

Wednesdays@7 presents

# Éliane Radigue: *Occam Ocean*

Wednesday, December 4th, 2019 – 7:00 p.m.  
Conrad Prebys Concert Hall

Occam XIII	<i>for bassoon solo</i>
Occam River XII	<i>for cello and harp</i>
Occam XI	<i>for tuba solo</i>
Occam River XI	<i>for bassoon and cello</i>
Occam River XXI	<i>for tuba and harp</i>
Occam V	<i>for cello solo</i>
Occam Delta VIII	<i>for cello, harp, tuba and bassoon</i>

Dafne Vicente-Sandoval, bassoon  
Robin Hayward, tuba  
Rhodri Davies, harp  
Charles Curtis, cello

*The program will be played without intermission.*

## About the Performance

*I cannot readily admit that there is such a difference, as is usually expressed, between timbre and pitch. It is my opinion that the sound becomes noticeable through its timbre, and one of its dimensions is pitch. In other words: the larger realm is the timbre, whereas the pitch is one of the smaller provinces. The pitch is nothing but timbre measured in one direction.*

Arnold Schoenberg, *Harmonielehre* (1911)

*The “river” of Occam, the ocean [oceanos], the great stream surrounding and flowing through the human island; the sense that all of the waters of the world are one, a scattered but integrally linked matter (hyle); and that likewise sound itself must be a fluid magnitude [following the ancient distinction between multitude and magnitude], not bounded by abstract structural or symbolic limits, non-discrete, irreducible to number. [Hölderlin’s concept of river as a “master trope” for the course of human culture; but also the physical progress of the river as geological and geographical fact; the river erodes, carves into the land, ultimately consuming it.] The oceanic as immeasurable, as pure space [Olsen in “Call me Ishmael”], a void even, defying orientation, supplanting place. Sound as “warped geometry” (Hennix in “Poetry as Philosophy”), warped by the place that it is in (walls, reflections, materials), as much as by the sounding source itself.*

Charles Cross, *Oceanic Sound* (2011)

*What a strange experience, after so much wandering, to return to what was already there, the perfection of acoustic instruments, the rich and subtle interplay of their harmonics, sub-harmonics, partials, just intonation left to itself, elusive like the colors of a rainbow.*

Éliane Radigue, *The Mysterious Power of the Infinitesimal* (2008)

After more than three decades devoted exclusively to creating music on magnetic tape with feedback and modular synthesis, Radigue in 2004 shifted over to the crafting of pieces for live performers and the instruments of the Western concert tradition. With the first of these pieces, *Naldjorlak* for solo cello, a form of collaboration was established in which composition, performer and instrument create an identity. Working without score, Radigue invites from the performer a set of instrumental materials and techniques, unique to that performer, to be shaped collaboratively, under her direction, into a “work.” One consequence of this working method is that each composition is henceforth to be performed only by the performer with whom the piece was made, on into the future, indefinitely.

Since 2011 Radigue has worked actively on “Occam Ocean,” an interlocking series of shorter pieces for individual performers on acoustical instruments. The title pays homage to scholastic philosopher William of Ockham and his famous “razor,” the protominimalist teaching that entities should not be multiplied unnecessarily, and that the optimal solution is the simplest one.

As in the process established for *Naldjorlak*, a performer comes to Radigue to suggest a personal and distinctive approach to her chosen instrument; if the sounding states that result from this approach seem appropriate and compelling to Radigue, a shared process ensues in which the materials are shaped into a coherent piece, under Radigue’s direction. No written score is made, and the performer relies on memory and the real-time confrontation with the dynamic conditions of performance to give the piece its immediate form.

“Occam Ocean” began as a series of solos; the first in the series, entitled “Occam I,” is for bowed harp, and was made with the Welsh harpist Rhodri Davies, premiered in London in the summer of 2011. An interest in combinatoriality and the multi-layering of pieces, which persists throughout Radigue’s career, here reaches a point of utter profusion. More than seventy pieces now comprise a virtual “ocean” of instrumental forms, spanning solos (“Occam I - XXVII”), duos (“Occam River I - XXII”), trios (“Occam Delta I - XVIII”), and larger groups (“Occam Hexa I - IV”, “Occam Hepta I”) all the way up to small orchestra (“Occam Ocean I”). The instruments employed vary from the known orchestral instruments -- violin, viola, cello, bass, trumpet, bassoon, tuba, etc. -- to bagpipes, birbyne, saxophone, organ, contrabass recorder and voice. The choice of these instruments rests not with Radigue, but follows from the personal encounters with instrumentalists who have presented themselves to Radigue in hopes of making a new “Occam.” Not “compositional decisions,” certainly not exercises in orchestration, but life events.

The ensemble pieces start from the solos, layering and combining them with slight adjustments to optimize the transparency of the combined layers. The fortuitous couplings and multiplications of instruments lead to highly unusual compoundings of timbre, just as timbre, spectral content, acoustical anomalies and borderline instrumental phenomena drive the content of the individual pieces.

It seems no accident that this combinatorial procedure (and that of the “Naldjorlak” cycle) revisits the “*propositions sonores*” of 1968-1971, in which tapes of differing lengths are looped or repeated simultaneously ad libitum. These works reveal a commitment to formal results that are unforeseen by the composer, and that carry within them a guarantee of unrepeatability and incompleteability. Indeed, Radigue views the “Occam” series as one that will remain unfinished. Given the number of individual pieces and the unlikelihood of realizing every possible combination, Radigue states that “... the overall construction ... implies, by nature, the impossibility of completing the oeuvre.”

*The constellation of works making up tonight’s program was first presented in 2015 at the Tectonics Festival in Glasgow, Scotland. Some of the pieces were repeated later that year at El Nicho Experimental in Mexico City, and again in the Ultima Festival in Oslo in 2017. In the summer of 2018 the full program was given at the Darmstädter Ferienkurse für Neue Musik.*

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**Éliane Radigue** (b. 1932) is a pioneering French composer of undulating continuous music marked by patient, virtually imperceptible transformations that purposively unfold to reveal the intangible, radiant contents of minimal sound—its partials, harmonics, subharmonics and inherent distortions. As a student and assistant to *musique concrète* pioneers Pierre Schaeffer and Pierre Henry in the ‘50s and ‘60s, Radigue mastered tape splicing techniques, but preferred the creation of fluid, delicately balanced feedback works to the spasmodic dissonance of her teachers’ music. Finding peers among minimalist composers in America, Radigue began working with synthesis in 1971, eventually discovering the ARP 2500 synthesizer, which she would use exclusively for her celebrated electronic works to come. With remarkable restraint, Radigue spent years on each piece, painstakingly assembling series of subtle, pulsating ARP recordings to be later mixed meticulously into hourlong suites of precise, perpetual mutation, including masterpieces *Trilogie de la mort* and *Adnos I-III*. In 2001, Radigue adapted an early feedback work to live performance on electric bass, *Elemental II*, and in 2004, with the encouragement of ongoing collaborator Charles Curtis, she permanently abandoned electronics for acoustic composition, beginning with *Naldjorlak* for solo cello, composed for Curtis. As within each individual work, Radigue has maintained an obstinate focus throughout the flow of her career, her dedication to the materiality of sound earning her numerous accolades and ensuring her place as one of the most important, and original, composers of our time.

## About the Artists

**Dafne Vicente-Sandoval** is a bassoon player who explores sound through improvisation, contemporary music performance and sound installations. Her instrumental approach is centered on the fragility of sound and its emergence within a given space, testing the threshold between instability and control. Her long-term collaborations with a handful of composers engaged in music that demands a high degree of critical interpretation have led to the creation of solo pieces by Peter Ablinger, Phill Niblock, Tashi Wada, Klaus Lang, Jakob Ullmann, and Éliane Radigue. Vicente-Sandoval is a graduate of the Paris Conservatoire and the Basel Musik-Akademie, and leads the bassoon studio at the Darmstadt International Summer Course.

**Robin Hayward** is a tuba player and composer who has introduced radical playing techniques to brass instruments, initially through the discovery of the ‘noise-valve’ and later through the development of the first fully microtonal tuba in 2009. In 2012 he invented the *Hayward Tuning Vine*, partly out of a desire to visualise the harmonic space implicit within the microtonal tuba, and began working on a solo tuba piece with Éliane Radigue, which became *Occam XI*. Other composer collaborations include Christian Wolff and Alvin Lucier.

**Rhodri Davies** is an improvising harpist who confronts traditional concepts of the harp through his use of preparations, detuned, bowed, and e-bowed strings. One of the most prominent members of the London reductionist school of improvised music, new pieces for solo harp have been composed for him by Philip Corner and Yasunao Tone, in addition to Éliane Radigue.

Cellist **Charles Curtis** has been associated with minimalist pioneers La Monte Young and Marian Zazeela since 1987, their intimate working relationship having yielded retroactive recalibrations of pieces like Young’s 1958 *Trio for Strings*, as well as the only solo composition created by Young for a performer other than himself, *Just Charles and Cello in The Romantic Chord*, based on just intonation tunings from *The Well Tuned Piano*. Curtis is also the first performer to collaborate with Éliane Radigue on a work for an unamplified, acoustic instrument without electronic support or accompaniment. This work, *Naldjorlak*, composed in 2004 and premiered in December 2005, is an hour-long, exhaustive enquiry into the inherent resonating properties of the cello.

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### Production Credits:

Production Coordinator – David J. Espiritu  
Theatrical Production Specialist – Jeremy Olson  
Production Technicians – Bobby Bray, Mark Geddes, Pablo Ochoa, and Aaron Sum  
Recording Engineers – Andrew Munsey & Mike Butler  
Recording Assistants – Xochilt Khoury, Christopher Robinson, Jeffrey Xing, Hailey Brown, Mason Davis  
122 GSR – Gabriel Zalles  
Program Associate – Madison Greenstone

Audience members are reminded to please silence all phones and noise-generating devices before the performance. As a matter of courtesy and copyright law, no unauthorized recording or photography is allowed in the hall. UC San Diego is a non-smoking campus.

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