Embodied Composition: Composing the Body with Sound

Julie Herndon (composer, performer). Stanford University. Oakland, CA 94609, U.S.A.

© ISAST
Manuscript received 24 August 2020.

Abstract
Embodied composition is the practice of organizing sound in relation to the body and its internal/external experiences. It includes the intuitive and corporeal capacity to create, remember and respond to the environment. This creative practice manifests in the use of voice, gesture, and the creative state. While many composers work with embodied composition, a clear definition is lacking. Towards this end, the author offers a perspective from her own creative practice as research. Her definition is illustrated with examples from Meredith Monk, Pamela Z, and Cassandra Miller.

In the abundance of online musical interactions only increased by covid-19, the physical presence of the sounding body has become markedly malleable. Despite the benefits of these platforms, sonic material is at risk of self-isolating in the escapism that personal devices enable. How can composers include the physicality of the sounding body as its presence all but evaporates? What is the audible vocabulary of embodiment?

As a composer, I constantly search for ways to communicate the embodied process of sound making. I preserve it through recording, relay it with images, describe it with notation, explain it verbally. My goal, only amplified during these times of isolation, is to find and name core attributes of a compositional practice that uses the idiosyncrasies and intelligences of the body as musical material.

Even though many musicians work with embodied composition as a set of priorities, there is no set definition of this term from a compositional perspective [1, 2]. This cannot be said of sound art, embodied listening and physical interactions with objects [3, 4]. Nor can it be said of embodied electronic instrument design and digital performance [5, 6]. Nor of the interpersonal dynamics and sociality of improvisation and music composition [7, 8]. While each of these subjects are germane to embodied composition, they illuminate only aspects of it. My intent is to define and describe this creative process based on my own experience, illustrated with examples by other composers.

Foundation
Embodied composition is the practice of organizing sound in relation to the body and its internal and external experiences. This includes its intuitive and corporeal capacity to create, remember, and respond to the environment.

A definition of this practice relies on conceptions of the music-making body from phenomenology, embodied music cognition, and ecological perception. It starts by acknowledging the insightful and intelligent capacities of the body. Merleau-Ponty defines the phenomenological body as one that “ensures metamorphosis. It transforms ideas into things” [9].

Herndon, Embodied Composition
It remembers, inhabits, and transforms experience within a musical environment, like an organism who “settles into the organ as one settles into a house” [10]. Embodied composition recognizes that all musical experiences are mediated by the body [11]. In the words of Jonathan De Souza, “musical knowledge is grounded not in bodies alone, but in an interplay of techniques and technologies” [12]. Musical creativity is in fact saturated by ecological, social, cultural and technological mediations [13, 14]. This web between corporeal senses and the environment results in a model of ecological perception in which “every kind of knowing rests upon or involves a perceptual relationship with the environment” [15].

Embodied composition seeks to craft these relationships consciously as material, rather than subconscious influences or even undesirable byproducts. It poses the question, in Gibson’s terms, what affordances does the body offer the act of composition? [16]. What does it provide the composer?

Elements

There are three primary affordances of the sounding body, which I call elements of embodied composition. First is the ability to sound quickly and precisely, creating vibrations with or without the help of an external object. The most pervasive form of this is the voice, the body’s primary form of audible communication. Second is gesture, movement that can be in tandem, but not necessarily coupled, with sound production. Last is a physiological creative state where ideas emerge and are realized. I will describe each of these in more detail.

Voice: The voice is a direct and physical means of sonic expression. Vocalizing is heard within the womb and commences immediately at birth as the primary form of communication [17]. It follows that an embodied compositional method may involve spontaneous vocalizations or be perpetuated by oral tradition as a means of accessing sonic material. Many of its qualities can be transposed to an instrument. As Barthes writes, “the ‘grain’ is the body in the voice as it sings, the hand as it writes, the limb as it performs” [18]. In the case studies that follow, all use voice as the primary instrument. But while the voice is essential to embodied composition because of its pervasive immediacy, it illustrates ideas that can also be applied to an instrumental voice.

Gesture: Sound is movement, from the motion which initiates vibrations, to the reflections through the space in which it resounds. Choreography and dance notation provide rich examples of gestural movement as a compositional material, including Labanotation and the open scores of Deborah Hay and Simone Forti, to name only a few [19, 20]. Embodied electronic instrument design, such as the gesture controllers I will mention, enables physical interactions with sound that are not bound by acoustics. This opens a discussion beyond the metaphorical definition of the “musical gesture” to the concrete: how a sound is initiated.

Creative State: This state is marked by a lack of impedance between ideas and action. Also called “flow,” it unites awareness and presence, a notion found in many Buddhist meditation techniques [21]. The act of composing, while it includes activities like listening and sounding, is rooted in this imaginative and focused realm. As I will show, a self-aware enaction of this state can also appear in/as the piece itself.

Herndon, Embodied Composition
While all composers bring something of their embodied experience into music, not all choose to do so consciously, and not all use those experiences as musical material. To do so is to consider the body not only in composition, but as composition. Donna Haraway calls this situated creativity “sympoiesis.” She says, “it means ‘making-with.’ Nothing makes itself; nothing is really autopoetic or self-organizing” [22]. Embodied composition makes use of these sympoetic relationships.

This process productively tangles the definitions of composer, performer and listener. While the practices that follow are collaborative and improvisatory, they entail certain divisions of labor. In that light, I hold the term composer to mean the body working to structure a piece. This can include improvisation (real-time composition) or instructions for performance by others. I use Paul Craenen’s definition of performer to be a “body making a musical effort […]”, understood as a side effect of its intention to produce sound” [23]. It is enabled by and aware of its visibility. The act of listening pervades composing and performing, both to evaluate in-process work and as the impetus for these acts to occur at all [24]. I use listener to mean a body witnessing a piece, as the following composers do not explicitly invite the audience in as performers, but rather propose the act of observing and its many implications [25].

In Practice

My interest in embodied composition originates in my own creative practice. I harvest material with my sounding body, develop it in community with others, and participate in assemblages which may house, order and perpetuate those utterances. I follow a similar process here. I have outlined a definition of embodied composition from my own phenomenological experience. I will now give correlating examples from conversations with composers working with a similar set of priorities. Each composer, Meredith Monk, Pamela Z and Cassandra Miller, highlights a unique combination of the voice, gesture and creative state.

These composers are not anomalies, but rather representative examples of a set of priorities within their subdisciplines: Monk uses the voice to choreograph collaborative musical structures; Z uses embodied interfaces to map sound to gesture; and Miller externalizes internal states in concert. Their varying emphases mark intersections with dance, instrument design and collaborative composition.

Despite their aesthetic diversity, they all self-define as composers (though not exclusively), work with all three of the afore mentioned elements, and have international reputations that enable a certain depth of scale and breadth of collaboration. It seems appropriate that writing on a co-creative process would itself follow a sympoetic journey, so I prioritized engaging with each artist and/or their collaborators in conversations that challenged and focused my own beliefs. It follows that these artists are living composers, enabling in-person and online correspondence.

Though the following discussion centers on three female composers, I do not see gender as essential to this topic. I acknowledge that embodied composition is an exploration and empowerment of the body’s intelligent capabilities and is undoubtedly affected or even propelled by historic marginalizations in Western music history. But (as the many references to male
authors and artists attest) while embodiment is affected by experiences of gender, it is not exclusively defined by it.

**Refracted Voice**

Meredith Monk projects, orchestrates and re-embodies her voice. This process occurs within the physical space of performance venues and within the interpersonal space of an ensemble. Foundational to her work is eurythmy, a gestural language in which movement signifies words, and syllables express “the inner being” [26]. Monk perpetuates this language with audiovisual recordings and collaborative rehearsal processes. Emerging in conversation with Fluxus artists in 1960s New York, her intermedia work engages sight and sound with social and technological amplification [27].

Monk uses projection to magnify and re-member material. In her breakout solo piece, *16 Millimeter Earrings* (1966), Monk embodies different personae, distributes, and interacts with them using audio playback and video projection. Each persona, each medium, brings its own unique conception of the body, from its acoustic resonance to its representation in the plastic arts.

In ensemble pieces, Monk works in a similar manner, using collaborative rehearsal structures and oral tradition techniques to cultivate and distribute musical material. For example, in rehearsals for *Indra’s Net* (2021), which included members of the Mills College musical community, Monk’s rehearsals used a combination of notation and improvisation. She led full-body exercises, distributed scores, and invited improvisation from selected players, modifying her score accordingly [28].

In some cases, Monk structures individual responses by notating relational cuing systems. In *Travellers 4* (1985), the score includes instructions to incorporate past notated material in an improvisation, or to repeat phrases for an approximate amount of time or until cued by another musician. Performing it requires relational awareness and an intuitive sense of completion, rather than an exact number of repetitions. These micro-responses emphasize communication and connectedness and can result in conversation-like sound that ebbs and flows organically, almost as if spun by a web of sentient looper pedals.

These methods color Monk’s materials with individual agency residing just outside of her direct control, fusing the social and musical. She capitalizes on music’s social aesthetics, which in Georgina Born’s words “engenders certain kinds of socialities, yet it also refracts or transforms existing social formations” [29]. Monk uses these refractions to develop and transform her material within a curated community of collaborators and technologies.

**Sonorous Gestures**

Pamela Z uses custom gesture-controlled instruments to augment her voice and demonstrate her creative process. She uses sampling and delays to convert ephemeral vocalizations into manipulatable signal. She crafts a shoreline between the ungraspable and the concrete that De Souza describes, saying “my voice originates inside my body. I can neither grasp nor see it. As
my voice resounds outside of me, it may sometimes be experienced as a kind of object” [30]. Her wearable sensor instruments originated with the BodySynth and now include the Ute, Mira, and Mimn II, made by Donald Swearingen in a close collaboration. They are situated among a growing number of artists working with hand-gesture controllers, including Laetitia Somani’s “Lady’s Gove,” Michel Waisvisz’s “The Hands,” or Imogen Heap’s more commercial “Mi.Mu Gloves” [31]. Distinctively, Z’s instruments are an extension of her voice and are communicative in nature, telling a story of the origin of the sound, or demonstrating the piece itself [32].

For example, in Breathing (2013), Z begins with self-narration. She then punctuates this narrative with movements that trigger interruptions and granulate her speech. In a performance, she positions these distortions as within her control—not happening to her, but by her. This sense of agency is intensified when she steps away from the microphone and sings un-amplified, delineating her live acoustic voice from its processed recordings.

Z also uses gesture to demonstrate sound in space. In Badagada (1988, 2015), her hands seem to pull the sound away from her as she sings, even before the audio spatialization begins. When her recorded voice starts to move around the speakers in the room, it follows and amplifies her gestures. The effect is a counterpoint of implication: in some cases, her gestures are larger-than-life, directing immediate sonic results; in other cases, they are strictly expressive and invite a listener to imagine their effect. The ambiguity between these two sorts of movement creates a performance space in which a listener must holistically attend to their significance and sonic implications.

Z’s performances invite the audience to be engrossed in her creative process. Her presence becomes a guide, signaling the listener, directing attention and communicating narrative. Like much of embodied composition, it capitalizes on a sense of liveness by developing material audiovisually in space. It requires a multimodal listening Steph Ceraso defines as “attending to the sensory, contextual, and material aspects of a sonic event […] the ecological relationship among sound, bodies, environments, and materials” [33].

Sonic Origins

Cassandra Miller performs the development and lineage of her creative practice. Her recent collaborations, such as So Close (2016) and Tracery: Attending to a task (2018), begin by inviting the performer into a focused exploration of physical and mental states. The incubation process is then recorded and recreated for listeners to witness and enter empathetically. Miller’s work marks an important component of embodied composition in its attention to the transformative effects of translation and transcription—the path between source and product [34].

In So Close, a collaboration with Silvia Tarozzi, Miller uses a body scan (meditating while focusing attention on different parts of the body) to prompt improvisation. These improvisations were recorded, shared, and closely imitated and responded to, each by the other while also in a state of meditation. Miller calls this process “transformative mimicry,” a method which relies on/delights in concentrated, yet imperfect imitation [35]. In a concert, these recordings are played back in layers as Miller and Tarozzi reperform over them.

Herndon, Embodied Composition

5
While the layered recordings in *So Close* demonstrate the origin of the piece, Miller goes further to expose the lineage of her meditative practice itself in *Tracery: Attending to a task*. Here, Miller and Juliet Fraser mimic as closely as possible the text from Robert Ashley’s interview with Pauline Oliveros in *Music with Roots in the Ether* (1985). In performance, Fraser mimics the esthetician from the video while layers of their past recorded imitations play back around her. By prescribing this focus, Miller and Fraser create the same “state of no intention” that Oliveros speaks of in the moment as a body attending to a task. Like Oliveros, they seek to achieve this state not only *in* performance but *as* performance, but their aim is quite different. While Oliveros effectively erodes the performer-audience binary, Miller and Fraser keep it intact. If Oliveros attempts to dissolve the boundary between inner and outer, they display it.

Miller’s work with meditative states is used as a means of bypassing cognitive processes to access unfiltered, improvised material. She calls her method of vocal mimicry “automatic singing” and links it with a similar practice used by Oliveros in pieces such as *Rose Mountain Slow Runner* (1979). Her performance of process also bears resemblance to pieces by Alvin Lucier, most notably *Music for Solo Performer* (1982). But rather than sonify a meditation itself, she uses it as a means of prompting improvisation. Her display of origin and process centers on interpersonal interactions and creates a translucent performance space which invites the listener as an almost voyeuristic observer.

**Using Embodied Composition**

Embodied composition uses collaboration, gestural implementation and shared body-mind states to shape and structure sound. It occurs in community and evolves in conversation. It establishes unique relationships between sound and movement that build on internal and external awareness. It exposes its roots and affirms that a shared narrative can deepen a sense of connectedness.

Can embodied composition be cultivated online, digitalized, at a distance? To do so, it must become an active inquiry into the contact points between the body and that which perpetuates its utterances. It must create with, rather than in spite of, evolving musical ecologies. It must locate the body in its mediated exchanges and ask: how is the voice conveyed in this correspondence; how does the body move with this material; how do I facilitate a deeper connection with the internal states of those involved? Residing in these questions is a host of possibilities for using the physicality of the sounding body to productively interweave, interface and interfere with sound and its technologies.

**Acknowledgments**

Thank you, Patricia Alessandrini, Erik Ulman, Jarek Kapuściński, Mark Applebaum, and Meredith Herndon for your encouragement, insights, and feedback on this material.

**Reference and Notes**

1. Anne Hege’s “Spirit in the Flesh” (PhD dissertation, Princeton University, 2014) discusses a compositional practice with the performing body.

Herndon, *Embodied Composition*


Herndon, Embodied Composition
25. Clarke [13].
27. This section is informed by rehearsals for *Cellular Songs* at Stanford University and conversations with performers of *Indra’s Net* in Fall of 2019.
29. Georgina Born, “After Relational Aesthetics: Improvised Musics, the Social, and (Re)Theorising the Aesthetic” from *Improvisation and Social Aesthetics* (Duke University Press, 2016) p. 44.
32. This section is informed by a conversation between Z and the author in San Francisco, May 2018.
34. This section is informed by a conversation between Miller and the author at Stanford University, May 2019.

JULIE HERNDON is a composer and performer based in Oakland, California. Her work explores the body’s relationship to sound using tools like musical instruments and personal technologies. Herndon is a doctoral fellow at Stanford University.