



# IN THE BEGINNING THERE WAS LISTENING

THE AMERICAN COMPOSER KELLEY SHEEHAN

By Martin Tchiba

Born in 1989, Chicago native Kelley Sheehan won the 2019 International Gaudeamus Music Week Prize in the Netherlands. She is currently pursuing post-graduate studies with Chaya Czernowin and Hans Tutschku at Harvard University. With her compositions, Sheehan intuitively explores the origin of sounds: the physical source and tactile experience, as well as the social frameworks that follow.

■ Even as a child, Kelley Sheehan remembers today, she was already passionate about the phenomenon of „sound,“ or more precisely, about the changes that happen to sounds when one plays creatively with the parameters of their production. She found the noises that she made with her fingers on her school desk more thrilling than her lessons as she held her ear very close and tightly pressed against it. Fingernail scratches, taps of the fingertips, soft beats with the hand, on different points of the wooden surface — improvised variations on furniture coalesced in Sheehan’s fantasy into structure and even began to presage the idea of a composition.

The passion for sounds remains. Sheehan used the word “essential.” What is to be heard, what is to be discovered is for her no tool that she has to „wield“ as a composer. It is merely the essence, the starting point for everything. “When I compose today, it is always as if I pressed my ear on a surface in order to listen into a different, secret, yet also accessible world.”

The experiments from her high school days also built the basis for the recognition that sounds are most exciting when they are not merely idling in a space. Rather, they are most exciting when they are arranged within a changing process and in relation to other sounds. Thus, Sheehan said, on her hunt for sound experiences, she became a “structuralist” who meticulously plans the orchestration of her compositions.

A good example of this is her string quartet *four sharp corners*, written in 2018, a piece in which she — in the best sense — noted with marked precision how, when, and where to produce which sound. At the same time, this is perhaps the piece that most conspicuously reflects Sheehan’s early

school desk experiments. The string players slowly drag their instruments over a wooden table, tap on the bodies of the instruments, scratch on the music stands. The sound production with the latter — certainly also originally wooden — is similar to the material of the music stand holding the printed score and takes on a central role. By touching the pages of sheet music, most often rustling them musically, Sheehan means for the musicians to engage with their haptics. This is a particularly intensive and „other“ way of immersing oneself in a composition. „When the musicians touch every single page of the score, they can develop and internalize their own personal relationship to the pages. This relationship results not only from the interpreter’s own feelings, thoughts, and memories, but also from the sensory impressions that are created from touching the respective surfaces.“

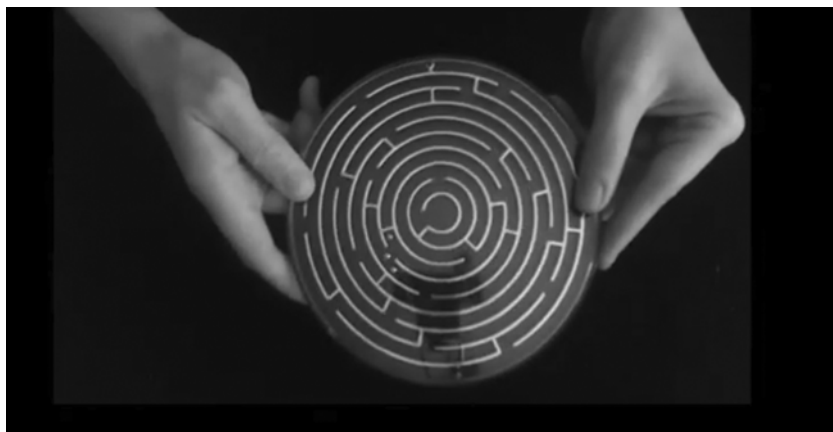
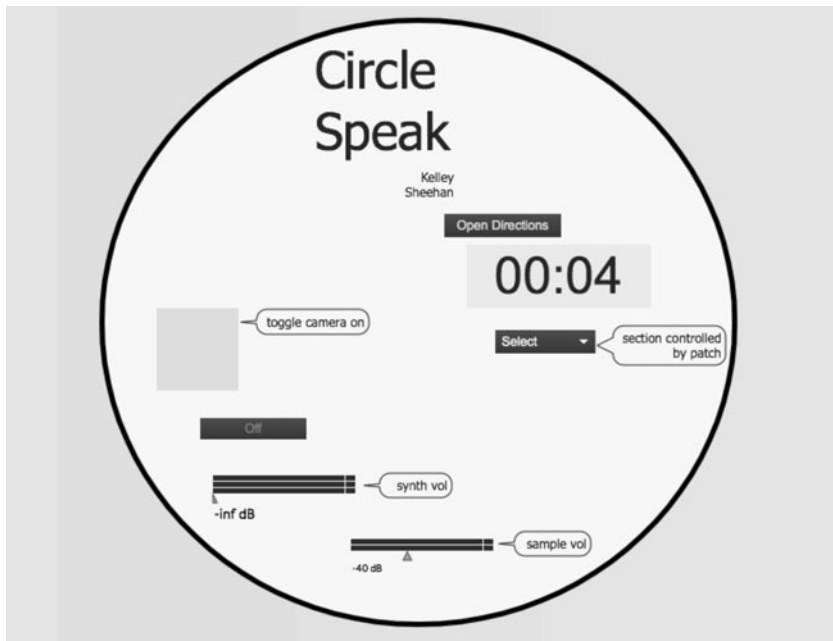
Sheehan’s strikingly quiet work *3 Movements* for chamber ensemble from 2016 is also situated within the field of tension between touch and sound experience. The score describes a panopticon of the finest imagined and heard gestures to be performed on every conceivable place on the instruments, which upon first hearing appears charmingly confusing, but becomes more and more well-ordered with time as the piece continues. It is a mechanism that is difficult to understand at first, but is itself very coherent, composed predominantly of the quietest squeaking and scratching, which moves slowly but steadily from bar to bar — somehow very homogeneous, somehow richly contrasting, yet continuously electrifying. The title *3 Movements*, explained Sheehan, does not merely refer to the three movements into which the composition is divided, but rather the principle that “every single sound [is engineered] from three individual horizontal or vertical movements.” Everything in the performance — including the handling of a rice bowl in the inner wings — appears

to be born unconditionally out of Sheehan’s conception of sound and structure. Only once, in bar 43, does she allow the musicians to play theatrically, whereby they remain mindful of their position as if they would have to continue playing right away, but then they unexpectedly lower their instruments.

In *A Series of Colors* for snare drum and electronics (2018), Sheehan focuses on sound events which do not actually exist. To this end, she uses an enigmatic psychoacoustic phenomenon known as “Zwicker tones,” which the physicist Jan-Moritz Peter Franosch from the Technical University of Munich (TUM) describes as a form of “acoustic exchanges” in which a “sound is perceived, which is not actually present.”<sup>1</sup> It is an “after-effect” that “manifests as a soft tone that almost every person thinks they hear for a few seconds when they have been exposed to certain types of noise.”<sup>2</sup> What is peculiar about this “short-term tinnitus” is that the exact nature of the Zwicker tones each individual hears can scarcely be controlled or predicted by those generating the sounds—and this is exactly where Sheehan comes in. “I have worked with this phenomenon in order to blur the line between my own sound experience and that of the audience,” she wrote in a Facebook message to me. Since every single member of the audience hears different tones, everyone present has a fundamentally different listening experience.

In practice, *A Series of Colors* works in such a way that in each of the nine movements noise is generated in different constellations (Brown Noise, Pink Noise, White Noise and Blue Noise, to which the title also alludes) and is abruptly interrupted at precisely defined points. In these moments, the previously described illusion of sound is discharged.

In order to relate this process to more familiar sound experiences, so to speak, Sheehan also orchestrated this piece with the snare drum, whereby it is simultane-



Winner of the International Gaudeamus Music Week | "Circle Speak", written and performed 2018

ously palpated with contact microphones, ergo „explored.“ Thus, Sheehan emphasized, the snare drum by no means plays a minor role.

The piece *Talk Circus* for two percussionists and no-input mixer (2018) spends around six minutes exploring the relationship between acoustic and electronic sound generation. Kelley Sheehan is fascinated by the idea of a no-input mixer, which is said to make „mixer-immanent“ sounds audible through corresponding feedback wiring. As soon as a sound machine is manufactured, it is able to produce its own sound events, especially without input. Sheehan does not stop there, however. Rather, she adds „human“ inputs to her composition in the form of two percussionists, whose instruments again are equipped with contact microphones. The playing of these two individuals mixes with the sounds emanating from the no-input mixing, influencing

and contrasting them, but also reacting to the automatism of the electronics. The result is an inhomogeneous trio full of inner networks – or is it a superordinate three-part music machine in which, according to Sheehan, each actor is merely a “cog in the wheel”? The finely tuned sound events of *Talk Circus* seem to virtually absorb the inherent tensions in this constellation.

The idea of a music machine, which the performers should themselves form, also appears in Sheehan’s commentary of *eyes on* (2019) for “mixed trio” and electronics. As can be seen and heard in a successful YouTube video,<sup>3</sup> the three members of the Belgian Nadar Ensemble sit closely together at three tables that have been pushed together. They frisk their instruments with contact microphones and other tools — here it is again, the joy of the acoustic exploration of touch — while three vintage lamps, which the musicians also operate,

bring light into the darkness at planned intervals or at times bathe the stage in complete blackness.

When she composes for an instrument, Kelley Sheehan explained, she prefers to hold it in her hand, try everything out on it herself. It is particularly obvious, then, to use objects which are already available at home. In the case of *Circle Speak* (2018), the composer found what she was looking for in the children’s room. This piece uses a maze toy and electronics. In contrast to other works, in which Sheehan exactly notated all of the preferred actions for the performers to carry out, the score for *Circle Speak* is rather more an instruction for improvisation. Improvisation is done with the aforementioned maze toy, whose three metal balls must be maneuvered towards the center through a labyrinth arranged on a circular wooden plate, approximately thirty centimeters in diameter, covered from above with a glass pane. The balls can only be controlled by gently tilting the toy back and forth. These movements are measured by a “discrete” rotation rate sensor (wireless 3 axis gyroscope),<sup>4</sup> which is attached to the underside of the wooden plate. The sensor uses a wireless connection to send its data to a computer, which then uses a Max/MSP patch to translate the sensor data into sounds.

“Solve the maze to end the piece,” writes Sheehan in the playing instructions. This usually takes approximately ten minutes, although it can also take more or less time, depending on how much haptic sensitivity is present, which then directly determines the duration of the piece. A live view of the maze toy is always projected on a screen so the audience can quietly “fidget along” with the performance, and the relationship of movement and sound, of success and failure can be intensely experienced, revealed Sheehan via Chat. The live projection ultimately has “no effect on the sound.”

The central idea of *Circle Speak* is that an entirely “unmusical” event – playing a game of skill – has been musically transformed. Sheehan wanted to expose a hidden layer of what is actually an everyday activity and „play with the expectations of the audience,“ she explained, adding that she nevertheless considers *Circle Speak* to be „a very musical piece.“ The fact that it is precisely the difficult „search for the right path“ in the middle of a maze that determines the course of the sound events,

points to a beautiful kind of ambiguity that can be found again and again in Sheehan's works.

The pieces described in this article, *Four Sharp Corners*, *Talk Circus*, *eyes on* and (as installation) *Circle Speak*, earned Kelley Sheehan a nomination for the International Gaudeamus Music Week in Utrecht, the Netherlands, in 2019, whose prize she was ultimately awarded.

The jury consisting of Clara Iannotta, Gerhard Stähler, and Yannis Kyriakides substantiated their selection with the following words: "Kelley Sheehan is a true explorer in the field of sound. She works with objects, whose function she expands. Machine-like repetitions enable the listener to surrender to an unfamiliar world of sound that almost seems to breathe. The compositions are embedded in transparent structures that lure and entice into an intimate and impactful environment. As a composer, she has a strong sense of community that reflects the integrity with which she devotes herself to her musical practice."<sup>5</sup>

Translated by Deborah Doleshal

1 Jan-Moritz Peter Franosch: *Der Zwicker-Ton – Ein Phänomen der auditorischen Informationsverarbeitung*, München 1998, S. 4.

2 <http://www.t35.physik.tu-muenchen.de/research/zwicker-tone.html>.

3 <https://youtu.be/8sKRn1-PZRw>.

4 A description of how the rotation rate sensor functions can be found at <https://de.wikipedia.org/wiki/Drehratensensor> and <https://de.wikipedia.org/wiki/Kreiselinstrument>.

5 <https://gaudeamus.nl/nieuws/muziekpionier-kelleysheehan-wint-de-gaudeamus-award-2019/> (accessed on Jan. 9, 2020, translated from Dutch to German by Martin Tchiba).

Blue noises with echo | Score page from "A Series of Colors" by Kelley Sheehan

INFO

About Kelley Sheehan

■ <https://www.kelleysheehan.com/>

Music with and without video

■ <https://soundcloud.com/kelley-sheehan-92905575>

■ <https://www.kelleysheehan.com/music>