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## Listening Beyond Pauline Oliveros

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It can be easy today to mistake Pauline's "Deep Listening" work as a kind of self-care, but it is so much more than that. Her philosophies of listening connect to the ideas of cybernetics and radical constructivism. Cybernetics is a systems science that relies on feedback loops, where an output becomes an input. The word comes from the Ancient Greek meaning of 'helmsperson,' where in steering a ship, the helmsperson continuously adjusts steering according to new inputs of the environment in order to find a steady course. Pauline pioneered feedback systems in her early tape machine experiments, layering multiple playback heads and mixers in live performance settings. Her sonic meditations filter listening through embodied feedback loops where participant/listeners carry sounds through their bodies and imaginations. Radical constructivism is an approach to knowledge that situates a person's knowing within their individual experience. Pauline's work in music places the listener center stage over the objectivity of the composed sound material. Through the filter of their perception and body, they become the music. In this talk I gather three ideas inspired by Pauline's practice which summarize how we listen.

1. Listening is a practice through the body.
2. Listening requires attention and awareness of self to connect with others.
3. Listening is a form of time travel.

We shall see how Pauline's prescient work carries through more recent musicological discussion, resonating through creative time and space. Ultimately, we find an embodied listening which transforms musical space from the objectivity of sound toward a vibrational and resonant practice in experience and presence.

### STATEMENTS ON LISTENING

#### 1. LISTENING IS A PRACTICE THROUGH THE BODY.

Our senses communicate meaning to our bodies prior to our analytical mind. We know this well: if we touch a hot stovetop – our hand pulls away before our mind identifies the object as 'hot.' Sound is no different than touch. Pauline acknowledged this pre-sensing:

*“The body is continually sensing and recording all of the information that is delivered to the auditory cortex, even though we may not be conscious of this constant activity. This is why the brain/body knows far more than our mind can process immediately. Inclusive listening then opens us to all possibilities in the space/time continuum. Depending on our perspective or emotional arousal... we can enter the profound interplay of the universe through sounds.”<sup>1</sup>*

Notice here she distinguishes between brain/body and the mind. She also kept both listening and dream journals. Frequently in her journals, she describes the sensory experience of sound such: “hearing seems to take place in my stomach...sound moves through my jawbone and out the back of my neck”<sup>2</sup>. These journals show an interplay between her physical sensing, the identification of sounds, and metaphors for what she hears in relation to her compositional voice. Later on, as she devised the deep listening curriculum, she would include units on sound and movement and sound in dreams. Compositionally, Pauline is not concerned about the material of sound, but how it is sensed and she increased her sensing sensitivity to improve her agency over her practice.

Let’s now consider how sound transfers through the world and how we hear it. Sound itself is not an object, but a wave of compression and rarefaction that propagates through a medium, which is usually air. Sound waves traveling in air do not move the air molecules from point a to point b; rather the energy of the wave pushes and pulls the air molecules through space. It is not matter I send to you when I speak, but a wave of energy.

Our own sense of hearing transduces this wave through several mediums within the body. Sound waves funnel through the ear canal, vibrating the eardrum. The bones of the inner ear amplify the vibrations, translating the sound wave to the liquid within the snail-shaped cochlea. It is interesting to note here that lower sounds with longer waves are sensed further into the cochlear spiral, while higher sounds are at the base. The liquid in the cochlea activates tiny hairs. As the hairs move, ions rush into the tips of the hair cells which produce chemicals at their base. These chemicals connect to the auditory nerve, sending signals to the brain. Overall, our ears transduce sound waves between many mediums: air, bones, liquid, and chemicals. Of course, we can also hear sound through the sympathetic vibration of bones in our temporal lobe, which activate the cochlear liquid.

When we consider sound as a transduction of energy through a medium, we realize that sound is a form of touch. The intimacy of sound as touch flips my classical values of music from one of sound as object – something a composer manipulates, to a view of sense and receptivity. When I touch someone physically, I consider the relationship between myself and the touched, considering how that touch may be received. Is it welcome? Or inappropriate? This consideration is somewhat outside of colonial listening perspectives, which are discussed in Dylan Robinson’s 2020 book *Hungry Listening*. “The meeting between listener and listened-to is bounded by a Western sense orientation in which we do not feel the need to be responsible to sound as we would another life... the act of listening should attend to the relationship between

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<sup>1</sup> Oliveros DL 18-19

<sup>2</sup> Oliveros 1968, p. 18

listener and the listened-to.”<sup>3</sup> If we name music as touch, then the musician is responsible for the listener. Only through sense listening will the musician be able to take responsibility for their sounding. **To make music is to be a listener.**

As humans, we already know that embodied listening is a core experience of being alive. Musicologist Nina Eidsheim begins her 2015 book *Sensing Sound: Singing and Listening as Vibrational Practice* with the well-known inquiry of a tree falling in the forest. If we were actually present for such an event, we really wouldn’t be worried about the sound, we would be sensing the fall of the branches, the trunk, the ground rumbling underneath our feet as we sense shadows and potentially run away from the danger. Later on, Nina connects this embodied listening with experiencing music, “We participate in the points of transmission: for each of us, there is no knowable music or sound before its singular transmission through us. While each iteration is unique, we exist as a sine qua non, and the vibrational energy exists prior to the particular transmission.” (Eidsheim 2015, p.18). Sound exists without us, yet we are the essential thing that transforms it into meaning. By feeling sound, we give it a sensed meaning. If to make music is to be a listener, **to be a listener is to make music.**

## 2. LISTENING REQUIRES ATTENTION AND AWARENESS OF SELF TO CONNECT WITH OTHERS.

Attention and awareness are two different ideas and require focus of both the self and the self in relation to others both human and non-human. To understand this relationship, we need to know our position. Pauline thought about these relationships as an explanation of the inquiry into how we hear:

*“How does one hear? Such a question necessarily promotes exploration of the nature of one’s role, as well as the nature of one’s physiology within the musical process. Understanding must be sought of the nature of another’s role within the same process. The resulting awareness tends to produce an inclusive, interdependent atmosphere ... This calls for the conscious training of intuition and feeling as well as observational and analytical skills, in order that one may experience and come to value the roles of others through imagination and reflection as well as present reality.”<sup>4</sup>*

By directly inquiring about how we hear, Pauline immediately names developing an understanding of one’s position and sense. Both musicologists Nina Sun Eidsheim and Dylan Robinson name the importance of discussing our positionality as listeners. For Eidsheim to name the position requires naming the values of our culture, “To advance the viability of the listener’s self-inquiry as an analytical focus, we need to clarify who we are as listeners and... to read and interrogate the impact of a piece of music as it is experienced by a listener who is encultured in a given way”<sup>5</sup>. This identifies that the same piece would not be received in the same way between two differently cultured listeners. Robinson goes further in naming how the various ways we are cultured affects our listening position:

*“Critical listening positionality involves a self-reflexive questioning of how race,*

<sup>3</sup> Robinson 2020, p.15

<sup>4</sup> Oliveros, *Software for People: The Noetics of Music* 1984, p. 131

<sup>5</sup> Eidsheim 2015, p.5

*class, gender, sexuality, ability, and cultural background intersect and influence the way we are able to hear sound, music, and the world around us...As part of our listening positionality we each carry listening privilege, listening biases, and listening ability... by becoming aware of normative listening habits and abilities, we are better able to listen otherwise.”<sup>6</sup>*

Pauline understood that to deepen her listening practice, she first needed to deepen her own sense of self and body. She kept listening journals that focused on her sense and connection to space and time. She kept dream journals, to deepen her connection to her subconscious. She was an early adopter of listening to recordings to evaluate her improvisation practice. She cultivated communities which evaluated their own listening practices together.

Ultimately, attention to listening for Pauline was a vehicle for cultivating mutual respect and connection. From Pauline:

*“If ‘attention’ is the act of using our senses, it begins with the ability to concentrate. Next is the ability to process our external environment through our senses by taking an interest. Third is giving care and tending to the information we have received, then fourth is responding to the information by an affectionate act. The summation of these properties creates respect... Attention is a gift we give to others, that builds respect...When we successfully give our attention, one may ‘feel heard.’ this justifies another’s bodily experiences – empowering that other body into a shared reality. It is a way of forming connections.”<sup>7</sup>*

This is Pauline’s equation for a respectful interconnected listening practice. You don’t have to be a professional musician to practice this, an essential quality for Pauline. In fact, with this process, you become a pretty advanced musical improviser. In this equation we see a care for the reception and resonance of sound through our bodies and also through others in a process that builds respect within communities.

### 3. LISTENING IS A FORM OF TIME TRAVEL.

At several points in her sound journals of 1971 and 1972 it is unclear if she is writing about her lived experiences or her dreams. Her descriptions of live listening become more and more dynamic, embodied, and somewhat otherworldly. The people in her dreams blur into the people she discusses in lived activities. Already in the previously mentioned quotations we’ve seen how she connects listening practices through the body and through space time.

Personally, as a young musician, I was always fascinated by the time travel of music performance. After I developed more musical skill, I realized that every time I performed, I was in all times at once. In the present moment, I played notes while simultaneously evaluating notes from the past already played as they lingered in my sonic memory, while also projecting my present phrase into the future.

However, this time travel is less present in my listening practice, I can keep sound in my

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<sup>6</sup> Robinson 2020, p.10

<sup>7</sup> Oliveros 2005, 63

memory, but have no idea what sound could come next. Dylan Robinson connects the pace of our listening to the hunger of settler colonial perception, defining hungry listening as starving:

*“Hungry listening consumes without awareness of how the consumption acts in relationship with those people, the lands, the waters who provide sustenance. Moving beyond hungry listening toward anti colonial listening practices requires that the ‘fevered’ pace of consumption for knowledge resources be placed aside in favor of new temporalities of wonder disoriented from anti relational and non situated settler colonial positions of certainty.”<sup>8</sup>*

As a listener entrained in the practices of western classical music, it can be difficult for me to hear music without evaluating it against those values. What is the tonality? Intonation? Rhythm? Form? All of these questions, while stemming from an ‘educated’ perspective distract me from connecting to the music on a basic level, what does it feel like in my body? In order for me to try to hear music aside from this training, I perform a kind of dimensional time-travel, to a place where I am in my current physical body, but allow my brain to explore a time and space without this training and expectations. While I cannot ignore my training, I can traverse space time to hear sound anew. It begs the question: What would aural skills pedagogy look like in conservatories if it included these more embodied and intuitive practices?

It is important to note here that one cannot ‘try-on’ another way of listening, as it is a kind of appropriation. I cannot hear outside of my own experience, there are aspects of music and sound that I may never understand because of my perspective as a classically trained musician. But in accepting my own limitations as a critical listener, I can also come to find a respect for more perspectives beyond my own and develop new practices for my future listening.

## CONCLUSION

Western classical music perspectives have historically prioritized the objectivity of the musical score, the genius composer’s great work of art; Music is an object, something that can be owned and performed with fidelity. What happens to these values when we prioritize the sense of listening over the objectivity of musical sound? Much of Pauline Oliveros’ work answers this question through her practice of deep listening with the body and within dreams and her sonic meditation compositions. She radically constructed knowledge through her sensing body and developed practices for her communities to share these experiences. Her cybernetic approach to listening continuously re-evaluated sound inputs, to find new paths through composition and community. Her work continues to resound and feedback through our encultured positions as we grow as a listening community. This respectful community building approach to listening is not only a process to increase our receptivity and agency to be better musicians, but is also in how we relate to humans and non-humans alike. Thank you.

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<sup>8</sup> Robinson 2020, p. 52-53

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