper? Can you start to make repeated patterns or rhythms of sound that sound good to you? Try changing how loud or soft (the volume) or how fast or slow (the tempo) you make the sounds. How does changing the volume or tempo change how the rhythm makes you feel?

Engagement Activity #2 (Pre-Performance)

DISCUSSION: *HUMAN AND MACHINE*

Overview

As technology advances, so do our options for creating and experiencing music. New technologies were created each time a new musical instrument was developed. The technology of musical notation allowed written music to be shared widely, without the need to hear and memorize music aurally. The gramophone, then record players, CDs, and eventually MP3 files enabled us to hear recorded music. These technologies made music more accessible, and allow for the dissemination of a variety of musical styles and genres.



However, some musicians also see the downsides – if it's free and easy to download music from the web, aren't we cheating the artists when we don't pay for what they create? And if artificial intelligence (like ChatGPT) can create lyrics, melodies, harmonies, etc. will their musical compositions crowd the music landscape and eventually even eclipse our own human creations?

Time needed: 20-30 minutes

Supplies and Prep

- Space for a large circle
- Whiteboard or easel sheets and pens
- Online articles:
 - [The Impact of Technology on the Musical Experience](#)
 - [How Music Tech is Making it Easier - and Harder than Ever - For Artists](#)

Instructions

Step 1 Discussion

- Share with your students an overview of music's relationship with technology.
- Ask them to share: In what ways may technology impact the field of music, musicians, and even audience members in positive ways?
- What are the potential downsides of technology on music, musicians, and audience members?

Optional:

- Connect with science subject matter or projects on AI and technology.
- Assign a writing topic about the pros and cons of artists working with AI technologies.



Before the Performance

Before the performance show your students a video of Angélica Negrón's [*gone*](#) that SŌ Percussion will perform at the April 19th SchoolTime performance. Watch it twice and notice how the musicians perform with each other, and how they perform with the percussion robots in this piece.

- Watch one minute of the video with the volume down.
- Reflect:* What did you observe?
- Watch the whole video now with the music on.
- Reflect:* What stands out for you in what you heard?
- What is the relationship between the human percussionists and the percussion machines?

- f) Discuss how your observations, perspective, and feelings changed from viewing to viewing. What does the music add or do?

Ask your students to look and listen for:

As stated in their composer's notes, Angélica Negrón and Nathalie Joachim explore themes of anxiety and loss in their works. Notice where you hear:

- Moments that feel tense, or as if worry and anxiety are expressed in the music. What is happening musically that expresses these emotions?
- Moments that feel uplifting and what is happening musically at the time.
- Where the percussion machines and the human musicians are performing in sync, where they aren't, and what these moments express.

Human & Machine Video Resources

You can also share these Cal Performances videos with your students:

- [Technology and Creative Expression](#)
- [The Instrumentalist and the Instrument Maker](#)
- [Beyond Our Hopes and Fears](#)

These three videos examine the evolution of musical instruments, the complex relationships between technology creators and users, technology's impact on the creative process, and the benefits and potential dangers of the growing role of artificial intelligence in our society.

See you at Cal Performances' Zellerbach Hall on
Wednesday, April 19 at 11am
for the SchoolTime performance of SŌ Percussion!



Engagement Activity #3 (Post-Performance)

REFLECTION: LISTENING AND OBSERVING

Time needed: 30-60 minutes

Students will reflect on what they saw and heard, thought and felt during the performance, and will make connections between what they did during the engagement activities and what they experienced at the performance. **Setting aside value judgments (“It was good.” “I didn’t like it.”) for deeper assessment of the experience. If short on time, skip to Step 3.**

Supplies and Prep

- Writing materials for students (paper, writing implements, journal)
- Space for students to stand and move in a circle together





Artistic Reflection

Step 1 Embodying images from the show

- In a circle, go around and ask each person to show with their whole body a movement they saw in the performance. They should also vocally share a sound they remember.
- After each person demonstrates their movement and sound, our whole group will repeat the movement and sound.

Step 2 Journaling and/or drawing reflection

- Think about what you **saw** during the performance. Right now, just remember things you actually saw with your eyes, not what you might have seen in your imagination. Write down and/or draw or doodle some things you saw.
- Remember what you **heard** during the performance. Again, focus on what your ears actually heard, not what you might have imagined among the sounds. Write down and/or draw or doodle some things you heard.
- Now, let’s bring in what we **thought** and imagined. Write down, draw or doodle some things you thought about or imagined during the performance.
- How did you **feel** during the performance? What emotions or feelings came up as you watched the musicians and heard the music? Write about and/or draw or doodle these.

SEE 	HEAR 
THINK 	FEEL 

- On a whiteboard or easel sheet make four quadrants, and title them See/Hear/Think/Feel. As a class, let’s share some things you saw first. (Write these in the See quadrant. If students share something they interpreted or imagined, remind them to share something they actually saw with their eyes.) Now, let’s share some

things you heard... some things you thought ... some things you felt during the performance. (Capture these in each of the quadrants.)

Step 3 Class Discussion Questions

- What did you expect the performance to be like? How do you connect this with what you actually experienced at the performance?
 - What in the show reminded you of the activities we did in class in preparation for the show?
 - What surprised you? What seemed a little familiar? What seemed really strange?
 - What questions would you ask the artists if you could? What artistic advice might you share with someone who was going to see the performance?
-

Further Exploration

You might consider seeking curricular connections in literature, history/social studies, or science. If you design a lesson that you'd like to share, please let us know! We'd like to include it on our blog or in future workshops for teachers...



10. Resources

Web Sites

[Sō Percussion](#)

[Cal Performances 2023/23 Illuminations Theme: Human & Machine](#): See videos examining the Human & Machine theme, and learn more about the 22/23 Illuminations season artists.

[Angélica Negrón](#)

- [Angélica Negrón and the Poetics of Musical Automata](#)
- [The Incredible, Edible Soundscapes of Angélica Negrón](#)
- [Angélica Negrón Turns Limitations Into Opportunities](#)

[Nathalie Joachim](#)

- [Defying Genre: A Conversation with Musician-Composer Nathalie Joachim](#)

[Sō Percussion on New Work Development](#)

[The Percussive Arts Society](#) is the foremost organization for education and advocacy for percussion. The site contains many articles, resources, and activities.

[A Brief History of Percussion](#)

Video Clips

Angélica Negrón's [gone](#)

Pauline Oliveros's [Rolling Meditation](#)

Books

- Music and Technology in the Twentieth Century. By Hans-Joachim Braun. 2002.
- The Music Technology Cookbook: Ready-Made Recipes for the Classroom. Edited by Adam Patrick Bell. 2020.
- Electronic and Experimental Music: Technology, Music, and Culture. By Thom Holmes. 2020

Local Organizations/Venues featuring Music & Technology:

[The UC Berkeley Center for New Music & Audio Technologies \(CNMAT\)](#): CNMAT is dedicated to multidisciplinary research and the creative use of sound, linking the concert hall to the laboratory.

[The UC Theatre Taube Family Music Hall](#)

[The Alternative Music Foundation](#)





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