

OCCHIO pr text posts:

## 1) **Poetry and Voice**

On Saturday, Sept. 11, the Chromelodia Project, a trio of Chris Brown on digital piano and electronics, Theresa Wong, voice and cello, and Kyle Bruckmann, oboe, will premiere *Occhio*, a composition I wrote last year based on poetry by Italian poet Erika Dagnino, at the Center for New Music, 55 Taylor St. in San Francisco beginning at 8 PM. Audience is restricted, and masks are required, tickets available [here](#).



“It is the gusts failing to prevent the shadow from touching you, from the leaves to you every shape shakes and escapes with all the tragic gentleness of velocity.” — Erika Dagnino. from *Canti dell’ Occhio*, 2009

Nature provides us a balance of light and dark, bad and good, life and death. So too, the pandemic has brought a time of aloneness, lockdown, isolation ... no live music (!) ,, while art and collaborations have continued at a distance — a positive achievement complementing our losses, in which place became everywhere and nowhere at once.

“With our parallel shadow, distanced to comprehend one singular way...”  
Erika Dagnino, *Canti dell’ Occhio*.

I met Erika in person only once, in Oakland in the ‘90s when she performed her poetry as part of a performance with the Glenn Spearman Double Trio in which I played piano. Since then we have collaborated on a few projects at a distance, while she has performed frequently with jazz musicians on festivals in Europe and New York, and on recordings. Her poetry emphasizes sound, in her own words...

“To reconnect the voice not only with the sound of words, but with sound per se: a possible feat, indeed. Innocent of further assessments, this sense of vocality results in a vindication of poetry as opaqueness and gravity, sound and emphasis on the sound, while at the same time each and every word changes into both a fragment and a part of a whole, a building block in a work and an unique substance, an element of gravity..” — Erika Dagnino, “Poetry and Voice” (2009).

Her work attracts me purely as sound, but also for the intensity of its imagery with surprising juxtapositions of matter and feelings, mysterious ambiguities, and its evocation of the “raw aroma” of nature. *Occhio* sets the first of 10 poems in her collection *I Canti dell’ Occhio* (2009), “Songs of the Eye” in English, creating a synaesthetic experience melding images of the body and nature with the sound of its language. Published both in Italian and English, I eagerly chose to set the luscious sounds of its Italian, but will also recite it in English as part of the performance, which combines notated microtonal music with electronically generated rhythms that fuel extended improvisations. I’ll describe the music more in three forthcoming posts —

## 2) *Chromelodia* - Coloured melodies



The Chromelodeon, Harry Partch's reed organ tuned in his 43-tone system, has keys painted in six colors to identify their harmonic "identity" whose frequency ratios include the same odd-number. Humans tend to identify musical intervals by their proximity to simple integer ratios — not because we recognize them mathematically, but because we recognize their resonances as coming from the same physical body. Everyone recognizes the sound of simple relationships better than complex ones. But if we use groups of simple ratios in tuning our instruments, the relationship between each pitch to all others inevitably leads to more complex (higher number) relationships — you can't get a simple pitch set that doesn't also imply complicated ones too" — so harmony (simplicity) is inseparable from dissonance ... reminding me of Thelonious Monk's title "Ugly Beauty".

Western Music tamed this issue by developing the system Equal Temperament (ET) where all intervals are separated from each other by

equal size, resulting in just 12 possible intervals, only one of which is in tune with an integer ratio (the octave). Equal-tempered tuning is like a ruler with 12 inches, each step the same distance from the previous and following one. It simplifies the pitch-world, equalizes and standardizes it, but removes variations of color, or flavor (*rasa*), in the process. It's black-and-white. Thankfully, very few musicians can actually sing or tune it accurately, so they put colors back in to their music by deviating from it. With voice, strings and wind instruments, players can adjust their pitches from the "standard" ET ones, creating different colors, like the "blue-notes" of jazz or 'sruti' of Indian music, of the intervals that we know from our tempered seven-tone major and minor scales. But if you use the ratio-based (called "just") way of tuning as a system, you can learn to play more accurately by ear, because it produces clearer resonances, and dissonances that are unique. And when played together they provide an infinite range of resonant and dissonant harmonies that expand the vocabulary.

*Occhio* is written in Partch's 43-tone system, but uses only 29 of its notes, and only 9 or 10 in each of its seven songs. It's notated on a standard 5-line musical staff with the addition of a flexible system of accidentals, based on standard sharps and flats, that identify the resonance families that they belong to.

# OCCHIO

1:1-O + 9:8-U

Erika Dagnino

Chris Brown

**A** ♩ = 60

The musical score is presented in five staves. The Oboe staff (top) begins with a half note G4 (marked *mp*), followed by a half note G5 (marked *f*) with a fermata, and ends with a half note G4 (marked *mf*). The Voice staff (second) has lyrics: "Lo sguar - do com - bat - tu - to tra se stes - so". The Violoncello staff (third) has lyrics: "The gaze \_\_\_\_\_ warring between\_itself". The Chrome HE (fourth) and Chrome TAB (fifth) staves show complex chordal textures with many notes and accidentals.

In composing each song, I gave myself a different palette of interval colors to embody the word-images of the poetry. Every mode contains pitches from both a major and a minor flavored pitch set, since deep feelings always contain some mixture of happy-sad ... or “ugly beauty”. In the next post, I’ll describe a parallel rhythmic system that is also used in the piece.

### 3) Rhythmicon



The connection of rhythm to the harmonic series was championed in the early 20th century by the Bay Area wunderkind composer Henry Cowell in his book *New Musical Resources*. In his book Cowell emphasized the direct connection of rhythm to pitch which although they occupy different ranges of the vibrational scale both employ whole number ratios to create the worlds of harmony and meter. He wrote several pieces while still in his teens that beautifully employ simultaneous use of different numerical divisions of a beat. In the early 1930s, he collaborated with the Soviet

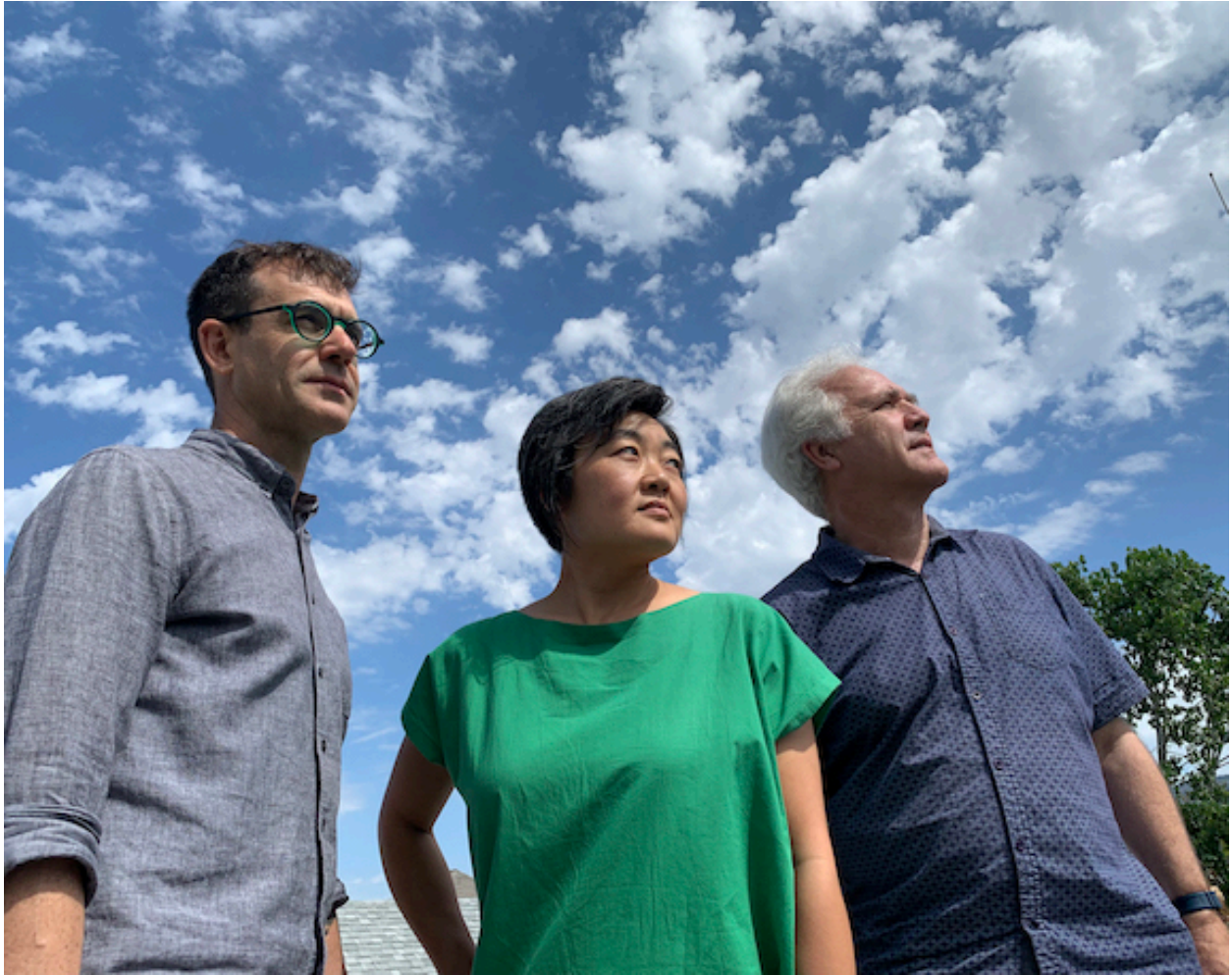
instrument inventor Leon Theremin in creating the Rhythmicon, an electric instrument that played rhythms in the same ratio proportions as the pitch intervals in a scale. Here's a [video](#) of a prototype of the instrument.

For *Occhio*, and its predecessor *Some Center*, I programmed a Rhythmicon-like software that automatically generates polyrhythms in relations with the intervals I play on a MIDI keyboard. The rhythms provide foils for improvisation by the *Chromelodia Project* players, while also being bound to the pitch relations of the music. [Here's](#) an example.



#### 4) Improvisation and Musical Culture

Composing<->Improvising<->Performing: western classical music most often omits the middle step in this music creation process. Without it we are left in a master-servant relationship in which one person defines the activity of all the others, and communication across the divide is about judging the ability of the many to render the vision of the one. Improvisation instead is a social process that hones the ability to listen to the self and others while playing and making musical choices at the same time. Feedback from imagination to realized sound and back is the key. Including improvisation in the process converts music from being a product of consumer culture, into a social practice of an ecologically adaptive one.



In composing for the *Chromelodia Project*, feedback from performers is available to me not just in rehearsals, but immediately as part of its performance. This [selection](#) from our 2019 release *Some Center*, is a part of that piece that is different with each performance and was scored with improvisation in mind. Similarly, the *Occhio* score is a blueprint for digging into the potential of all its materials. Learning to play in its tuning is like learning to speak, not only to read, a new language. Improvising is an essential part of becoming musically polylingual, and it's only possible with performers who are highly experienced collaborators in doing it. With Theresa and Kyle I am fortunate to be working with musicians who are themselves composers, improvisors, and master instrumentalists. Working with them is a realization of a social process, where the materials and structure of the music are revealed as they are discovered in the real time of live performance — performance + interaction = evolution.