An experiment in educational research-creation using music as diagram

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Abstract

In response to the call for this special issue to begin our inquiries with concepts rather than methods, the DeleuzeoGuattarian notion of the diagram is taken up in this paper as part of a musical experiment with educational inquiry. In doing so, two musical *sound creatures* are created through the use of music as a molecular and imperceptible image of thought that is different from language and its semiotic modes of representation. This paper asks how music might be plugged into the world and what a musical onto-epistemology could produce as a result. Perhaps educational inquiry would open up to new explorations and different configurations, discursive and non-semantic, through music as diagram.

Keywords

Music, diagram, Deleuze, method, concept, research-creation

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Introduction

Music is the art of making the outside of time return to every time, making return to every moment the beginning that listens to itself beginning and beginning again. In resonance the inexhaustible return of eternity is played (Jean-Luc Nancy, 2007, p. 67).

In this paper, I attempt to produce a musical encounter by working with music as a conceptual apparatus in educational research-creation. Taking up the call of this special issue to begin our inquiries with concepts rather than humanist qualitative methods brought me to consider how Deleuze and Guattari's (1987) notion of the *diagram* might be put to work through a musical experiment. For Deleuze and Guattari (1987), the diagram does not represent reality but provides a means of asignification and the forming of new modes of expression. Similarly, music does not seek to be knowable as it bypasses the signification of language and instead provides a particular onto-epistemological mode, which is where I believe the potential of music as diagram might be found.

Lather and St. Pierre (2013) provide a significant provocation for qualitative researchers, when they ask, "could we just leave it behind and do/live something else?" (p. 631). This paper and its description of my efforts to begin inquiry with concepts, forms a partial and experimental response to this provocation. I also attempt to consider how St. Pierre's (2011) claim that "we and the world are products of theory as much as practice, and that putting different theories to work can change the world" (p. 614) might work through different musical experimentations. As such, my interest in music as diagram and how I might put it to work in educational inquiry is

not simply about trying to leave humanist qualitative research methods behind, but also to experiment with how putting different concepts and theories to work might produce something different in the world.

We know that concepts are not neutral. For example, Massumi (1987) refers to concepts as bricks, which may be used to build structures of logic and reason, or else might be employed as weapons to break down such structures. When Deleuze and Guattari (1991) describe philosophy as being the act of creating concepts, I tend to agree with the metaphor of concepts as bricks being thrown through windows. I might even take the idea further, in order to argue that while philosophy might involve acts of creation, we are acting upon the world when engaged in the deployment of concepts through our research practices and that can be risky and precarious work. Furthermore, Bergson (1912) warns that there is a real danger that lies within concepts and their use, as they generalise at the same time as abstracting. There is always a potential of trapping and double-bind in the ways that we construct and deploy concepts in the world. To address this danger, Bergson (1912) argues that concepts need to go beyond themselves, to be freed of rigid existing structures in order to form new relations, new diagrams, new images of thought, and moreover produce ever more new concepts. This is where I think the potential of inquiry beginning with concepts might be realised, and which I demonstrate through the musical experiments presented in this paper.

I have adopted the particularly DeleuzeoGuattarian understanding of concept formations as being diagrammatic in their creation, as I believe that music as diagram considers most carefully how diagrams produce relations in the creation of abstract machines (Deleuze & Guattari, 1987). It is not what music is, but what music does, that is of interest to me – its speeds and intensities, its frequencies and durations, its molecular sound-particles and movements of

waveforms through our bodies and the world around us. How might music be plugged into the world? What could music produce that some other conceptual apparatus or abstract machine could not? What could a musical onto-epistemology produce? I am interested particularly in how a musical onto-epistemology might be formed, given the important ethical charge of living and thinking differently through the ontological-turn in order to refuse binary logic and the humanist condition (St. Pierre, 2013). This paper is my partial and experimental attempt to address this problematic.

Describing how assemblages are formed, Buchanan (2015) reminds us that, for Deleuze and Guattari, concepts must have cutting edges and that "it should always be possible to determine with precision the specific characteristics and features of a concept" (p. 383). Deleuze and Guattari (1987) further explain that a diagram does not "represent, even something real, but rather constructs a real that is yet to come, a new type of reality" (p. 142). They go on to detail how everything escapes and creates through an "abstract machine that produces continuums of intensity, effects conjunctions of deterritorialization, and extracts expressions and contents." (p. 142). For me, this is where music as diagram becomes a useful conceptual tool, given that its traits and cutting edges include the material, discursive, virtual and actual sound elements combining in different ways to form musical expressions, heterophonies, modulations and vibrations. To put it other way, for me music helps me to express how words fall apart in my own inquiries as an educational researcher who thinks of the world in music.

Music as diagram

Sonorous or vocal components are very important: a wall of sound, or at least a wall with some sonic bricks in it...A mistake in speed, rhythm, or harmony would be catastrophic because it

would bring back the forces of chaos, destroying both creator and creation (Deleuze & Guattari, 1987, p. 311).



Figure 1. Music as diagram. Stewart Riddle.

The work of musical philosopher, Jean-Luc Nancy (2007) on listening provides a useful starting point for a musical onto-epistemology. He speaks of the eye as attempting to make evident through manifestation and display – a knowing, seeing eye of humanist inquiry – whereas the ear is more attuned to vibrations and flows, making resonant and sonorous forces – forming musical assemblages. Nancy (2007) calls forth an invitation to "prick up the philosophical ear" (p. 3) through attention to sound and resonance, accent, tone, timbre and other sonorous forms. He goes on to say, that "to be listening is always to be on the edge of meaning...a resonant meaning, a meaning whose *sense* is supposed to be found in resonance, and only in resonance" (p. 7). Similarly, Deleuze (2003) argues that there is a power of intensity in rhythm as logic of the senses, which is "more profound than vision, hearing, etc." (p. 42). Immediately then, it becomes

apparent that there is a logic in music that is not available through language alone, with its semiotic modes of representation, and any attempt to produce a sense-making exchange between the two modes of content and expression is necessarily limited by the bounds of a continued over-reliance on the linguistic mode to express thought and action. Yet at the same time, there is a productive resonance of music, where the edge of meaning might be found through listening, not just with the ears to language but with the entire body (Deleuze, 2003).

In a musical onto-epistemology, music forms points on the plane of immanence (Deleuze & Guattari, 1987), producing variable durations and intensities, vectors and speeds. Music provides melodies, harmonies, counter-melodies and rhythms, beats and tempi. It is about process, movement and change, a perpetual music in becoming. What then does music offer for thought, if not a different conception of thought itself (Campbell, 2013)? Perhaps music might be understood as non-linguistic, non-representational, fluid and perpetual motion and relation to itself. Music offers us a musical mode of thought, which is consistent with Deleuze and Guattari's (1987) conception of the plane of consistency, which involves "singular, nonsegmented multiplicities composed of intensive continuums, emissions of particles-signs, conjunctions of flows" (p. 72). Diagramming then, is what lines of flight and deterritorializations are afforded within the particular abstract machine in question. In this paper, I am interested in how music as diagram might be put to work as a dynamic and creative act of research-creation. The intent is to focus on movement and molecularity, rather than a search for some kind of referent signification or inherent meaning that moves from music to language, or from being to knowing.

At the same time, I am interested in how Campbell (2013) describes music as creating the potential for articulating and embodying a "difference-based, non-representational, fluid and

molecular image of thought" (p.35). From my understanding, a musical image of thought recognises that existence is the polyphony of vibrations – everything in the universe resonating and harmonising with everything else in the universe – or as Szekely (2003) says, music presenting "itself to us as simply, and unintentionally, productive, not dialectical as producing certain tendencies and intensities" (p. 121). Music, in this sense, might be considered as a *Body without Organs* (Deleuze & Guattari, 1983), that is, a virtual assemblage that produces vitalities and effects, including the thinking of thought, which cannot be captured in any other form.

Music modulates between the virtual and actual, smoothly double-moving as a reterritorialization of the refrain (Deleuze & Guattari, 1987), while simultaneously becoming-molecular and deterritorializing through ceaseless movement of vibrations and rhythms. While the actual might be bounded by the expressive forms of each performance, the virtual involves varying potentials and tendencies. As such, it produces a musical-becoming. Like Bogue (2014), for me, music involves the creation of "a realm of pure speeds (duration, frequency, sequence) and affects (intensities, timbral qualities)" (p. 487), which is the purest form of time (Deleuze, 2006). Along with Hulse and Nesbitt (2010), I suspect that despite the important contribution of Deleuze and Guattari to understanding the diagrammatic functions of music, they have still "only scratched the surface of the infinite modes of musical embodiment" (p. xv). As such, this musical experiment might help to creatively engage with the potential for music to assume the condition of thought (Campbell, 2013) in its creation of sensations, affects and percepts — what Bogue (2003) describes as a musical onto-epistemology that makes evident the connections between sensations and creation in the artistic, natural and philosophical worlds.

Perhaps the most important consideration is how rhythm is clearly placed at the centre of a musical onto-epistemology as it functions as a spatio-temporal ordering of chaos (Deleuze &

Guattari, 1987). Turetzky (2002) argues that bodies – human and non-human – express their coherence through the production of rhythms in order to determine and organise both spatial and temporal intervals of difference. As such, it is of little surprise to note that Deleuze and Guattari (1987) argue that "rhythm is the milieu's answer to chaos" (p. 313). It is through the musical movement of frequencies, harmonies, durations and intensities that we are able to make *sense* (with the body-ear, not the mind) of how the milieu flows and forms. As such, there is much potential in the virtuality and potentiality of music, in the difference that produces musical difference. As Campbell (2013) reminds us, we might need to consider music anew, "no longer focusing on it as something static, unchanging, eternal, always the same, but as dynamic, changing and always shifting" (p. 33).

Minimalist composer, John Cage (1961), claims that rhythm involves durations that coexist in "states of succession and synchronicity" (p. 15), while Nancy (2007) describes rhythm as being the very *time of time*, as "the vibration of time itself in the stroke of a present that presents it by separating it from itself, freeing it from its simple *stanza* to make it into *scansion* [rise] and *cadence* [fall]" (p. 17). It is this rise and fall that gives the movement to a rhythmical pulse, a musical spatio-temporal ordering. Music involves perpetual speeds and differences, like a polyrhythmic clock that offers up various flows and forces. This is perhaps what Deleuze means by describing how music forms a plane of consistency. On a plane of consistency, there is only surface, movement, duration, repetition and difference (Deleuze & Guattari, 1987). The music diagram permits an unplugging from striated, pulsed time, a de-stratified sonic scape of speeds and vectors, where duration is experienced through rhythm. Music creates new assemblages, both as it re- and de-terrritorializes the refrain (Bogue, 2003). As Hulse (2010) explains, duration "continuously expands as its present sends its former beginning further and

further into the past" (p. 33). At the same time, Turetzky (2002) argues that the heterogeneous elements of sound and other forms are grouped together through the forces and flows of rhythm and duration. Rhythm must therefore be at the core of any musical diagram that seeks to create movements and sensations in the world.

The second consideration for music as diagram comes from Deleuze's (2003) claim that, "music attempts to render sonorous forces that are not themselves sonorous" (p. 56). To further explain the point, he says that, "music traverses our bodies in profound ways, putting an ear in the stomach, in the lungs, and so on. It knows all about waves and nervousness. But it involves our body, and bodies in general, in another element. It strips bodies of their inertia, of the materiality of their presence: it disembodies bodies" (p. 54). When Deleuze (2003) writes that music puts an ear in the stomach, it might look like composer, Nigel Stanford's *Cymatics: science vs. music* (https://vimeo.com/111593305), which shows visual performances of sonic frequencies producing effects on matter. The imbrication of visual, physical and aural elements in the piece works to generate a viscerally-sonorous rendering of movement and music that affects and effects the surrounding material. Clearly, music is felt and seen as much as heard, and the rendering of forces as sonorous becomes an act of creative deterritorialization.

Finally, I argue that music relies upon the intuitive, affective domain of human sensation, one that involves an embodied molecular dynamism, where the body-ear becomes vital. In this regard, I am interested in what Barthes (1977) refers to as "a muscular music in which the part taken by the sense of hearing is one only of ratification, as though the body were hearing" (p. 149). Bogue (2003) says that music "makes perceptible the most elemental forces, but in such a way that our corporeal experience of these forces tends to 'disincarnate' and 'dematerialise' our bodies" (p. 189). At the same time, Deleuze and Guattari (1987) capture this notion when they

say that music is plied with becomings, which "become progressively more molecular in a kind of cosmic lapping through which the inaudible makes itself heard and the imperceptible appears as such: no longer the songbird, but the sound molecule" (p. 248). It is this molecular becoming that produces flows and desire, working upon our bodies and simultaneously destroying their sense of embodiment.

Like the composer Edgard Varèse (1966), I would like to consider myself a "worker in rhythms, frequencies and intensities" (p. 18), where sound becomes the materiality (both actual and virtual) to be worked with, de-re-composed and played again through the molecular rhythmic machine of music making. I attempt here to produce what Deleuze might call a *plane of* composition, which deals in sensations, percepts and affects (Bogue, 2003) rather than representations and reproductions. Varèse (1966) refers to this as the creation of multiple zones of intensities, which are "differentiated by various timbres or colours and different loudnesses [where] the role of colour or timbre would be completely changed from being incidental, anecdotal, sensual or picturesque; it would become an agent of delineation" (pp. 11 - 12). In order to contemplate the delineation of planes of consistencies and their reconfiguration through music as diagram, Colebrook (2014a) considers how "music refers to the relations established among expressive qualities and their capacity to create forms, territories, identities and to open to the cosmos" (p. 113). It is through my experimentation with educational inquiry and the composition of sound creatures that I have attempted to work such forms, territories and identities.

Two sound creatures

Music is not a literal interpretation of life [or] referring to something outside itself, but it rather embodies itself without any mediation. The listener will therefore need a different approach to listening, without the traditional concepts of recollection and anticipation. Music must be listened to as a pure sound-event, an act without any dramatic structure (Phillip Glass in Mertens, 1983, p. 88).





I refer to the two musical compositions shared in this paper as *sound creatures*, a term borrowed from contemporary electronic composer-producer, Alessandro Bosetti. In describing how each piece is composed, Bosetti (2014) explains that, "each piece contains some sort of creature, sound creatures that seems to have their own personality. They are living entities, intelligent somehow and yet not human." The first sound creature is shared above and the second below, both as a visual pitch-space mapping of their durations, frequencies and intensities in this paper, and also via hyperlinks to the audio performances of each piece. As Glass suggests, these should be listened to as sound-events, without the expectation for structure and mediation.

It is not my intent to provide a recognisable analysis of these two sound creatures, for to do so would be to disregard the earlier discussion of music as diagram and to potentially lapse

into a humanistic qualitative analytical frame. However, one thing that I might say is that these two sound creatures or sound-events have resulted from my experimentation with audio recordings of interviews conducted with participants for a qualitative research study. In attempting to work with music as diagram, my aim was to break apart the language that was originally the focus of my research capture and analysis work. For this process, the words being spoken needed to become incomprehensible and to have their signification removed. With the first sound creature, this was achieved through the layering of multiple interview audio recordings, along with a drum loop and arpeggiated guitar pattern, which provided rhythmic and harmonic structure. The second sound creature was created through using a spectrum analyser to determine the frequency ranges of human voices in an interview audio recording, which were then filtered out and the surrounding 'pitch-space' amplified. No further instrumentation was added to the second sound creature.

Stripped of their linguistic coordinates, these two sound-events are left without referents and are able only to become *blocs of sensation* (Deleuze & Guattari, 1991), which simply involves a multiplicity of percepts and affects. The deterritorialisation of the voice through music uncouples the voice from language (Deleuze & Guattari, 1987). What then remains? Namely "sensations, percepts, and affects are beings whose validity lies in themselves" (Deleuze & Guattari, 1991, p. 164). These sound creatures form an intersection with the world, where the event itself is what is of interest. There is an imbrication of layers of sonic material with other, non-sonorous elements, forming new assemblages in the process.

I am interested in how Deleuze and Guattari (1991) consider that "sound must be held no less in its extinction than in its production and development" (p. 165) in order for a musical bloc of sensation to be felt. I wonder at what this might mean for a treatment of the 'data' I present

here in this paper. Hulse (2010) refers to such treatment of musical blocs of sensation as forming a *minor science* of music, where the contact of sensation "is primary to everything else. Sensation lies beneath any distinction between thought and feeling, or between science, philosophy, and art" (p. 31). Thus, I have attempted to construct visual representations of a musical mode that performs and experiments with the interplays of "chance, corporeal performativity, graphic experimentation and affective intensity" (Bogue, 2014, p. 478). In doing so, I am also hoping to combine the aural and visual in order to map how sound elements overlap the semiotic and material (Criton, 2011), through the visual mapping of their durations, frequencies and intensities.

Young (2015) describes the human voice as a musical machine, one that defies capturing; each mediation produces a new inscription, a new performance of the voice. As such, the act of audio recording and transcribing human voices becomes a musical act of repetition and reproduction, albeit through different arrangements each time. The materiality of the voice, rather than its linguistic signifiers, is what comes to count in the capture and recapture of the voice as a musical enunciator. Like Manning and Massumi (2014), I think that there is something happening "between music and voice. And between movement phrases. Disjunctive synthesis upon disjunctive synthesis, passing each other in the middle, crissing, crossing, rolling together into the rhythm of the moment" (p. 34).

The voice falls apart and what is left is a molecular vocality that is no longer centred in the larynx and language. What is left is musical. A useful example of this manipulation is by composer, Robert Davidson in his piece, *Hitler sings – Germany is awake* (<u>https://www.youtube.com/watch?v=DGU1iQhfafY</u>). The linguistic form of content of the voice is removed and instead becomes a form of expression and a bloc of sensation; in this case, a

menacing and thoroughly unpleasant bloc. As such, language is swept up "in its entirety, sending it into flight, pushing it to its very limit in order to discover its Outside, silence or music (Deleuze, 1997, p. 72). I think that is what these sound creatures are doing, although I am not sure. Such sensation can only be felt in the body-ear of the listener, after all.





We can hear the body and its internal mechanisms of nervous tension as she tries to deliver her words with perfect conviction: the sound of the lips forming the vowel-shapes of her upper-class British diction; the resonant chambers that sound the body – trachea, soft and hard palettes, nasal cavity, something of the chest; deeper, we may hear the involuntary vibration of the vocal folds in the glottis as they are activated by the air stream; we hear Nightingale's audible breath, the pitchcentre of her voice, the natural peaks and troughs of intonation, rhythm, timbre, and the audible degeneration of the vocal chords from age and wear.

A Description of Thomas Edison's recording of Florence Nightingale's voice in 1890 (Young, 2015, p. 14).

Barthes (1977, 1981) speaks of the *grain* of the voice, which describes a sensual relationship between performance and listening. He describes how "the grain is the body in the voice as it

sings, the hand as it writes, the limb as it performs" (Barthes, 1977, p. 188) and then goes on to explain that we set up new schemata of evaluation when we attempt to theorise the grain in music and the voice. For my purposes, a molecular scheme is useful in understanding how new matters of expression might be produced through the forming of new heterogeneous assemblages, "below that of representational forms and in such a way that they formulate an intensive diagram composed of music's most molecular properties and components " (Campbell, 2013, p.147).

A heterophony of musical elements is produced, one that is multidirectional and moves in between, over and through inside/outside, human/nonhuman, subject/object binaries; after all, there are simply no such things in a musical onto-epistemology. The sound element itself is a compound of variables that include frequencies, intensities, and durations. These molecular materials vibrate and modulate in ways that "make forces audible that are not audible in themselves, such as time, duration and even intensity. The *material-force* couple replaces the *matter-form* couple" (Deleuze, 2007, p. 160). In these sound creatures, form gives way to force and flow, where the feeling is what matters rather than some signification or supposed meaning to be grasped.

I find the poet, T.S. Eliot's (1933) notion of the *auditory imagination* useful for what I am calling a *minor science of music*, as a way of understanding how the material-force produces sensations through music, which Eliot describes as "the feeling for syllable and rhythm, penetrating far below the conscious levels of thought and feeling" (pp. 118). The auditory imagination is both pre- and post-linguistic. It requires a dual movement of thinking in thought and the use of language to define auditory concepts, while also requiring a bodied response that is more about the particles and waves, the nervous energies and vibrations moving through

matter than anything the mind might conjure up. As such, we need to think with "sound molecules rather than pure notes or tones. Sound molecules, coupled together, are capable of passing through totally heterogeneous layers of rhythm and layers of duration" (Deleuze, 2007, p. 158). The molecular movement of sound molecules produces differences that are at once imperceptible, but also heard through the body-ear. This imperceptibility breaks apart the meaningfulness of representational logics of a knowable humanist individual. Instead, the subject becomes a series of affective registers and sensations, where durations, intensities and rhythms provide a means for making sense of experience.

Music as schizo-method in education research

You say: the real, the world as it is. But it is not, it becomes! It moves, it changes! It doesn't wait for us to change...It is more mobile than you can imagine. You are getting closer to this reality when you say as it "presents itself"; that means that it is not there, existing as an object. The world, the real is not an object. It is a process (John Cage in Cage & Charles, 1981, p. 80).

I have elsewhere (see Riddle, 2013a, 2013b, 2014) attempted to argue for a more musical image of thought in education research using interview data collected as part of a project mapping the links between literacy learning and music in the lives of teenagers. However, each of my previous attempts to engage with a musical mode continued to rely almost entirely on language as the organising feature and the conceptual apparatus. In order to move towards a more asignifying musical mode that is molecular and imperceptible, I need to continue to work on setting aside conventional understandings of data, research problems and the like, and instead attempt to focus on research-creation through musical compositions. When Deleuze and Guattari

(1987) say that while there is not necessarily any correspondence between the components of sound and the features of language, they do ask "that the issue be left open, that any presupposed distinction be rejected" (p. 96). This is my problematic and forms the basis of a musical schizomethod for inquiry that I hope to explore further in acts of research-creation.

Manning and Massumi (2014) suggest that "this idea of research-creation as embodying techniques of emergence takes it seriously that a creative art or design practice launches concepts in-the-making. These concepts-in-the-making are mobile at the level of techniques they continue to invent. This movement is as speculative (future-event oriented) as it is pragmatic (technique-based practice)" (p. 89). It is the speculative, pragmatic movement of research-creation that I think might be useful as I continue to work with a musical onto-epistemology, living and learning with sound creatures in my hope for a more musical mode of thought in my research practices.

I think that what I am working with now is a more schizo-musical mode of creation, which fits with Hulse's (2010) argument, that "hearing music in its properly mutant, diagonal mode through analysis means, above all, to connect with it intuitively—which can only be done directly, immediately" (p. 31). It is this intuition that Bergson (1912) speaks of when he describes the impulse of intuition as a coming together of science and philosophy, where concepts are put into movements and durations of varying speeds and intensities. He says of composition that there is a need to "seek as deeply as possible an impulse, after which we only need let ourselves go" (p. 90). For me, a musical intuition allows for the expression and form of variations of repetition—an impulse to smoothly move between the virtual and actual or to deterritorialise the refrain.

While Western traditional music is striated, chopping up frequencies into neat little slices that we then call notes and place on scales in well-ordered staves on pages, I think that music as diagram takes us into the smooth spaces between. The Indonesian gamelan or the Indian Raga is more aligned to a schizo-musical mode than the symphonic orchestra. I think that Cage (1961) is arguing for an understanding of the smooth spaces of music, when he says, "there is no such thing as an empty space or an empty time. There is always something to see, something to hear. In fact, try as we may to make a silence, we cannot" (p. 8). There is little doubt that music, like painting, creates the smoothest of smooth spaces (Deleuze & Guattari, 1987). Furthermore, one of the productive flows of music as a milieu is in its onto-epistemology of change (Kielian-Gilbert, 2010), where music becomes a focus for actualising the effects of becoming, a way of possibly experiencing the ebb and flow of life as rhythms and harmonies, musical-becomings and movements in space and time.

Deleuze wonders in his conversation with Clare Parnet (2002), "is it by chance that music only knows lines and not points? It is not possible to produce a point in music. It's nothing but becomings without future or past. Music is an anti-memory. It is full of becomings: animalbecoming, child-becoming, molecular-becoming" (p. 33). These becomings speak to the potentiality of music as having the capacity to deconstruct itself, of becoming molecular, imperceptible, while also retaining a sense of cadence, rhythm and harmony. There is a dissolving of one within the other, yet not so that the two become one or the one become two. Harmonies emerge from the milieu and are swept alongside each other. Deleuze and Guattari (1991) quite rightly point out that harmonies are simply affects of consonance and dissonance, timbre and tone.

This becoming musically molecular perhaps allows us to embrace music as a different image of thought; of musical enunciations where we become what Nesbitt (2010, p. 159) describes as "asubjective sounding machines" rather than individual subjects; machines that sound out into the virtual. Campbell (2013) elucidates the musical becomings of music when he explains that "musical sound is only one component among others within a musical assemblage, since it is formed equally from literary, artistic, philosophical and many other milieus" (p. 42). A proper musical diagram then, needs to account for the milieu, rather than treating music as a rarefied art form, which has been the tendency of traditional Western musicology. I am not sure that I have achieved such a proper musical diagram through these two sound creatures, but I will continue to experiment, to create, to synthesise and to molecularize through music.

Colebrook (2014a) argues that "thought is a synthesiser: just as musical synthesisers take the sounds of the world and repeat, create and mutate various differences, so thought can maximize rather than diminish the complexity of sensations" (p. 15). It is in this thought, the sensation of musical thought, where difference in educational (and other) inquiry might be set free from its linguistic cage. At the same time, I wonder whether we can actually take up her (Colebrook, 2014b) call to completely abandon narrative modes of inquiry, move to nonsemantic registers and escape the humanist condition. I am not sure if this is possible, let alone desirable. However, there is hope, when Colebrook (2014b) says that "perhaps everything will approach the condition of music…something like a pure affect" (p. 59). There is a potential in music as diagram to produce pure affect, whether it is through the blocs of sensation and the sound creatures we compose or through other means and methods.

Educational inquiry might be opened up for new explorations and different configurations, discursive and non-semantic, as a productive engagement with the transformative

force of music as an expressive act of affect. I do not suggest that this would mean abandoning narrative modes of meaning and sense-making from educational endeavours, but we might reconstruct inquiry in more entangled and active form of vitalism. Perhaps in this way, music as diagram and the experimental encounters presented in this paper of music and educational inquiry could suggest one possible response to Lather and Pierre's (2013) call to live-do-be something different. While not a conclusion, I conclude the paper with this thought from Deleuze (2007), as it speaks to the ongoing project of attempting to experiment with music as diagram in my research practices:

There is no absolute ear; the problem is to have an impossible one—making audible forces that are not audible in themselves. In philosophy, it is a question of an impossible thought, making thinkable through a very complex material of thought forces that are unthinkable. (p. 160)

References

Barthes, R. (1977). Image music text (S. Heath, Trans.). London: Harper Collins.

- Barthes, R. (1981). *The grain of the voice: interviews 1962 1980* (L. Coverdale, Trans.). New York, NY: Hill and Wang.
- Bergson, H. (1912). *An introduction to metaphysics* (T. E. Hulme, Trans.). New York, NY: The Knickerbocker Press.
- Bogue, R. (2014). Scoring the rhizome: Bussotti's musical diagram. *Deleuze Studies*, 8(4), 470 490. doi: 10.3366/dls.2014.0166
- Bosetti, A. (2014). Radio yak: Alessandro Bosetti. In M. Jokiranta (Ed.), *ABC Radio National*. Sydney: Australian Broadcasting Corporation.

- Buchanan, I. (2015). Assemblage theory and its discontents. *Deleuze Studies*, 9(3), 382 392. doi: 10.3366/dls.2015.0193
- Cage, J. (1961). Silence. Middletown, CT: Wesleyan University Press.
- Cage, J., & Charles, D. (1981). For the birds: John Cage in conversation with Daniel Charles. London: Marion Boyars.

Campbell, E. (2013). Music after Deleuze. London: Bloomsbury.

- Colebrook, C. (2014a). *Death of the posthuman: essays on extinction Vol I*. Ann Arbor, MI: Open Humanities Press.
- Colebrook, C. (2014b). Sex after life: essays on extinction Vol 2. Ann Arbor, MI: Open Humanities Press.
- Deleuze, G. (1997). *Essays critical and clinical* (D. Smith & M. A. Greco, Trans.). Minneapolis,MN: University of Minnesota Press.
- Deleuze, G. (2003). *Francis Bacon: the logic of sensation* (D. W. Smith, Trans.). London: Continuum.
- Deleuze, G. (2007). Two regimes of madness. New York, NY: Semiotext(e).
- Deleuze, G., & Guattari, F. (1983). *Anti-Oedipus: Capitalism and schizophrenia* (R. Hurley, M. Seem & H. R. Lane, Trans.). Minneapolis, MN: University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1987). A thousand plateaus: Capitalism and schizophrenia (B. Massumi, Trans.). Minneapolis: University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1991). *What is philosophy?* (H. Tomlinson & G. Burchell, Trans.). New York: Columbia University Press.
- Deleuze, G., & Parnet, C. (2002). *Dialogues II* (H. Tomlinson & B. Habberjam, Trans.). London: Continuum.

- Eliot, T. S. (1933). *The use of poetry and the use of criticism: studies in the relation of criticism to poetry in England*. London: Faber and Faber Ltd.
- Hulse, B. (2010). Thinking musical difference: music theory as minor science. In B. Hulse & N.
 Nesbitt (Eds.), *Sounding the virtual: Gilles Deleuze and the theory and philosophy of music* (pp. 23 50). Surrey: Ashgate.
- Hulse, B., & Nesbitt, N. (2010). Introduction. In B. Hulse & N. Nesbitt (Eds.), Sounding the virtual: Gilles Deleuze and the theory and philosophy of music (pp. xv xvii). Surrey: Ashgate.
- Kielian-Gilbert, M. (2010). Music and the difference in becoming. In B. Hulse & N. Nesbitt (Eds.), *Sounding the virtual: Gilles Deleuze and the theory and philosophy of music* (pp. 199 225). Surrey: Ashgate.
- Lather, P., & St. Pierre, E. A. (2013). Post-qualitative research. *International Journal of Qualitative Studies in Education*, *26*(6), 629 633. doi: 10.1080/09518398.2013.788752
- Manning, E., & Massumi, B. (2014). *Thought in the act: passages in the ecology of experience*.Minneapolis, MN: University of Minnesota Press.
- Massumi, B. (1987). Translator's foreword: Pleasures of philosophy *A thousand plateaus: Capitalism and schizophrenia* (pp. ix - xv). Minneapolis, MN: University of Minnesota Press.
- Mertens, W. (1983). American minimal music (J. Hautekiet, Trans.). London: Kahn & Averill.
- Nancy, J. L. (2007). *Listening* (C. Mandell, Trans.). New York: Fordham University Press.
- Nesbitt, N. (2010). Critique and clinique: from sounding bodies to the musical event. In B. Hulse & N. Nesbitt (Eds.), *Sounding the virtual: Deleuze and musicology* (pp. 159 179).
 Farnham: Ashgate.

- Riddle, S. (2013a). Looking for madness in the method: Rhizo-becoming in educational research.In W. Midgley, K. Trimmer & A. Davies (Eds.), *Metaphors for, in and of EducationResearch* (pp. 131 144). Cambridge: Cambridge Scholars Publishing.
- Riddle, S. (2013b). Youth as rhizome: music, machines, and multiplicities. *Social Alternatives,* 32(2), 45 48.
- Riddle, S. (2014). Musicking as literacy: possibilities and pragmatisms. In G. Barton (Ed.),
 Literacy in the arts: retheorising learning and teaching (pp. 235 249). Switzerland:
 Springer International Publishing.
- St. Pierre, E. A. (2011). Post-qualitative research: the critique and the coming after. In N. K.
 Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (4th ed., pp. 611 625). Thousand Oaks, CA: Sage Publications Inc.
- St. Pierre, E. A. (2013). The posts continue: becoming. *International Journal of Qualitative Studies in Education*, 26(6), 646 - 657. doi: 10.1080/09518398.2013.788754
- Szekely, M. (2003). Becoming-still: Perspectives on musical ontology after Deleuze and Guattari. *Social Semiotics*, *13*(2), 113 128.
- Turetzky, P. (2002). Rhythm: assemblage and event. *Strategies: Journal of Theory, Culture & Politics, 15*(1), 121 138. doi: 10.1080/10402130220127889

Varèse, E. (1966). The liberation of sound. Perspectives of New Music, 5(1), 11 - 19.

Young, M. (2015). *Singing the body electric: the human voice and sound technology*. Farnham, Surrey: Ashgate.