

Ontological Play:
Reinventing (Machinic) Arts-Based Research in the Posthuman Era

By

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of the Requirements for the Degree of

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We acknowledge with respect the Lekwungen peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

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ABSTRACT

In an era characterized by unprecedented ecological and technological change, *Ontological Play: Reinventing (Machinic) Arts-Based Research in the Posthuman Era* attempts to seed creative processes for educators, researchers, and artists to collaborate for the common good of planetary co-existence. Humanism and anthropocentrism have created precarious conditions, and much is at stake. Here I consider the revolutionary potential of aesthetic production, while engaging concepts such as mashup and remix as points of departure. In these times of theory fatigue, this dissertation functions as a wayfinding device with both simple and complex refrains that can be further sampled and repurposed. The aim is to reinvent social practices and to learn to play, ontologically.

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From “Shady Figures and Shifting Grounds for Re/truthing: Channeling McLuhan’s Posthuman,” by S. Stevens. and R. Wainwright, 2019, *Journal of Curriculum Theorizing*, 13(3), 108-121. Shannon Stevens and Richard Wainwright. Reprinted with permission.

WAYFINDING

Several types of materials are included in this dissertation. *Joint publications* are the most formal. *Chapter introductions* display less formality and aim to help establish a joint publication's fit within the whole, while at times also revealing something about the functioning of the collaboration. *Intermezzos* are mini essays folded into the larger work. *Ritornellos* are the least formal and are presented without (much) analysis. They include a selection of sound files, video clips, and images illustrating the type of arts-based research presented in the dissertation. At six points a reader will be offered the opportunity to visit a ritornello at an external site. To summarize a reader is invited to consider the work diagrammatically¹:

The Archival:

1. Joint Publications.

Activations and the Emergent:

2. Chapter Introductions add complexions to the published works.
3. Intermezzos are spaces where concepts are folded-in.
4. Ritornellos (re)activate creative play.

¹ Here I consider Deleuze's suggestion that "the diagram, as the fixed form of a set of relations between forces, never exhausts force, which can enter into other relations and compositions. The diagram stems from the outside but the outside does not merge with any diagram and continues instead to 'draw'" new ones. (2014, p.89). There is a similar conceptual basis for the mobius strip or the Klein Bottle

CHAPTER 1: OPEN, BOOK

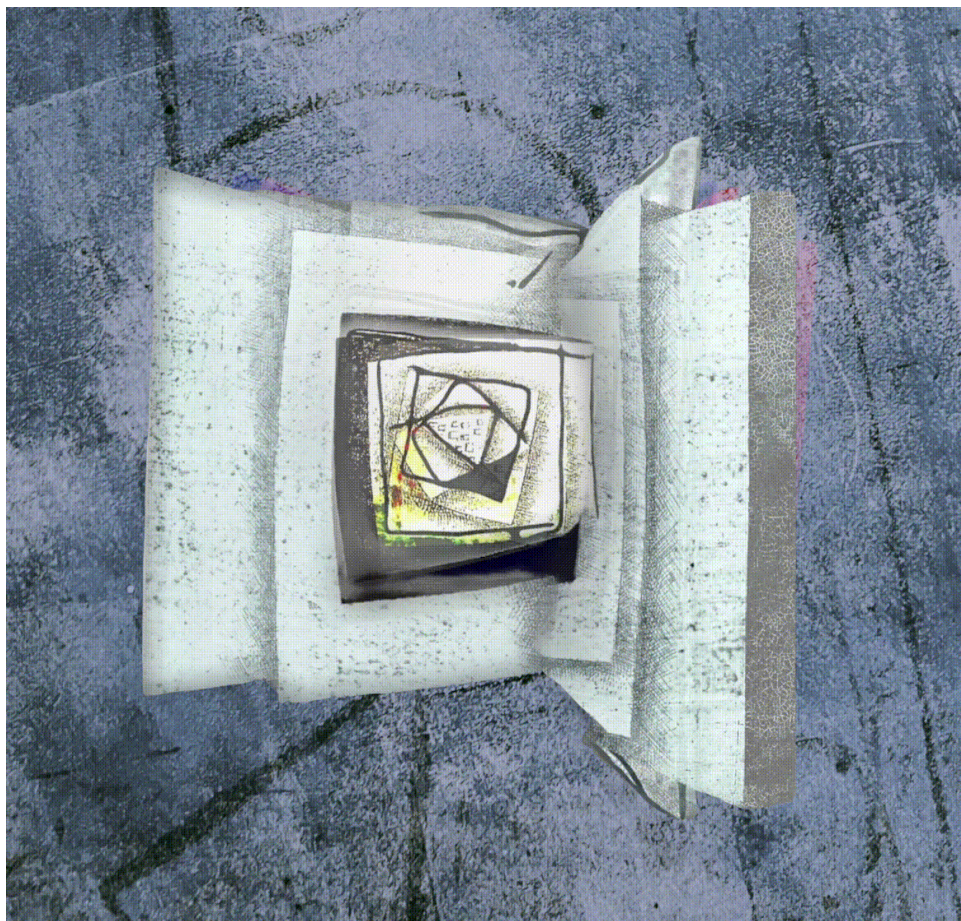


Figure 1. *Codex's Experiment.*

R. Wainwright, 2021. CC BY-NC 4.0

Note: This image was generated using techniques taught at the [Zentrum Paul Klee Museum \(CreaViva\)](#) and inspired by the painting *Open Book*, Paul Klee, (1930). Solomon R. Guggenheim Museum, New York. Used and altered with permission of Zentrum Paul Klee.

1.1 Open, Book

To be an open book implies freely revealing one's vulnerability, and just as Paul Klee's *Open Book* (1930) depicts multiple overlapping planes, so too does this dissertation. The concepts flow inwards and outwards, blurring the line between the interior and exterior, as if resisting the convenience and common-sense appeal of textual beginnings and closures. This is glitchy text.²

Instead of a linear progression through a single document, this dissertation opens to a variety of spaces by reconsidering previously written materials in new ways, thus taking the reader beyond the constraints of a traditional text. This dissertation is not designed as a container; instead, it spills into other documents, video, and writings that are only available beyond its margins. I liken it to *39 Microlectures in Proximity of Performance*, (2002) where Matthew Goulish describes discovering Paul Klee's *Open Book*:

I found a record: Béla Bartók's Concerto for Orchestra, played by the Israel Philharmonic, conducted by Zubin Mehta, in a brown record jacket with a reproduction of a painting by Paul Klee called *The Open Book*. The book, seen from above, unfolded its pages in all directions – left to right, top to bottom, impossible triangulations near the center. It looked like an oversized flower, a brown rectilinear artichoke opening. No, it looked like a miniature model for a city. It doesn't matter what it looked like. (p. 6)

Why bother describing an image when an archive of potentials awaits new adventures?

² In the edited book *Minor Photography: Connecting Deleuze and Guattari to Photography Theory*, O'Sullivan's article "From Stuttering and Stammering to the Diagram: Towards a Minor Art Practice?" (2012, p. 249) explains: "It is these moments of noise – or glitches as we might call them – that free language from itself, at least, from its signifying self, by putting it into contact with other forces. This is an experimentation with, and from within, language. A rupturing of representation. A breaking of the habit of 'making sense', of 'being human'"

Traces: Archive to Anarchive to Dissertation

A reader expecting a conventional dissertation style may initially find this document's macrostructure difficult to follow. In their 2020 study, Anderson et al. describe trends in dissertation composition as being on a continuum, beginning with the traditional style and ending with manuscript styles. A *monograph* dissertation typically contains specific chapters: an introduction, literature review, methodology, results, and conclusions. The *manuscript* macrostructure is a compilation of already published or publishable materials (Anderson et al., 2020, pp. 5–6). This dissertation combines elements of both.

There are five formerly published studies, plus one submitted for and currently under review. Each article has been written jointly by myself and Shannon Stevens over the past five years. The macrostructure that I present is “about seeing what one can do with an extra-textual practice that extends the text” (Deleuze, 2004, p. 260). This means that the intention is to grab a reader's attention, while also activating trajectories away from the dissertation's core text.

Each joint publication focuses on a unique element of the inquiry and is specifically tailored to the journal in which it is published. Since the materials were compiled over a considerable period (2016–2021), there have been shifts in theoretical positions, approaches, terminology, – and some of these differences are discussed throughout the document.

Jointly Heterogeneous

Since joint studies contribute significantly to each of our dissertations, one might assume the elements are presented and discussed in the same way, but that is not the case. Shannon's treatise (Stevens, 2021) is heavily influenced by Marshall McLuhan's thoughts and then related to those of continental philosophers, including Deleuze and Guattari. She elaborates a curricular

process that sharpens perception and boosts understanding in creative ways. Shannon's dissertation, *Collaborating in the Electric Age: [onto]Riffological Experiments in Posthumanizing Education and Theorizing a Machinic Arts-Based Research*³ is described as:

a study about locating opportunities and entry points for introducing consideration of the nonhuman and posthuman to pedagogical perspectives that are traditionally concerned with human *beings* and epistemological subjects. The research, herein, engages *doings* in collaborative effort, during conditions of unprecedented interconnectedness facilitated by the electric age. Steeped in an environment thus created by technologies' immense ubiquity and influence, this collaboration endeavours to recognize their full research participation, alongside that of humans. (p. iii)

It is especially in our approach to McLuhan that our solo works are differently focused. Here, McLuhan's contribution is described as a disjunctive-synthesis, drawing from Deleuze and Guattari's description of the term in *Anti-Oedipus: Capitalism and Schizophrenia* (1972/1983). Heterogeneity and the production of difference, conceptually scratch surfaces only to reset and later start again. This becomes increasingly important as people with diverse and seemingly unrelated backgrounds find common purpose during times of technological change and ecological disaster.

What we describe in our joint and solo essays is an approach to activating the learning and research process by way of bootstrapping, a theme that is described at different points throughout the dissertation. A computer's boot-up process requires both hardware and software, and the two processes are mutually dependent. A computer drive cannot start without an operating system, and a system cannot run without the drive. The problem of concurrent and

³ <http://hdl.handle.net/1828/12665>

reciprocal processes is solved by hardwired code that is soldered to the motherboard and initiates the sequence each time. This functions in similar ways to children on a playground— the act of climbing on a merry-go-round requires one to grasp the apparatus already in motion, ideally with a firm grip. Also, likely familiar is the image of someone running toward a moving train, grabbing its metal rail just in time to board. Bootstrapping is a procedural starting point, but may require tremendous resources, force, and artistry to engage (DeLanda, 2010, p. 27; Stevens & Wainwright, 2016; Stevens & Wainwright, 2019; Wainwright & Stevens, 2020;). *Reach-grip* describes the joining of mechanical processes already in motion, fraught with aleatory risks of all kinds—which is described in the collaborative writing as “plug in and play” (Wainwright & Stevens, 2017). The themes outlined above are key elements of our collaboration, illustrating how we kept a steady, enduring grip on collaborative work while each engaged our communities in very different ways.

In my collaboration with Shannon, we went beyond simply composing text⁴. We also read together, meaning that we often focused on different sections of the same materials, each tangent yielding unpredictable results. We dug throughout the internet, pulling information from academic and non-academic sources, gathering heaps of files, screenshots, and emails. Collaborative reading has always been more than just consuming materials for later reconstruction. The collaboration generated a collective memory, as Shannon accumulated books in bursting closets, and I accumulated terabytes of materials. We collectively engaged our learning experiences and managed shared-memory processes in many ways, some of which are described later.

⁴ The terms *reading* and *documents* refer to texts of all sorts, including multimedia.

Between|Refrains

Shannon and I use different musical terms to distinguish the joint material from the solo-authored work. Shannon describes intermezzos as light entertainment, such as those performed between acts of a play or opera. In the middle of things, the intermezzo is rhizomatic, resting in the centre of activity. I envision her *between-spaces* as openings, places of folding, unfolding, and pleating. I see her intermezzos not as separate places but as those in which the joint writings mix to create new possibilities⁵.

I would characterize this document as a remix, mashup, or recomposition, in which elements are renested, rehoused, evaluated, and complexified. The spirit of the project continues as I revisit the jointly published materials, especially those that have been identified as in-review (Chapters 4 and 5), keeping the Klee-style book as open as possible, deterritorialising space for ritornellos. Ritornello is not limited to its use as a musical term and may also be understood as multisensory, artistically intermodal *unfoldings*.

Ritornellos are instances of all sorts, some of which are soft landings and those of fleeting affect. They may be a musical note, the deep exhalation of a frustrated reader, the recognition of a shared insight, or the sensing of a misplaced comma. A ritornello explains, demonstrates, and illustrates the context of a topic. As I re-read and re-contemplate the published articles, there are also moments of self-critique and self-awareness as I prepare my ‘what’s next’. Because the ritornellos are in a generative state, they are difficult to pin down as finished products.

In the long quote below, from *A Thousand Plateaus*, Deleuze and Guattari (1980/2014) describe ritornello:

⁵ An airport, for example, is both a pause between points (a station) and a hub of relays and switches of human and non-human entities.

I. A child in the dark, gripped with fear, comforts himself by singing under his breath...The song is like a rough sketch of a calming and stabilizing, calm and stable, centre in the heart of chaos.... (p. 311)

II. Now we are at home. But home does not pre-exist: it was necessary to draw a circle around that uncertain and fragile center, to organize a limited space. The forces of chaos are kept outside as much as possible, and the interior space protects the germinal forces of a task to fulfill or a deed to do.... A child hums to summon the strength for the schoolwork she has to hand in. A housewife sings to herself, or listens to the radio, as she marshals the antichaos forces of her work... (p. 311)

III. Finally, one opens the circle a crack, opens it all the way, lets someone in, calls someone, or else goes out oneself, launches forth. ... This time, it is in order to join with the forces of the future, cosmic forces. (p. 311)

Kleinherenbrink (2015) describes territory and ritornello as inseparable, and as “associated with notions such as rhythm, milieu, counterpoint, and force” (p. 208). Revisiting the published materials is not simply a matter of explaining and *displaying* the work but rather a re-engagement – a *ritornellizing*. Returning to Klee’s painting above, this *open dissertation* defies linear sequencing and a fixed place of entry or exit. This means that some of the *ritornellizing* now resides at a slight distance from the examinable document in a type of conceptual maker-space accessible by link a wee distance away from this grounding document.

The Archive and Anarchive

The *Online Oxford English Dictionary* (Lexico, n.d.), defines the word *archive* as both a noun and verb. As a noun it is “a collection of historical documents or records providing

information about a place, institution, or group of people” or a “place where historical documents or records are kept”. As a verb, it is “to place or store (something) in an archive”. The word origin is described as from the “early 17th century (in the sense ‘place where records are kept’): from French archives (plural), from Latin *archiva*, *archia*, from Greek *arkheia* ‘public records’, from *arkhē* ‘government’. The verb dates from the late 19th century.”

The term *anarchive* is related to the Greek term *anarchos*. While the *archival* process seeks to capture and restrain materials to a particular physical or electronic location, the *anarchive* is related to the chaos that springs forward and out of the archive. Siegfried Zielinski (2015) describes the pairing as a relationship between “archives that collect, select, preserve and restore autonomous, constantly reactivated” anarchives that are tailored toward individual needs and methods (p. 122). Anarchives “must necessarily challenge, even provoke the archive, or they are meaningless” (p. 122).

Paul Klee’s Anarchives

Tamara Trodd describes Klee’s 1940 studio in her article “Drawing in the Archive: Paul Klee’s Oil Transfers” (2007). She speaks of three large folders in one corner that contained unframed sheets, each protected by another cover. They held sketches and drawings, and a complex system of archival record-keeping and storage practices ensured that the repository was also accessible as a compositional tool. Trodd, in her study of Klee’s artistic processes, describes his use of oil-transfer paintings in which the final product consists of both oil and watercolour paints. She explains:

Klee would paint a sheet of paper with black oil paint (or lithographic printing ink), and when the paint had almost dried but was still slightly tacky, he would turn the painted

sheet face-down onto a fresh sheet of paper. Next, taking an existing drawing, he would trace around the contours of the original drawing with a metal-tipped etching tool. This stage of the process appears sometimes to have varied: presumably in order to protect an original drawing from becoming too scored and marked by the etching needle, sometimes, it seems, he would make a tracing of an existing drawing, and, laying the tracing over the face-down sheet of black painted paper, would re-inscribe around the contours of the tracing, using the etching tool, or, sometimes, would lay a sheet of tracing paper over the original drawing and trace with the etching needle through both sheets. (Trodd, 2007, p. 80)

Klee's work emerged from these folders⁶, or "from within the archive," as Foucault said of Manet and Flaubert (1977/2007, p. 92). Klee's tracings are not attempts to reproduce the original image but are departure points from the archived work which result in new compositions. Klee's works share elements with musical remix and mashup in the process of transforming artistic representations by recomposing and recombining them into something different⁷. The creative process that he inspires plays an important role in my work. This is discussed more in *Intermezzo I: Signposts and Speed Bumps*.

Instead of linking objects of the archive with objects of production as Zielinski does, Massumi and Manning emphasize processual activities in their description of the concepts. Following are six points that illustrate the relationship between the status of an archive and its anarchic quality. Massumi and Manning's writings are adapted and repurposed in the following passages, adopting their idea that archives should serve as launching points for the anarchival.

⁶ Tamara Trodd (2008) shares a photo of Klee's studio in the already cited article, a copy of which can be viewed at <https://bit.ly/2VhNQcC>

⁷Details of the Museum of Modern Art's exhibit can be viewed at <https://bit.ly/3l20l19>

Repertory of Traces

Manning (2017) explains:

The anarchival is best defined [...] as a repertory of traces of collaborative research-creation events. The traces are not inert but are carriers of potential. They are reactivatable, and their reactivation helps trigger a new event which continues the creative process from which they came, but in a new iteration. (p. 14)

Shannon and I explored the materiality of museums and films and reworked them accordingly. We described the 2016 MashUp Exhibit at the Vancouver Art Gallery, playing with the idea of place and space such that we deterritorialized the official exhibit in favour of that which was unofficially displayed. We applied remix theory to considerations of the museum's physical building, board of directors, unceded dirt upon which it rests, all as a literal part of the exhibit, and we then applied theories about attribution and property rights in considering the relationship between the culture-industry's different functions. If copyright litigators, restaurant owners and banks are written back into the script of the exhibit, how could the exhibit be engaged differently?

Feedforward

It feels disingenuous to simply look backwards to what was accomplished without considering the 'reach forward', thus my premise that the entire archive is a procedural place of launching new lines of flight (Deleuze & Guattari, 1975/1986, 1980/2014). A reader may well feel like they are being ushered towards a starting point that never arrives and an ending that simply extends the introduction. The writing of a dissertation is generally a retrospective process that requires both the presentation of scholarly materials and an explanation of its significance

and meaning. However, much resistance is given to representation, the task is still dependent on a completed and examinable document.

No longer simply limited to artistic references in the prose, the production of art has become a more vital part of academia. In 2015 I was present while AD Carson recorded part of his hip-hop dissertation at the European Graduate School (EGS), which culminated in the release at his defense at Clemson University, of a 34-song album, *Owning My Masters: The Rhetorics Of Rhymes & Revolutions* (2017). AD Carson, now on faculty at Virginia State, bills this as the first peer reviewed rap album. EGS professor DJ Spooky (Paul Miller) remixes climate change with human and nonhuman music, sampling sounds created by melting ice from climate change, capturing the attention of hip hop fans, artists, and National Geographic while exploring continental philosophy and media theory. His claim is that the Anthropocene can be viewed as a massive mashup/remix project.

Lakehead University graduate Holly Tsun-Haggarty (2021) offers a brilliant way forward from the problem of representation and dissertation writing, one that could just as easily be described as riff or ontological play. She envisions her body of work as that which falls into the addenda, almost parenthetical to the playful nature of her very serious research. There is a balding clown with a comb-over named Gilles, and the Stranger is Camus at his best. This is a creative and useful rebellion against the structure of a dissertation, a familiar disruption with intertextual references. What makes Tsun-Haggarty's work a great production is that her dissertation is in fact a preparation for the performance of her defense, a semi-scripted event, with rehearsal, an elaborate virtual stage, scenes, props, and audience participation. While tethered to her dissertation, her work was a springboard away from the PDF (as a repository), much like a DJ who liberates a vinyl album from merely being a storage device to being an

instrument. Anarchical, complete with script, poetry, graphic illustrations and serious theorizing, her dissertation leaps beyond itself in an event that I was delighted to participate in.

Explaining the relationships between the archive and anarchival differently, Manning (2020) suggests that “the anarchival is not documentation of a past activity, rather, it is a feed-forward mechanism for lines of creative process, under continuing variation” (p. 92). In this way an attempt is made to infuse new concepts into the work. In keeping with the examples above, and in particular Holly Tsun-Haggarty’s, a reader will be cued at a few points in this dissertation towards anarchival processes with materials that appear offsite.

Compositional Forces

Manning (2020) explains of the anarchival’s force:

Its supplemental, excessive nature means that it is never contained in any particular archive or documentation element contained in an archive. It is never contained in an object. The anarchival is made of the formative movements going into and coming out of the archive, for which the objects contained in the archive serve as springboards. The anarchival as such is made of formative tendencies; compositional forces seeking a new taking-form; lures for further process. Archives are their waystations. (pp. 92–93)

The anarchival is a compositional force: Its play space is enunciative, and its gaming and toying with all that is in its proximity blurs the distinction between archive and anarchival. For example, the act of amassing a valuable hockey card collection is fully entangled with the act of playing the competitive sport within enclosed ice-layered arenas, which is again inseparable from the way we learn to perceive that frozen space (and by extension, all space) is reserved for humans’ needs and entertainment. It is in these contexts that I consider the potential to reinvent

social practices. Here the broad theme of this dissertation is the way we are collectively brought to experiment with the world and the proscriptive or enabling conditions discovered in how subjectivities are formed.

Activated by Relays

Throughout the research I considered *extensions* and *relays*, primarily in the context of McLuhan and Deleuze, and largely focused on the nature of heterogeneity in the production of that which is considered *new*. A major challenge of engaging collaboration is the management of transversal subjective relationships across heterogeneous roles and functions. How do we collectively work across and between disciplines? What are the platforms for art and philosophy to collaborate? What are the enunciative capacities of our creative work? Manning (2017) explains:

Since it surpasses the archive and is uncontainable in any singular object or set of items, the anarchival is inherently a cross-platform phenomenon. It is activated in the relays: between media, between verbal and material expressions, between digital and off-line archivings, and most of all between all of the diverse archival genres it may take and the live, collaborative interactions that reactivate the anarchival traces, and in turn produce new ones. (p. 14)

Chapters, Articles, Intermezzos, etc.

The dissertation's flow, structure and purpose are discussed in Chapter One and I present the joint publications in the same order as Shannon. Chapter Two, "[Onto]Riffology: Explorations into Collaboration, Assemblage and Learning Events" (2016), lays out the original

research proposal, functioning as an introduction to the research and preliminary literature review. Chapter Three, “Machinic Arts-Based Research: Posthumanizing Approaches to Art Inquiry” (under review, 2021) is the last joint composition. It summarizes the published articles and describes Machinic Arts-Based Research, approximating a literature review and methodology section.

Chapter 5, “A Review of ‘The Anthropocene Project’: Treachery in Images” (2020) describes the pressing ecological and technological features of these particular times as an iteration of the problem facing the planet. Chapter 6, “Shady Figures and Shifting Grounds for Re/truthing: Channeling McLuhan’s Posthuman” (2019) on the surface is about Trump, media, technology and truth, and it is also about the trials and tribulations of powerful monsters, the identities of heroes and villains, and the discourses of zombies. “Posthumanizing McLuhan’s Curriculum: Riffing on City as Classroom” (2020) is concerned with our discovery of a fairly rare McLuhan pedagogical guidebook and the consideration of its potential in the posthuman era. Chapter Eight wraps it all up.

To avoid needless repetition, a more detailed summary of the In-Reviews can be found in the second half of the *Machinic Arts-Based Research* article by clicking the bookmark [here](#). A bookmark at the end of that section will return a reader to this paragraph.

Quandaries and Erasure Risks

The archive upon which this dissertation is built includes the co-authored work that Shannon and I generated across several years. The partnerships also involved a wide range of other professional, academic, and personal engagements, almost all of which had nothing to do with the collaboration with Shannon. In such situations, the instinct is to get more specific and

drill into what each individual does. I believe that creative work is potentiated while in collaboration, and the value is in how collaborativity is honed in a broader set of relations. The way in which a pod of whales maneuvers its feeding areas and habitats probably provides more insight into the workings of the pod than the study of how one or two function alone. The parallel in human healthcare would be a singularized public health and primary care system, instead of simply considering collection of uncontextualized treatment outcomes. What we count determines what matters.

Deleuze, and Deleuze and Guattari, are often used interchangeably, sometimes counting as one, two or three different entities. Guattari was a very public intellectual, his relevance touching on nearly every field of study. He was an activist and did things that would be bewildering to most of us who are conditioned by these more conservative times in the academy.

Guattari's famous experiments at La Borde Clinic involved all residents, regardless of their clinical status or professional responsibilities, working together to disrupt traditional social hierarchies in institutions. By virtue of their power functions, social roles represented oppressive relationships in the broader community. Nurses, doctors, and patients would all wear regular clothing, and it wasn't uncommon for clinical staff to do the dishes or sweep the common area as part of their duties. Historically, the area around La Borde was used by militant radicals and Resistance fighters for rest and recuperation. To be appointed clinic director at La Borde, Guattari had to avoid being drafted into the military conflict in Algeria, and to achieve this he was admitted to the psychiatric hospital long enough to get the medical exemption. Guattari was a patient and clinical director in-waiting at the same time, a bizarre example of transversality, a context that Bifo Berardi would have noted when he stated that his earliest work was inspired by Guattari's *Psychoanalysis and Transversality* (1975/2015), adding yet another layer of

connection to Berardi's Radio Alice, a guerrilla broadcasting station in the late 1970s. Guattari's liberatory and militant roots are too often overlooked by those who follow a traditional focus on Deleuze, and Deleuze and Guattari. When I use the term transversal and transversality, it is in the context of these relational grids that create the conditions for micro-revolutionary change.

Alliances and New Spaces of Liberty

In 2014/15 I attained 'all but dissertation' status on my studies at the European Graduate School in the Media and Communications Division, and since then have been fully engaged, without interruption, with the Arts Health and Society Division as co-advisor providing academic supervision to Masters students. Twenty initiated their programs, eight have fully graduated, four have won academic awards, a few have abandoned or deferred their studies, and the remainder are doing research. These supervisions have been done in collaboration with Roberta Rasmussen-Merz MSW, DVIT.

Throughout my graduate studies I have partnered with Alana Abramson, PhD, faculty at Kwantlen University. With this partnership, she has helped me learn about restorative justice, guide my role within the restorative justice community, and I have helped set up events and conferences. With her assistance, I became part of the inaugural board of directors of the BC Restorative Justice Association, and later, of the Canadian Restorative Justice Consortium. I am also a member of the local Kamloops based Interior Restorative Justice Hub.

My work has been influenced by the media archaeology practices of Siegfried Zielinski, PhD, director of the Flusser Archive and professor at the Berlin University of Arts. It's not because of his theories of Variantology or his densely written, and nearly impossible-to-understand writing, but rather because of his contagious enthusiasm for media archives and their

technologies. Zielinski's AnArchive sparked my interest in Massumi and Manning, and he inspired me to join the Magic Lantern Society and start collecting glass slides. Having read about telescope-to-projector conversions, I converted old 35mm cameras into portable projectors equipped with powerful LED lamps. This type of projector was used by students and several art therapy clients. There are now tens of thousands of slides, vintage photographs, projectors of all types, scanners, and digitizers available for converting 8mm movies. It is in the context of posthuman agency that I consider these archives and machines as machinic collaborators.

Through the hyperlinks in these chapters and articles, I invite readers to explore some of these parallel projects, which are for the most part short texts or photos.

1.2 Intermezzo I: Signposts and Speed Bumps

In *A Thousand Plateaus*, Deleuze and Guattari (1980/2014) explain:

We are writing this book as a rhizome. It is composed of plateaus. We have given it a circular form, but only for laughs. Each morning we would wake up, and each of us would ask himself what plateau he was going to tackle, writing five lines here, ten there. We had hallucinatory experiences, we watched lines leave one plateau and proceed to another like columns of tiny ants. We made circles of convergence. Each plateau can be read starting anywhere and can be related to any other plateau. (p. 22)

It is unlikely that Deleuze or Guattari could have foreseen the current state of technology or the extent to which their work would be adopted. There is possibility for continuous rewriting, extraction, recomposition, and reassembly of the materials because of their richness, as if they were vaults of surplus value awaiting future application. Deleuze and Guattari's proposal that a reader could start *A Thousand Plateaus* (1980/2014) from any point at all inside the book, may have seemed provocative. Today, a reader may well be seen as starting *everywhere* without a single commencing point, such that all media content across all screens, audio, and haptic channels are a single hypertextual co-composition. So seriously taken are these technological co-readings and co-writings that Google has already put a lien on this page's text when they state, "When you upload, submit, store, send or receive content⁸ to or through Google Drive, you give Google a worldwide license to use, host, store, reproduce, modify, create derivative works [and] communicate, publish, publicly perform, publicly display and distribute such content. Make sure you have the necessary rights to grant us this license for any content that you submit to Google"⁹.

⁸ It would, presumably, be difficult to grant a worldwide license to Google in many of these cases.

⁹ Google Terms of Service https://www.google.com/intl/en/toolbar/ie/tos_en.html

I've changed the cover page of this dissertation to elect a Creative Commons license, but that doesn't matter.

More Signposts and Speed Bumps

Paul Klee's artwork appears in each chapter of the dissertation, starting with the Open Book. As described in Chapter One, Matthew Goulish tells the reader about discovering the Klee painting on the album cover of Bartok's Concerto conducted by Zubin Mehta. As Goulish points out, "it doesn't matter what it looked like" he is, I believe, encouraging the reader not to fixate on the image, but rather the flight made possible in its discovery (p. 6).

During my investigation, I was particularly interested in Tamara Trodd's description of Klee's drawings, specifically her discussion of the sketches that Klee archived and an archived in the production of new works. I used Klee conceptually. The texture of the paper, size and weight of the brayers, and the manipulation of ink's thickness were central to the compositions, and were literal experiments to examine remix and mashup, matters of heterogeneity, mimesis, and duplication. I used line vectors as a riff on mechanical tracing and sampled small bits of colour and image data to use with paint brushes, much like musicians do with loops and music samples. Additionally, I conducted a detailed experiment on 'contingent production,' which falls outside the scope of the dissertation, but is inextricably linked to the topic of *production of the new*. It is centered around envelopes, packets of sensation, and transversality. The curricular potentials seem promising.

Bertelsen and Murphie (2010) explain;

Refrains may sometimes be drawn from the discursive, but they break up the logic of discursive frameworks, at first in an imperceptible fragmenting of frameworks via

affective intensity. This affective intensity is “capable of overthrowing” [Guattari 1995a, p. 19] the entire order of discourse in favor of transformation and the new modes of living ... (p. 139)

As chapter headings, the artwork does not serve merely as a collection of anchors, but rather as a means by which the text accommodates digressions, creative wormholes, and glitches.

1.3 Ritornello I: Check Your Papers

As a first ritornello, I sequenced the published articles chronologically and reflected on academia's disciplinary interrogations and the way defenses are waged. In preparing the ritornello, I considered recent Ph.D. graduate Tsun Haggarty's (2021) rehearsals for her theatrical doctoral defense, curious about how I would present my arguments. [Click here](#).

1.4 Ritornello II. Concept Makerspace with Paul Klee

It is a thought exercise to consider Bach's Fugue in E Minor as a conceptual opening for this ritornello. There is no progress in the musical line since it only contains one note, perhaps like the one shown in the header for Chapter 7 and in the Ritornello [Figure 7](#). What is it that a note is capable of? In the ritornello, I mention traces, yet the traces are not mere outlines, they are fragments from previous work, or like tracer missiles ready to launch. A single note from Bach's Fugue in E Minor can be played and mixed, yet it is also a work-bench. I used Klee as a point of departure in my concept building, and in this ritornello, I share some of the creative process. As with the other ritornellos, there is very little analysis. [Click here](#).

1.5 Addendum. Metaphysics

Because the joint publications and dissertation were composed at different times, concepts and positions evolved and shifted. The metaphysics of the first publication in 2016 is certainly different from that of the final compositions in 2020/21. At the suggestion of a committee member, I addressed these concerns, clarifying the movement across positions, specifically Deleuzian, new materialism and speculative realisms. The addendum may be viewed by following at the bookmark [here](#) and is best read in tandem with [Chapter Three](#).

"Machinic Arts-Based Research: Posthumanizing Approaches to Art Inquiry" (Wainwright & Stevens, 2020), which also helps the reader identify the theoretical directions of the broader work.

CHAPTER 2: EXPLORATIONS INTO COLLABORATIONS

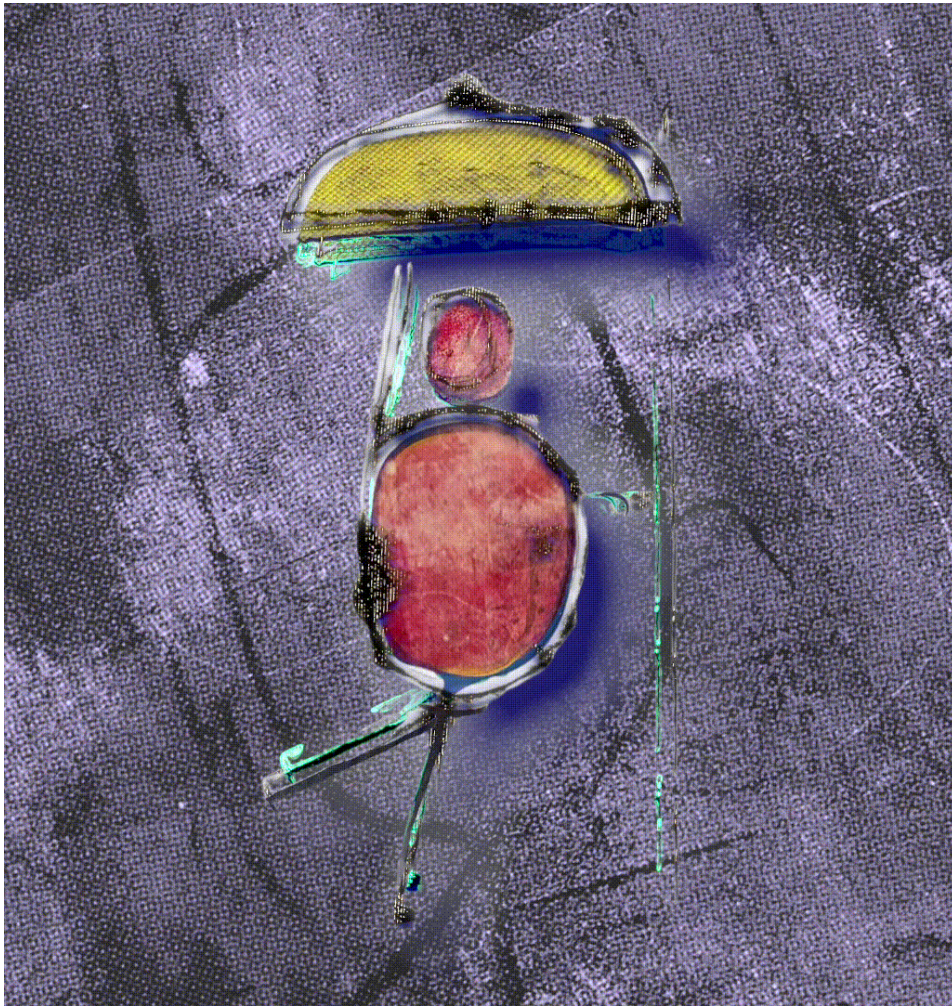


Figure 2. *Dominee*.

R. Wainwright, 2021 CC BY-NC 4.0

Note. This image was generated using techniques taught at the Zentrum Paul Klee Museum, building on a line drawing by Paul Klee, *With Umbrella*, (1939). Used and altered with permission of Zentrum Paul Klee.

2.1 Introduction: Explorations into Collaborations

We circulated rough drafts of our research proposal to a variety of scholars and tried to incorporate feedback into our final draft. Our effort was rewarded with an invitation to transform our proposal into a publishable chapter. This feedback helped lay the foundation for the entire doctoral process.

Wolfgang Schirmacher, then the Dean of the European Graduate School (EGS), served as general editor for Atropos Press' Think Media Series. Giorgio Agamben, Alain Badiou, Judith Butler, Avital Ronell, and Slavoj Zizek were among the editorial board members. My contributions were made largely based on my learning at EGS in 2014/2015.

By the time “[onto]Riffology: Explorations into Collaboration, Assemblage, and Learning Events” (2016) was published, Riff as a concept existed in a state of tension somewhere between being a pedagogical tool to distill meaning, and a research methodology. In both cases it was intended to be infused with the edginess of sampling, remix, mash-up and appropriation, all themes that endured throughout the entire research process.

2.2 [onto]Riffology: Explorations into Collaboration, Assemblage and Learning Events

From “[onto]Riffology: Explorations into Collaboration, Assemblage and Learning Events,” by S. Stevens and R. Wainwright, in M. Bernico and M. Kölke (Eds.), *Ontic Flows: From Digital Humanities to Posthumanities*, (pp.163-183), 2016, Atropos.

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What term may be applied to an intuitively formed academic discourse of many years’ length that has been entirely conducted by way of various technologies and functions such as phone, text, email? We call it riff—interactive and freeform. And if we approach it scientifically, we practice Riffology. As we seek to reference our interest in educational ontologies, we prefix it with [onto], which we enclose in brackets to suggest a compound word that’s primacy of focus is placed on the active (action) constituent of “riff” and “riffing.” [onto]Riffology. We have been archiving emails and texts passed between us in an approach to learning that is largely thus: technology facilitated encounters gratifying our embodied curiosities and *becoming curricula* without syllabi. Incrementally, we have witnessed our inquiries broaden, understandings multiply, and relationships in assemblage intensify. As educators, students, and researchers we believe that there are evolving ways of learning in relationships whereby we simultaneously plug-in technological platforms and facilitate education’s capabilities and capacities.

Contexts and Historicities

In 2009, a university acquaintance became a correspondent. Without any physical proximity whatsoever, we two (Richard and Shannon) were first motivated, and eventually

compelled, to continue learning in each other's midst. Clips of video (self-produced, sourced online), photography, music, song lyrics, online encyclopedic entries, and varied text were spliced through “cut and paste” functions to visually reinforce ideas, reference thought and entertain in call(s) and response(s) across technological media.

In 2013, we brought our collaborative approaches to a doctoral program at University of Victoria’s Faculty of Education, where we pursue academic interests in criminology, incarceration, institutions, prison visits, prison education, and the carnivalesque. Our inquiries became subsumed, however, by deepening interest in the *process* of our engagement; what it’s ever been about, and by what sorcery it could be maximized in its learning engagement. We neither sought to bring together a structuralist account of knowledge, nor to formulate a truth in any unifying theory. Exciting approaches to attribution, technology, arts, mash-up and performance made Remix Theory an attractive area of reading. Richard’s subsequent studies at The European Graduate School in 2014 brought to us concepts from continental philosophy, while University of Victoria faculty pointed us towards qualitative methodologies that might approximate our riffologic interests.

One such methodology was duoethnography, whereby two or more researchers juxtapose their life histories in order to provide multiple understandings of a social phenomenon. Duoethnography possesses qualities similar to those of our riffing; it widely sources emergent themes and the construction of meaning (Sawyer & Norris, 2013), while positioning participants not as *topics* of the work, but rather as sites of sociocultural inquiry (Sawyer and Liggett, 2012). Duoethnography features dialogue not only between research participants, but likewise between participants and artifacts of cultural media such as photographs, music, and excerpted duoethnographic text.

We, ourselves, engaged a duoethnography during the summer of 2014 and wrote a class assignment that we titled, “Because we play: Riffing on rhizomes, attribution and voice in duoethnographic assemblage.”^[1] We incorporated archival texts and media artifacts not just to be consumed and reflected upon, but as art supplies and fragments to be assembled, disassembled, used outside of context and within. Reading the work back and forth over the telephone, writing (a)synchronously on a Google document; in our conversation, we experienced a further stabilization of our social entity’s identity through exchange’s repetition (Goffman, 1981). Its performance was creatively satisfying as we effectively pressed a “record” button on a certain day of our ongoing interactions and “paused” the collaborative experience on the date of submission, exiting the exercise in quoting the DeleuzoGuattarian prerogative—nay, *incantation*—to continue all inquiries in stammering “and... and... and” (Deleuze & Guattari, 1986/2014, p. 25).

We made glancing reference to philosophers Gilles Deleuze and Felix Guattari because they had been first brought to our attention that same summer. Their thought was entirely complex, their words confounding, yet we were attracted to their writing’s sense of rhythm, movement and speed. We recognized that in our own collaborative explorations, we meander, misunderstand, get lost, misdirected, redirected, and (re)understood, while accessing multiple entry and exit points. We enjoyed metaphors that evoked how lines of query lead us to next thoughts and new indulgences, that music speeds up, and individual notes form lines (Deleuze & Guattari, 1986/2014, p. 8). We found resonance (as we had with remix studies) with DeleuzoGuattarian concepts of repetition, movement, and vibrations across planes, in multiplicities, rhizomes, assemblages, open systems, interactions, intensities, and lines of flight.

Events sprouting, pleating, interacting, refolding, unfolding, enfolding, territorializing, re-territorializing, subterraneously mapping, and nomadically roaming.

We were encouraged to hear Deleuze (1977/2007, with Parnet) assert that philosophy is to be enjoyed by those who appreciate it, without necessarily being a philosopher, just as music and art are generally appreciated by non-practitioners (Deleuze & Parnet, 1977/2007). We are not philosophers, yet we could tentatively approach concepts with less fear of intimidation or presumption for only wanting to let the ideas wash over us, hoping that they could eventually find purchase.

What were we to make of these burgeoning interests? Might our emerging attraction (albeit, unconscious) to philosophy that espouses rhizomes and assemblage be a response to technology's shaping of human experience during conditions of posthumanism, specifically those of *methodological* posthumanism; a philosophy of technology termed such for its provision of "conceptual tools" to facilitate study of technology vis a vis society? (Sharon, 2014)^[2]

Perhaps in personal circumstances of post-incarceration, there was also attraction towards conceptions of new materialist ontologies that recognize human beings' relatively limited scope of influence in a world well outside of human authority, language, and characterization; the existence of a world "independent of our minds" (DeLanda in Van der Tuin & Dolphijn, 2012, p. 39). We find ourselves increasingly influenced by concepts that stretch far beyond the temporality of our physical conditions and circumstances.

New materialism generally seeks to avoid distinctions between inert and alive, instead increasingly "discern[ing] emergent, generative powers (or agentic capacities) even within inorganic matter" (Coole & Frost, 2010, p. 9). Such discernment is recognized when political theorist Jane Bennett (2001) ascribes "agency to inorganic phenomena such as the electricity

grid, food, and trash, all of which enjoy a certain efficacy that defies human will” (p. 167). If we recognize a methodological posthumanist lens directed at our inquiries, we are intrigued by the materiality of technology from (with, through) which our engagement takes place, by which software programs are used on a desktop computer, which operating system is being used on a cell phone, and in examining why talking about the same thing can take so many different forms and directions when we recognize agency in technology-machines.

Bennett’s (2001) conceptions of “enchanted materialism” and “vibrant materialities” feature on a landscape of various incarnations of this cultural theory. Barad (2007) suggests new materialism as “a diffractive methodology” that mines insights, reads for differences and bears an ethics based on entanglement expressed in a framework of “ethico-onto-epistemology” (p. 185). Diffractive reading across various new materialist scholars reveals contrasting approaches to such relationships, and to the nature of the agency that the physical world holds. Barad (2012) posits agency as an “enactment... reconfiguring entanglements” and supporting a “relational ontology” that eschews notions of agency that endlessly mire one in humanist concerns (p. 54). Better understanding nonhuman agency in theories of new materialism will inform what a posthuman account of pedagogy might entail.

Riff as Learning Event?

DeleuzoGuattarian imperatives include those of concept creation whereby machinic propulsion replaces inert structure, and the act of production replaces the reproduction; its metaphysics replacing that of representation (De Beistegui, 2013). Representational thought is regarded merely as categorical, even judgmental (MacLure, 2013). In rejecting “icons or images:

the only reality is that of simulacra, that is, phenomena generated through *difference* [emphasis added]” (De Beistegui, 2013, p. 74).

In Deleuzian parlance, “event” is predicate expressing a verb (Deleuze, 1990). An event of whatever duration, even one that is instantaneous, indicates ‘something going on’ regardless of appearances to the contrary. Daignault (in Hwu, 2004) posits curriculum as an event, “which subsists in subject or inheres in language” (p. 195). What can riff as an event, “explosion of the unexpected” (Dosse, 2010, p. 136) provide for collaborative learning? We suggest that riff is a *learning* event, and are interested to understand how Deleuze’s conception of event^[3] may be applied to individual acts of learning, pursuing inquiry into such pedagogical potentialities.

Our earliest academic collaborations envisioned our riffing as external to traditionally conceived educational processes (which, after all, happen in the classroom or in written assignments that are composed to be handed off for external critique). We began to realize that what we once thought was ancillary to such academic work, was in fact “the work” itself. This recognition emerged despite adherence to stylistic and referencing conventions that may be less than orthodox. We “cut and paste” indiscriminately and make prodigious reference to popular culture (of which we are enthusiasts). We consider quotes and song lyrics ripe for hacking, pasting and reconstitution, sometimes pushing up against canonical materials while at other times pushing towards them. We sample theory, seek affect in discovery, imbibe concept’s rationale and engage play beyond discourse. Individual and collaborative skills assume fluidity when each of us indulges an exploration of processing and sharing information with one another; a practice that is then repeated thousands of times as part of a fundamentally pedagogical engagement.

As the “man-horse-bow” assemblage of nomadic warfare is irreducible in composition, the relationships in our assemblage between human participants, technology and platforms empower intrinsic capacities amongst assemblage members in their combination that if even partially dispersed would significantly reduce the entity’s efficacy (Deleuze & Guattari, 2014).

Given the potential intersectionalities between technology, remix, DeleuzoGuattarian philosophical conceptualizations such as assemblage, new materialism and information transmission through [onto]Riffologic exchange, we investigate how *learning events* may be facilitated and actualized as pedagogic practice by integrating these various theories and methodologies toward curricular pursuits.

Curriculum Theory and Performing Events

Into the existing wave angles the surfer, windsurfer, paraglider; each wave’s event is in turn exited with as little impact as it was entered (Deleuze, 1995). This becomes inspirationally conceptual to our engagement with learning, and the learning event. “Get[ting] into something” becomes the prerogative of riff (getting out, as well), whilst making fleet passage during its *within* is the nature of the encounter.

In curricular domains, events span Royal, minor geopedagogic and nomadic spaces; from state mandated curricula to unschooling movements. In our collaborativity, we seek increasingly experimental, new-materialist understandings that indulge educational ontological explorations expanded by our heightened recognition of the basic, elemental material of which all things are made, thus helping release us from anthropocentrism. Curricular imperatives and the concepts expressing them, are not to be merely burnished and endlessly reflected on, but rather pressed into *production*; “Curriculum does not exist, it happens” (Daignault in Hwu, 2004, p. 183).

The concept of virtual difference recognizes that in any given circumstance, reality emerges from an always vast number of tendencies that never will be actualized. Western thought privileges “a politics of the actual over the potential and does this by stressing human life as already expressed and constituted” (Colebrook, 2002, p. xxx). In contemplating unfulfilled potentialities (*the virtual*) however, a plethora of opportunities to shape the future are better recognized: “If we look at all the bizarre, aberrant and different expressions of human life we begin to intuit the virtual powers that are capable of transforming life beyond what it actually is to what it might become” (Colebrook, 2002, p. xxx). Life grows richer for the exercise.

Deleuze (1994) suggests that we learn through means other than contemplation; that is, by *acting*, Daignault (2011) finds deep significance in this suggestion and proposes that learning takes place when an “accident” is transformed into an event, gleaned from Deleuze that we “don’t learn what we want, we end up wanting what we learned. There is a very Nietzschean twist here” (in Masny, p. 535).

An event possesses an inherently performative nature. It is “not the object as denoted, but the object as expressed or expressible, never present but always already in the past and yet to come” (Deleuze, 1990, p. 136). To Daignault, the nature of the event is wrapped up in Deleuze’s conception of the virtual’s actualization (as resolution of a problem), the expressible and expressed. Daignault does not intend to contradict Deleuze (who seemingly rejects an event’s *present tense*) by suggesting the importance of *expressing* the expressible (the virtual) before it is expressed, and rues that pedagogy has become increasingly overrun by “the nation state (*société de contrôle*)” in which universities are marketed to students recruited as “clients” (Daignault, 2011). As such, students vociferously demand results and may deem any diversion from the syllabus by the professor as being “off task.” He laments that instructors navigating these

circumstances increasingly trade in entirely predetermined curricular themes and expressed realities, rather than in the potentiality of the expressible or by engaging the pedagogically rich force of *expressing*. Of instruction, Daignault explains to Masny (2011):

I don't think Deleuze ever considered something like virtual pedagogy. I will try to explain via an example as I think that's part of the process of the virtual. When I teach, I have a syllabus. I have goals to reach. I have content to get across, things like that. Fine. If I just mechanically do that, regardless of how great I think I am doing that, I think I would simply be passing along expressed realities to the students and not getting them to shake up the expressed themselves. Yet most teachers I know are not at all mechanical. We all have different digressions, parentheses. We always go aside. We open a parenthesis. We think of something. We make connections. We have divergences and a kind of lateral thinking while teaching. This is the virtual at work. All those digressions are opportunities to create an event. The event is a very big concept in the work of Deleuze. I think the event and the virtual are very strongly connected. The connection is political. Virtual pedagogy would mean transforming all imposed curricula into events. To do this you have to conceive of the imposed curriculum as a kind of accident that is happening to you. Actually everything that happens to us could be seen as an accident. [...] Accidents happen all the time, but an accident is not an event. The event is what the accident makes me think about. (p. 530)

What then does it precisely take to guide the passage from an accident to evolve or become an event and what role an educator takes on in this process requires further investigation. Is it possible to guide the passage from accident to event *or* is this passage itself accidental with the consequence of educators as obsolescent? Staying on task, following the curriculum and

memorizing information that may be tested on the final exam have been overly valued parts of educational policy and evaluation. Daignault (2011) asserts that in such oppressive teaching environments, richer content is often pursued in the “parentheses,” the margins, and that sometimes we can only get to the event by what seems to be an accident. This doesn’t mean that we only sequence events via accidents, but rather that sometimes the learning environment is so regimented (by syllabus, disciplinary requirements and standardization) that the only way to get to the event is by accident.

As we feel an event, affect is the engendered response (Colebrook, 2002, p. xix). Both affect and percept are extracted from art (Deleuze and Guattari, 1994). We paint, sculpt, compose, and write (with) sensations (Deleuze & Guattari, 1994, p. 166). Percepts are described by Deleuze (1995) as “packets of sensations and relations that live on independently of whoever experiences them” (p. 137). As a distinction is made between philosophically wrought concepts and “general or abstract ideas” (Deleuze & Guattari, 1994, p. 24), we are motivated to explore how pedagogically recognizing distinctions between percepts and perceptions, affects and affections (that is, *feelings*) is apposite, and may enhance educational engagement.^[4]

Riff embraces potentials through functions of cut, paste, alter, assemble, rewrite, hack etc. More broadly, and perhaps more importantly, riff proposes skipping the imposition of class(es), de-disciplining subjects, and re-gripping the materiality of education. These practices already exist to some degree; we suggest wider adoption. We envision riff as bootstrapping ontologies in a manner akin to DeLanda's philosophical application of the bootstrap, a computer term describing how a small amount of computer software is wired into its hardware to ease the "boot" function and break the circularity existing in the interdependence between the two. In DeLanda's (2009) conceptualization, a minimal amount of foundational knowledge may

bootstrap further interests and inquiries by galvanizing the process; riff facilitates the momentum, sharing, and conditions for such. More importantly however remains the exploration of how experiences of concepts, affects and percepts by students might intensify their learning as we attempt to problematize the assumptions of humanism in education and educational research?

Events spur further curiosities, and concepts fold into the becomings of inquiries that are collaboratively engaged. The concept is a way “of approaching the world... [and] creating a world through the active extension of thinking the possible” (Wallin, 2010, p. 1). These acts of creation suggest necessary collisions of creative force igniting passions for learning. Wallin (2010) recognizes a requisite proximity of concepts to problematics, providing tensions and imperatives to shift, control, function, and without which the concept is rendered meaningless. The challenge is to engage the philosophical speculative to “create new concepts for the problems the [artists and philosophers] pose [...] (Deleuze & Guattari, 1968/1994, p. 28).

Building on the work of Pinar and Grumet (1976), Wallin (2010) understands established conceptualizations of *currere* in a Deleuzian, alternative sense of singularity and “individuation... the setting apart of pedagogy from pedagogy in general” (p. ix). The trajectory becomes that of flinging *centrifugally* off the circumscribed curriculum track evoked by the “cursus” (of Grecian chariot driving), if only fleetingly released from the “structuralist legacy and reactive tendencies of pedagogical thought” (Wallin, 2010, p. 1)^[5]. For Wallin (2010), an “active conceptualization” of *currere* engages arts-based research “in its most radical, nonrepresentational form” (p. 1).

Difference is a creative force that acts as catalyst to the creation of concept in the “educational encounter” (Wallin, 2010, p. 8). In engaging [onto]Riffology we consider Deleuzian conceptualizations of *repetition* (in contrast to “re-representation”) and *difference*, which returns

“and returns always, and always differently” (De Beistegui, 2012, p. 75) as an object of affirmation.

[onto]Riffology reaches towards remix studies, which assert that all progress and discovery are built on the creative achievements of others, nothing is ever really new. *Copy, combine, transform*. Collaborativity—artistic, academic and otherwise—harnesses much popular culture (in which we are each immersed) to effect pleasurable disruptions, production and dissemination. Riff is arts-informed in that language and communication are broadly understood to include words, art, dance, and film, all as part of cognitive and embodied exploration. Drenched in remix ethos, practice and its effects, this cultural age induces a democratization of media production mobilizing participation (Borschke, 2015, p. 107).

Methodologies, Remix and Riff

Remix becomes a “convenient metaphor for a mode of production assumed to be specific to our post-postmodern era and media technologies” (Irvine, 2015, p. 15). Where once existed distinctions between musician, producer, DJ, and audience, we suggest that as roles merge and melt, ruptures also make themselves apparent. Likewise, does the fundamental anti-essentialism inherent in remix practices, and the contingency of the relationships held in assemblage (Stefan Sonvilla-Weiss, 2015).

Riff, like remix, draws on intuitive events, and spontaneous engagements with music and ideas. Similarly, [onto]Riffology injects heightened impulse, and relational impetus not to merely talk *at* people, but rather to *engage* ideas and invite exchanges located in the event. [onto]Riffology is inherently expansive, sampling popular culture in intellectually promiscuous ways.

Academia has remained particularly obtuse to remix culture's re/combinatorial potentials of sampling, and any relaxation of creativity's careful attribution. Johnson-Eilola and Selber posit that academic contexts have not hitherto reflected the wider remix culture which we societally inhabit, while "other contexts, both disciplinary and popular, have developed interesting and useful remix approaches that can aid invention, leverage intellectual and physical resources, and dramatize the social dimensions of composing in this day and age" (Johnson-Eilola & Selber, 2007, p. 375).

"Remix" suggests the activity of copy and transform, while conveying the repurposing of elements, and near ancient practices of "recycling old culture to make new," while not working alone but in joint production." Resulting challenges of attribution are addressed by Mark Amerika (2015) when he writes that:

there are certainly not near enough conventional grounding devices that a proper academic paper would give you, some might even claim a certain lack of professionalism given the tendency to sample bits of data from contemporary new media theory without properly citing the supposed original source of the information, as if there could ever be an original source for the sampled data. (p. 3)

In the recording industry, the striating effects of the Digital Millennium Copyright Act (DMCA) of the late 1980's, imposed radical adherence to copyright rules. Music created just a few years prior, which prodigiously samples various sources, would never have come to be. A legal challenge to a work's legitimacy can purge this creative material from the public record by simply sorting an algorithm enforced by Google and YouTube. Notes become lines, lines become music and musical notes are further sped by video creators seeking to evade detection

of a song's incorporation from record companies broadly searching content in order to stem music's unlicensed use. Alternatively, Fair Use provision may be invoked to protect the videos themselves, or to protect the video creator from prosecution (Aufderheide, 2015).

In remix, a musical riff may be sampled (lifted from an existing work) and repeated throughout a piece. Conceptually an act of becoming, the refrain (ritornello, as "little return") is similarly deterritorializing and territorializing (Parr, 2010, p. 70). A refrain territorializes when birdsong declares protection of the nest, a child's humming evokes home, a blaring television or radio announces "household within" (Deleuze & Guattari, 2014, p. 311). [onto]Riffs incrementally territorialize intellectual space, but like refrains also deterritorialize by making declarations of immanent change during preparations to leave established territories to create new ones (Drohan, 2009).

Further, the refrain provides "a contradictory dynamic to territoriality. It stretches toward a return to known territory to inhabit it and expel chaos" (Dosse, 2010, p. 253). More than marking boundaries and turfs, the refrain is recognized as expressive—sonically, mechanically or visually (Drohan, 2009). Such expression is motion, and the refrain "becomes concentrated by elimination in a very short moment, as though moving from the extremes to a centre, or, on the contrary, to develop by additions, moving from a centre to the extremes, and also to travel these routes in both directions" (Deleuze & Guattari, 2014, p. 349)

Methodological Consideration: Theoretical Framework or Practice?

The concepts we discover in theoretical, philosophical and academic reading, and our riffological engagement shape the questions we ask. We are mindful, however, that inquiries are delimited by assumptions about which "kinds of familiar, unchallenged, unconsidered modes of

thought the practices we accept rest” (St. Pierre, 2014, p. 4). For scholars steeped in qualitative research methods—perhaps not *so* generously referred to by St. Pierre (2014) as “conventional humanist qualitative methodology,” “1980s qualitative methodology,” and ‘the posts’—some basic assumptions first involve *where* inquiries are engaged: in and out of “the ruins” of methodologies termed “posts” (p. 4).

The experimental nature of DeleuzoGuattarian philosophy and its concepts inspire emergent capacities capable of blowing *completely* apart constraining frameworks determining our understanding of all matter that surrounds us.

Reading and listening to these matters persuade us to commit to thinking past conversational tones and toward the Deleuzoguattarian conceptual; understanding that our assemblage is indispensable and irreplaceable during our shared experience of the world at this time and since our first meeting. Somehow words explicating *assemblage*, particularly those by DeLanda (2006) explaining his conceptualization, have deeply affected us and provide clarity. What is [onto]Riffology doing? What isn’t it doing?

The territorialization that takes place in face-to-face interactions—through “behavioural processes defining its boundaries in space and time”—differs only somewhat from that which occurs in computer facilitated exchanges conducted between participants whose geographic distance results in a “blurring of spatial boundaries” (DeLanda, 2013, pp. 54-55). Once ratified, the proceedings feature relational traits that benefit from affecting *ritual equilibrium* between participants (Goffman, 1981). Any destabilization of the exchange has a deleterious, deterritorializing effect on the assemblage, and grounds must be regained to reclaim the structure’s integrity; content, expression *and* articulation. Even when conducted asynchronously, riff is similarly bound by the etiquette and protocols of relational dynamics.

Copy, Combine, Transformativity

Assemblage creates territories, occupying them and conducting multifaceted, complex doings; enjoying what each integral participant and component “can do.” Emergent potentials found in (re)combination of constituent parts into assemblages bearing relations of exteriority, create wholes far greater than the sums of parts.

Waves and wind gusts suggest how events of learning may be experienced in brief, almost instantaneous time periods where all the senses are harnessed and capabilities galvanized to optimize any educational opportunity the given circumstance provides, during its duration. Movement is described by Deleuze (1994) as implying “a plurality of centres, a superposition of perspectives, a tangle of points of view” (p. 56). New materialism indicates methodology that eschews dualisms (Dolphijn & van der Tuin, 2012). In its ability to sweep across historically defined academic disciplines, new materialism is claimed to be “rewriting academia as a whole, which includes the disciplinary boundaries that organize it today” (Dolphijn and van der Tuin, 2012, p. 40).

Deleuze and Guattari (2014), themselves sourcing widely, explain of their jointly written *A Thousand Plateaus*, “here we have made use of everything that came within range, what was closest as well as farthest away” (p. 3). Our own dynamic is an ideal happenstance found in expressive assemblage that eases space between its components (participants, technology, topics, available media, ideas) during acts of creation and agency. [onto]Riffology’s tangential nature inspires its raison d’être: explorations of concepts, ideas and learning as events.

^[1] This 2014 university assignment is unpublished.

^[2] In Sharon's *Cartography of the Posthuman*, methodological posthumanism comes in two varieties: the historical-materialist axis and philosophical-object axis. Each of these axes have their own trajectories of thinkers associated with them. The historical materialist axis involves STS scholars such as Bruno Latour and Michel Callon, whereas the philosophical-object axis includes critical theorists; most important among them, Deleuze and Guattari. This project, while finding some middle ground with new materialism, tends to lean towards the trajectory of theorists situated along the philosophical-object axis.

^[3] Gilles Deleuze, *The Fold*. 80. "A concert is being performed tonight. It is the event. Vibrations of sound disperse, periodic movements go through space with their harmonies or submultiples... 'First the solitary piano grieved, like a bird abandoned by its mate; the violin heard its wail and responded to it like a neighboring tree. It was like the beginning of the world...'"

^[4] As with jazz, riff isn't simply accidental in its learning and performance. Humans and machines perform their collaboration in improvisation. Strings are tuned, stages are set. Jazz does riff, performs riff and jazz *riffs*. Non-human objects do music, and this music can be remixed. Sounds are lifted, played with, assembled, reassembled. There is a discipline of sorts in performance, yet its goal isn't representation.

^[5] While we do not address the structuralist legacy and reactivity of pedagogical thought here, we situate ourselves in an evolving critique within the field of educational research. The legacies we consider are those of institutions, curricula, subjects, academic and disciplines. What are the materials of learning material and how may they be remixed? What do we do with the emancipatory strategies that are embedded in education theory and history? How do we academically collaborate with people and stuff? How do we deal with attribution and intellectual property? How do we conceptualize and perform education in and around the hegemony of the familiar 'tracks' (academic and otherwise)? How do we hack in, sometimes uninvited to Riff for a while?

CHAPTER 3: MACHINIC ARTS-BASED RESEARCH



Figure 3. *Training Time.*

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3.1 Introduction to Machinic Arts-Based Research

“Machinic Arts-Based Research: Posthumanizing Approaches to Art Inquiry” (2021) concludes the series of documents generated with Shannon. The first section of the article is a rough conceptual mapping of Machinic Arts-Based Research (MABR), and the second is an overview of the published materials from the past. It was surprising to me that the conceptual mapping of MABR’s does not once mention McLuhan. As Shannon notes in her introduction, the article is informed by curriculum theorists, Jan Jagodzinski (Jagodzinski & Wallin, 2013; 2017; 2018) and Jason Wallin (2011, 2013, 2014, 2015; Jagodzinski & Wallin, 2013). I would add that MABR is first and foremost an affirmation of and commitment to aesthetic production as a means by which to disrupt humanism and anthropocentrism. In reviewing our past experiments with Riff and laying out a trajectory for MABR, it seemed as if we were moving from one beta strategy to another, the second with a broader collective and political mission.

3.2 Machinic Arts-Based Research: Posthumanizing Approaches to Art Inquiry

(Under review: *International Journal of Qualitative Studies in Education*)

Theoretical dalliances characterize an academic study that we have engaged as doctoral students disrupting humanism to philosophically conceptualize a posthuman critical pedagogy. We are interested in doing research more broadly than merely describing or adoring a human perspective and enfolding arts-based research—a traditionally humanist, qualitative, research methodology—within a profusion of postqualitative, nonhuman, and posthuman theories that shift learning towards an incorporation of ontological with epistemic approaches. We are interested in that which exists near the fringes of continental philosophy and dabbling in the experimentality characteristic of remix and sampling. Favouring the processual over procedural, we are without deep loyalties nor strong adhesions to methodologies nor their proponents. We have theorized the mode of our engagements, influenced by what surrounds us academically while eschewing the prescribed research methods and playing across disciplines.

As ontological shifts are taking place, we explore how decentering the human influences our learning and explore the nature of learning's engagements as riffologic. We mobilize *riff* as free form, spontaneous, post qualitative inquiry that samples poststructural philosophical concepts, speculative realism, new materialism, and the kinds of experimental recombinationality found in remix (Wainwright & Stevens, 2017). As interventions in music production, sampling and remix indulge the same promiscuity of approach that we pursue when we conceptually “plug in and play” with materials of all kinds as tools with which we intervene with learning (Wainwright & Stevens, 2020). Here, we are deterritorializing paradigmatic conflict towards conciliatory strategies.

Arts-Based Research

Arts-based research has proven influential to art education theorists, art educators, and practitioners around the world. Its design brings artistic methodologies towards knowledge construction. According to its earliest theorists, Barone and Eisner (2012), arts-based research “enlarge[s] human understanding” (pp. 8-9). Its humanistic gravitas being well assured, “its aim is to create an expressive form that will enable an individual to secure an empathetic participation in the lives of others and in the situations studied” (Barone & Eisner, 2012, pp. 8-9). Traditionally, ABR enmeshes humanist values and phenomenological approaches that are nobly engaged alongside artistic expression to bring attention to, and alleviate, societal and ecological ills. The field is well-entrenched within educational research faculties and although its credibility may be questioned by some, it is rarely dismissed as illegitimate practice.

Under ABR’s canopy, art practitioners engage its approaches by employing artistic senses, abilities, and theories to “adapt the tenets of the creative arts in a social research project” (Leavy, 2017, p. 191). Its efforts are described as “utiliz[ing] the forms of thinking and forms of representation that the arts provide as a means through which the world can be better understood and through such understanding comes the enlargement of mind” (Barone & Eisner, 2011, p.xi). Leavy (2017) lists its various formats:

Arts-based practices may draw on any art form and representational forms that include but are not limited to literary forms (essays, short stories, novellas, novels, experimental writing, scripts, screenplays, poetry, parables); performative forms (music, songs, dance, creative movement, theatre); visual art (photography, drawing, painting, collage, installation art, three-dimensional (3-D) art, sculpture, comics, quilts, needlework); audiovisual forms (film, video); multimedia forms (graphic novels), and multimethod

forms (combining two or more art forms). (p. 4)

ABR's various renderings may include art-based (McNiff, 1998), arts-informed (Cole & Knowles, 2008), poetic inquiry (Prendergast, Leggo, & Sameshima, 2009; Galvin & Prendergast, 2016), a/r/tography (Springgay, Irwin, & Leggo, 2008) and ABER as educational research (Barone & Eisner, 2012).

Anthropocentric Conditions and Shifts

We are attracted to its philosophy because of the questions that its concepts elicit within us about the human species and how it co-exists with the world, particularly during thoroughly anthropocentric conditions. DeleuzoGuattarian thought challenges **our** lifelong patterns of thinking and understanding. We bring riff's propulsive energies into assemblage with, among many things, a developing conceptualization of a machinic arts-based research (MABR) that ontologically maneuvers the field of arts-based research (ABR) by materializing it and "radicaliz[ing]... the human in relation to the nonhuman and inhuman forces" (jagodzinski, 2017, p. 268). Riff taps agential forces populating artistic domains and amps arts-based research through its inclusion in machinic assemblage. It entangles arts-based approaches with *conceptual* elements necessary for creating philosophy through the use of art.

Deleuze and Guattari employ the machinic to "dethrone the notion of structure" (Dosse, 2013, p. 527). jagodzinski and Wallin (2013), in turn, conceptualize a machinic arts that prompts an "operative question: what can be created capable of constructing a new type of reality?" (p. 10). We are curious about forces that might operationalize such potentialities and are intrigued by Deleuze's (1986/2014) assertion that "the power to be affected is like a matter of force, and the power to affect us like a function of force" (pp. 71–72). In what ways can we philosophically

understand the capabilities of the machinic and force?

The machine is described by Deleuze (2002/2004) as being any system interrupting flows (p. 219). The machinic (distinct from the mechanic or mechanistic) emphasizes repetition, but as difference and, therefore, creative space (Dosse, 2013). In articulating the “machinic arts,” jagodzinski and Wallin (2013) invoke *turntablism* as the repurposing of the turntable from a machine facilitating representation, to one in creative assemblage with other technologies (Guins & Cruz, 2006). From music player to music maker, this challenges an image of thought that we hold for the traditional mode of playback and the work of the disc jockey. As turntablist, the DJ becomes musical artist, shifting the turntable’s purpose from that of representation to instrumentation. Technologies not only attach to walls, servers, and turntables, however. We conceptualize the technological as not necessarily a tool of man, but as a function of relationship: nonhuman and human. “Techne,” the root word meaning art or skill in Greek (τέχνη), suggests capacities that are evidenced in organic and nonorganic materials.

A machinic arts “survey[s] what art might do, [and] how it might connect to and create a plane upon which social revolution might be thought” (jagodzinski & Wallin, 2013, p. 11). Experimental recombinality of art and philosophy extends and optimizes capacities for invention and concept building. ABR and its materials, artistic representations, qualitative methodological approaches, and creation of affects and percepts, all provide *source materials* that may be folded into assemblage in ways contributing to an ontology of becoming. Forces propel our [onto]Riffological task of bringing encounters, events, and learning events into such machinic assemblage.

Machinic Arts-Based Research

ABR is largely identified with social, cultural knowledge generation that is epistemic and typically attributed to humanism. ABR has been influential to our riffology. We repurpose ABR's features as the conceptual food which animates the kind of philosophically posthuman inquiry to which some ABR has been less suited to engage, given its humanistic, representational pedigree. We riff as "prompt to event" by plugging in materially with forces that perturb and instigate the machinic, artistic, technological, human, and posthuman; as well as the agency that facilitates such passages (Stevens & Wainwright, 2016). Brought to ABR contexts, our proclivities and impulses engage what jagodzinski and Wallin (2013) articulate as a machinic-arts that shifts research from the actual towards contemporary art's potential to create singularities (p. 11).

This hybrid of machinic impulses and ABR that we are theorizing as MABR operates in open systems of the machinic; drawing on the richness of ABR across variations such as a/r/tography and poetic inquiry. Art education is recognized as impactful learning, partly because of art's ability to access learners' emotions (Leavy, 2015). In hybridity, MABR's aesthetic and educative imperatives—as well as its intensity of engagement—are enfolded by philosophy bearing a poststructuralist perspective.

Braidotti (2013c) submits that "Deleuze's philosophical monism makes no categorical difference between thinking and creating, painting and writing, concept and percept" (p. 309). MABR's *raison d'être* is to ride waves. Weaving philosophical consideration with arts-based research in the pursuit of creating concepts, MABR is engaged as ABR that might never produce an artistic figure, figuration, or figurine. Its prerogative is, instead, to produce *thought*.

Thus, the creativity of MABR extends itself to the conceptual and even to concept creation.

Artistic materials of humanist aesthetic and phenomenological context are brought into proximity with philosophies of arts and science, to alter their course. Sometimes, the turntable and LP are there to facilitate representation and at other times the vinyl provides the raw materials with which the DJ makes art with ontological urgency. This suggestion is exemplified in Deleuze's (2005) ontological re-configuring of both painter Francis Bacon's art and the transcripts of the artist's extended interviews with art critic David Sylvester. Similarly, Deleuze's (1986/2014) turntabling of Foucault's writings does not especially represent either's thinking, but, rather, repurposes Foucault's writings: "bringing out and working with minor differences" between the two men's work (Marks, 2013, p. 113). These approaches evidence *encounters* between Deleuze and the oeuvres of filmmakers, philosophers, artists, and writers (including Kafka, Masoch, Carroll, and Proust). Each of Deleuze's works is (re)interpretive and re-imaginative to the functions that art traditionally performs, while combining constituent relations of interiority and exteriority (DeLanda, 2016).

Forceworking

We suggest that in performing MABR, riff *forceworks* and brings into machinic assemblage what Ziarek (2004) describes as that which "makes art-works distinctive from other objects and what allows art to intervene into social practice [that is] meant to reinforce the distance between the kind of work [Ziarek] see[s] modern art perform and the idea that there is primarily a cultural or an aesthetic object" (p. 30). Forcework forges interrelationships between force as "spatial-temporal play" and a Heideggerian sense of the German *kraftwerk* (forcework, a power plant) or *kunstwerk* (artwork). These interconnections and their observable results, however, are advanced in a "transformative sense," rather than as an *objet d'art* (Ziarek, 2004).

Ziarek (2004) conceptualizes *forcework* as being capable of mobilizing art's agential powers to facilitate encounters inspiring the conceptual, rather than consigning art to being primarily commodified, collected, and displayed as objects—nay *trophies*.

Of the philosophically transformative, Deleuze and Guattari (1980/1987) write: It has always been a question of forces, designated either as forces of chaos or forces of the earth. Similarly, for all of time painting has had the project of rendering visible, instead of reproducing the visible, and music of rendering sonorous, instead reproducing the sonorous. (pp. 346-347)

Ziarek's (2004) conceptualization of a forcework in art acknowledges the labour through which full artistic engagement takes place. Initially, there is "the work of redispensing forces" in the creation of artwork, then providing art the necessary space that would enable it to "perform its work beyond the parameters of aesthetic experience" (p. 31). Furthermore, forcework facilitates an appreciation of art beyond any passive contemplation or reception of its import (Ziarek, 2004). Instead, art is hurled back into the world. Labour that is performed by forcework lets "the work bring about the rupture and displacement within the usual doing, knowing, and valuing that are constitutive of social relations" (Ziarek, 2004, p. 31).

We consider new concepts to be every bit as important as the creation of traditional artistry. Riffologically engaged, concepts come together as artistic activity—sometimes we bring art to those activities, while at other times we perform activities with art. Necessarily, we initiate, induce, and even *force* disruptions to habitual ways of thinking about matter. Riff enters relational recombatoriality in mashup and turntabling. Phonographic platforms are ontologically reconstituted into musical instruments entering into machinic assemblage with computers, DJs, electricity, audiences, vibrations, proximities, distances, rotation, and

revolution. Their combination annihilates the binary relationship between musical product and consumption. Turntabling traditional methodologies, MABR aspires to an ingenuity infused with the experimentality of poststructuralist philosophy that moves our thinking in, what we consider to be, important ways.

Forces of Art

In matters of the aesthetic, it is sensation that first “strikes a viewer of a painting or the reader of a poem before meaning is discerned in figuration or a thematic design” (Conley, 2013, p. 247). Thinking with the *logic of sensation* liberates and deterritorializes. Deleuze (2005) describes its logic thus, “I become in the sensation and something happens through the sensation, one through the other, one in the other” (p. 31). Shifting emphasis from representation to the creative powers producing art, artistic aesthetics duly respond: substituting “a work of art” for “a force of art.”

Art’s inspiration is provided by *sensations* with which we “paint, sculpt, compose, and write” (Deleuze & Guattari, 1994, p. 166). Deleuze (1995) describes percepts as “packets of sensations and responses that live on independently of whoever experiences them” (p. 137), while the *affect* is explained as “the change, or variation, that occurs when bodies collide or come into contact” (Colman, 2013, p. 11). Deleuze and Parnet (1977/2007) write that affects “[...] sometimes [. . .] weaken us in so far as they diminish our power to act and decompose our relationships (sadness), [and] sometimes they make us stronger in so far as they increase our power and make us enter into a more vast or superior individual (joy)” (p. 60). This is hardly insignificant and explains some of the great trust and hope conferred on art and art education. Striving to experience felt responses and effect social change in meaningful ways, arts-based

researchers access affects and percepts in both their art consumption and artistic production. Deleuze (1995) contends that art must continually create both affects as new ways of feeling and percepts as new ways of seeing and hearing. Affects and percepts become the terms in which artists think; it is their currency in thought. Deleuze (1990/1995) asserts, however, that to truly “get things moving,” a convergence of *three* forces—*affect, percept, and concept*—must be realized (p. 164). Once the thinking of artists and musicians is infused with concepts, thought becomes philosophical (Deleuze, 1990/1995). “Painters think in terms of lines and colours, just as musicians think in sounds, writers think in words, film-makers think in images, and so on” (Smith, 2012, p. 25): however, philosophers think in concepts. Artistic creation exercises a capture of forces, “making it possible to substitute the forces-matter relationship for the form-material relationship” (Dosse, 2011, pp. 463-464). Of philosophy’s transmutating potentials, Massumi (2002) writes:

Not reflection, description, prescription or judgment [...] The object of philosophy is not things as they are, but things as they potentially come-between, to become-together, outside of their normal conditions of captivity. (p. 4)

Concepts

A “becom[ing]-together” enacts a level of connective intimacy worthy of the encounter (Massumi, 2002). Alchemy potentiates innovations outside of habituated humanity and beyond human tendencies to rely on the traditional cliché. Forces of affect, percept, and philosophical concept enrich ABR’s significant potentials, as, “the philosopher seizes the expression of forces underlying forms and tries to evaluate their hidden power [...]” (Dosse, 2011, p. 463).

MABR is being theorized as revolutionary work that thrusts arts-based research towards

Deleuzoguatarian becoming. This provides resistance to the default positions and strategies that we tend to “go to” in our consideration of what art is, rather than what it could do as the possible and the creative. In MABR contexts, an aesthetics of affect and percept broadens appreciation for art beyond what is experienced in the midst of the *object d’art*, while the conceptual reconfigures ontological assumptions.

Ideally, concepts facilitate thinking of the possible, while philosophy’s “job has always been to create new concepts” (Deleuze, 1995, p. 32). Deleuze (with Guattari) conceptualizes *agencement*, or assemblage, as an arrangement that is:

a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them, across ages, sexes, and reigns—different natures. Thus, the assemblage’s only unity is that of co-functioning: it is a symbiosis, a “sympathy.”

(Deleuze & Parnet, 1977/2007, p. 69)

Alliances of “co-function” are temporary, reflecting Deleuze and Guattari’s emphasis on movement and time. The assemblage comprises “encounter[s] of a number of elements... that create something resembling a context...” (Dosse, 2011, p. 527).

Riffs and In-Reviews

We write in-reviews and articles as articulations of the turntabling that ontologizes our own encounters. These acts of production punctuate our processes. Each are exemplars of MABR, spinning of content—and intentions—as raw materials that we ontologically reconstitute into conceptual food (for thinking).

The in-review is a continual revisiting of sites of creativity, such as art, science, and philosophy. We draw on affect when re-experiencing these spaces and the artistic engagements

they host, even online. Concepts inform our thinking about what we are witnessing. Activities of deterritorializing and reterritorializing characterize the various machinic and social assemblages to which each riff adheres and detaches in new forms. We have composed two in-reviews for *Art Research International: A Transdisciplinary Journal* and, herein, describe our turntabling processes.

MashUp Exhibition

The first, *MashUp at the Vancouver Art Gallery: Appropriation, Modern Culture and Riff in its "In Review,"* was published in 2017. *MashUp* was held in the Vancouver Art Gallery (VAG) in May 2016, its entire gallery space dedicated to housing the exhibition. *In-reviewing* the event, we acknowledge the “unceded dirt” on which the physical structure of the gallery rests as appropriation that mirrors the materiality and themes of the exhibits displayed inside the building. We bring into relationship art galleries’ conventional practices of forming corporate partnerships, while creating commercial spaces hosting exhibitions, which we liken to Walter Benjamin’s study of the 19th century arcades of Paris, France. Benjamin (1982/2002) compiled an exhaustive collection of notes and manuscripts that were posthumously edited, then published as the *Arcade Project*. We co-opt his study of commodified spaces, reinvesting physical, structural, and historical spaces in riffing the intersubjectivity between Paris arcade habitués: flaneur (loiterer), prostitute, and collector.

The exhibition’s “engagement is redirected from officially suggested discourse to a non-representational ‘riff’ that doesn’t ask what the exhibit means, but rather what does this curation—this MashUp—do?” (Wainwright & Stevens, 2017, p. 175). Long since physically dismantled, *MashUp*’s offerings continue to elucidate in a compendium book (purchased at the

art gallery bookstore), while YouTube serves as a video archive of the exhibition and the materials sampled, remixed, mashed up, then variously displayed.

We are interested in deterritorializing that which is being curated (Wainwright & Stevens, 2017) and our attention is increasingly brought to the material, the ground, the nonhuman, the bits that the exhibitors don't particularly want us to see. This MashUp in-review is comprised of two pieces: one document that was published in *Art/Research International*, which easily met editorial standards, and another that remains largely hidden from human view. The latter work becomes a “virtual scrapbook” evidencing the generative nature of riff. Unsorted screenshots of our notes and source materials became an arcade that is a stand-alone document and a complex archive of the fragmentary—awaiting future re-assembly. The journal's editorial board cited concerns about possible copyright infringement and deemed the document unpublishable. It declined to permit inclusion of even a hyperlink or URL address to the website, where it resides (<https://mashup-at-the-vancouver-art-gallery.com>).

When reflecting on the dual documents, we consider the published article to be relatively tightly structured and loosely riffed, while the web published companion piece is highly riffed and loosely structured—chaotic and unencumbered by the limitations traditionally imposed by regimented academic writing. The parallel document digitally performs like Benjamin's rough notes of paper scraps and clipped articles. It functions as an axis between structure and riff.

Published online in 2017, the human readership of our article, *MashUp at the Vancouver Art Gallery: “In review” [onto]Riffologically*, as of early 2020, has generated fewer than one hundred hits. Interestingly however, the companion document is being accessed with increasing frequency at thousands of hits per month: averaging 1,300 hits throughout 2018 and nearly 5,000, monthly, in 2019. Bots are interacting with each other, scraping online documents and

entire websites. Web crawlers, online-spiders, and malware have drawn the in-review documents into discursive behaviours and machinic assemblage. This activity demonstrates that such sites comprise data of interest to algorithmic and AI processes—all largely beyond our human capacity to understand. This shifts its content from being a concern of humanistic epistemics to that of the posthuman and ontological. It is only then that we can start to map the entanglements in an article that so few humans have read, yet Google, at one time, ranked higher than the VAG *MashUp* exhibition homepage itself (as an internet search when using the search string “*Vancouver Art Gallery*” and “*Mashup*”).

The Anthropocene Project

Our second in-review, *A Review of The Anthropocene Project: Treachery in Images*, will be published in 2020. The art event on which it is turntabled includes a feature film, pictorial catalogues, and a touring exhibition that has been held in Canada and internationally. We spin the project as a thanatouristic curation of the macabre that is turntabled by ontologizing the nature of the questions we ask.

The Anthropocene is a proposed epoch, proceeding the Holocene, during which the ecological and geological effects of human activity have been drastically escalating. If we take seriously the contention that capitalist methods of production have a role in environmental destruction, then to remain impassive to its death drive is to succumb to its violence. Therefore, if we critique the concept of the Anthropocene without applying proper consideration of the mechanics and workings of capitalist systems, we are apt to try “fixing” the problem by adopting yet *more* capitalistic means as “solutions.”

Despite our wariness, as the project’s motion picture—*Anthropocene: the Human*

Epoch—plays, it engenders within us a strange sense of awe at disturbing aesthetics. By the time the credits roll at film's end, we are turntabling notions of *credit* beyond those of cinematic attribution and authorship: both the project's receipt of film production credits in corporate sponsorship programmes and consideration about *who* is credited with the visual artistry of *The Anthropocene Project*.

In a story about the Anthropocene, the film's credits betray the extent of capital's role. Throughout the film, capital lurks outside the photographs' frames. The film—much like the entire project—bears a narrative linearity and myopic vision. We begin to ask what is scripting the film's narration, striking the eerie tones of the soundtrack, and rewarding the production team and the project's funders? There is marked incongruity between *The Anthropocene Project's* titular epoch and corporate sponsors' business dealings, and this seemingly explains an inability of the filmmakers to fully divulge what influences its messaging about the Anthropocene. Researching the partnerships in this anthropocentric, deeply corporate endeavour, we deduce that there is still much about the film's photography that communicates what the filmmakers don't want viewers to see, hear, or reflect on. For example, they have seemingly expunged reference to capitalism and obscured the visibility of most brand names and logos. This is capital that “necrotizes the entire planet” (McBrien, 2016, p. 116). And the Capitalocene is a second proposed timescape, alongside the Anthropocene, during which the lure of lucre and drive for profit have worked a heavy toll on our environment in the pursuit of resource extraction and consumption.

The filmmakers have carefully framed their editorial approach. During a Q&A session held after a screening of the project's film, *Anthropocene: The Human Epoch*, its director, Jennifer Baichwal (2018), shared with the audience that both the film's visual and aural

narrations were crafted to avoid dogmatic positions that might prompt prospective viewers to dismiss the film out of hand (Baichwal, 2018).

Riffs on the City as Classroom

We apply turntabling's creative enterprise to a curricular work co-developed by Marshall McLuhan: a nearly forty-five-year-old Canadian high school media textbook, *The City as Classroom: Understanding Media and Language* (McLuhan, Hutchon, & McLuhan, 1977a, 1977b). We wrote two pieces based on the textbook: *Shady Figures and Shifting Grounds for Re/Truthing: Channeling McLuhan's Posthuman* and *City as Classroom: Posthumanizing McLuhan's Curriculum* (Stevens & Wainwright, 2019; Wainwright & Stevens, 2020).

To play a textbook would amount to us bringing its contents to pedagogical venues and navigating within the authors' assertions, parameters, and biases. We might mirror its sentiments, in kind, by presenting a piece of work in response. To turntable the textbook, however, is to bring technological function into academic assemblage while turning the classroom out into the cityscape, as prescribed by McLuhan et al. (1977a, 1977b), and there applying technological potentials also found in classrooms.

Once forceworking curriculum outside the classroom, we disc jockey as turntablists to ontologize McLuhan et al.'s (1977a, 1977b) *City as Classroom* and McLuhan's early recognition, sixty years ago, of information's now simultaneous availability due to electric technologies. Classrooms, then, were no longer the only physical spaces in which to engage curricular tasks. The classroom is increasingly located anywhere and everywhere. In this paradigm, *classrooming* becomes both acts and sites of production.

To demonstrate how turntabling shifts humanist and representational tendencies towards

the ontological and posthuman, we itemize the processes of academic publication to which we have submitted. We explain corresponding turntable approaches that infuse technological imperatives in creative assemblage: the nature of academic authorship in riff and at our host university; the content of the papers' matter; and the academic publication's editorship and review processes. In each section below, we show how we have turntable these encounters and then summarize both the play and turntable modes—reproduction to production—that characterize our desire to embrace the epistemological *and* ontological.

Turntabling Authorship

Lone authorship, particularly concerning dissertations and theses has been an academic tradition these past centuries. Learning institutions find it challenging to properly address, or tease apart, computers' contributions from those of the human students enlisting their support. Assemblages are increasingly recognized as enfolding human writing with technological functions of composition that are instrumental to research operations. In our riffological study, we collaboratively avail ourselves of all manner of technological assistance and available device when co-composing various assignments, articles, and works. In the context of educational research, we theorize [onto]Riffology as activity “we do” with technologies and that technologies do with us: what is happening between all manner of actants as the human is increasingly decentred.

Our host learning institution, the University of Victoria (UVic), holds academic integrity related standards for the creation of assignments and dissertations that typically require sole authorship in order to ensure that scholars demonstrate their individual, authentic knowledge on their research. To maintain these conditions, UVic's offices issue guidelines to students that^[1]

dictate the nature of permissible academic engagements with other students, instructors, materials, and human academic supports, such as editors. UVic states clear penalties for breaching its requirements, however, most of these institutional expectations, in our opinion, are no longer reflective of contemporary academic environments. Censure of human editing in academic production overlooks the reality that students, scholars, and academics are enmeshed within all manner of technological editing functions and platforms in the co-production of their work. Therefore, prohibiting human assistance in the creation of written text is inconsistent with permissible use of technological editing functions and platforms, all of which feature evolving capacities.

Conceptually, editing has transitioned from being a human generated writing tool towards one that is technologically mediated with AI and neural networking tools. Universities overlook countless resources employed by scholars to shape content, question meaning, assist in completing tasks, and compose works. Multiple technological functions are generating and editing content: autocorrect; AI algorithms and news outlets; content rankings provided by *Google Docs*, *Google Scholar*, *Bing*, and *ResearchNet*; and editing software, including *Ginger*, *Grammarly*, *Hemingway*, and *ProWritingAid*. For centuries the university has acted as a repository of knowledge, however, UVic's commitment to regulating students' reliance on human sources of academic support—the kind that humans might lend one another during the writing and research process—seems an almost absurd preoccupation that ignores this online availability of information and machinic processing.

Supplanting the university, networked technology rhizomatically archives information amassed throughout human history, and activates the archive by providing date and significance rankings for academic works, their total citations counts, authors' profiles, references and

hyperlinks to all other cited papers, etc. Whereas, legitimately conducting, publishing, and accessing research was once only possible through universities, students now have any number of academic publishing options, making possible an emerging field of human independent scholarship.

By turntabling notions of “who edits” and “what edits” academic works, we rhetorically ask whether these platforms perform as tools or collaborators? What tasks of structural and stylistic editing, copy editing, and proofreading is this assortment of software capable of assuming to assist the human academic writer? In this day and age, how do we remain mindful about the nature of sole authorship in order to continue to distinguish between the contributions of scholars and their “technological assistants”? How do we adequately articulate these distinctions to satisfy academic standards imposed by universities and how much longer will we continue to make them?

Turntabling Content

McLuhan’s co-written high school curriculum of 1977 is recognized for its prescience in early anticipating the changing role of the classroom as technologies alter larger society. Convinced of *City as Classroom*’s educative potentials as riff, we simultaneously wrote two pieces based on this media studies textbook. *Shady Figures and Shifting Grounds for Re/Truthing: Channeling McLuhan’s Posthuman* was conceived for a journal’s proposed special issue on post-truth and Donald Trump. Our submitted abstract echoed the palpable sense of social polarization that we detected in the American based, peer-reviewed journal’s call for papers. We have become fascinated by the American political and media landscape: a “situation exacerbated by mercurial relationships with what is ‘truth’ and ‘fake’” (Stevens & Wainwright,

2019, p.111). We suggested that as Canadians, we are likely observing events somewhat less encumbered by the rhetoric of American partisan politics. We have been theoretically committed to resisting the dominant discourses of polemic debate that were all-consuming during the USA's 2016 election cycle, and we breached national boundaries that were laid out in the call for papers—and did so on the editorial board's terms.

Living so geographically proximate to the pervasive cultural influences of our nation's southern neighbour, we are drawn into consideration of highly polarized political narratives and the binaries that seem inevitable in the United States' "two party system" of governance. We riffed on figure/ground analysis, the perception sharpening technique favoured by McLuhan as an approach that may appear binary but provides latitude to recognize the shading between each figure that simultaneously comprises each ground—and the reverse.^[2]

Once invited to participate in the journal's special issue, we composed an article that resituated the premises of the call for papers from either/or propositions to ones that provide space to play between and around multiplicities and complexity. Turntabling the binary composition of figure and ground, we conceived a *surround* as a perspective extending concept to be applied to figure/ground analysis investing in future ontologies. This surround is: less apparent to humans and is instead attuned to intensities and forces. It:

introduces spatial depth to our considerations. By bringing into assemblage the functions of figure, ground and surround, we [...] ontologically re-conceptualize, re-group and re-intensify our efforts [...] We are relying on the ability of the assemblage to potentially unleash realizable force. (Wainwright & Stevens, 2020, p. 61)

In *City as Classroom: Posthumanizing McLuhan's Curriculum*, we riffed additional themes of McLuhan's *City as Classroom*. We conceptualized a *hypercity* that "negotiate[s]"

passages through and under city spaces” (Wainwright & Stevens, 2020, p. 5). The piece opens with McLuhan’s prescient, albeit humanist, observations that technologies were increasingly becoming extensions of human bodies, skin, and nervous systems. We turnable education by decoupling pedagogy from humanism, while theorizing a posthuman critical theory that interrupts a humanist ontology, while providing contexts for learning encounters to happen spontaneously and to resituate human participation. We conceptualized a posthuman *hypercity* as networked assemblages that re-world relationships away from being territorial and predatory. The hypercity posthumanizes the metropolis in its orientation of materiality.

Turntabling the Editorial Process

To satisfy UVic’s requirements concerning a collaboratively conducted (post)qualitative study, collaboratively written pieces must be published in academic journals as a condition of their inclusion in the students’ dissertations. Therefore, as participants in a collaboratively conducted (post)qualitative study, we find ourselves complicit in these operations as we are eager to be published. We have determinedly clawed our way into academia’s journals’ pages.

The editing process in research publication is anticipated, mostly linear, and contingent on completion of a hierarchical process of peer-review in which opinions are delivered and discourse is mediated. Seeking publication in academic journals has drawn us into machinic assemblage with all sorts: humans, technologies, concepts, and academic journal editors. Editorial boards bear their own respective assemblage of relations that include the journal’s readership and the anonymous human reviewer. We have deemed engagement with these entities to be necessary: this shared study is largely comprised of collaboratively created works. Having submitted papers replete with theoretical and procedural disruptions, we entered the journals’

editorial process, which involved anonymous reviewer feedback. This we received outside the generative process as a necessary assessment to meet normative standards of rigour. At times, the hierarchical editorial structure imposed during review and editing invited collaboration into writing processes between primary authors, technologies, and human contributors of varying durations. The participation of supervisors, editors, reviewers, committee members, and copy editors continues throughout the editorial phase of publishing to considerably influence the theoretical work.

For example, our use of terminology in *Shady Figures and Shifting Grounds for Re/Truthing: Channeling McLuhan's Posthuman* was challenged by one reviewer who seemingly bristled at our points:

There is also a certain usage of terms like “binary,” “humanist,” and other common pejorative terms among recent posthumanist scholars . . . I am relatively fluent in this parlance, but I do not take the dogmatic positions on the Anthropocene or against binaries and humanism to be simply true.” (private correspondence, 2019)

The reviewer’s response alerted us to potential concerns held by researchers presumably engaging “conventional humanist qualitative methodolog[ies]” (St. Pierre, 2014, p. 379), for whom “humanism” isn’t considered something to necessarily overcome, nor an ideology that requires careful framing. Traditional ways that educators have adopted pedagogical theories both synthesize learning and structure academic research to the ways we logically reason towards them. Ecological terms like the Anthropocene, particularly in the present US political climate, may feel dogmatic while its viability as a geo-political epoch is still under scientific evaluation.

We riff with journal reviewers editors, et al. and turntable their critiques, which have been technologically facilitated, sometimes anonymously, and at times excoriatingly. These

interrelations of composition facilitate asynchronous authorship that intersects roles and boundaries defining editor, scholar, computer software, reviewer (human, electronic, and otherwise). Drawn into collaboration, the reviewers and editors have written themselves into the text.

Outro

Our pedagogical approach to reconsidering humanity's ill-effects on the environment, all species, and fellow human beings includes striving to break anthropocentrism's lock on our senses. We believe that humanism is failing in its liberatory aspirations, while heedlessly committing ecological ruin in its service to excessive greed, enabled by contemporary economic systems. We conceptualize MABR as a process ontology to supplement our humanist gaze by expanding our purview to encompass the nonhuman, matter, and the posthuman.

MABR's methods ideally initiate the alchemical reactions possible when affect and percept, as sensations engendered in art, draw nigh to concepts, as "the means by which we move beyond what we experience so that we can think of new possibilities" (Stagoll, 2013, p. 53). Philosophy is particularly resonant to us when imbued with the notes and tones of DeleuzoGuattarian approaches (and those of the cadre of contemporary academics who are intrigued by them). That ABR practitioners reach for DeleuzoGuattarian concepts, such as the rhizome (Irwin, 2013), suggests that they too have an appetite for inquiry beyond the conventionality of the qualitative, epistemological, and humanist.

[onto]Riffology theorizes *riff* as propelling technologically mediated inquiry towards onto-encounters. In MABR, we mobilize the influential, orthodoxy-challenging work of researchers, jagodzinski and Wallin (2013), including their commentary on the machinic arts,

turntablism, and forcework. Applied to curricular pursuits, we avoid passively consuming the physical classroom and hitting play into that environment, solely to consume its output.

Deploying agential relationships, MABR ontologically turntables acts of creative production, for a world yet to come.

^[1] See: <https://www.uvic.ca/current-students/home/academics/academic-integrity>

^[2] Examples of “figure” and “ground” may be found here:

<https://www.youtube.com/watch?v=7f1G6Nx5VDw>

3.3 Ritornello III: Curricularizing the Micro-Revolutionary

This ritornello is about the micro-revolutionary potentials of ontological play. My general concern is “how to make a class operate like a work of art” (Guattari, 1995). [Click here.](#)

CHAPTER 4: MASHUP AT THE GALLERY



Figure 4. *Data Herd.*

R. Wainwright, 2021. CC BY-NC 4.0.

Notes: Influenced by Paul Klee, *Red Balloon*, (1922) Solomon R. Guggenheim Museum, New York, Estate of Karl Nierendorf Red Balloon. Used and altered with permission of Zentrum Paul Klee.

4.1 Introduction to Mashup at the Gallery

Our joint publication “MashUp at the Vancouver Art Gallery: ‘In review’ [onto]Riffologically” (Wainwright & Stevens, 2017) went viral.

However, not with humans.

Essay One is the formal publication with *Art/Research International* which appears below. A visual bibliography is included in Essay Two with screen prints, YouTube clips, web pages, Facebook posts, and almost anything else we developed through our formal and informal research. About 200 links and full academic citations are included.

We had hoped to have a link to Essay Two included with Essay One so I assigned a custom DOI^[1] with Crossref and an ISSN^[2] which I had registered for another project. While never the intention, the vast quantity of links and images on the page invited web crawlers and internet bots to visit and linger for those extra microseconds. In addition, having an assigned DOI and ISSN gave it a bump in authority in the search engines, (in Google Scholar, Google Search, Bing and other academic and non-academic indexes).

For whatever reason our publication continues to rank on the first page of the regular Google search engine when using the search string “*mashup at the vancouver art gallery*”, and sometimes ranks even higher than the Vancouver Art Gallery itself. Using Bing^[3] as the search engine with the same search string continues to rank our article as their first hit, and this has been so for a long time.

However, there are very few if any human readers. Humans have simply failed to take the bait. However, the machines are talking, and there were about 208,000 hits last year. It is hosted on a regular cloud-based web server, using a standard build of WordPress. Web crawlers and

bots from around the world try to break into the account, scrape the server for content while search engines poke and prod at the site. The site and its logs are non-human exhibits.

Using the exact full name of the joint publication in quotes delivers 5,700 locations on the internet that have now linked or shared the document^[4] all of which demonstrate the degree to which second and third parties have grabbed the article and made it their own. The visitor stats are linked with this link.

In our article we stated, “By various means we revisit (repeatedly) our initial browsing of MashUp, held at Vancouver Art Gallery, applying ontological focus through riffological measures” (Wainwright & Stevens, 2017, p. 168). We meant it quite literally, as we revisit the materials ourselves and are subject to continuous revisiting by others.

Though Guattari had no inkling about the future of search algorithms, there is a resonance between the complex technological compositions resulting from Mashup and an appreciation of “hypercomplex refrains, with hypercomplex problematics” (1995a, p. 16). Hypercomplex refrains sometimes transport one to an abstract, ‘interior’ world, into the ‘incorporeal universes’ of music or mathematics perhaps” (Guattari, 1995a, p. 16). Despite being intimately dependent upon these human-nonhuman data relationships—for publication counts, income and career advancement—many scholars seem indifferent, or quick to dismiss these data relationships as irrelevant or of little concern. In this age of the cognitariate, the conditions that made this article go viral ought to be on the discussion list of every graduate research course.

[1] Digital Object Identifier (<https://doi.org/10.35937/11012>)

[2] International Standard Serial Number (ISSN 2562-6833)

[3] <https://binged.it/3Dr0NBT>

[4] <https://bit.ly/37VGFJI>

4.2 Intermezzo II: Cartographies

The Ground Beneath our Feet

MashUp: The Birth of Modern Culture at the Vancouver Art Gallery (February 20, 2016, to May 15, 2016) was a milestone for Shannon and I in the evolution of riff's theory and became the theme for the joint publication "MashUp at the Vancouver Art Gallery: 'In review' [onto]Riffologically" (Wainwright & Stevens, 2017). Just as the museum provided the material conditions for a published review, the published article now is itself in-review.

Remix theory describes how different materials can be combined to create new forms of artistic expression. Through the collaborative process, Shannon and I wondered whether such principles could be applied to academic research and publication, and we imagined a continuous process of gathering new fragments that could be assembled into new artistic expression.

Rock and river cooperate in a recombinatorial process that involves erosion and sedimentation, followed by subsequent reconstitution and cementation, which is then repeated in a continuous process. In simpler terms, DeLanda explains it as follows:

A rock like limestone or sandstone, for example, is first articulated through a process of sedimentation (the slow gathering and sorting of pebbles that are the component parts of the rock. Then it is articulated a second time as the accumulated sediment is glued together by a process of cementation. (Quoted in Dolphijn & van der Tuin, 2012, p. 39)

A more technical definition is found here in Deleuze and Guattari's theorizing of *double articulation* in *A Thousand Plateaus, Geology of Morals* (1980/2014):

The first articulation chooses or deducts, from unstable particle-flows, metastable molecular or quasi-molecular units (substances) upon which it imposes a statistical order

of connections and successions (forms). The second articulation establishes functional, compact, stable structures (forms), and constructs the molar compounds in which these structures are simultaneously actualized (substances). (2014, pp. 40–41)

The Turbulence of Social Experience

The term *turntablist* is widely attributed to DJ Babu of the Beat Junkies who said, “my definition of a Turntablist is a person who uses the turntables not to play music, but to manipulate sound and create music” (Gragg, 1999). The famous singer-songwriter-musician Mark Ronson explains that mashups and other remixed cultural materials cannot be broken down into their constituent parts or into their methods of reconstitution (2014). Taking aim at the pastiche, Ronson explains that Vanilla Ice’s (Rob Van Winkle) *Ice Ice Baby* (1990) takes Queen and David Bowie’s *Under Pressure* (1981) and simply puts rap lyrics overtop the musical hooks, taking advantage of the familiarity of the original with new twists to make it marketable. “These records don’t really age that well. You don’t hear them now, because they borrowed from an era that was too steeped in its own connotation. You can’t just hijack nostalgia wholesale. It leaves the listener feeling sickly” (Ronson, 2014). Most would say that Van Winkle is qualitatively different from more highly respected Slick Rick, Grandmaster Flash, or Public Enemy, despite each using some of the same sampling, cut, scratch and mashup technologies. Are these simply matters of personal preference^[1] and musical taste? Ronson describes a “collective consciousness of pop music” (2014) whereby some music becomes part of the nervous system of a culture; with elements that are appropriated and recycled sometimes across generations of musicians. The composers are in an aesthetic relationship which is not only technical but bound

to the social conditions of the times. These similar concerns become central to the academic and curricular work described throughout this dissertation.

Blue Skies of Ideas

Jay Hammond's essay "Mattering Black Life: Time, the Rhizome and a Gullah-Geechee Politics of Rhythm" (2017) is based on a number of interviews with performer and scholar, David Pleasant whose field of expertise is the music and culture of the Gullah-Geechee, described as "the unique African American inhabitants of the Sea Islands, a 250-mile area of barrier islands off the coast of Georgia and South Carolina" (Manigault-Bryant, 2014). Pleasant states of the Gullah-Geechee:

"Its musical traditions such as the Ring Shout, the Juba and the African American Spiritual hold profound and lasting importance for any consideration of the artistic, political and social import of black music in the United States" (Hammond, 2017, p. 70).

Hammond starts his article with a quote from Pleasant, describing the contrast between meter as a *measure of time* versus that of *rhythm*; explaining that "meter can have rhythm in it, but groove is the real danger; groove placates, locks in; rhythm liberates, unlocks. Groove is so comfortable it can make you believe a lie" (Pleasant, 2015). It is striking how similar this claim is with the description of a cliché image described by Deleuze (2003, p. 91). Groove, then, is another limiting tool in music's production capability:

In the music of the Gullah, rhythms that go with one another even in contrasting ways are seen as complementary: Rhythms are not against one another. Gullah children are particularly adept at singing one rhythm/melody, clapping another, and foot patting separate left-and right-foot rhythms. This polydexterity comes from a culture in which

present tense is key: The language does not distinguish between tense or gender. This ever-present consciousness (which in Black English is seen as “It just be’s that way”) speaks to a polyrhythmic and polymetric sensibility, one in which time, ancestors, nature, God, and being morphed into what can best be described as chord rhythm. (Pleasant, 2004, np.)

Polyrhythms and syncopations are collective musical experiences that do not attempt to solve chaotic situations, but rather allow for their expressivity. In the context of the chaos of these times, there are many themes that are relevant for arts-based researchers who are developing innovative ways of attempting to break the habits of the past. As Pleasant explains:

The linear-progressive, linear-sequential quality of modern Western sensibility falls short of acknowledging the richness of that consciousness. Rhythmic density, complexity, and order in these forms would most often be viewed as superfluous, extraneous, or busy to a “modern” ear. The quality of those forms is lost in Western hegemonic presuppositions that limit the motion of non-sequential, non-linear-progressive resources. (2004, n.p.)

The explanation provided by Guattari helps explain how metrics (clock time) differ from rhythm:

from this perspective, universal time appears to be no more than a hypothetical projection, a time of generalized equivalence, a ‘flattened’ capitalistic time; what is important are these partial modules of temporalization; operating in diverse domains (biological, ethological, socio-cultural, machinic, cosmic...), and out of which complex refrains constitute highly relative existential synchronies (1995, p. 17)

The Rhythmic Insistence of Waking Dreams

The rhythm of our lives is no longer natural, or festive. It is no longer the bird's song that wakes us up in the morning, but the baker's motorcycle. The syncopated rhythms of machine levers, of motor pistons, and of typewriters' keys mark our life. We no longer wait for the feast of the new moon, but for the due date of the credit loan. Our rhythm is profane and tends to dilute itself. (Flusser, 1965, p. 2)

Flusser compares humans, social rituals, moon cycles, bird songs, and machines to explain the rhythm of life. He explains that rhythm "obeys certain cyclical rules imposed by the circumstance in which we find ourselves (p. 1). He speaks of rhythms of going to sleep and waking up, of sowing and harvesting, of youth and old age, of birth and death (p. 1). It is in his writing about music, that Flusser best articulates a position on representation which resonates with the writing of this dissertation, demonstrated when he clarifies that "in it we are freed from the illusion of representation, and of all figurativism. Music simply is, and represents nothing" (1965, p. 3).

Rhythms of all kinds govern our physical movements, and there seems to be an ability to link conscious memory with rhythmic activity such as skipping rope with schoolyard songs. The predictability of television commercials, their slightly higher volume and easily recited jingles were many of the comforts craved as children. When the classroom bell rang, we responded in a startled manner, which later affected how we reacted to the sirens of firefighter, ambulance, and police vehicles. These experiences have conditioned and colonized our bodies because of our participation in these social, psychological, and physical environments.

Capitalism puts on par the thrilling rhythms of life with the metrics of payment due dates. Homogenized, simple tempos make it comfortable to stay in a rutted-groove, and anticipation is

formed around the expectation that the next beat is the same as the one prior, a process that centres on compliance and conformity. When Pleasant speaks of syncopation and polyrhythm, it is another way to conceptualize the (micro) revolutionary potentials of complex aesthetic and ethical refrains/ritornellos.

Some of the terms in this intermezzo are borrowed from David Cole's more poetic description of Guattari's *constellations of aesthetic refrains*, (2014, p. 146) which Cole designates as *the rhythmic insistence of waking dreams*, thus capturing the lyrical, musical, percussive, and multisensory nature of the type of play that informs my curiosities.

[¹] An example: A baker has the ingredients they need, and the power supply to do the required heating and chilling. There are many options and creations to choose from. Taste and preference, then, is the measure of concern. Alternatively, in considering the embargo against Cuba, Oroza describes a nation of hackers and self-taught engineers, who employ "technological disobedience." (2017). The motor of a washing machine operates as a key-cutting machine, an electric bicycle, or a saw. This is more than simple upcycling. The creativity is different in terms of aesthetics and politics from a Canadian who can go to Home Depot.

4.3 MashUp at the Vancouver Art Gallery: “In review” [onto]Riffologically

From “MashUp at the Vancouver Art Gallery: ‘In Review’ [onto]Riffologically,” R. Wainwright and S. Stevens, 2017, *Art/Research International: A Transdisciplinary Journal*, 2(1), 166-184. Copyright 2017 by Richard Wainwright and Shannon Stevens. Reprinted with permission.

Abstract

[onto]Riffology, a “plug in and play” method of inquiry that *riffs* across technological platforms and with all manner of material, finds easy resonance in mashups and remixes. We turned our riffological sights to the Vancouver Art Gallery, which hosted *MashUp* from February 20th through June 12th, 2016. Creative and combinatorial, *mashup* is identifiable in popular discourse as fundamentally humanist and epistemological in nature; however, as an interdisciplinary, *ontological* practice of repurposing and reconstituting, acts of *mashup* also exist in geological activity, far outside of humanity, and here we apply ontological focus through riffological measures. We are interested not in seeing merely what is being exhibited, but deterritorializing what is being curated. Our emergent senses of new materialisms inform our riffology here as we ceaselessly (re)encounter the exhibition; experienced as a *riff arcade* of dream like experience that one mayn’t exit; like the arcades of Benjamin’s mammoth project of 1927 to 1940 (Benjamin & Tiedemann, 1999).

Mashup at the Vancouver Art Gallery: “In Review” [Onto]Riffologically



Figure 4.1. *MashUp: The Birth of Modern Culture.*

R. Wainwright, 2021 CC BY-NC

When the first German railway line was about to be constructed in Bavaria, the medical faculty at Erlangen published an expert opinion...: the rapid movement would cause... cerebral disorders (the mere sight of a train rushing by could already do this), and it was therefore necessary, at the least, to build a wooden barrier five feet high on both sides of the track (Benjamin & Tiedemann, 1999, p. 428)

MashUp. Move Through the Exhibition; Riff with its Sites, Displays, Exhibits; Repeat.

By various means we revisit (repeatedly) our initial browsing of *MashUp*, held at the Vancouver Art Gallery, applying ontological focus through riffological measures. Our intention is to welcome readers perusing this “review” of experiences across and beyond the exhibition itself. This is a sponsored event.

A companion document riffs with this one, and further elucidates our process. Whereas this document is tightly framed and loosely riffed, that one is hardly framed and highly riffed. Movement through both suggests that of a window-shopping flâneur browsing within the arcade – in this case a riff arcade. The footnotes detail more and more. Both contain links to various viewables that may be perused by left clicking on words in blue font, while various pictorial representations nestle within the documents. Riff layers upon layers; in every perusal we are drawn back into more creative interaction with the material. We invite you to browse through the second document by receiving its web address from us personally: (richardw@uvic.ca, stevenss@uvic.ca).

We riff on MashUp in anticipation of art educators and arts-based researchers resonating with pedagogical approaches to entanglements of decentered human experience, and curiosities that shift query from phenomena's meanings to questioning what events are doing. We are interested not in seeing merely what is being exhibited, but deterritorializing what is being curated.

MashUp at the Vancouver Art Gallery, Vancouver, BC.

First floor: The digital age: Hacking, remix and the archive in the age of post-production

Second floor: Late 20th century: Splicing, sampling and the street in the age of appropriation

Third floor: The post-war: Cut, copy and the quotation in the age of mass media

Fourth floor: Early 20th century: Collage, montage and readymade at the birth of modern culture

A Way to Talk Around the Problem: Riff, Mashup and New Materialism.

“Riff.” What is riffing? Riff becomes information passage; passing and sharing that which passes our eyes, that which is shared unseen. Riff is creating a document like this with countless, *endless* links to more and more available information; and each perusal of such a document is experienced as completely individual and unique from any other. It is tangential, it is *method* facilitating inquiries, and it is one that we have theoretically conceptualized as [onto]Riffology whereby we consider what it is to riff with what we read, view and interact (technologies, sites, each other, art and art’s affect), while seeking opportunities to tap experiential forms bearing a promiscuous spirit of sampling (Stevens & Wainwright, 2016). As [onto]Riffers we don’t simply watch as we plug in; we play (Stevens & Wainwright, 2016).

[onto]Riffology finds easy resonance in mashup and remix, and here we turn both of our riffological sights to the Vancouver Art Gallery, which hosted *MashUp* from February 20th through June 12th, 2016. Creative and combinatorial, *mashup* is identifiable in popular discourse as fundamentally humanist and epistemological in nature. As an interdisciplinary, *ontological* practice of repurposing and reconstituting, acts of *mashup* also exist in geological activity, far outside of humanity. Elements remix, materials fold: rock and water reconstitute into sand and mud, oceans and rivers converge into hybrid space. These processes happen with and without human engagement. When recording artist DJ Spooky (1st floor) (Vancouver Art Gallery, 2016) remixes the sounds of melting ice in the Arctic, we begin to acknowledge in such artistry how generally limited is a solely humanist perspective on matter. As we mediate epistemological matters alongside explorations into the ontological and posthuman, we are inspired by new materialism; “cultural theory for the 21st century” as discussed by Dolphijn and van der Tuin (Dolphijn & van der Tuin, 2012).

MashUp is an exhibition chronicling historical and artistic events touted as the “birth of modern culture.” Our emergent sensibilities in new materialism discourage narratives of cultural genesis and “newness,” as suggested in such analogies invoking acts of “nativity.” “Cultural birth” does, however, suggest creative “passages” such as conception and gestation (Wajdi, 2014) as we explore inspirations to mashup; *MashUp*, conditions of their ontologies, and relationships with which to riff.

Melt the Statues in the Park: MashUp, Unceded Dirt and Arcades

An art exhibition is being held. We regard not only the gallery’s building artefact at 750 Hornby Street, Vancouver, British Columbia for all that it has once been (including a courthouse), and will one day become abandoned to its fate (The Canadian Press, 2013); while acknowledging the indigeneity of unceded dirt on which its physical form rests. The building, and all the material contents it houses, is in deep relationship not only with its history and physical space, but also with sundry vendors trafficking their wares in the art gallery’s proximity through various forms of “sponsorship” and “partnership” with businesses and foundations: a restaurant and bar chain called the *Keg*, the *Royal Bank of Canada* (both its name and logo resonant of British colonialism in Indigenous territories), and *DLA Piper*, a global law firm enforcing claims to intellectual property and copyright, among others (2015). Herein lays a tenuous relational balance that exists in materiality of commerce that helps fund displays but mustn’t overstep consumers’ willingness to be shilled.

Such diverse merchants and venues of commercialization in close proximity to the Vancouver Art Gallery, and each other, bring to mind Walter Benjamin’s (2008) extensive study of 19th century Paris arcades; enclosed passages constructed of iron and glass within which shop fronts were situated, and precursor to the urban shopping mall. *The Arcades Project* (Benjamin

& Tiedemann, 1999) proves not only a compelling examination of cultural theory, but its source materials—hundreds upon hundreds of pages of handwritten notes on multiple topics (that were only posthumously collated into book form)—chronicle its subject in scattershot ways similar to riff.

The Arcades Project (Benjamin & Tiedemann, 1999) becomes a theoretical underscore upon which we peruse and hyperlink the experience of visiting the Vancouver Art Gallery and the *MashUp* exhibition. We are drawn to descriptions of the *flâneur* (as idler strolling through the arcade), the *collector* (hawking his merchandise), and the *prostitute* who lingers at the fringe of the physical cityscape and its society, discouraged from loitering in the arcade lest she likewise sell her wares in heavily commodified space. At once subject in her humanity, yet self-objectifying in her occupation and her purchase, she is banished from the same space where her male counterpart is encouraged to consume. An epistemological humanist perspective concerns, even possibly condemns itself with identity politics, with building meanings and understandings out of the human relationships. As *riffers* and new materialists we suggest that although this perspective of knowledge is useful, particularly as commentary to its historical times, we gravitate to broader contemporary understandings whereby knowledge and being become “indistinguishable... [an] ethico-onto-epistemology” (Barad, as quoted in Dolphijn & van der Tuin, 2012, p. 110). We are interested in the gallery (and galleries of yore) as composites of wood, stone and dust, the relationships to the body, the complex material systems upon which the agential is but a part, and one through which agents—both human and non-human—participate in the margins, in places that are unseen and that are never *elected* to appear in the official maps of the city. This is where our interests are drawn as we seek to engage the museum, its exhibits, agential “forces” and all the ways they interact even politically.

There's the Progress...: Appropriation, Remix, and Aura.

In a work demonstrating the irrepressibility of creativity (regardless of subject, content, and practice), while celebrating appropriative practices, poet Kenneth Goldsmith (Louisiana Channel, 2014) queries the differences between collage and appropriation. Referencing Pablo Picasso and Marcel Duchamp's considerable artistic influences, Goldsmith (Goldsmith, 2011; Johnson, 2014) likens the two artists to candle and mirror, respectively: a warm appealing glow of visually compelling collage, and a "cool reflectivity" borne of the industrially produced "appropriated" object (Goldsmith, 2011, p. 210). As "readymades," Duchamp (1st floor) (Vancouver Art Gallery, 2016) hindered selected objects' performance of intended functions merely by altering their position and locality ("Duchamp Was Here", 2017) while works by Picasso, such as *A Still Life and Chair Caning* (Harris, 2016) compelled visual interest by bringing objects and ideas into close proximity through mixed media constructions in ways and to degrees neither previously witnessed.

Artistic approaches such as Duchamp's, Picasso's, and DJ Spooky's are all representative of mashup amongst hundreds more "found images, objects, sounds and words [pressed] into art production" Vancouver Art Gallery ("Groundbreaking Exhibition on Mashup Culture to Occupy Entire Vancouver Art Gallery") Remix (Lasalle, 2009) like mashup, challenges notions of copyrighted works' appropriation, materializing authorship within contexts of hybridity and (re)combinatoriality. The rapid adoption of "collage, montage, sampling and the cut-up" are all practiced in creativity's pursuit "where the New Aesthetic seeks to harmonize the now-everyday crossover of the digital and the actual" ("Mashup: The Birth of Modern Culture")

According to Benjamin (2008) the work of art in the age of mechanical reproduction bears an *aura* as breath or wind that diminishes in the act of reproducing. The work becomes

contemporaneous as we embrace non-mechanical reproduction *vis-à-vis* what is now digital reproduction.

Weights and Pulleys: Walter Benjamin, Pangs, and the Virtual Flâneur.

Goldsmith declares Walter Benjamin's *The Arcades Project* a "literary roadmap of appropriation": "...A great book to bounce around in, flitting from page to page, like window-shopping, pausing briefly to admire a display that catches your eye without feeling the need to go into the store" (Goldsmith, 2011, p. 117; CNN, 2014).

Attribution becomes blurry, difficult, and contentious in an age of mashup and remix as appropriation is still considered ignoble, and alleged infringement may be aggressively pursued by any aggrieved party and its legal counsel. In many ways, an art gallery exhibition such as *MashUp* – in its showcase of mashup, is constrained by a spectre of litigious threat that might caution any relaxation of attribution if mashup sensibilities of the co-construction of artistry were to be fully embraced.

Building Towered Foresight: Gestation, MashUp, and Exhibitors.

As doctoral students from communities outlying the primary, physical location of the *Mashup* exhibition, once hosted *at* the edifice of the Vancouver gallery and now long since dismantled, we continue to access its exhibits at an amalgam of sites, including YouTube, various web links and a catalogue available for purchase in the gift store: the compendium companion work, *MashUp: The birth of modern culture*.

Once entered, the entire space is dedicated to *MashUp*. It could hardly be otherwise, for to maintain any segregated portion of the gallery for the exhibition of standard fare, say, Emily Carr paintings ("Fuse at VAG ", 2017) would be anathema to mashup aesthetic (Capehorn2, 2016). Throughout all four storeys, the exhibition impresses as a massive undertaking by any

metric. In the gallery entryway (Vancouver Art Gallery, 2016) bold slogans (Laurence 2016). stand staircases high and stretch across the entire floor. Spanning an entire wall are images of Logorama (1st floor) Vancouver Art Gallery, 2016), an award-winning film that challenges proprietary notions of logos' use by featuring thousands of them.

Countless exhibits within the gallery showcase mashup, montage, sampling, collage, remix and (mis)appropriation. (Re)photographic works by photographer Richard Prince (Forbes, 2015) (2nd floor) (Vancouver Art Gallery, 2016) are exhibited. French film director Jean-Luc Godard's 1965 work, *Pierrot le Fou* (*janusfilms*, 2007; Vancouver Art Gallery, 2016) (3rd floor), which applied numerous features of the pop art movement, is shown in one of several small viewing theatres. Elsewhere, a video plays which highlights American director Quentin Tarantino's (2nd floor) (Vancouver Art Gallery, 2016) reliance on homage (IndieWire, 2016) in his filmmaking; an approach also alleged to be blatant appropriation. Vidding – as fan (“vidder”) produced music video creation, is also on display, including such offerings as “multifandom” (Gray, 2014; space vid, Bironic's Starships.” Throughout the gallery, videos loop examples of the cinematic remixer's craft: Joseph Cornell's 1936 collage film, a curiously composed ode to film actress Rose Hobart (TheLyulai, 2012), (4th floor) (Vancouver Art Gallery, 2016) and filmmaker and Canadian National Film Board (NFB) employee Arthur Lipsett (Xezene1, 2010) (3rd floor) (Vancouver Art Gallery, 2016) who created an oeuvre comprised of sound clips and found images from NFB archives.

The culture of the 1980's drag ball (Lawrence, 2016) (2nd floor) (Vancouver Art Gallery, 2016) is featured as a subgenre of entertainment created by New York inhabitants who were male, African American, and gay, and who “seized available cultural artifacts and objects to create an organic composite culture” (Lawrence, 2016).

Hip hop, electronic and dub (3rd floor) (Vancouver Art Gallery, 2016) tracks are available for listening. Dub's Jamaican roots, and pioneering use of multitrack technology are showcased as an approach whereby "any song could become countless other songs through dub's playful recastings" Machinimas (Silverberg, 2011) genre's "misappropriated" use (1st floor) (Vancouver Art Gallery, 2016) of video game Equipment (Silverberg, 2011) to create movies, exemplifies the Situationist (Augustine, 2013) conception of *détournement* (Gross, 2016) that is elsewhere featured (2nd floor) (Vancouver Art Gallery, 2016).

The Internet archives many of these films and artistic works, continuing the experience of the gallery's exhibition long after the physical incarnation has been disassembled. It really was an informative and inspiring display; highly influential. We were thrilled to attend and witness it all. It still reverberates in and around us.

Feathers, Iron...: Appropriation Crowning, Commodification, and Appropriation.

Goldsmith likens navigating the Web (as we, similarly, liken riffers) to the virtual *flâneur* "hypertexting from one place to another... casually surfing from one place to another; how we've learned to manage and harvest information, not feeling the need to read the Web linearly, and so forth" (Goldsmith, 2011, p.114).

In riffing on *MashUp*, we find ourselves less enthralled with notions of birth, and "cultural birth," preferring instead a visual metaphor of "plugging in"; and "riffing" to do so. We also contest implied dualities between man and machine, modern and non-modern culture, and separations that imply any superior human agency, as we acknowledge progression in the relationships between technology and human entities in both mediated and unmediated shared spaces.

Humanistically, museological legacies of “exhibition” as representational, positivist, and epistemic in their historicity are contemplated alongside new materialist curation as performative, embodied, and ontologically focused. For example, by engaging the ontological, an exhibit by Brian Jungen (*Art2*, 2019) (2nd floor) (Vancouver Art Gallery, 2016) plugs into relationship with the unceded aboriginal dirt under the building (Johnson, 2016). How do entrances and exits relate to a physical structure’s surroundings, and reflect a continuous sense of inside, outside, reversals; an exoskeleton that is reminiscent of the architecture of Frank Gehry (3rd floor) (Vancouver Art Gallery, 2016)?

Similarly, *The Keg Restaurant and Bar*, as “Presenting Sponsor,” litters its banners and logos in the gallery’s materials; the contradictions between the *MashUp* curation’s presentation and participation in matters of appropriation, contrasting the protection of intellectual property provided for clients by sponsor DLA Piper (2015). Prostitute, flaneur, collector. We relate Wonder Woman’s inclusion in the exhibit to pop culture’s “embrace of commodity culture” (Rebick, 2016, p. 147) to the dress code for waitresses at the sponsoring *Keg Restaurant and Bar* (CBC News, 2013). Why not? Flaneur, prostitute, collector.

The human and non-human co-occupy this space as remix, mashup, and exhibitional-performance. Engagement is redirected from officially suggested discourse to a non-representational “riff” that doesn't ask what the exhibit means, but rather what does this curation—this *MashUp*—do? Museums can be sites of radical encounters, contentious maps can overlay official programs, and ontological foci may hasten pedagogical collision. Throughout, we riff (with) these encounters, finding inspiration and precursor in Benjamin's monumental *Arcades Project* of which Goldsmith writes:

It is (...) made up of refuse and detritus, writing history by paying attention to the margins and the peripheries rather than the center: bits of newspaper articles, arcane passages of forgotten histories, ephemeral sensations, weather conditions, political tracts, advertisements, literary quips, stray verse, accounts of dreams, descriptions of architecture, arcane theories of knowledge, and hundreds of other offbeat topics. (Goldsmith, 2011, p. 114).

This is the stuff of [onto]Riffology and new materialism's cultural sensibilities that bring onto-epistemological readings to the creative, "the uncreative," (Goldsmith, 2011) material, the arcade, the art gallery, mashup, and MashUp "in review."

4.3. Ritornello IV: Graffiti

Ritornello IV is a photo essay that highlights an important arts initiative in Kamloops. Commercial trash bins are owned by the city and were often vandalized with costly repairs and damaged the visual landscape. Such matters have historically been either a civil offense subject to fines or treated criminally, and both have failed in Kamloops. Two city staff from the solid waste department chose an *aesthetic* intervention instead of a legal one, fully bypassing police and enforcement. The Kamloops Bin Project hired young street artists to do the work, and the planning group included the local art gallery, a skateboard and graffiti store, artists from non-profits and others. The program had unexpected benefits. Almost immediately, the program was cost-neutral and the generated savings. Here are some photos taken during the initial phase of the project, and a video shows how well-preserved the bins were at the beginning of this year. [Click here.](#)

CHAPTER 5: ANTHROPOCENE'S PROJECTIONS



Figure 5. *Fort Da: Tra-La-La.*

R. Wainwright, 2021 CC BY-NC 4.0

5.1. Introduction Anthropocene's Projections

Treachery in Images

Green coloured vegetation covers a roadside pull-out where the treeline opens into a neat rectangular shape. Without a conscious thought, my brain assembles the near perfect shape of the clearing and surrounding trees into the familiar image of a soccer field, and when the seasons and colours change, it is easy to confuse the space with that of a construction site breaking ground. As I visualize the world, I am surrounded by familiar, and cliché thought-images. In an environment where every clearing is momentarily regarded as a potential development site, and when subjectivities form around these perceptions, how likely is it that other capacities or applications will be considered? Gregory Bateson explains that “we create the world that we perceive, not because there is no reality outside our heads [...] but because we select and edit the reality, we see to conform to our beliefs about what sort of world we live in” (1999, p. 6).

In this way, the grassy field exists in my mind as a visualized construction, carrying whatever meaning attached to it, yet it properly exists in the real world, independent of my perception. The ecology of the mind is inextricably linked to that of the social and environmental. Stated otherwise, Guattari says, “the ecological crises can be traced to a more general crisis of the social, political and existential” (1995, pp. 119–120). In Guattari’s use of the term ecologies, three registers are considered: the environment, social relations, and subjectivity (2011, p. 28). They are often called the “mental, social, and environmental ecologies” (2011, p. 41) and together, irreducibly, they constitute a broader approach to earthly matters that Guattari refers to as ecosophy (1996, 2000, 2013). Distress in one register will affect all others.

Environmental impacts are often treated symptomatically and from neoliberal perspectives: Attempts at remediation are delivered within the same conventional socio-economic framework under which they originated. The damage of clear-cutting forests in British Columbia results in interventions that introduce fast-growing species that are less resistant to fire and pests (Daniels, 2021), and these market-driven interventions negatively impact multiple ecological systems (Daniels, Brooks, et al., 2020). Guattari explains;

The only true response to the ecological crisis is on a global scale, provided that it brings about an authentic political, social and cultural revolution, reshaping the objectives of the production of both material and immaterial assets. Therefore, this revolution must not be exclusively concerned with visible relations of force on a grand scale, but will also take into account molecular domains of sensibility, intelligence, and desire. (2011, p. 28)

Throughout this dissertation I speak broadly about the relationships between art and the visible world, and here I underscore that “in this regard, poetry, music, the plastic arts, the cinema—particularly in their performance or performative modalities [which] have an important role to play, with their specific contribution and as a paradigm of reference in new social and analytic practices” (Guattari, 1995, p. 91).

5.2. Review of the “Anthropocene Project”: Treachery in Images

From “A Review of ‘The Anthropocene Project’: Treachery in Images,” by S. Stevens. and R. Wainwright, 2020, *Art/Research International: A Transdisciplinary Journal*, 5(2), 567-584. Copyright 2020 by Shannon Stevens and Richard Wainwright. Reprinted with permission.



Figure 5.1. *Treachery Projected.*

R. Wainwright, 2020. CC BY-NC 4.0

Note: Projected in Kamloops, BC: The Anthropocene, Treachery in Images, (2020). “The sooner governments move to allow additional pipeline capacity to be built, the better off Canada will be” (Scotiabank, 2020a, p.5).

Projects in the Anthropocene

The world is replete with natural features that humans find visually pleasing. For example, humans confer much aesthetic value on mountains: towers of igneous protrusion formed at points of contact between tectonic plates. Mountains compose artistry alongside plant life, waters, and animals, in assemblage. They express themselves creatively as their crevices and grades determine waters’ courses and flows, while these waters reciprocally act on

mountains by slowly eroding contours into their surfaces.

Despite mountains' self-expression, there is also potential for their human exploitation, and they have long been co-opted, commodified, and monetized in service of humanity's various projects. An art exhibition that was unveiled in 2019, *The Anthropocene Project*, showcases the extent of human activity's impact on planet earth. Truly a *project* in its many components, it includes photographic displays in art galleries and museums both across Canada and internationally, a feature length film (*The Anthropocene: The Human Epoch*¹⁰, an illustrated catalogue¹¹, a book of essays¹², a lecture series, educational programmes, a proposed curriculum, virtual/augmented reality, a podcast, and smartphone applications.

As doctoral students, we bring ontological curiosities to the topics raised by *The Anthropocene Project*. We view, review, experience, and critique its offerings vis-a-vis the things that make us think, how we think about them, and what we might do with thinking about them. Exploring what the exhibition is doing becomes the preoccupation of this museum "in-review" (Wainwright & Stevens, 2017). We attempt to redirect our gaze from aesthetically pleasing images of global destruction to what actually *drives* proclivities that risk calamity. In doing so, different relationships, forces, and concerns come into relief.

Thanatourism

Mountains' biomes are collections of physiological adaptation, which include mosses, fungi,

¹⁰Feature film: Baichwal, J. (Director). (2018). *Anthropocene: The human epoch* [Film]. Mercury Films.

¹¹Exhibit catalogue: Burtynsky, E., Baichwal, J., de Pencier, N., & Boettger, S. (2018). *Anthropocene*. Steidl.

¹²Hardcover book: Hackett, S., Kunard, A., & Stahel, U. (Eds.). (2018). *Anthropocene: Burtynsky, Baichwal, de Pencier*. AGO/Goose Lane Editions.

grasses, plants, insects, and animals. These combinations demonstrate artistry independent of mind and human involvement. Viewed through an anthropocentric lens, mountains are natural wonders and visual masterpieces; however, their images belie significant environmental impacts sustained within their ecosystems. While admiring their majesty from a distance, humans simultaneously scheme to access mountains' hidden treasures: their vast potentials for tourism and resource extraction by mining and drilling. Although mountains have always been obstacles to the easy conveyance of humans and resources, Herculean feats of human tunneling—assisted by the mighty force of dynamite—have been increasingly successful in conquering such challenges. Like rock, glaciers' ice may also be tunneled as touristic sites. Mountains host all manner of recreational venues as theme parks for winter play and sport. At their highest and most inhospitable elevations, mountains can become sites of macabre spectacle. Climbers litter detritus that becomes preserved in the snow through generations: including, at times, their corpses.

Touristic industries that visit upon the macabre and unseemly have long existed. These direct the human eye and body to visceral experiences, while stirring emotions when one is in physical proximity to sites “[...] associated with death, disaster, acts of violence, tragedy, scenes of death and crimes against humanity” (Walby & Piché, 2011, p. 451). This genre's offerings are variously called “dark tourism”, “shock tourism”, or “thanatourism”—“thanatos” meaning death in Greek. Making excursions to this touristic genre's theme parks and museums, visitation is engineered as an immersive experience that may employ enhanced use of sound effects, audio recordings, videographic presentations, and sensory events to heighten grisly experiences (Walby & Piché, 2011). Human desire may give rise to a double articulation that both fetishizes destruction and makes palatable its cinematic representation. As a multi-mediated exhibition co

created by Jennifer Baichwal, Nicolas de Pencier, and Edward Burtynsky (2018a, 2018b), *The Anthropocene Project*¹³ thematically addresses these pressing, yet controversial, matters of our age: climate change and the effects of human activity on the earth. The project comprises multiple sites that each warn against the spectre of ecological calamity, while perversely showcasing the visual appeal of rubbish tips, pools of polluted water, and topographical scarification. During the project's capstone feature length movie, *Anthropocene: The Human Epoch*, its filmmakers (Baichwal, 2018) use photography to “document evidence and experience of human planetary domination” (The Anthropocene Project¹⁴, 2018b). *Anthropocene: The Human Epoch* has played in cinemas internationally, on Air Canada flights, on CraveTV, and is available for purchase on DVD. *The Anthropocene Project's* multiple approaches (film, exhibit, books, curriculum, merchandise, etc.) all become part of a cultural conversation on, and of, questionable ethics. *The Anthropocene Project* performs something wholly curious, disturbing, and informative in its presentation of images. We are spectating a triumph of human-will which allows the aestheticization of the colours, textures, and sounds of environmental disaster. The viewer is seduced by lingering scenes and compelling images of ecological destruction.

What is it about these times, our sense of aestheticism, and our personal taste for nihilism that a CBC news article about *The Anthropocene Project* can apply such an improbable term as

¹³ According to its homepage, “The Anthropocene Project is a multidisciplinary body of work from world-renowned collaborators Nicholas de Pencier, Edward Burtynsky and Jennifer Baichwal. Combining art, film, virtual reality, augmented reality, and scientific research, the project investigates human influence on the state, dynamic and future of the Earth.” See <https://theanthropocene.org/> Given its multiple forms, platforms, and creators' functions, we variously reference and cite de Pencier, Burtynsky and Baichwal across this in-review as they indicate in their credits.

¹⁴ Here *The Anthropocene Project* refers to the legal entity and corporate author of the webpage <https://theanthropocene.org/>

“apocalyptic beauty” to the project’s film aesthetic (Tremonti, 2018) and we can imagine the truth in this juxtaposition of words? We are convinced that having never enjoyed proximity to whales we would rush to view one stranded, among dozens of its species washing ashore onto coastal lands each year. Almost analogous to our curiosities about beached whales is a human propensity to zoologically display all types of animals and insects, both in life and death. Humans nobly attempt to address our species’ role in hastening other species’ displacement and depletion by protecting their remaining numbers. However, zoos are problematic, too. Zoos regularly *keep* animals wholly unsuited to the climates of their host institutions (polar bears in Mexico, camels in Canada). Attempts to anthropocentrically *care* for animals by displaying them has perpetuated a worldview that wildlife exists for human entertainment. We fetishize their exoticism, as we lament their near extinction. Visiting a zoo is a childhood rite and initiation that early normalizes our domestication of wild species. In a futuristic version of a zoo that need not be physically visited, *The Anthropocene Project’s* photographic catalogue¹⁵ (Baichwal, de Pencier & Burtynsky, 2018) features an augmented reality (AR) display of the last remaining male northern white rhinoceros (now deceased). As visitors to the project’s locations, we are thanatourists who pay admission fees to experience the physical museum exhibits, browse the project’s collections in printed catalogues, and peruse its website. As online attendees, our participation in the exhibition, and all that surrounds it, is disorienting. This is not simply “a world for us” (jagodzinski, 2018, p. 16). We are jolted by the exhibition’s affect. If we find ourselves awed by aesthetically pleasing portrayals of human and technological achievement among displays of environmental ruin, what does this betray about our personal collective desires? Burtynsky, the project’s photographer and cinematographer, employs light and chemical

¹⁵ This refers to the museum catalog.

properties with skills that render work sites, quarries, mines, and garbage dumps as works of art to a degree far beyond what our mind's eye typically summons. Given both the project's title and premise, we enter its sites prepared to submit to education by grim spectacle. Instead, we find ourselves seduced by the elaborate photographic treatments that the images have received. We wonder why we haven't previously recognized this beauty in a landfill or an excavator?

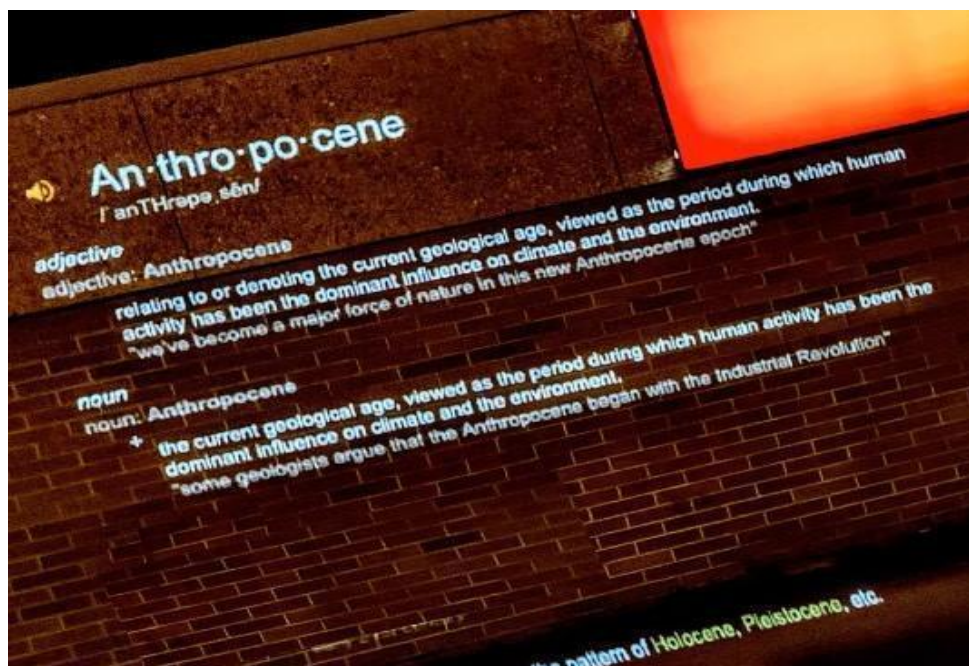


Figure 5.2. *Projected Definition.*

R. Wainwright, 2020. CC BY-NC 4.0

Note: Anthropocene Definition, Kamloops B.C., 2020. "Scotiabank affirms their support of the Paris Agreement and that matters related to the Anthropocene are of critical importance" (Scotiabank, 2020b).

We attempt to confront our disconcerting tendency to champion anthropocentric achievement. In what ways are we becoming complicit in a treachery of images by appreciating aesthetically beautified photographs that anaesthetize viewers in order to regulate their exposure to anthropocentric scenes of horror?

Deterritorialized Zoo

The sixteenth century Dutch painter Pieter Bruegel¹⁶ created busy scenes of peasantry engaging in the rituals and festivities of agrarian society. *The Anthropocene Project's* photography often adopts a bird's eye view perspective that evokes Bruegel's approaches and subjects: depictions of distant elevated landforms, foregrounded by villagers and buildings viewed from on high—presumably viewed from hills and mountains. The artist portrayed nature and humanity in relationship, centuries before the Industrial Revolution, and explored darker themes suggesting the degree to which these relationships can go awry.

Burtynsky elevates his camera's viewpoint using airplanes, helicopters, and drones to achieve vantage points that only mountains and hills have historically provided¹⁷. Receiving Burtynsky's attention, details become indistinct and colours come to the fore. Skilled photography creates beauty in scenes of lithium ponds captured many hundreds of metres above ground, a result that would seem impossible to achieve in a human held glass of these same ponds' murky, poisoned waters.

If such eco-disasters are the cost of doing business, then should we feel anything but dissonance when peering at the digital cinematic photography yielded by alchemical potions of disaster capitalism? Presumably, newspapers would not publish descriptions of a human crime scene showcasing “the murderous beauty of the mass shooter's skill.” Yet, here, views of nature stripped, poisoned, and mutilated elicit our attention for their seduction.

Aesthetically pleasing portrayals of disaster desensitize—denervate—us as viewers, thus, stymieing meaningful considerations of that which remains ontologically unseen and

¹⁶ See Bruegel painting that depicts peasant life: <https://bit.ly/3tbJe4l>

¹⁷ See <https://www.edwardburtynsky.com/>

unexplored. *Anthropocene: The Human Epoch* is billed as a “cinematic meditation” (2018b). Its effect reassembles our felt horror at what is going on in the world. Viewing skilled filmmaking (sets, script, lighting, soundtrack, editing) provides impetus to structure visual, auditory, and cognitive narratives about what we need to take back into the world as affect.

Like Bruegel’s village scenes of workers centuries ago, this pictorial study similarly features site workers, salaried machine operators, and unskilled labourers busy at their tasks. In the film, employees populate various scenes; however, we don’t see images depicting the matrix of relationships between public and private stakeholders, nor the historicities of how these relationships came to be. Anonymizing bureaucratic and corporate structures in *The Anthropocene Project* serves to obfuscate the relationships between what incentivizes human activity and the capital motivating it. Notably, most every scene’s depiction of the Anthropocene—photographic and cinematic—has been seemingly purged of most indications of corporate ownership, including logos that normally brand companies’ names. These have been obscured by light, fog, distance, or absence (possibly by removal). In this manner, *The Anthropocene Project*’s unscripted narrative is analogous to showing the enormity of Hiroshima without mentioning America’s development of nuclear technology and its willingness to deploy it.



Figure 5.3. *Projecting Sponsorship.*

R. Wainwright, 2020. CC BY-NC 4.0

Note: Projected in Kamloops, BC: Banking on the Anthropocene. 2020. “The *Anthropocene* exhibition, presented by Scotia Wealth Management, documents how humans have changed the face of the planet” Scotiabank (2020c).

Capitalocene

When viewing *The Anthropocene Project*’s feature film and books, we grow concerned that depictions of the role of corporations in resource extraction, the manufacturing of goods and services, distribution processes, consumption, and ultimate disposal have ended up on the cutting room floor. Perhaps this excision results from the filmmakers’ attempts to chronicle anthropic effects on ecologies, while dodging capital’s significant role in driving them. We are curious about the tenuous relationships that the filmmakers maintain and the fine lines they tread in this pursuit. *The Anthropocene Project* gives us pictures of the anthropocentric

problem, while avoiding disruption to shareholders' profits. For example, in *Anthropocene: The Human Epoch*, the segment about the German Tagebau Hambach open-pit coal mine makes no mention of the RWE Power company, its connection to the German government and to European private security firms; nor that it has been accused of waging a low level war against those who oppose its activities (Brock & Dunlap, 2018). Curiously, despite being the focal point of its images, the mine's mammoth excavators are positioned at considerable distance, in already small photographs. In one of these images, the machine's logo hangs suspended on its frame, but is inexplicably blurred and illegible. Were these omissions the conditions to which the filmmakers submitted in order to secure entrance to the worksite and its impressive machinery's inclusion in the motion picture?

Overall, *The Anthropocene Project's* thrilling presentation fails to contextualize a geopolitical crisis that is framed in capitalist exploitation. There is an alarming paradox between *The Anthropocene Project's* subject and its corporate sponsors' business dealings. Scotiabank provides key funding, while investing in environmentally controversial projects worldwide that include fossil fuel mega-projects (Banktrack, n.d.). Various Canadian telecom providers also financially support *The Anthropocene Project*, and we are intrigued by the nature of the contributions they make through the Canadian Radio and Telecommunications Commission's (CRTC) *Certified Independent Production Funds* programme. The CRTC requires that Canada's cable television providers contribute 1% of their annual gross revenue to independent drama productions (Government of Canada CRTC, 2013). Hence, the funding of this film has been at least partially operationalized by corporations' inclination to receive tax breaks and financial incentives from government mandated programmes, more so than pursuing editorial truths or engaging meaningful altruism.

This is all a continuation of the complex, but compromising, relationships between humans and nature compellingly depicted in the project. We are witnessing the “consequences of environment-making” (Moore, 2016b, p. 78). Haraway (2016a, 2016b) recalibrates the Anthropocene from prospective *aeon* (that proceeds the Holocene), to a phenomenon of far shorter duration: a boundary event. Additionally, Haraway (2016a, 2016b) introduces the Capitalocene as a concurrent boundary event to the Anthropocene. The Capitalocene recognizes capital as being the force compelling relentless resourcing of the earth by means of “exterminationist extraction” (Haraway & O’Neil-Butler, 2016). The Capitalocene marks the era when “nature became a factor of production” (Moore, 2016b, p. 91). Some five hundred years ago, a new economic system—an ideology—was born from supplementing the agrarian concerns of land productivity with those of labour productivity at lowest cost.

The emergence of anthropogenic capital explains even the historical reluctance of landowners to assert personhood to slaves: humans’ value was only fully optimized once their labour could be so fully exploited. In environmental realms, capital’s existence explains why earth’s *bounty* is communicated by using terminologies that bespeak the manner in which humans readily commodify nature: fish become “fisheries . . .” “[...] animals ‘livestock,’ trees ‘timber,’ rivers ‘freshwater,’ mountain tops ‘overburden,’ and seacoasts ‘beach front’” (Crist, 2016, pp. 28-29).

Altvater (2016) asserts:

‘Nature’ has been transformed into capital asset. Nature has been reduced to something that can be valued and traded and used up just as any other asset: industrial capital, human capital, knowledge capital, financial claims, and so forth. (p. 145)

Perhaps it is not the mandate of an exhibition called *The Anthropocene Project* to

overtly explore or portray these relationships of capital, but herein lays a treachery. Capital suggests why all the humans depicted in the film show up at those worksites. Capitalism indicates why the earth's crust is being relentlessly scraped and scoured. The Anthropocene “sounds the alarm—and what an alarm it is! But it cannot explain how these alarming changes [allegedly to planet earth, purportedly by human activity] came about” (Moore, 2016a, p. 5). The Capitalocene invests in strategies nearly exhausted; always cost shifting to a future of increasingly doubtful longevity. We had best develop “capacit[ies] to forge a different ontology of nature, humanity, and justice” (Moore, 2016b, p. 114). How do we achieve this without being as financially, editorially, and aesthetically compromised as *The Anthropocene Project* appears to be?

Curations

In Bruegel's 1562 work, *The Triumph of Death*¹⁸, we witness suffering and desolation across a smoke choked landscape of scorched earth, deadly waters, dying trees, beached fish, emaciated animals, and distraught humans that are being dispatched, irrespective of their social status, by malevolent skeletons. This is an apocalyptic vision; we observe its tableau from an elevated viewpoint that permits us to more easily behold the extent of its ghastly proceedings. Thanatouristic narrations abound in the Anthropocene. “In darkest tourism, museum cyberguides and curators will take their virtual-tourist on real time tours of active detention camps, killing fields, death rows, and execution chambers” (Miles, 2002, p. 1177). There is a certain moral superiority that is implicit to the thanatouristic experience, as we gape at the barbarity of human activity through the ages. The thanatourist feels a sense of relief at the

¹⁸ See <https://bit.ly/3yOQa8M>

privilege of not having to remain in these curated spaces after business hours. The nature of the Anthropocene is different. Whence is our escape from this macabre theme park? Who and what beings are exempt from its grave portent?

The Anthropocene Project tests our efforts to resist our tendencies towards representational thought. We are disciplining ourselves by attempting to look past images of human endeavour and their capture, so that we might ask questions of a different nature: ones layering those typically asked of the content as epistemology, rather than ontology. We are, therefore, hopeful that the act of viewing artistic images in an exhibition such as *The Anthropocene Project* will serve to galvanize new thinking and understanding. We enfold Deleuze's (1985/1989) caveat concerning over-reliance on the representational: "When grandeur is no longer that of the composition, but a pure and simple inflation of the represented, there is no cerebral stimulation or birth of thought" (p. 164). This informs a suspicion about the "inflated" representation of striking images of destruction included in this project. The photographic production, and its curation, has been intentionally preserved as other worldly and devoid of context. The photographic representation detaches us from the true ugliness of the depicted scenes. The skills and resources dedicated to beautifying these images are considerable—why should this be a priority to the creators of *The Anthropocene Project*? How do our appetites inform what we want to view, and not see?

Deleuze and Guattari (1980/2014) suggest that "for all of time, painting has had the project of rendering visible, instead of reproducing the visible..." (p. 346). Photography is doing likewise throughout the Anthropocene Project. As cameras are pulled back farther and flown higher, colour diffuses across space and shifts the appearance of what lays between. The

catastrophe must look aesthetically pleasing, not interfere with stock values, not provoke disruption to work sites, not attract protesters. The capitalist aesthetic is to make everything for sale. This is the banality born of a socio-economic system: Its negotiation takes place when citizenry is held hostage to an inevitable course, whatever form that may take.

Closing

Mountains thoroughly preoccupy humans, they are relied on for their beauty, resources, and recreational uses. Mountains, however, exist independently of humans' conceptions of them and intentions for them. Mountains do not depend on humans for either their beauty or artistry. Their composite is not intended for human use. Flags of patterned fabric planted on their summits are irrelevant to their being. Anthropocentrism asserts belief in "mountains for us," however mountains long precede us, and the future of humanity will be predicated on a rapidly forged ability to reimagine relationships with our physical environments, including with mountains.

Haraway (2016a, 2016b) suggests that alongside the Anthropocene and the Capitalocene, a third timescape of Chthulucene spans past, present, and future. It comprises mutually reciprocal relationships that are entwined, *tentacular* existences of all species in a reconfigured world (Haraway, 2016a). "The unfinished Chthulucene must collect up the trash of the Anthropocene, the exterminism of the Capitalocene, and chipping and shredding and layering like a mad gardener, make a much hotter compost pile for still possible pasts, presents, and futures" (Haraway, 2016b, p. 61).

Describing "precarious times, in which the world is not yet finished, and the sky has not

fallen—yet,” Haraway (2016b) further asserts:

We are at stake to each other. Unlike the dominant dramas of Anthropocene and Capitalocene discourse, human beings are not the only important actors in the Cthulucene, with all other beings able simply to react. The order is rather reversed: human beings are with and of the earth . . . (p. 59)

The Anthropocene Project is a defining moment rather than an epochal one about environmental catastrophe. *Anthropocene: The Human Epoch* features a human vocal narration that sings a gentle song, and scores violently calm images that lull us in our eerie state of dissonance. The project co-creators, individually and jointly, are masters of their crafts and seemingly stress the aesthetic of the distant and surface, rather than the affective and intellectual. If the planet’s future is to be determined by the interests of capitalistic investors and the cinematic images they fund, as in the case of *The Anthropocene Project*, then the planet’s future looks frightfully amazing.



Figure 5.4. *Sponsorship's Project.*

R. Wainwright, 2020. CC BY-NC 4.0

Note: Projected in Kamloops, BC: Edward Burtynsky. 2020. "Photographer Edward Burtynsky and [Scotiabank's] CONTACT are requesting submissions for the 2020 Burtynsky Grant—a \$5,000 annual grant to support a Canadian artist in the creation of a photobook" (Scotiabank, 2020d).

5.3 Intermezzo III: In Formation

“A bird in flight has no idea of the shape of its flock,” says Berardi and Geraci (2019, p. 57). Yet the bird and the flock persist continuously in a state of territorialization and deterritorialization. Members join and leave; wind patterns shift, and obstacles are maneuvered. The formation is in motion. It is motion. Research doesn’t merely represent information, “returning constantly to the same supposedly foundational structures, the same archetypes ... but rather compositions of the unconscious, contingent topographies, evolving with social formations, technologies, arts, sciences, etc.” (Guattari, 1989, p. 23). Lines of flight (Deleuze & Guattari, 2014) aren’t defined by the movement from point to point, nor are they simply moving in waves. “The idea of a flock emerges from creatures that are completely unaware of their collective form, of its size and formation. A bird that joins a flock is blind to the grace and cohesiveness of the geometries of flight” (Berardi & Geraci, 2019, p. 57). The work of this chapter, and dissertation, is in-formation.

Dolleen Tisawii’ashii-Manning describes starlings’ murmuration from the point of view of her Ojibwe-Anishinaabe heritage, and the way they “interweave intricate cascading flight patterns around land, wind, and other flock formations without ever colliding” (2017, p. 216). She explains:

...as a cohesion of particularized differences and a correspondent whole of communal indifferentiation, this theory of entanglement negates the possibility of any absolute indifference. I propose that a kind of autonomy does infiltrate this ‘reality,’ not as a bounded locus of knowledge, but as an externally conceived and torn co-responsiveness (2017, p. 205)

The researcher's reflex, then, is to perceive the world both as internal and external to what is being observed to gain an understanding of our human selves, a position which is never fully attainable. Yet there seems to be a tension between the urge to separate from something to study it, while on the other hand holding on to the value of the close perspective. Among the different elements of the flock, there are concurrent and mutually dependent physical and mechanical relationships: The flock's collective vision, and its physical sensation bear little resemblance to that of any individual within the larger body^[1]. There are relays of intensities and flows, controlled, for example, by wind, gravity, radiant heat, light, sounds, humidity, and electromagnetic energy. Sight doesn't rely on a specific set of eyeballs attached to discrete individual bodies, but rather to a multiplicity of sensations that are open and distributed.

Referring to Guattari's description of hypercomplex refrains, Bertelsen and Murphie explain:

Overall, we face a powerful mix of simple, sensory, problematic, and massive affects, given some structure in time by simple, complex, and hypercomplex refrains in varying processes of composition and decomposition. These perform a reorganization of sensation and instinct, of temporalities, of resonances within or across nervous systems, involving the likes of globalization, neoliberal economics, global warming, the war on terror, mathematics, love, music. (2010, p. 149)

It is not just the simple birdsong but also the complex and relational refrains of murmurations that make political statements collectively.

^[1] Tisawii'ashii Manning speaks to similar themes on several podcasts at <https://bit.ly/3zsAkBx>

5.4 Ritornello V: Starlings, Miners, TikTok Teens

As the story is told, it was TikTok teens who disrupted Trump's Tulsa rally in June 2020 by not showing up, having booked tickets that were never meant to be used. This received a great deal of attention, demonstrating to the world that angry teens may be a force in the face of Donald Trump's tyranny. To put this in perspective, similar tactics of disruption were used to interrupt police investigations into some of the BLM riots, where police were tracking keywords and posted images to identify rioters. The US Government threatened to force TikTok's sale to Microsoft, a heavy hand reminding the Chinese owned company that they were in the US at the government's discretion.

The totality of individual Starlings are only part of what comprises a murmuration. In other words, they are not simply enclosed machines, but they are broad and open in that they interact with everything else in the air, trees, mountains, while responding to electromagnetic energy, ambient light, sound, temperature, and much more. To see only the starlings is just as limiting as focusing on the TikTok teens when the complex environment is so important.

We must not think for a moment the act of coming together in a common cause is necessarily good. Both fascism and late-stage capitalism exist in formation. I caution myself not to over-romanticize humanist perspectives of such formations, and as Robert McFarlane asks:

Is there a word yet for the post-natural rain that falls when a cloud is rocket-seeded with silver iodide? Or an island newly revealed by the melting of sea ice in the North-West Passage? Or the glistening tidemarks left on coastlines by oil spills? We speak

memorably of a murmuration of starlings, to describe vast flocks of those birds dancing and palpitating in the air above reed beds and wetlands. But as yet we have no term to denote the gulls that swirl above our landfill sites, or the red kites [birds] that turn above the meat factories of the Cotswolds [south central England]. (2015, n.p.)

The example I find of most interest is that of the alliance between Welsh miners and a gay and lesbian advocacy group that under came together under Thatcher's leadership, forged a transversal relationship with long enduring impacts, some of them quite related to the types of murmuration described by Berardi (2019). [Click here.](#)

CHAPTER 6: TRUTH AND TRICKERY

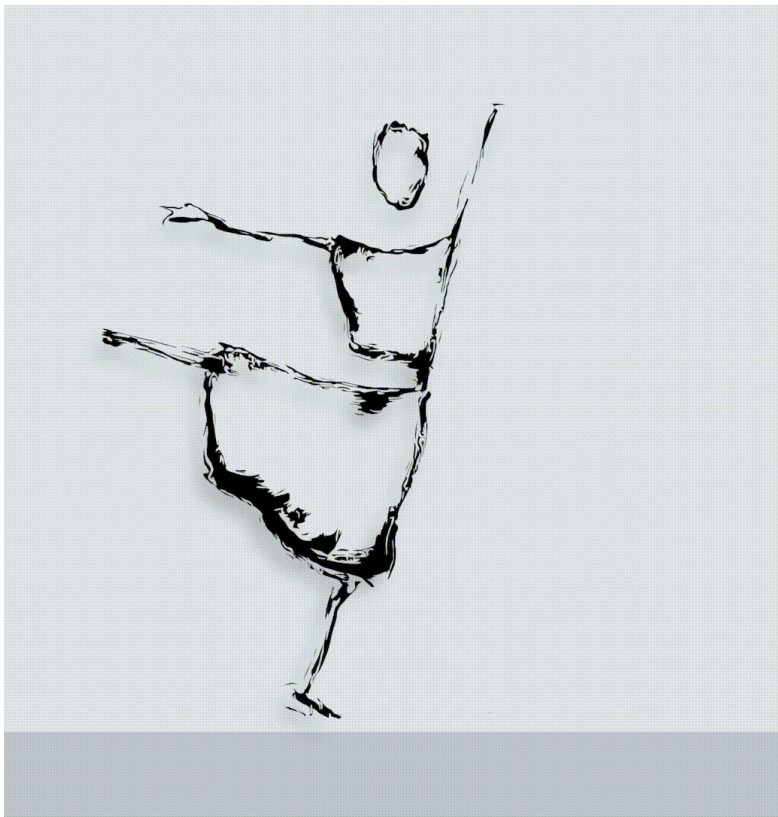


Figure 6. *Klee-mation.*

R. Wainwright, 2021.

Note: Adapted from *Paul Klee Painting Scarecrows* by J. Strieder and A. Niex. Used with permission.

All rights to the original © J. Strieder and A. Niex 2014.

6.1 Introduction to Truth and Trickery

Marginal Scribbblings

“Shady Figures and Shifting Grounds for Re/Truthing: Channeling McLuhan’s Posthuman”, was published in a special issue of the *Journal of Curriculum Theorizing* (JCT) in 2019. *Curriculum Theorizing in the Post-Truth Era* was the theme of the call for papers. With the [American] election resulting in considerable upheaval, the guest editors were interested in the impact of Trump on education and the responses from theorists and practitioners. When referring to the election, teachers across the country, students who feel unsafe, and minoritized communities, the guest editors were really speaking of an *American* election, unsafe students in *America*, and *US* based educators and researchers. In their acceptance notification, they provided a brief reminder of their international readership, informing us that the effects of the Trump era extend well beyond the US borders (Editor, April 2018), obviously written to nudge American contributors to think beyond their borders.

Shannon and I reviewed the questions posed by the guest editors, as well as the language used in the call for papers. They asked: “How do we teach those whose perspectives differ from us [i.e., Trumpsters]?” and “What are the funds of knowledge of young people in Trumster (sic) families?” It was clear that they believed this student population required specialized handling. We wondered why the editors considered almost half of the US electorate marginalized. Why are teachers, educational researchers, and journal contributors perceived as necessarily anti-Trump? It appears that even the disparaging use of the term repeatedly written as *Trumster* (sic) carries such disdain that spelling is of no concern. Another worry they asked us to lend particular attention to are the kids of those who voted for Trump: “How may educators connect with the

children of Trumpsters in their classrooms?” A strange question to ask when most of the students were in attendance the year prior.

Left to Cue in the Anon

A reviewer for JCT raised important questions and concerns about the article “Shady Figures & Shifting Grounds” (2019). As for writing style, we were told that “all of this translates into the fact that so many of the arguments in this paper are simply rhetorical. They are not supported by any argument or analysis, or any other device to expose them to scrutiny”. “There are no traditional arguments that make objections possible.”

The draft needed work, but we could see that the reviewer privileged conventional analytical writing that argues a point or attempts to persuade a reader, instead of balancing the rhetorics of description and reflection that we used in our work. As the reviewer observed, “the paper ends as something of a cliché among critical scholars”, having missed the irony when we conclude that we are now simply turning our backs from the issue.

The reviewer observed that “[McLuhan’s] connection to post-humanism is abrupt and historically anachronistic” and that “there is nothing to suggest that McLuhan would have used the terms in this way”. McLuhan’s theory of technology and his description of a global nervous system are the only claims we have made in connection to posthumanism. We were told that we “use terms like binary, humanist, and other words that are considered pejorative by recent posthumanist scholars, and to justify their use to readers who do not take them to mean anything negative out of hand.” The reviewer was likely, in part, correct.

Trickery

The JCT article contains some trickery. The description of figure and ground is a lighthearted means of describing left/right dualisms and the term *surround* relates to *everything else* that remains unconsidered. The term *surround* also picks up on Delueze's *milieu*, which as Zhang notes, "is a French term meaning 'surroundings,' 'medium,' and 'middle' all at once" (2011, p. 208). Our role here is to play between theorists, the technological medium, and the process of rendering visible.

Figure/ground analysis is based on McLuhan's teachings on perception, exemplified by the famous Rubin image, which shows either an older or younger woman, one of which naturally appears in relief. No matter which is selected it is materially impossible to be correct—it's neither a young nor old woman. It is evident when the paper is flipped over, crumpled, and thrown away.

What matters in the call for papers is the contrast between Hillary Clinton and Donald Trump as competing images, a struggle between good and evil, and the meaning of each person's ascent/descent. We were interested in the 'rest of the picture—of which this is merely a part', or the surround as we called it. McLuhan, I argue later, is a way of approaching this dilemma as a disjunctive-synthesis. Shannon and I stated, "it's not that the King is without clothing; it's that the monarchy's textiles are made using exploited labour, and the kingdom's cotton is being picked in the Plantationocene" (2019, p. 116). The reviewer informed us it was a false equivalence which needed to be corrected. Of course, we were pleased that this was recognized, yet disappointed, again, that the irony wasn't appreciated.

While the article below stands on its own, to fully appreciate the serious-play in its composition, I encourage a reader to consider it a direct response to and critique of the guest

editors' call for papers. A reader may also consider this a nod to Bill Pinar's prescient observations from 2013:

The concepts that once reconceptualized the US field—power, identity, discourse—appear to have played themselves out, signaled by tendencies toward totalization, reductionism and self-referentiality. Like the positivism these concepts were intended to replace, once again researchers are somehow exempt from their embeddedness in the reality they purport to depict. (p. 50)

The article was submitted and published in the reconceptualist *Journal of Curriculum Theorizing* that owes much to Pinar, making his quote that much more impactful.^[1] To use the language of hacking, we used McLuhan as a pen-test to break in, and then it was an exercise in white-hat trickery to get the editors and reviewers to read each and every one of our concerns, on a line by line basis, and reply to them.

6.2 Shady Figures and Shifting Grounds for Re/Truthing: Channeling McLuhan's Posthuman

From "Shady Figures and Shifting Grounds for Re/truthing: Channeling McLuhan's Posthuman," by S. Stevens. and R. Wainwright, 2019, *Journal of Curriculum Theorizing*, 13(3), 108-121. Shannon Stevens and Richard Wainwright. Reprinted with permission.

Medium

A tumultuous relationship is taking place between the American presidency¹⁹ and its nation's media and is on display in front of the entire world no less. Its technologically mediated discourse is demonstrably rancorous, making for fraught terrain that antagonizes divisions exacerbated by frequent allegations of lying and misrepresentation lobbed between the establishment media and President Trump and his administration.

Donald Trump has proven to be a ubiquitous force in "technospace" owing to an unprecedented approach to his professional role as U.S. president that has been amplified by his particular brand of relationship with the American media. Experiencing a strong sense of his mediated social presence, these conditions indicate acclimatization to a rapidly changing environment during which humans have been slow to recognize the extent to which they coexist with nonhuman machines. Meanwhile, Trump and his administration hold a particular affinity for Twitter, presumably attracted to the tweet's brief, impactful nature and the immediate conveyance of its messaging directly from @realDonaldTrump to Americans and world citizens alike. These are among visible effects of the electric age permitting an instantaneity of information's release (McLuhan, 1964).

¹⁹ This article was published in 2019, during the 45th American presidency

In conditions such as these, Twitter's global reach and sense of immediacy create a space of consequence rivaling network news' coverage of American presidential communications, while displacing traditional power relations. During technologically mediated coverage of roiling debates and divisive policies, American media are oft times preoccupied with reporting Trump's lack of presidential etiquette and various faux pas, among other manufactured dramas and exaggerated upheavals that distract our attention and fail to safeguard us from attending to far more consequential concerns. Political events of global import—among them America's withdrawal from various treaties and accords, thus, reneging on obligations to address climate change and nuclear arms proliferation—call for multiple rationales: not only epistemological, but ontological, philosophical, and pedagogical.

Our interest in the educational implications of these circumstances has us delving into approaches conditioned by the posthuman, during which relationships between human and nonhuman actants are being more fully imagined. Herein, we do so by consulting a rare document co-written by Marshall McLuhan, a work that propels a consideration on media, technology, and education in the present day as riff. *City as Classroom: Understanding Language and Media* is a 40-year-old high school media curriculum that McLuhan (McLuhan, Hutchon, and McLuhan, 1977a, 1977b) co-developed to sharpen the perceptions of Canadian teenagers when engaging their surroundings. McLuhan (1964/1994) early recognized the effects of media and technologies when he posited that “all technologies are extensions of our physical and nervous systems,” thereby challenging a basic humanist premise (still largely assumed today) that humans exist independently of their “tools” (p. 137).

We are intrigued by the profundity of McLuhan's often pithy pronouncements, his highly original approach to information, and his curricular strategies. In this present “Post-Truth Era,”

we suggest that failing to scrutinize media's effects leaves us vulnerable to imbibing polarizing binaries and being constantly distracted by frivolous narratives instead of grasping larger, far more consequential threats: a situation amounting to us leaning in closely to read mediated messages that are actually, in the words of McLuhan, "the stenciling on the casing of an atomic bomb" (McLuhan, 1969/1995, p. 238).

AI

Interactions with networked technologies and public platforms like Twitter, keep bumping up against Trump, who troubles widely held conceptions of what a world leader looks, sounds, and acts like. Holding a presumption regarding what an American president says or does, we compare Trump to this image of thought and the chaos and disorientation with which he is associated, particularly in regard to media. For example, he frequently alleges that the American media trades in "fake news." Is he merely identifying reportage that is "yellow journalism"? Or is he correctly identifying a territorialization of news corporations by an array of interest groups that include so-called "socialists", "liberals", "right-wingers" and corporate interests? Conjecturing posthuman veins: Are, are relationships between humans and machines sufficiently developed to a degree permitting networked technologies to independently generate news items outside of human authorship? We are suggesting a world of the machines that is, to humans, still enigmatic.

Figure

A dramatic shift in ground across the American political and social landscape is taking place, the kind that happens when a figure such as Trump conducts himself in the media,

including through Twitter. In describing approaches to navigating a changing world through media, McLuhan employed the concept of figure/ground to evaluate media and their effects: a pursuit in sharpening perceptions. When an object of interest becomes figure (the content), the ground is often overlooked. We have ourselves employed figure/ground analysis to better recognize that a traditionally accepted humanist lens as figure has largely precluded recognition of a posthuman grounding that increasingly structures the conditions of the developed world's existence (Sharon, 2014). Western society may be presently disrupted by political events internationally; however, holding one's attention on both the figure and its (back)ground helps to better understand both the relationships between, and the properties of, mediated situations and meanings conveyed. A "Post-Truth Era" warrants educators' recognition that the ground, as "underlying structure," supplies the "conditions for experiencing any part that presents itself as figure" (McLuhan et al., 1977a, p. 14). When compelling figures "advance into the foreground," it is important to recognize their effect on perception and to balance relationships between the figure and their ground (McLuhan et al., 1977a, p. 9).

While figure and ground are constantly reconfigured amongst consumers of media preoccupied by their immediate environments, rapid developments such as technological change, the looming threat of environmental disaster, and militarization remind us that we are arguably on the brink. While Trump's political priorities are largely shared by supporters, even some of his opponents may hold quiet sympathy for particular issues: including protectionist and isolationist stances. The situation is further complicated by an accelerated concentration of American media ownership since telecommunications' deregulation in 1996, the corporate nature of which bears global importance. Alongside advertising, mainstream media's approaches are still often determined by the demographics of a generally aging television audience,

homogenizing content to accommodate the news coverage preferences of its viewership, including talking points and panel discussions. There has been much upheaval throughout broadcasting as “alternative” news sources stream video content on platforms such as YouTube and Facebook, each requiring independent channels to enter contractual agreement and remunerative relationship before being reminded that, despite their “independence,” they must uphold the corporation’s terms of agreement lest they risk being disciplined for disrupting their platform hosts’ advertising revenue streams.

McLuhan

McLuhan’s work established humanist theories in a radically new way by “explor[ing] the contours of our own extended beings in our technologies,” while creating space for understanding more and differently (McLuhan, 1964, p.7). Although situated in a humanist tradition of the mid20th century and having never witnessed either the personal computer or the Internet, McLuhan’s prescience ensures that posthumanists recognize him as having cleared space for academia to theorize technologies. Malabou (2017) suggests that, by corresponding technological development with an “extension of the nervous system to the very limits of the world” (p. 48), McLuhan (1964) recognized the Anthropocene when he wrote:

After three thousand years of explosion, by means of fragmentary and mechanical technologies, the Western world is imploding. During the mechanical ages we had extended our bodies in space. Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned. (p. 5)

McLuhan held serious concerns about “the disaster civilization faced if mankind could not learn to use new media wisely” (Gordon, 2010, p. 102). We can only guess the nature of his sense of foreboding; however, what most troubles us now are the ecological ill effects wrought by rampant capitalism, material consumption, and technological conditions that permit facilitation of our exacting, destructive whims. Haraway (2016a) asserts that, as proposed geological epoch, the Anthropocene too anthropocentrically bespeaks an innate speciesism of “human exceptionalism,” disproportionately focusing on threats posed to humans and particularly the human concerns of those inhabiting developed regions and monetarily wealthy classes (p. 49). In addition to the Anthropocene, Haraway (2016a) introduces her conceptualization of additional “timescapes.” The Capitalocene is a timescape during which capital is recognized as the force driving relentless resourcing of the earth by means of exterminationist extraction (Haraway in O’Neill-Butler, 2016), like the Anthropocene, a boundary event, for its projected short duration. The Chthulucene is conceptualized as a timescape—past, present, future—comprising mutually reciprocal relationships as entwined, tentacular existences of all species in a reconfigured world (Haraway, 2016a).

City as Classroom

In the mid 1970s, McLuhan co-wrote a media textbook for Canadian high school students: *City as Classroom: Understanding Media and Language* (McLuhan et al., 1977a). Recognizing that, in a technologically mediated society, knowledge increasingly resides outside the schools that had once been physical hubs of information, McLuhan et al. (1977a) sought to pose questions within school walls that then could be explored outside them. Committed to honing media-informed perceptions about the city as a “changing environment,” McLuhan et al.

operationalized the early twentieth-century psychological work on figure/ground analysis by Edgar Rubin as a study in structural relations.²⁰ The authors contended that balancing relationships between figures and their ground will expand understandings of the situations with which one is confronted (McLuhan et al., 1977a, p. 9). Let us demonstrate figure/ground using a familiar urban scene: that of congested traffic in which vehicles will idle, crawl, briefly accelerate, frequently brake. The motor car, a quintessential symbol of modernity and human ingenuity, typically dominates one's attention and, therefore, acts as figure. Backdrop to the motorized vehicle, however, are the countless entities that support the automobile's existence and function: gas stations, highways, traffic lights, parking lots, toll booths, and signage, etc. (Marchand, 1989). Moreover, the automobile's ground includes the extent to which modern society is arranged and habituated around its use, including motorists' acceptance that to travel by the motorcar is to be subjected to traffic jams. Figures are altered by their ground, which is never static.

We suggest that the ground of the United States' once familiar domains is experiencing seismic shifts, a situation exacerbated by mercurial relationships between the Trump administration and the nation's establishment media, locked in disputation about what is purported to be "truth" and "fake." McLuhan, Hutchon, and McLuhan (1977b) asserted that by "concentrat[ing] on the structure of a situation, we can assess problems more realistically and change the situation or our response to it" (p. 10), surely an advisable course of action in seemingly chaotic times.

²⁰ For examples of figure and ground, visit: <https://bit.ly/3qGFkPo>

Twitter

How far are post-truth narratives being advanced through a U.S. president's Twitter activity, his repeated allegations of "fake news," and the scrutiny these accusations bring upon the journalistic practices of American establishment media? In Trump's tweets, how might he be interchangeably positioned as figure, ground, or medium? These questions reflect features of a new era in media, its reporting, and milieu, all demonstrating the observation by McLuhan that "the clearest way to see through a culture is to attend to its tools for conversation" (Postman, 1985/2006, p. 8).

Tweeting, retweeting, and hashtagging engage Twitter users in co-authorship that reconfigures traditionally regarded roles of writer, audience, content, subject, and object. Readers are themselves co-opted into writing Trump's messaging as Twitter mines information about who views each tweet, where the cursor is placed and clicked, for what duration it rests, to whose account it is retweeted, which hashtags are added, what commentary is made, etc.

The use of analogies between information networks and vehicular traffic seems apt. Automobility, so intimately tied to a North American sense of freedom, is situated on networks of roads and freeways that, when gridlocked, may cause a level of human frustration, even rage, that is demonstrated in the kind of violent scenes at times reported in the media.

When Trump tweets late at night, he is riffing with technology, with available information, with his Twitter followers, with his thinking, and with the Twitter publishing mechanism itself. His declarative statements are setting conditions that are in turn riffed in media reports and retweets, online discussions, news programming, late night television monologues, and comedy skits. Some of his tweets, which presumably (although not necessarily) feature his own, uncensored words, bear the immediacy and environmental impact of some kind of

detonation within and well beyond Twittersphere. Any resulting consternation, excitement, upheaval, and validation experienced by members of the U.S. electorate, even global citizens, fully demonstrates the prescience of McLuhan’s iconic phrase, coined over a half century ago: “the medium is the message.”

Trump’s early penchant for retweeting the opinions of others, including nefarious individuals and groups such as David Duke and Britain First, provides the President opportunity to present (even seemingly endorse) controversial positions without personally stating them—acts of collaborative activity, engaged however briefly. The “ground” (be it human personalities, corporations, demographics, or algorithms) constantly shifts beneath “shifty” figures (again human personalities, corporations, demographics, and algorithms) constantly altered by their conditions. Hidden ground exists as the entire political, economic, and AI apparatus that is required to establish conditions on which Twitter activity is conducted, becoming so familiar that it tends to be overlooked—users having “stopped paying it any conscious attention” (McLuhan et al., 1977a, p. 19).

Algorithms

On city streets, a triangulation of cell phone data, Wi-Fi signals, and GPS provides a great deal of information to data providers, while Google and Apple services have been able to harness this data to determine traffic speed, areas of congestion, and make recommendations about how to navigate adverse conditions. Vehicles now routinely have sensors to automatically parallel park, move the car out of harm’s way, protect pedestrians, avoid lane drift, etc. Roadways increasingly have sensors that monitor traffic flow and adjust the regulation of stoplights and automated sensors regulating variable speed zones according to weather

conditions. Some emerging networked technologies use Bluetooth/Wi-Fi and microwave technologies to aggregate more specific information about who is travelling where, while collecting information from roadside and overhead monitors that feed back into big data systems. The smooth flow of traffic is figure, while the backdrop is a massive collection of data that is being catalogued for all types of current and future purposes, many of which were unthinkable a relatively short time ago.

Transportation related technologies possess features that are shared with Trump's use of social media. Trump's tweets aren't simply unidirectional communications injected hypodermically into the veins of Twitter, paralleling the communications of broadcast television. Like the conceptualization of automobility as the AI guided aggregate of car-driver-road, here we think of DeLanda's (2010) man-horse-bow assemblage. Trump's Twitter compositions end up being an amalgam of tweeter-Twitter-tweet, increasingly entwined in such a way that the boundaries of each role are no longer easily identifiable. Once Trump's tweets become further encoded with tracking data, visual framing, and comments by other users, the texts (in the broadest sense) accumulate and morph machine data in previously unimaginable ways.

Upon tweeting, Trump and his team have immediate access to reports indicating where the tweets were posted, retweeted, and what feelings readers attached to these messages. This contrasts earlier forms of opinion polling whereby reactions to a U.S. president's controversial platforms were collected after their unveiling. The results took days, even weeks, to assemble. There is now immediate access to sentiment data provoked by any message, including the broad demographics of gender and location. Trump and his administration can easily renege, shift, or pursue positions within a few hours of posting any given message on Twitter, in effect employing a "try before you buy" method of laying out policy shifts and initiatives. Creating a

continuous cycle of text, this feedback informs how the tweet is further circulated in other media such as Facebook. The process continually adds or subtracts data from the transmission, the reader, the writer and the medium, all contributing to the way that Twitter exists in an almost virtually real world.

In the Twittersphere, we participate in what is an often-chaotic social media version of an “information superhighway”: tweets blast like car horns on digital roads, political pundits erratically careen and glance off one another, and bottlenecks form in areas of high traffic circulation that are also frequented by passersby slowing to rubberneck at any spectacle.

Surround

Reliance on humanistic, binary claims of “truth” and “fake,” or “lies” and “false,” restrict perceptions by being “either/or” propositions that keep us bound within the present. Figure and ground can also amount to binary positions, so we expand our purview beyond the largely anthropocentric concerns of McLuhan’s use of both by proposing a further layer of consideration for analysis, one we term surround. This additional perspective is conceived to recognize the parts of the situation displaced or destroyed in order to accommodate emerging properties such as techno-fossils and anthroturbation—countless traces of human activity now abundantly populating earth. Surround acknowledges environmental impact on the earth caused by human activity. Revisiting our example of the automobile, a configuration of figure/ground/surround helps us to recognize not only a car as figure and the roadway beneath it as ground (in two senses), but also a surround comprising the swathes of land, plant life, and rich soil that have been excavated, paved over, tunneled under, and, thus, “lost” to roadways, back alleys, driveways, and car lots.

Surround's inclusion alongside the figure/ground paradigm permits us to better recognize the extent of ecological destruction caused by urban development—loss and ruin compounded by automobility that permits travel over further and further distances. Arable land is similarly lost to petroleum wells, oil sands, and tail ponds (not to mention the copious amounts of freshwater consumed in fracking for natural gas). The decentring of the human becomes imperative to both recognizing and mitigating the extent of humans' environmental impact while, in educational contexts, heightening students' awareness beyond immediate observations, familiar constructs, and epistemological debates. The Anthropocene continues to manifest distress, marked by a sense of growing anxiety, that Morton (2015) claims is:

precisely the feeling of the loss of the world—the end of the world, but not as we thought, a great bang or a void, but a prolongation of things in synchrony with the disappearance of meaningful backdrop—and thus the disappearance of the foreground as such. (p. 185)

Rideshare

The tools we use and the modes of transportation on which we anthropocentrically rely are expiring. Human work forces are becoming just another data set, increasingly consigned to fulfilling tasks informing machinic learning. Here, we look to a widely heralded player in the “sharing economy,” Uber. In congested traffic, some cars are being engaged for the purposes of ridesharing, an arrangement secured by both patron and driver through the Uber app. An Uber hired car assumes a figure in traffic quite unique among the cars, apps, drivers, and occupants in its midst. What is the ground of the Uber car operated by the Uber driver? It is likely significantly different from the cars around it, for the Uber platform is using onboard smart

technologies in its development of nonhuman automobility. Once ridesharing vehicles' activities are mapped by Uber, the humans presently conveying its technology (on company issued cell phones) are likely to be made redundant in their employ as driver. Human activity is in the midst of a tremendous existential shift; in the near future, the human will no longer drive vehicles carrying people and transporting freight. Meanwhile, online shopping continues to seriously disrupt human employment in retail work.

While we hold an image of thought that humans program the computer technologies that run automated devices, increasingly, it is machine learning technologies that collect information from humans and any other data source. Hierarchically, humans' position in matters is changing, and humans are being irreversibly delegated to machines' use. More specifically, humans aren't teaching self-driving cars their expanded role, as they are increasingly introduced to city streets, but are most likely sitting as passengers while being machine chauffeured—humans effectively riding “shotgun” from the driver's seat.

Philosophy of technology academic Tamar Sharon (2012, 2014) articulates a “cartography of the posthuman” as a typology of biotechnologies during the posthuman that careens between reactions to technological and human interactions: alternately dystopic, liberal, methodological, and radical. Identification of these types prompts similar questions about how technologies spring from human creativity yet reciprocally shape our human experience. Methodological shifts toward philosophical frameworks, such as those of Deleuze and Guattari (1980/2014, 1994), and radical posthumanism recognize the “political potential inherent in technologies to overcome some of the most detrimental effects of modernity” (Sharon, 2014, p. 8).

Riff

What might educational learning during the posthuman look like and how might it be pursued? We identify our rhizomatic tendencies towards unfettered discovery (primarily, but not exclusively, by technological means) as a compulsion to riff (Stevens & Wainwright, 2016; Wainwright & Stevens, 2017). Our learning is potentiated by thought: ideally open ended and without hierarchical structure. An assemblage of figure/ground/surround is conceptualized as a tool of analysis to develop simultaneity of perception, taking into account the entire “visual” field. High school students of media were encouraged by McLuhan et al. (1977a) to summon powers of observation to assess what might be these settings during the electric age: “You are always the figure, as long as you are conscious, the ground is always the setting in which you exist and act” (p. 10). These considerations invite approaches developing awareness, particularly when any given ground is better understood as composing any other entity’s figure (human, nonhuman, technological). “The interplay between you and this changing ground changes you” (McLuhan et al., 1977a, p. 10). We are interested in posthumanizing these important curriculum initiatives created by the authors of *City as Classroom*. McLuhan’s career-long study of media was self admittedly always of its effects rather than of its content, which is what still distinguishes it as unique in its field.

Such analysis encourages observation and curiosity, a breadth of perception permitting one to “experienc[e] the sense of configuration; this is the sense that an artist brings to bear on painting, a satirist on situations” (McLuhan et al., 1977a, p. 10). Our personal sense as pedagogues is to “plug in and play”—to riff—and we have been developing an [onto]Riffology, which is rooted in our tendency to tap philosophy, cultural theory, and critical approaches in

technology to infuse posthuman education with creativity (Stevens & Wainwright, 2016; Wainwright & Stevens, 2017).

Riff pursues freeform inquiry that has never been about “bring[ing] together a structuralist account of knowledge, nor to formulate a truth in any unifying theory, [but rather] we sample theory, seek affect in discovery, imbibe concept’s rationale and engage play beyond discourse” (Stevens & Wainwright, 2016, p. 169). In research and classroom contexts, riff effectuates a posthuman leveling of hierarchical relationships between teacher and student. In our development of [onto]Riffology, we draw on the theoretical work of various educational theorists exploring DeleuzoGuattarian approaches during which the human is decentred, representation is avoided, and understandings of “what it means to be human” are interrogated. In conceptualizing riff, we are inspired by Wallin’s (2011, 2015) mobilization of philosophy for thinking pedagogical difference, jagodzinski and Wallin’s (2013) machinic arts, Roy’s (2003) case study on nomadic spaces, and St. Pierre’s (2017; St. Pierre, Jackson, & Mazzei, 2016) elaboration on post-inquiry.

We take notice of the extent of technological interactions and that humans are deeply enmeshed with the machinic. This is hidden ground that we explore by way of riff. Riff is information sharing between humans and nonhumans in relationships of (re)combinatorality—one action bootstrapping another’s function in machinic assemblage. Humans riff off the nonhuman, machines riff off machines, machines riff off humans, and humans riff off humans. Expanding our lens past the human to grasp the nature of these relationships has been akin to lifting a veil or developing an additional sense; we are continually upending figure/ground/surround, while engaging multiple, intersecting lines of reasoning that tenderize otherwise binary debates about whether, for example, Russian interference significantly

impacted the 2016 American election. Socially mediated contexts indicating hostility result in disagreements held on epistemological terms that stymie what is better achievable by way of ontological strategies of becoming.

Riff seeks to emulate methods of experimental inquiry; the research that is termed “post qualitative” or “post-inquiry” by proponents who likewise relinquish dualisms of organization and belief such as “same/Other, human/nonhuman, mind/matter, culture/nature” (St. Pierre et al., 2016, p. 99). Much as it is near impossible to unsee nonhuman and technological paradigms once they have been recognized as fully existing alongside the human, it is a difficult prospect to unlearn post qualitative research approaches once introduced to them. Post-inquiry disrupts the relationships between the traditionally privileged fields of knowledge (empiricisms) and those of being and becoming (ontology); methodological frameworks just no longer suit (St. Pierre, 2017).

Mr. President

When a car works as expected, we don't notice the necessary tools and labour that keep it in running condition. In the case of Trump's presidency, we enter a state of “breakdown.” When Trump refuses to “act presidential” in the function of his job, great discomfort results. It is like a gestalt that switches figure and ground (what Trump says and what the medium does), optical illusions holding us transfixed. As long as the American governmental machine performs to our expectations, we rarely reflect on the nature of the tools, their workings, and their operations. Trump's approach to the presidency draws attention not only to Trump, but to the entire Trump/tweet/Twitter/reader assemblage in general—and the nature of the presidential role in particular. To riff on this tension is not so much to critique Trump's singular performance as

president, but the presidential role over centuries. It's not that the King is without clothing; it's that the monarchy's textiles are made using exploited labour, and the kingdom's cotton is being picked in the Plantationocene (Haraway, 2016). Citizens of other countries, likewise, monitoring Twitter and the media, join in a collective state of dissonance at the unfolding of internationally mediated events. Trump's disinclination to act "presidential" makes us all intimately aware of this fact.

This becomes the terrain of double figure/ground, the creation of which is "the most potent tool for creating insight and facilitating analysis" (McLuhan et al., 1977a, p. 49). In mediated circumstances, this technique alters figures and grounds to both form ground by their stark incongruence—bringing divergent audiences "into sudden collision" (McLuhan et al., 1977a, p. 49). It all plays with perceptions in the ways that one may expect when a gameshow host, property developer, and political neophyte unexpectedly becomes president of the United States (not entirely an unexpected phenomenon in the country given the political careers of Ronald Reagan, Clint Eastwood, Arnold Schwarzenegger, Jesse Ventura, and Al Franken). The situation of Trump's ascendancy creates an interesting figure and ground scenario of compelling dynamics all on its own; however, a double figure/ground comes into play when a media celebrity of this self-styling becomes a world leader yet declines to perform presidentially. What is created by these juxtapositions becomes "the basic structure of much satire and most metaphor" (McLuhan et al., 1977a, p. 49), deeply jarring but exceedingly compelling. Such assertions raise important questions when the spectre of post-truth is fully cast. Is it the handiwork of intentional obfuscation or merely the nature of (even, unintentional) satiric work?

Probes

Deleuze's philosophical propensity for experimentality in thought inspires our mobilization of his concepts to explore and understand news events (published, streamed, or broadcast) and what to make of alleged "fake news" (as lies with an intent to misinform its audiences). In Deleuzian thought, events are conceptualized as stemming from processes of two intertwining flows: both the real as actual and the real as virtual.

Deleuze (1993) considers the actual event not as a state of affairs but as "actualized in a state of affairs" (p. 152), while the virtual comprises "incorporeal events" (Boundas, 2010, p. 197): "Real without being actual, ideal without being abstract"; and symbolic without being fictional" (Proust as quoted in Deleuze, 1994, p. 208). In navigating distinctions between the actual and virtual, "elements and relations" forming structure must not be overstated in the former circumstance, nor understated in the latter (Deleuze, 1994, p. 208). Moment by moment, as countless virtual events become actualized, exponentially more don't. While always real, actualized events in due course return to virtuality—events endlessly flow from states of virtuality to a moment of actualization and then return to the virtual. Massumi (1995) describes the virtual as:

a lived paradox where what are normally opposites coexist, coalesce, and connect; where what cannot be experienced cannot but be felt—albeit reduced and contained. For out of the pressing crowd an individual action or expression will emerge and be registered consciously. One 'wills' it to emerge, to be qualified, to take on sociolinguistic meaning, to enter linear action-reaction circuits, to become a content of one's life—by dint of inhibition. (pp. 30-31)

This interplay between actual and the virtual fuels riff by pushing towards mobilization of theory, pressing concepts into active tenses. What is this world of our creation, and by what impulses and constraints is it alternatively propelled and structured? “Predatory capitalism,” “proto-fascism,” “democracy,” “consumerism,” we can’t necessarily slow global systems and curb its preoccupations, but we may engage thought to not act complicitly. Identification of “fake news” is a provocation to discovery and engagement. Where does it exist, and what does it do? Riff is a tool kit of borrowed concepts, particularly those pursued as learning trajectories as becoming, infused with a sense of discovery and naïveté challenging us to think our way out of this mess. Humanity’s ultimate destination may not be averted by such intellectual diversions, but the ride might be more interesting. Understanding figure, ground, and surround, we read the inscription and see the atomic bomb on which it is stenciled. We also see the material waste and poisoned water left in its construction’s wake, as well as the dead beings and land that will feel its touch, if launched.

Zombies

We recognize that what we may well be witnessing is the culmination of the Anthropocene, a scenario about which Wallin (2015) evokes chaos, eco-catastrophe, and zombies—a scenario in which humanist educational ambitions to lift humanity out of a morass of its own creation are entirely for naught. Analogies of the post-apocalyptic and zombies (equatable to Sharon’s [2012, 2014] description of the posthuman as dystopic) bring a certain cult movie sensibility—something like a breath of pollution choked air—to *mises-en-scène* that counter all the sentiments of hope that humanist pedagogical aspiration attempts to muster, then inspire. We’re dying here, alongside all life forms. There is no real escape, and we rush headlong

to our own demise, hastened by our unbridled anthropocentrism, that “key assumption of modern Western rationality” (Shaviro, 2014, p. 1). Wallin (2015) invokes zombies in breaking “the humanist conceit of progress and perfection by actualizing the occulted unconscious background of horror and decay with which human life is imbricated” (p. 140). Like this apocalyptic rendering of the Anthropocene, the Chthulucene tells its own tales, of an “order [that] is reknitted: human beings are with and of the earth, and the biotic and abiotic powers of this earth are the main story” (Haraway, 2016b, p. 55). Having suggested that, in a Deleuzian sense, reality inhabits the potentialities of the virtual and the actual, we now work within its ontology to consider McLuhan’s confidence in figure/ground analysis as an “approach to problems as interrelated aspects of culture...stress[ing] the fact of continuity in a world of seeming change” (McLuhan et al., 1977b, p. 1). Our motivations in resurrecting a four-decade old curriculum—albeit one co-developed by a foremost public intellectual, astonishingly prescient in his anticipation of the impacts of technology on civilization and learning—include unsettling our thinking and paradigms to embrace further implications of the posthuman conditions into which we have been thrust. We explore the nature of interchangeable subjectivity between online author, reader, and text, whereby, through responses, retweets, hashtags, and algorithms, Internet content is co-written—further disrupting traditional notions of news and its production.

In *City as Classroom*, McLuhan et al. (1977a) refer to “problems” inherent to a changing environment, betraying a decidedly dystopic approach to networked technologies and their effects on society. Both the textbook and its accompanying teacher’s guide instruct students to be vigilant while identifying figure and ground when navigating “two major concerns...[both] to discover the new problems this environment poses, and to develop ways of coping with these problems” (McLuhan et al., 1977b, p. 1).

Shifting understandings of interdependence between animal, vegetable, and mineral, the metropolis becomes something like a petri dish of relationships culturing human and nonhuman matter. Over four decades after McLuhan et al. (1977a) introduced figure/ground analysis to Canadian youth to broaden their gaze on topics of media studies, speculative realist ontologies—such as object-oriented ontology (OOO) theorized by Graham Harman (2002, 2010), Ian Bogost (2012), and Levi Bryant (2011)—further move notions of subjectivity in multiple directions. Any traditionally understood exceptionalism of human inhabitants over their nonhuman counterparts is being completely reimagined, particularly a hitherto acceptable hierarchy in which human life is considered more worthy of subjectivity than is other matter.

Ontologies

The self-driving car becomes “figure” on the city’s streets, an editorial plotline and a point of both interest and consternation in the ever-changing world. The autonomous vehicle, engineered to carry freight and passengers, will one day end any reliance on human drivers, and this eventuality will create massive (human) job redundancy. As we recognize the many ways that Twitter induces human users to collaborate in garnering its data, we can anticipate how much of self-driving cars’ learning will take place on city streets. In its experimental phase, the autonomous vehicle has already caused human fatalities when systems have failed to anticipate all situations and eventualities. Without human pilots, the cars will be in transit night and day, car ownership will be reimagined, and the considerable space presently dedicated to parked vehicles and roadways may be repurposed. Figure becomes ground becomes surround, elements of ground become figure, and human perceptions are accordingly honed as foci shift.

Proponents of autonomous vehicles note that collision avoidance features will be based on detailed vehicle placement technologies that will virtually eliminate traffic accidents. For the first time, vehicles will be able to simultaneously focus attention in all directions. No longer will vehicles' navigation be compromised by human pilots' periodic gazing into the rear view mirror to assess their ability to safely proceed.

In an era of human-built machines, the automobile ("self-movable") has shaped modern existence while being human navigated. The car's future incarnation as autonomous will necessitate new tools and concepts that require radical transformation of existing thought images based on perishing technologies of car/driver binaries.

Fake, truth, false claims, and lies are not just about trying to figure out what is fake and what is true, but concern striving towards a new conceptualization of the possible, of a new becoming. This doesn't happen by trying to continuously decipher the meanings in any particular statement or reporting; it comes instead by shifting figure, shifting ground, enlivening new folds, and by avoiding distractions caused by epistemological debates being sponsored by corporate interests, their bought politicians, and the mainstream news agencies.

Ontologizing our surroundings and engagements better navigates our passage than constant epistemological ruminations. Ontological considerations reimagine relationships in the many ways necessary to stem the ruin we have wrought. This will take more than a shift of content or even medium. It requires an entirely new way of creating and conceptualizing what's real. McLuhan (1967) wrote that "when faced with a totally new situation, we tend always to attach ourselves to the objects, to the flavor of the most recent past. We look at the present through a rear-view mirror. We march backwards into the future" (McLuhan & Fiore, 1967, pp. 74-75). But we march, regardless. We riff to decentre the human, avoid representation, and to

engage ontologies to question war economies, rampant material consumption, cult of celebrity, political malfeasance, and environmental destruction—the makings of a posthuman critical pedagogy.

[onto]Riffology is an attempt to posthumanize education and ontologize learning that, optimized by machines and networked technologies, moves towards data rich inklings more than fixed knowledge, discovery more than dogma. Humanist renderings of the figure, ground, and surround are perhaps analogous to the bomb, its stenciling, and catastrophic detonation. Does a posthuman version of figure, ground, and surround approximate a combination of the boundary events and timescapes, Anthropocene, Chthulucene, and Capitalocene? What do these next years look like?

Trump and the lies spun from the presidential office seem to demand action of some sort. The entire American broadcast news media arguably inspires less confidence than ever. We are, however, attempting to shift our attention from this figure and that ground to instead scrutinize the significance found in posthuman events.

6.3 Intermezzo IV: The Shudder and the 🤖

Massumi, in a 1993 essay, “Everywhere You Want to Be, Introduction to Fear”, describes the horrific events when “on December 6, 1989, a lone gunman entered the University of Montreal Institute of Engineering. The gunman walked into a classroom and ordered the women to one side and the men to the other” (p. 4). In all, fourteen women were killed with a military assault rifle. Massumi continues:

Things like that happen all the time in the United States, but *never* in Canada. We’re just not used to it here. Incomprehension. “He was a madman.” Empathy. “It could have been *my* daughter in there.” Tears. (1993, p. 5)

Massumi goes on to explain the ‘ordinary madman’, describing how the reporters collected mug shots of the killer and interviewed his family, landlord, friends, and roommates. All remarked just how ordinary he was. The Montreal massacre then “becomes an opportunity to explain away men’s violence toward women as the sudden onset of an individual case of ‘madness,’” (1993, p. 26), a condition that lurks behind the ordinary. The absence of any sign of being sinister made him even more of a madman.

Trump was the madman he seemed and was duly elected the 45th president of the US. Trump wasn’t a condition of sudden onset, he was a pre-existing condition, one that wasn’t a secret to anyone during the election. Trump was unable to act presidentially, like an ordinary president, which is like Massumi’s description of the ‘ordinary madman’. When America’s ruthless military and economic enforcement of the mechanisms of global capitalism is the broader milieu, the election becomes a choice between a Madman/woman or an *Ordinary* Madman/woman. The 46th president of the US has demonstrated just how much better many

people feel with an ordinary president doing many of the same mad things. Returning to Massumi and the Montreal massacre:

No sooner does [an event] happen than it is a has-been. The who, what, when, and where become a what not (“anything can happen”) and a what’s next (“what is this world coming to?”). Retrospective analysis is replaced by a *shudder and a shrug*, memory quickly elided by expectation. Broadcast is a technology of *collective forgetting*. It is not that the event is lost. On the contrary, it is accessible for immediate recall: *instant replay*. [emphasis added] (p. 25)

We ended *Shady Figures & Shifting Grounds* with:

Trump and the lies spun from the presidential office *seem to demand action of some sort*. The entire American broadcast *news media arguably inspires less confidence than ever*. We are, however, *attempting to shift our attention* from this figure and that ground to instead scrutinize the significance found in posthuman events. [Italics added]. (2019, pp. 119–120)

And now as the conditions of the 46th presidency finds its groove, we return to a refrain of collective forgetting and instant replay:

The 🙄

[Something] seems to demand action of some sort.

*The news media arguably inspires **less confidence** than ever.*

We are attempting to shift our attention.

Shudder.

Shrug.

Replay.

6.4 Intermezzo V: Playing with What's at Stake.

Assimilation into the dominant class was once considered to be a danger of the Gramscian organic intellectual (1971). The risks are different for those who haven't already abandoned the field, and Berardi refers to the newer class of bit-economy labour as *cognitive workers* or *cognitariate*. Genosko explains that “cognitive workers are precariously employed—on occasional, contractual, temporary bases—and their work involves the elaboration of segments or ‘semiotic artifacts’ that are highly abstract entities combined and recombined through an exploitative digital network only at the precise time they are required.” (Genosko in Berardi, 2011, p. 14). Canned curriculum²¹, barriers to entry, and low pay can't help.

The demands of teaching, publishing, and administrative work weigh heavily on tenured faculty, while knowledge privatization, peer review, and scholarly ranking add to the frustrations. Berardi describes that from the “cognitive workers’ perspective, the work done has a fragmentary character: it consists in fractions of cellular time available for productive recombination. Intermittent work cells turn on and off within the large control frame of global production” (Berardi, 2009, p. 184). While scholars debate methodologies and the incommensurability of conventional and post-qualitative approaches, what reigns is clearly an institutional *methodology that is quantitative*.

Exhausted

In Braidotti's (2019) opinion, the current epoch is characterized by the crisis of extractionist capitalism, which is exacerbated by the rapid development of technology.

²¹ When referring to “canned curriculum” I am speaking to the trend, particularly in e-learning, of separating professorial duties into the technical functions of content experts, curriculum composition, platform integration and content instruction.

Everything everywhere seems to be in a state of near exhaustion, extinction, or destruction.

Throughout her career, Braidotti has observed the tremendous stress educators and activists face, especially noting the “the manifest fatigue with theory and theorists” (p. 43). She explains:

Indeed, ‘we’, the human heirs of Western post-modernity, are increasingly burnt out and fatigued, while ‘they’ – the technological artefacts we have brought into being – are smarter and more alive than ever [...] Exhaustion and fatigue have become prominent features of the contemporary psychic landscapes. Exhaustion is witness to the daily and nightly struggles that mark our interaction with the complexities of the present. (p. 44)

Technologically Frustrated

Due to the intensity of technological change during what Braidotti calls the *Fourth Industrial Revolution*, familiar strategies of engagement have been disrupted. There is mounting frustration with new theoretical explanations. Grusin (2015) explains,

...interrelated critical and theoretical methodologies that have coalesced at the beginning of the twenty-first century invites the expression of what can only be called “turn fatigue”: the weariness (and wariness) of describing every new development in the humanities and social sciences as a turn. (p. ix)

It seems as if familiar procedures and knowledge-sets that once formed the foundation of the professions are being rejected or challenged. When the term *human* is pejorative, “I believe in humanity” means something quite different, and at times the disconnect seems unreal. Guattari (1992), explains, “Humanity seems to have lost its head, or more precisely, its head is no longer functioning with its body. How can it find a compass by which to reorient itself within a modernity whose complexity overwhelms it?” (p. 26).

Soft Dogma and Populism's Haze

Kakali Bhattacharya's, "Rejecting Labels and Colonization: In Exile From Post-Qualitative Approaches" (2020) is reminder that the best efforts of those engaged in research focused on posthumanism, Deleuzoguattarian theory and new materialisms need to be attentive and cautious in our efforts. Shannon and I have been reminded of this in different ways throughout our writing. The problem remains that conventional humanist epistemology sometimes seems incommensurable with the 'new' ontological theorizing^[1].

Bhattacharya brings this tension to her article as a passionate response to Elizabeth St. Pierre's keynote presentation at the 15th International Congress of Qualitative Inquiry (2019, May 17), which was later published as "Post Qualitative Inquiry, the Refusal of Method, and the Risk of the New" (2019). For St. Pierre, Post Qualitative Inquiry, (PQI) is a complex affair which starts with a rejection of qualitative, quantitative and mixed methodologies" (p. 11) and students that ask for feedback on how to begin their research processes are directed to the textbook study of philosophy, stating that "I recommend those interested in post qualitative inquiry study philosophy, ontology, epistemology, empiricism, social theories, and the history and philosophy of science and social science" (p. 11). She continues by adding a recommended reading list, one that includes "studying philosophers [of] Deleuze's lineage: Lucretius, Hume, Spinoza, Nietzsche, and Bergson—and, in philosophy of science, Gilbert Simondon and Raymond Ruyer. One should not skip Derrida" (p. 11).

Bhattacharya's 2020 article explains that it is through privileging western philosophical discourses that we practice yet another form of epistemic violence towards marginalized communities by ignoring the colonizing knowledge-making structures these discourses represent. She says, "we did not need to make turns, when what is considered new knowledge in the west

was part of our heritage, onto-epistemologies, and considered foundational, upon which more complex ideas have been built” (p. 182).

As part of her response, Bhattacharya provides alternative theorists and knowledge keepers that she considers to be valuable alternatives to St. Pierre’s. Bhattacharya’s themes seem to suggest that mothers, elders and cultural rituals remain untapped wells of knowledge, thus encouraging researchers to be attentive to the risk of complicity in the erasure of cultural knowledge. Deleuze may be a *way in*, but he is just one among many in this massive emerging category of scholarship, and as Bhattacharya explains, there are many less eurocentric theorists who engage similar concepts. Alternatively, I contend that this doesn’t mean that scholars should reject the innovations that have been labeled as *turns*. Clearly, post-colonial theory plays an important and often unappreciated role in advancing posthumanist lines of inquiry.

“Incommensurability”

Evidence of the precarious nature of scholarly knowledge-work can be seen in the expectations around publishing and the transformation of electronic infrastructure that packages and repackages academic outputs to financially benefit all except those who first generate them. I include Google Scholar, Microsoft Academic, Researchgate, Academia.edu, Amazon, as well as a growing number of companies who are in the process of even further privatizing academic knowledge, amassing, categorizing, summarizing, and dissecting books and articles. Emerging artificial intelligence and learning machine technologies consume large data sets in training, and the prospects for that technology’s application remains unknown. We’d be foolish to think that we are writing only for a human audience.

A common denominator *does* exist in the knowledge market, and these are the quantitative benchmarks, and statistical analyses that determine ratings, access, distribution, and career advancement. When we reject humanism and focus on the ‘theoretical posts’ it does not make sense to ignore the radical ontological reconfigurations that permeate the knowledge market. To say that qualitative and post-qualitative methodologies are incompatible is reasonable, but they aren’t incommensurable. It says so in the fine print.

[¹] Which is not at all new in Western philosophy or in the history of humans.

CHAPTER 7. CITY AND CLASSROOM

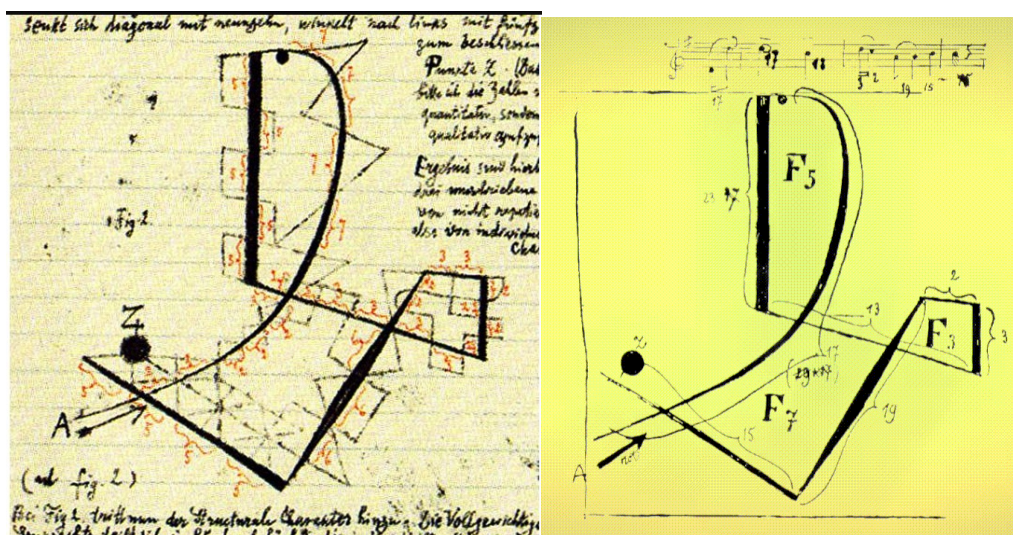


Figure 7a, b. *Music Notes, Teaching Notes.*

Figure 7a. Beiträge zur bildnerischen Formlehre, S. 56, fig. 1, ZPK Bildarchiv. Used with permission from Zentrum Paul Klee.

Figure 7b. Paul Klee Notebooks Volume 1: The Thinking Eye, (1969 p. 297).

Notes: Music, notes, spaciality and the structure, the visual artist very much like a composer of music. Used with permission from Zentrum Paul Klee.

7.1 Introduction to City and Classroom

Disjunctive-synthesis

Most people will not get up and leave a conference session at the mention of his name. McLuhan is a favourite Canadian uncle, full of outrageous stories and jokes. His appearance in Woody Allen's *Annie* (1977) and his interview with *Playboy Magazine* (1969) gave him cachet in an instance of popular culture that no longer exists.

McLuhan's role in the jointly written articles has long been debated between us: his theories of technologies rarely align with what we speak of as new materialisms, nor do they resonate with what Deleuze and Guattari have written collaboratively or individually. Yet they occupy common tracks that are very useful.

Disjunctive-synthesis, according to Deleuze and Guattari (1972/1983), "refers to the system of possible permutations between differences that always amount to the same as they shift and slide about" (p.12). Shaviro (2011) explains that "in Deleuze's technical vocabulary, a disjunctive-synthesis is a synthesis of divergent series that do not converge yet somehow manage to communicate by virtue of a *difference* that passes between them like a spark." (p. ?).

O'Sullivan (2012) compares disjunctive engagements to grinding gears and skipping tracks in a recording. "This disjunctive-synthesis includes within it a principle of recordings the either/or shunts are striated/scratched on to the body without organs itself" (p. 173). After a certain point, "everything stops dead for a moment, everything freezes in place - and then the whole process begins again" (Deleuze & Guattari, 1972/1983, p. 7).

One of the objectives of posthuman scholars is to subvert anthropocentrism.

Technology's instrumentality to humankind ought not be its defining feature. In the article *Posthumanizing McLuhan's Curriculum* (Wainwright & Stevens, 2020) we said:

When McLuhan (1994) posited in 1964 that "all technologies are extensions of our physical and nervous systems to increase power and speed" (p. 90), he understood that humans do not exist independently of their "tools." McLuhan was suggesting both that there is agency in the technologies used by humans and that humans are merging with their technologies by extending themselves in prostheticity (p. 60)

The technologies of McLuhan are human, as are the bodies and nervous systems that they extend, and the primary objective of his work is to sharpen senses and train perceptions: "Man is an extension of nature that remakes the nature that makes the man" (McLuhan & Nevitt, 1972, p. 66).

Respected Deleuze scholar, Peter Zhang, has contributed much to this association, and has had the additional benefit of a long-term writing relationship with Marshall's son Eric who died in 2008 (see Zhang and McLuhan, 2016; E. McLuhan and Zhang, 2012, 2013, 2014). His article "Deleuze's Relay and Extension of McLuhan" (2011) describes "how Deleuze actively used McLuhan as a mediator for his philosophical speculation, how he picked up a whole volley of McLuhan's probes and relaunched them in a new direction" (p. 208). Zhang's article speculates that Deleuze, like other continental philosophers, drew on McLuhan's writing to open their own theorizing. McLuhan is a good opening and served us well.

7.2 Posthumanizing McLuhan's Curriculum: Riffing on City as Classroom

From "Posthumanizing McLuhan's Curriculum: Riffing on City as Classroom," R. Wainwright and S. Stevens, 2020, *Journal of the Canadian Association for Curriculum Studies*, 17(2), 55-66. Copyright 2020 by Richard Wainwright and Shannon Stevens. Reprinted with permission.

City as Classroom

From within this present Canadian educational milieu, we delve into the half-century-old prognostications of Marshall McLuhan on media learning during the electric age, recalibrating one of his many remarkably prescient works. The textbook was designed to transport secondary school media students into the city in order to alert and expose them to "problems in their cultural environment" (McLuhan, Hutchon, & McLuhan, 1977b, p. 2). Once out of the physical classroom, they were challenged to train their perceptions by "concentrat[ing] on the structure of a situation" (McLuhan, Hutchon, & McLuhan, 1977a, p. 14).

As human scholars collaborating with technologies, academic influences, and physical environments within agented assemblage, we have studied the approaches with which we explore informational spheres. We have fashioned this study as an [onto]Riffology during which we perform riff as a medium for exercising postqualitative research's attractions. Riff, as a process ontology, operationalizes the experimentality of DeleuzoGuattarian philosophy by embracing becomings, interrupting hegemony and recognizing nonhuman agency. In composing this paper, we resist linearity, instead allowing emergences of refrains and bass lines. Each section's headings punctuate these emergences, attempting to straighten nonlinear processes. These media-enabled ruminations and our technologically mediated tangents invite readers'

participation in a bootstrapping process that will be discussed herein. When we “leave off”, it is with a call to action for a people and world yet-to-come (Deleuze & Guattari, 1994).

McLuhan’s media textbook has us thinking about all manner of spaces of ontological potentials. We theorize a posthuman critical pedagogy that draws on Guattari and Negri’s (1985/2010) liberatory work, and we regard their revolutionary tones as aspirational.

Posthumanizing a study on the city as classroom, we negotiate passages through and under city spaces, and we immerse ourselves in a hypercity that is not just for humans, and which is enmeshed with materiality. We adopt as signposts the various human ages, called timescapes (Haraway, 2016), and geological epochs mapping our histories and futures. One demarks the human populating of the earth after its most recent ice age (the Holocene); a second eyes capitalism's inability to structurally regard the needs of the nonhuman as central to the needs of the world (the Capitalocene); a third bespeaks the significant impacts of humanity on earth (the Anthropocene); while another favours multispecism and deprivileges the myopic humanism that has preceded (the Chthulucene).

As educators, we build pedagogical tools, rendering students more than repositories of facts. However, there remains a dearth of clear indications about how to fully engage learning encounters that equip students for their futures. Although the banking model of education has been largely abandoned, learning encounters are still often physically situated in vaults and safety deposit boxes holding bonds and certificates of graduation, available only during bankers’ hours, and with staff supervision. In schools, education is being offered in epistemological conditions that have indeed evolved, while technologies have destabilized ontological ambitions and hastened the posthuman.

In their time, McLuhan's pronouncements seemed strange to audiences, barely comprehensible to most. The public and academic community, alike, struggled to grasp the ramifications of what was taking place in a rapidly changing world and were troubled by McLuhan's assertions. Early on, McLuhan had suggested that any human-made artefact, idea or tool becomes medium once harnessed to human use, and he forewarned that technologies—products of the electric age—were the media that had increasingly become extensions of human bodies, skin, nervous systems and functions. In the post-world-war era, the simultaneity in availability of information through technology had launched the world on an irreversible course to a seemingly unknown destiny. By as early as the late 1960s, however, the implications of satellites orbiting earth, of computers' ability to surveil and of societal infiltration by technological media were becoming apparent to McLuhan and were startling to consider. His pressing concern became how to deal with the effects of the burgeoning media.

Decentering the Human

In 1977, McLuhan co-wrote a media textbook for Canadian youth, in collaboration with schoolteacher Kathryn Hutchon and McLuhan's son Eric. The authors reimagined the school's function in response to the altered circumstances of an electric age. *City as Classroom: Understanding Language and Media* explores a modified function of schools as venues in which educators ask questions that elicit discovery in urban spaces. Although McLuhan and his collaborators recognized that the preponderance of available information was now sourced outside school edifices, McLuhan also believed that the school "might still be useful for examining the real education children were receiving from the electronic media" (Marchand,

1989, p. 275). McLuhan et al. (1977a) tasked students with activities that they hoped would expand their gaze and sharpen their powers of observation. An example reads thus:

Have you ever tried to find a book which you knew was in a particular bookcase, yet still couldn't find? We're too used to looking at the books on the shelves as we look at the wallpaper.

Be sure to find a safe and sensible place for the following experiment, where you are legally entitled to drive at the speed suggested. Arrange to have both the driver and observer in the car. They should not share responsibilities.

Put a Toulouse Lautrec poster beside the road. Drive by at 10 km/h.

Can you read the poster? Drive by again at 80 km/h. Can you see it?

What information have you discovered from this experiment about the ground of nineteenth-century France? What have you discovered about the ground of twentieth-century North America? Is there a difference between town and country billboards?

Are city billboards supposed to attract conscious attention?

Are they figures or part of our barely noticed, urban ground? (p. 19).

The three educators wrote curriculum that was intended to “enlist the school system as a prophylactic against the effects of advertisements and best sellers” (Marchand, 1989, p. 274).

We, in turn, want to understand what it is about their manner of engagement that helps us to learn. Our interest is in posthumanizing education by decentering the human, and our point of departure is the textbook *City as Classroom: Understanding Language and Media* (McLuhan et al., 1977a). These considerations of posthuman education delve into the implications of McLuhan's assertions that media (a chair, a film, a motorcar, a satellite) are prosthetic to humans and are even extensions of our nervous systems (McLuhan, 1969). Relationships between

technology and humans have complexified to a degree not quite anticipated even a few decades ago, while technology in schools is still presented as partitioned learning and often as a defined subject area taught by human instructors. Epistemologically, computer learning is often still presented as “the tech bit” of a school day, a topic of study scheduled to fit timetables.

The school wall is no longer the site into which students and school systems plug their computers, but whence worlds of artificial intelligence (by way of an “always-on” network connection replacing the dial-up modem) are reciprocally plugging into students’ intellects, technologies, social systems, ecosystems, and even physical bodies. Today, students have far less legitimate networked access within learning institutions than is granted during youth’s private use of technology outside of school hours.

Riff

We are interested in posthumanizing education by decoupling pedagogy from the humanist enterprise (Snaza, 2016). Riffologic activity compels us to “plug in and play” (Wainwright & Stevens, 2017), generating a toolkit of strategies that interrogates the traditional methodological approaches to which “emancipatory researchers” often default, regardless of how enthusiastically they have been hitherto dabbling in the experimentality of DeleuzoGuattarian concepts (St. Pierre, 2014a). We resonate with St. Pierre’s perspective (2014b, 2018) as we, too, reach towards post-inquiry and DeleuzoGuattarian ontology and defy contemporary qualitative research methodologies.

By mobilizing riff, we explore ways of becoming that are other than anthropocentric and which attempt to initiate a posthuman critical pedagogy that is preparing for a people yet-to-come, before knowing who those people will be (Carlin & Wallin, 2014; Deleuze & Guattari,

1994; St. Pierre, Jackson, & Mazzei, 2016). Here we anticipate what lies beyond, in a future of people inseparable from other beings and matter. Riff is not merely an epistemic response or logical argument against humanism, but rather, it interrupts the ontology of humanism by appropriating, hacking and eroding its relationships with "resources", while reimagining relationships capable of life-fulfilling balance.

Riff draws from the concepts of Deleuze, Guattari, other continental thinkers and a contemporary discourse that engages new materialism, the nonhuman turn, the ontological turn and the posthuman. Haraway (2016a) broadens our thinking of the conditions in which we are situated by asserting the existence of a Chthulucene, an epoch she posits as a becoming-together. During this timescape, one may better recognize that relationships between the human and nonhuman are inextricably interdependent and that sympoiesis "makes with" all species to effect co-existence on this planet, Earth. Rather than perpetuate human practices of rampant resource extraction and heedless ecological dominance, we wonder how we might, over less explored terrains of thought and experience, push posthuman ontologies farther yet.

Riff facilitates pedagogical engagements: those happenings that populate educational encounters and stimulate learning in assemblage as "becoming curricula without syllabi" (Stevens & Wainwright, 2016, p. 163). The nonlinear history of humanist pedagogies includes Platonist assertions of the individual as "raw ontological input" rendered human through one's education (Snaza, 2016, p. 21). Aristotle's early rationalist reasoning, Descartes' cogito, Dewey's social projects and Freire's (2000) liberatory ambitions each posit relationships between human democracy, citizenship, and freedom, in the context of educational pursuits. If human education is concerned about agency, emancipation, and democratic institutions, a posthuman education decentres the human and envisions a different type of agency that

encompasses matter, conceding the limitations of humanist critical pedagogy, while adequately broadening participants' scope, tools and relationships.

Wallin (2011) and Jagodzinski & Wallin (2013) submit that humanist emancipatory pedagogies are no longer central to education for social change. Thoroughly surveying the field of posthuman education, Snaza and Weaver (2016) admit that posthumanist thinking without concern “for what things mean for humans” is so recent a prospect that its implications are still largely undiscovered: a situation necessitating educational approaches that even more fully imagine critical engagement through an exploration of relational ontologies. We contemplate the role of schooling (and, by extension, teachers) during conditions of radical-reshaping of human and nonhuman engagement.

Bootstrapping

Are we mistaken in our belief that teachers remain critical to the survival of the world and the creation of a world worth surviving? What becomes of the human instructor once students are immersed in posthuman education streams, particularly if learning is happening during their encounters with the vastness of information simultaneously available? If learning and change are closely tied to aleatory processes, then how do we set conditions in which events are experienced?

Daignault (2008) describes curriculum as accidental encounters that are neither scripted nor anticipated. Curriculum becomes parenthetical. Despite our avowed interest in the spontaneities of thought and curiosity—the very lifeblood of riff—we are mindful that if human instructors are relegated to merely providing contexts for learning encounters, their function is threatened to become reduced to opening schoolhouse doors, rebooting computers for students'

use and staffing the physical locations in which students will potentially engage learning during online collisions with stimuli. Moreover, if this is the case, we wonder, do educators' roles simply approximate those of the technician, casino croupier, or code authenticator? We alternatively attempt to re-invigorate aspirations held by schoolteachers to become change agents, submitting that such an incarnation of the educative role and pedagogical endeavour befits a societal circumstance determining that students generally average more time daily spent with their schoolteachers than with any other adult presence in their young lives.

To initiate these capacities, bootstrapping as conceptualized by DeLanda (2013) intrigues us. Its human function activates a “machinic ontology” that is performed in a manner analogous to computing’s assemblage of hardware, software, and bootstrap loader. The schoolteacher’s part corresponds with the activation of the small strip of code responsible for loading the operating system and hardware once a computer reboots and initiates its potentials. The educational bootstrap’s operations are intentional, setting terms and conditions for learning events. Bootstrapping re-situates human participation in learning from that of engagement in operating the machine to being machinic. A necessary shift away from anthropocentrism’s typically custodial role takes place when riff is deployed. Consequently, the machinic assemblage depends not on the human as master, but on the human as one of many agential collaborators.

In bootstrapping, DeLanda (2003) recognizes that “a realist ontology may be lifted by its own bootstraps, assuming a minimum of objective knowledge to get the process going and then accounting for the rest” (pp. 27-28). If bootstrapping is indeed a machinic function of social and educational change, then, in turn, the application of Freirean (Freire, 2000) critical pedagogy—with its Marxist-inspired focus on emancipation from the oppressor—demands a different type of

revolution. This circumstance hearkens back to Guattari and Negri's (1985/2010) enthusiastic claims:

Nobody will seize power in the name of the oppressed! Nobody will compensate freedoms in the name of freedom. The only acceptable objective now is the seizing of society by society itself. (The state! That is another problem. One should not oppose it in a frontal way, nor flirt with its degeneration to smoothen the way of tomorrow's socialism! (p. 126).

New Alliances

Process ontology encompasses the tenor of Guattari and Negri's (1985/2010) version of revolution and Guattari's (2011) advocacy of social, mental, and environmental ecologies that counter the homogenizing processes applied by mass media and Integrated World Capitalism. A flattening of ontologies, thus, ensures that humans become partners-in-the-world, rather than its rulers and stewards. The bootstrap incorporates, within an ontology of becoming, an insertion of crucial, human-constructed, objective knowledge that jumpstarts technological processes, providing a context for educational encounters to become Deleuzian events. Without this necessary piece of mind-dependent reality, how do humans know that they are moving in any direction and singularity, either by aleatory means or ones shaped by ecological encounters? We submit that for the purposes of explicating bootstrapping, Guattari and Negri's (1985/2010) rather humanist revolutionary stance serves to operationalize Deleuze and Guattari's philosophy of revolutionary change.

Guattari and Negri's (1985/2010) call to action, *New Lines of Alliance, New Spaces of Liberty*, sets forth mechanisms by which we can apply DeleuzoGuattarian thought to riff,

effecting a change theory that shifts our reference points beyond established humanist critical pedagogies and Freirean dialogical epistemologies, and towards a materialist ontology. The pair writes, "What we are evoking here is not a utopia. It is the explication of a real movement, which innumerable traces and indices designate as a power in action" (Guattari & Negri, 1985/2010, p. 73). Guattari (2011) conceptualizes three ecologies—re-singularizing social relations, the environment, and the human mental state—which he contends are vulnerable to mass media's ill effects that penetrate "people's attitudes, sensibilities and mind" (Guattari and Negri, 1985/2010, p. 53). Guattari's ability to fully anticipate the acceleration in speed and impact of social, environmental, and mental decay suggests him to be every bit as prescient as we have deemed McLuhan.

Hypercity

While physically inhabiting his mid-20th-century North America environs, McLuhan was always anticipating the ways that the electric age would wholly change societies. Given his observations of technologically wrought change, he early predicted that the metropolis would:

become a circuited city of the future [which] will not be the huge hunk of concentrated real estate created by the railway. It will take on a totally new meaning under conditions of very rapid movement. It will be an information megalopolis.

(McLuhan & Fiore, 1967, p. 72)

Railways had once been the circuitry of cities, their installation influential in determining the locations of cities, their formation central to the amalgamation of towns, and their groupings into megalopolises. It is, in fact, locomotives' sheer physical mass that has determined the location of train stations, requiring their separation at a distance of some three to five kilometres,

to permit both their acceleration and deceleration (DeLanda, 2016). Such spatial distribution has similarly influenced the positioning of subway stations beneath cities. The physical materiality of cities' transportation systems is juxtaposed with information systems travelling at lightning speed, these systems the means of its technological conveyance.

McLuhan brought cities, information and the classroom into proximity when he posited that "the metropolis today is a classroom, the ads are its teachers. The traditional classroom is an obsolete detention home, a feudal jungle. The city is obsolete, ask the computer" (McLuhan & Fiore, 1967, p. 12). His curriculum projects on studying the effects of media had been taking shape for some years, having been first conducted in 1964 (Gordon, 1997).

Our riff on McLuhan, cities and education now imagines the posthuman metropolis as a hypercity: its spaces energized by hypermediated engagements. What it means to be human is changing at an exponentially rapid pace during an "hyperreal 21st century" (Petitfils, 2014) during which humans have been slow to recognize the extent to which they have become interdependent with machines (McLuhan, 1994). We apply to "city" the prefix, "hyper" to imply activity, speed and movement toward conceptualizations of hypermedia and hyper-objects.

The hypercity challenges an ideology that the city is made only for humans. Instead, all matter coexists and potentiates in assemblage within many layers of enfoldment. Returning to McLuhan's assertion that "the city is obsolete, ask the computer," we now do exactly that, and often.

Siri, is the city obsolete?

Understanding Media

McLuhan et al. (1977a) sought to enlist media students in addressing what the authors feared would be the deleterious impact of the electric age on youth. As curriculum, *City as Classroom: Understanding Language and Media* encouraged high school students to spill into city spaces while engaging the study of media and its properties: magazines, motor cars, newspapers, light bulbs, films, clocks, airplanes, satellites, money and so on. (McLuhan et al., 1977a). Class members were to group themselves with one or two other students, select a project among the textbook's many offerings, exit the schoolhouse to engage their inquiries within the city and reassemble to discuss their findings, upon completion of their tasks. These explorations were designed to help students identify patterns and structures within their social environments, while sharpening perceptions about their surroundings. The research would be "important and original" (McLuhan et al., 1977b, p. 1). It would study the media's effects rather than its content. The culture presented "problems" that McLuhan believed could be ameliorated by engaging the perspectives presented. However, *City as Classroom* never gained traction.²² Perhaps, it has been suggested, the curriculum merely comprised "too patently a bouquet of McLuhan's ideas" to ever be widely accepted (Marchand, 1989, p. 275). Its inability to prove influential to youth quite disappointed McLuhan and it would be his last work published during his lifetime (Marchand, 1989).

²² The textbook was retitled and published in the United States in 1980, only to suffer the same fate (Marchand, 1989).

Plug in and Play

We are interested in potentiating pedagogical complexities in the city's physical, informational and ecological spaces. City as Classroom assumes the nature and spirit of the school field trip: taking the world seriously, engaging it as fieldwork. Upon having returned to the physical classroom, the "intelligibility" of the world can be determined through a discussion of one's findings (McLuhan et al., 1977b, p. 1). Investigations into these environments explore tensions between what happens in the classroom, the city and the rest of the world.

Our conceptualization of a hypercity aligns with speculative realism and its disavowal of anthropocentrism: a response that is deemed necessary "when we face the prospect of ecological catastrophe and when we are forced to recognize that the fate of humanity is deeply intertwined with the fates of all sorts of other entities" (Shaviro, 2014, p. 1). City as Classroom addresses features inherent in a cultural environment considered to be evolving too rapidly to be entirely understood by its denizens (McLuhan et al., 1977a).

In the 21st century, the Anthropocene—a geo-political epoch subsequent to that of the 12,000 year-long Holocene—is evinced, signaling the degree to which humans impact the earth's ecosystems and geology. Haraway (2016b) characterizes the Anthropocene as one of various "timescapes," alternatively proposed to be "boundary events" when these geological episodes are of relatively short duration. Another such timescape and boundary event is the Capitalocene, which recognizes wealth's acquisition as a primary factor driving the earth's resourcing by "exterminationist extraction" (Haraway, 2016a). Haraway (2016a) contends that because the Anthropocene asserts the anthropocentric, its premise is, therefore, speciesist. Further, its moniker bespeaks not only "human exceptionalism", but primarily concerns itself with the activity of homo sapiens who live in highly industrialized regions and who occupy higher socio-

economic classes. Haraway (2016b) submits that it is the Chthulucene that more inclusively and accurately tells the story of humanity's, and all beings', circumstances. It is a timescape—situated in the past, present and future—wherein the multiple species of survivors, victims and refugees of the Anthropocene construct intertwined tentacular existences and thrive during mutually reciprocal states in an ecologically reconfigured world.

Figure, Ground, Surround

As we are exploring how engagement and informational access course through learning as rhizomatic pressings-forth, it is the nature of what happens to thinking that spurs interest in discovery of concepts. Learning events are situated in a pedagogical assemblage that includes the bootstrap as evidence of both human interjection and a capacity to leverage, in Deleuzian parlance, what is real, virtual and actualized (Deleuze, 1966/2011).

An articulation of riff is enriched by Deleuze's conceptualization of the event: "a garden, a chair, the great pyramid, a collision with a bus, Adam sinning, a concert..." (Williams, 2011, p. 82). Events signal a "set of singularities . . . [as] turning points and points of inflection; bottlenecks, knots, foyers, and centres; points of fusion, condensation, and boiling; points of tears and joy, sickness and health, hope and anxiety, 'sensitive' points" (Deleuze, 1969/1990, p. 52). Indulging spontaneity, tangentiality and inspiration in learning, we can perhaps say both that riff events and that the event riffs. In its momentary appearance, "it's the chance we must seize" (Deleuze, 1990/1995, p. 170).

In *City as Classroom*, students are encouraged to learn to differentiate between "figure" and "ground",²³ introducing the early 20th-century psychological work of Edgar Rubin as a study

²³ See <https://youtu.be/7f1G6Nx5VDw>

in exercising perceptions. The structural relationships of any given situation are examined by recognizing what scrambles to the forefront of our attention, which is "figure," while "ground" becomes backdrop (McLuhan et al., 1977a). Although a "figure" might immediately recede into "ground," then reverse again, the components (lines, shading, sounds) of figure and ground may be simultaneously detectable by the viewer: "Therefore the ground, or underlying structure, of a situation provides the conditions for experiencing any part that presents itself as figure" (McLuhan et al., 1977a, p. 14).

Inattention to the "hidden ground" of sound, representation, technology, and media takes place because its familiarity has resulted in us no longer "paying it any conscious attention" (McLuhan et al., 1977a, p. 19). A hidden ground of media exemplifies how technology, too, may elude notice. When McLuhan (1994) posited in 1964 that "all technologies are extensions of our physical and nervous systems to increase power and speed" (p. 90), he understood that humans do not exist independently of their "tools." McLuhan was suggesting both that there is agency in the technologies used by humans and that humans are merging with their technologies by extending themselves in prostheticity. The nature of these mediated relationships aligns with Sharon's (2012) typology of the posthuman, which features four manifestations in biotechnologies: liberal, dystopic, radical and methodological. The extension of human function through technology as prosthesis may alternately be viewed as bringing more comfort and leisure to human existence (the liberal), creating the conditions of our human demise (dystopic) or providing to humans the tools that overcome tyranny during future revolution (radical). The category of methodological posthumanism is aligned with the riffologic project as an advancement of conceptual frameworks in both science and technology, and in the adoption of

tools “that can better account for the networks and zones of intersection between the human and the non-human” (Sharon, 2012, p. 6).

In riffologically methodologizing the posthuman, we expand our purview beyond the anthropocentric concerns of McLuhan’s use of both figure and ground to propose a further layer of consideration for analysis which we term surround (Stevens & Wainwright, 2019).

Interchangeably, figure becomes ground and hidden ground (by its familiarity); ground becomes figure; and surround encompasses materiality that is figure, ground, hidden ground, and all that is largely imperceptible to humans. We conceptualize surround broadly we now narrow our interest to its enfolding of entities, features and resources that have been displaced, destroyed or reconstituted in a centuries long capitalistic orgy of destruction imposed on ourselves and all matter. Surround’s inclusion alongside the figure/ground paradigm permits us to better recognize, among other things, the extent of ecological damage caused by urban development, anthroturbation (human tunnelling) and technofossils (plastics, aluminum and the cement used to human tunnel, etc.). Surround provides context for consideration of matter to which we may be largely inattentive because it does not serve capitalistic gain.

Technological Assemblages

McLuhan et al. (1977a, 1977b) promoted figure/ground analysis in order to hone perceptions to solve problems. Figure and ground are observable to humans, each alternately creating territory and, in turn, reconfiguring territory within binary relationships. However, Harman (2009) deems “figure and ground” to be confining and relegated “to the sphere of human perception” (pp. 119-220). A conceptual surround is less apparent to humans and is instead attuned to intensities and forces. It introduces spatial depth to our considerations. By

bringing into assemblage the functions of figure, ground and surround, we attempt to ontologically re-conceptualize, re-group and re-intensify our efforts to decentre the human. We are relying on the ability of the assemblage to potentially unleash realizable force, as demonstrated by the oft cited "man-horse-weapon" configuration, which brilliantly illustrates all that these interrelationships impel.

DeleuzoGuattarian nomadic "innovations in war" include "technological elements ... the saddle, stirrup, horseshoe, harness, etc." (Deleuze & Guattari, 2014, p. 404), all maximized in assemblage. Tools may become weaponized as a result of speed—not merely absolute speed, but its expression as well (DeLanda, 2016, p. 75).

The galloping horse ever increases its pace once spurred by a rider prosthetically attached to his mount through feats of technological engineering (saddle and stirrup). In turn, the rider augments the inflicted damage of his weaponry by supplementing the speed of his mount with his own physical strength in order to maximize his weapon's velocity—its tip sharpened by technological means to a degree befitting its deadly intent.

What Deleuze and Guattari consider "innovation," McLuhan (1964/1994) recognizes as "disruption" that catalyzes performance. McLuhan (1964/1994) posits that:

unless there were such increases of power and speed, new extensions of ourselves would not occur or would be discarded. For an increase of power or speed in any kind of grouping of any components whatever is itself a disruption [emphasis added] that causes a change of organization. (p. 90)

Social Assemblages

Hypercity comprises assemblages of the physical, the social, the technological, the human and the animal, the organic and the inorganic. The hypercity exists in sites of anthropurbation, for example, subway systems, which are far more than spaces occupied by human beings shuttling to their destinations. Multiple material features contribute to subways' transportation functions, including platforms, rails, electricity, tunnels, plumbing and turnstiles. There are also life forms dwelling in these subterranean spaces that include, but are not limited to, molds, mildews, viruses and rodents, which complexify an elaborate ecosystem beyond what has been a traditionally anthropocentric gaze. So complex is this hidden life that as much as half of the DNA found in New York subways remains unidentifiable to human categorization (Afshinnekoo et al., 2015). Toronto's sewer systems intersect with its subway systems, at times creating spillages of human waste and weather-related effluents. In these complex networks, humans, trains, power, fresh-water, raw sewage, and storm run-off all may converge and diverge (Bharti, 2018). The innumerable elements forming a subway's (eco)system offer opportunities for learning from everything in one's environment.

Alfred North Whitehead pioneered realist conceptualizations of nature as independent of the human mind, engaging metaphysical speculation to overcome what he considered an error of modern Western thought. He identified this oversight as the separation between phenomenological interactions and the "hidden physical reality" of the natural world (Shaviro, 2014, p. 2). Whitehead (2004) explains:

The reason why the bifurcation of nature is always creeping back into scientific philosophy is the extreme difficulty of exhibiting the perceived redness and warmth of the fire in one system of relations with the agitated molecules of carbon and oxygen, with

the radiant energy from them, and with the various functionings of the material body. Unless we produce the all-embracing relations, we are faced with a bifurcated nature; namely, warmth and redness on one side, and molecules, electrons, and ether on the other side. (p. 32)

Fully integrating the scientific properties of a fire with the sensation of its heat and the visual attraction of its “glow” is an apt example of all we wish to witness in the hypercity as space beyond cities, energizing sights, sounds and smells.

Networked Assemblages

Cities are traditionally recognized as busy, physical, geographic locations of populations, systems, interactions, and intensities, all of which concern the doings of the “social agents” inhabiting them. In riffologically exploring the hypercity and the significant complexities existing between the human and nonhuman, we refer to DeLanda’s (2013) consideration of realist ontologies as being committed to “a mind-independent existence of reality” (p. 1). DeLanda (2016) suggests that social and biological identities are forged in the extensivity of spaces such as “the frontiers of a country, a city, a neighborhood, or an ecosystem; or . . . the defining boundaries of our own bodies—our skin, our organs’ outer surfaces, the membranes of our cells” (p. 110).

Extensivity is described by DeLanda (2016) as quantitative features, such as length, area and volume, while the properties of the intensive are qualitative, expressing “speed, temperature, pressure, concentration [and] voltage” (p. 76). The former may be mapped as physical features that include coastlines and mountain ranges, while features of intensity may include “zones of

high and low pressure, cold and warm fronts, air masses moving slowly or rapidly” (DeLanda, 2016, p. 110).

Cities, as networked assemblages, are heterogeneous in composition, made up not just of human inhabitants but of all manner of matter. DeLanda (2016) lists city occupants as including: the material and symbolic artefacts that compose communities and organizations . . . the architecture of the buildings that house them, the myriad different tools and machines used in offices, factories, and kitchens; the various sources of food, water, and electricity; the many symbols and icons with which they express their identity (p. 20).

Recognizing that a material world exists “independent of our minds” (DeLanda in Dolphijn & van der Tuin, 2012, p. 39) disrupts human reliance on anthropocentrism.

Leaving off

The city retains heat and muffles wind. It shades plants that grow, and it hosts water-flow systems that flush out detritus. The city acts as contaminant, as sediment and as a filter. The city is assemblage and is in assemblage.

Reconfiguring an understanding of community, a hypercity is a posthuman metropolis, a collectivist entity not just for humans, nor restrained by geographic location. It comprises networked relationships amongst humans, animals, organics, bacteria, and networked technologies. Different classes of relationship engage these diverse ecologies in a hypercity: teacher, student, technology; soldier, stirrup, bow.

The *hypercity* as classroom is both a physical space and one of intensities. Human cities, even the ones into which McLuhan pitched media students, will stand as relics of times past, as ontologically distinct from the hypercity as is a 1960’s gasoline-fueled car from a fully

networked, self-driving 2020 Tesla. McLuhan and Fiore (1967) forecast that “former ‘cities’ will be preserved, museum-like, as living monuments” (p. 72). The posthuman city brings into relief living matter that thrives within metropolises. We recognize the hypercity, and the nonhuman features comprising it, when navigating spaces on which trains travel. Long conditioned to the sight of railway tracks across city surfaces and in subterranean tunnels, we now turn our attention to the rhizomatic nature of their domains of microorganisms and subterranean life forms. In so doing, we are reimagining the *City as Classroom* which ushers in a “becoming curriculum without syllabi” (Stevens & Wainwright, 2016). This is a hypercity.

Our present Canadian educational milieu demands that teachers and students act revolutionarily in their work. The ecosystem is in a state of human-made crisis, and technological change is happening at such a rapid rate that every part of human economies is affected. Traditional, humanist strategies have largely failed to address environmental degradations, safeguard technological development from dystopic (even malevolent) application and ensure equitable distribution of income and wealth. Strong stances buttress resistance to commercialism and rampant consumption. Departing from the liberatory practices that traditionally link human democracy with human education, this emancipatory work necessitates a flatter and more worldly consideration of an *agency of all things*.

7.3 Intermezzo VI: Derailing

In the joint article “Posthumanizing McLuhan” (2020) Shannon and I said:

Railways had once been the circuitry of cities, their installation influential in determining the locations of cities, their formation central to the amalgamation of towns, and their groupings into megalopolises. Such spatial distribution has similarly influenced the positioning of subway stations beneath cities. The physical materiality of cities’ transportation systems is juxtaposed with information systems travelling at lightning speed, these systems the means of its technological conveyance..... It is, in fact, locomotives’ sheer physical mass that has determined the location of train stations, requiring their separation at a distance of some three to five kilometres, to permit both their acceleration and deceleration. (p. 58)

The above seemed like a simple observation when the article was written, and I did not realize its broader implications until later. We privileged the perspective that *technology* determined where population clusters emerged and erased (by omission) that the physical presence of the train was enabled by conditions of European colonialism, and that there was a simultaneous process of dispossession and depopulation of existing communities. Benjamin Joseph Lafford (2015), explains in *The Survivors Speak: A Report of the Truth and Reconciliation Commission*:

...So we heard a train, we heard a whistle and we said, and my brother said, “Oh, that’s the train coming to pick us up, pick us up.” I said, “Okay,” you know. So, when the train came, they put us on, Indian agents put us on, the RCMP put us on the train. Told us to sit over here. So it doesn’t matter, so we left from Grand Narrows. Every station we stopped at, there was children, Native children, that had long hair when I looked out the window.

And I went, “Wow, there’s more children going on the train, probably they’re going the same way as I’m going.” So at that time it didn’t matter to me, so every station we stopped, there was Native children, girls and boys. And there was RCMP and an Indian agent lining them up, put them on the train, put them on the seats. (p. 25)

Also from *The Survivors Speak*, Larry Beardy (2015) describes “at every stop”:

...And, and the train ride was okay for the first half hour or so, then I realized I was alone. My mother was not there. And like the rest of the children, there was a lot of crying on that train. At every stop if you understand the Canadian National Railway, families lived in sections every twenty, fifteen miles, and children will get on the train, and then there’d be more crying, and everybody started crying, all the way to Dauphin, that’s how it was. So, there was a lot of tears. That train I want to call that train of tears, and a lot of anger, a lot of frustration. (p. 26)

Trains, then, *extended* the monarchy’s physical reach, and the intensity of the tools of financial exchange, legal systems, property tenure, became the *relays* that flowed along with colonial ambitions. Settler-colonialism’s use of train technology cannot be separated from the ambition to constrict territories and destroy the social and cultural capacities of Canada’s indigenous communities.

If below-ground railway networks are understood as areas occupied by today’s hypercity, it may also be reasonable to consider them part of a continued posthuman and neocolonial process. Combined with the insights from Bhattacharya’s (2020) in the previous Intermezzo, this topic deserves more attention than it received in the published article. Moving forward is to strategize and complexify simple narratives, derailing the dominant ones while attempting to give way to agile approaches to knowledge creation.

7.4 Ritornello VI: Seen and Heard

I present two short snippets of audio from my granduncle relating the story of my family's journey from Russia to Saskatchewan, arriving on the first Doukhobor ship in 1898. My colonial settler history was established when the government of Canada granted my great grandfather and his two brothers homesteads on the traditional territories of the Cote and Keeseekoose First Nations near Kamsack, Saskatchewan. Their land grants were a short distance from The Treaty Four Reserve and the Crowstand Indian Residential School. I am interested here in the ways that stories are told, the richness that is conveyed beyond simple printed text.

Similarly, on a whim, I hired a vocal actor to read four of the published articles aloud partly in response to Alicia Vikander's performance in the *Anthropocene Project*. Eventually, this developed into a curiosity about the privileged nature of eye-to-mind meaning-making. A child's earliest sensory experiences are social and relational, and an infant knows a caregiver's smell, sound, taste, and touch before recognizing them by sight. Yet our current Eurocentric systems of knowledge are ordered so that the more complex sensorium is sanitized and 'lost in transcription'. [Click here.](#)

CHAPTER 8. CONCLUSION



Figure 8. *Collagraph.*

R. Wainwright, 2021 CC BY-NC 4.0

Note: This image was generated using techniques taught at the Zentrum Paul Klee Museum (Creaviva) and inspired by the painting *Adam and Eve* (1921), The Berggruen Klee Collection. Used and altered with permission of Zentrum Paul Klee.

8.1 Reinventing in the Posthuman Era

Conclusive Starts

In *Intermezzo I*, I described a starting point that is simultaneously everywhere and nowhere-in-particular, a body of work ready for new directions, ripe with traces and activatable fragments. This book is multidimensional, open, polysensorial, and autopoetic. Just as the dissertation begins with an opening, so too does its conclusion.

Anarchic Archives

Early in the dissertation, I introduced Manning & Massumi's (2017) description of the concepts *archive* and *anarchive*, suggesting that they are never fully separate from one another and constitute a relationship in which materials (such as joint publications) become readied for radical reexploration. The *archival* is met with energies that compel redirection and reconstitution. Curiosity, financial need, and a longing to escape are examples of forces that are just as important as those measured by speed, weight, and temperature. Territories and fluxes resist easy bifurcation, made evident in the recent flooding of the Fraser Valley of BC, where the water was removed from Sumas Lake in the 1920s, yet its force remained.

Though moving rocks, walking in mud, and riding bicycles to higher ground may be key learning strategies in the anthropocene, playing is about much more than force and materials. Stated otherwise, assemblages include rocks eroded into sand; and also that of the aggregation of silt, the forces of cementation, the movement of tectonic plates, and the ruptures that form mountains. The returns are eternal, processual, rhythmic, poetic and transformative. Paul Klee's art does not only move from archive to anarchive, there are always aleatory events, remnants of materials, and processes that make evident one creative act cannot be separated from another.

Activations and the Emergent

Content and expression, are variables in a common function, explained by Hjelmslev (1961), who states:

expression and content [...] are each defined only oppositively and relatively, as mutually opposed functions of one and the same function. (p. 54)

Intermezzos' and ritornellos' functions become machinic when they are applied to the *possible*, be it the autopoietic (self-organizing) or the allopoietic (producing difference). It is compelling to think of an intermezzo as simply a space between locations or a crease between folded pages, but when plotted three-dimensionally, an intermezzo is generative and emergent, and a reader may consider the examples [here](#) and [here](#).

Ritornellos are transversal, activated in the context of universes of reference. Hip Hop as a musical genre existed virtually before it was conceived, just as the Concorde airliner took off before a universe of reference was built. Time and space are crystallized in ritornellos, as are spaces between and across assemblages. The rupture of closed systems creates the possibility of new collaborations in a world that is always in a state of becoming something altogether different. A reader may consider the examples [here](#).

Gerunding Activations

I was struck by committee member, Mike Emme's question, "how much of this dissertation is concerned with the gerund?" (personal communication). It resonated with me not only because of its connection to DeleuzoGuattarian *becoming*, but also because of its frequent use elsewhere in continental philosophy. Jane Bennet (2004) explains:

...the Russian scientist Vladimir Ivanovich Vernadsky (1863-45) also refused any sharp distinction between life and matter. Eschewing that dichotomy, he preferred to speak of "living matter." Vernadsky "made every attempt to consider life part of other physical

processes and consistently used the gerund 'living' to stress that life was less a thing and more a happening, a process. (p. 353)

Haraway (2003) explains that "reality is an active verb, and the nouns all seem to be gerunds with more appendages than an octopus" (p. 6). Nancy Roth, (2010) opines that Roland Barthes looked at photographs as objects, while Flusser spoke of *photographing*, a difference that Roth describes as transforming an object into an *activation*, and in Flusser's case this action is a *gesture*. This oeuvre is of metaphysical significance for Deleuze's ontology of *becoming*, where everything is on the plane of composition.

The Rhizomatic Nature of Play

With Deleuze's metaphysics of becoming as a first principle, I use the term Ontological Play to describe not only sports, games, and childhood activities, but also international affairs, agriculture, slaughterhouse practices and public transit. Play is meant as the act of playing out our relationships as humans, and as a species, with one another and the world. This is a micro-revolutionary proposal which does not hesitate to rewrite the rules of the game.

Creativity is cartographic in nature as described in *Intermezzo II*, starting with the ground beneath our feet, the material conditions under which we exist, and the relationship between location and territory. I wanted *Intermezzo II* to be brief and poetic, and if there is a manifesto-like moment in the dissertation, it is here. A micro-revolutionary framework considers the turbulent conditions of our time, the need for new concepts, newly considered navigation of our daily lives and new rhythms and intensities to apply to our work. I use musical concepts such as syncopation, polyrhythm, mashups, remixes, bird songs, for their enunciative potentials.

The rhizomatic is where all kinds of mutations can occur and that's where one gets out of the ordinary's groove. As a result of using Klee's work as I did, I avoided treating the task

mechanically and instead placed myself outside of the content-expression dualism. *Intermezzo IV: The Shudder and The 🤖* is an ode to sound review and replay technology, and is another testament to persist efforts.

Tending to Care

Deleuze (1992) describes the institutions of disciplinary society as being in crisis, in perpetual reform, as “finished [...] regardless of their expiration periods [and] it’s only a matter of administering their last rights and of keeping people employed until the installation of the new forces knocking at the door” (p. 5). Deleuze’s predictions remain unrealized, yet it is clear that the university as an institution is under tremendous stress, and this historic period is presenting serious challenges to educators who have chosen to enter or remain in the field. *Intermezzo V: Playing with What’s at Stake* is a love letter to the social class of academic cognitive workers, who occupy a particularly important place in the posthuman era, often working at the front lines of ontological becoming. No longer just the custodians of the skills to figure out what the world means, the *ontological front-line worker* disrupts disciplinary knowledge in favour of new ontological possibilities, thus creating transversal relationships with teachers, artists, researchers, community activists, organic farmers, and nuclear scientists alike in the sharing of common purpose. In *Intermezzo V*, I describe the process of derailing as it relates to disjunctive synthesis. I suggest that it is possible to work together and occupy common strategic purposes with those who act from different social positions.

Classing the Arts: Towards Ontological Play

I think it is important to reconsider aesthetic production from outside humanism, while at the same time attempting to disrupt disciplinary art's reign over creative production. In the first case, it is about appreciating the artistry of a world, of which we are only a small part. Secondly,

it involves reimagining how we engage with the aesthetics and ethics of the work that art performs.

The most commonly described characteristics of sentience, intelligence, language, and creativity have been used to distinguish humans from non-human animals, and at times similar terms have been used to sort humans, enabling justifications for racism and sexism. An intelligent river, trees with sentience, roots with knowledge systems, and ecological systems in pain are examples of the type of discourse possible when considering the agentiality of all things. These are not metaphors or analogies. While most people would not find it unusual that limited liability companies have human-like legal status, they may find it highly unusual to grant rivers similar protections.

In a human-centric view of art, creativity is viewed as a human attribute, distinct from all else. Human exceptionalism restricts the categories of artist and creativity to humans. It is interesting to consider the exception that is entertained when an elephant is chained up with human art supplies such as paper, paint, paintbrush, and easel. Even though the question is rhetorical, it is reasonable to ask why we only consider such things when an animal behaves like us, on our terms, and with our gear. And we learn about these relationships very early, requiring Dumbo, zoo and circus elephants, and those in the *wild* to necessarily occupy different ontological positions.

Genosko (2002) explains:

[Guattari] once suggested that micropolitical struggle begins in the daycare, with infants labouring on games and toys, videos, gender and race relations, hierarchies, and codes by means of which they may be translated into the socioeconomic system. (p. 220)

Yet adult play is often seen as a frivolous activity that punctuates the more important work at hand, and we are incrementally taught that art is a specialist activity of those with particular skills. Guattari (1995) clarifies:

It was only quite late in Western history that art detached itself as a specific activity concerned with a particularized axiological reference. Dance, music, the elaboration of plastic forms and signs on the body, on objects and on the ground were, in archaic societies, intimately connected with ritual activities and religious representations (p. 98)

By linking play and art, I work from a metaphysical perspective aligned with Deleuze's becoming and new materialist approaches, aiming towards a posthuman aesthetic and ethic. It follows that one may misunderstand Guattari's (1995) question, "How do you make a class operate like a work of art?" (p. 133), as "how do you make a *classroom* operate like a work of art?" Differentiating a classroom as a physical space for humans, and the nuances of the word (social) *class* is an easy mistake to make. *Work of art* most often describes the finished product, such as a sculpture or painting created by a human student. But of equal concern is the posthuman work that art does, and the machinic work that it compels. What is the nature of art's work? Guattari would argue that the *work of art* is transgressive and subversive, making the aesthetic inseparable from the ethical.

To play ontologically requires, I believe, the same commitment that was invested in epistemological terms like *situated knowledge* and *privileged perspectives*. A war veteran, Doukhobor grandmother, raver, someone with severe mental illness all share degrees of ontological diversity, a type of machinic capacity rendered by different universes of reference. A backyard or communal garden conditions us to a play out new concepts of collective farming and interspecies relating; folk music festivals and raves invite us to sensitize to sounds and bodily

movements in shared spaces. When the metaphysical and onto-epistemological diversity of grandmothers is dismissed as being simply *tea-worthy* and the artistry of life *just* artisanal much is lost.

I share Shannon's (2021) sentiments when she concludes her dissertation stating, "humanity lives surrounded by the fruits of its labour, in a bed of its making, with the systems it values" (p. 195), yet my agreement is provided with the caveat that the world wasn't made for humans, we certainly didn't make it ourselves; and long after humans are done, the systems of the world will somehow prevail. This is in part what Guattari (1995) asks of us to consider:

[H]ow do we reinvent social practices that would give back to humanity [...] a sense of responsibility, not only for its own survival, but equally for the future of all life on the planet, for animal and vegetal species, likewise for incorporeal species such as music, the arts, cinema, the relation with time, love and compassion for others, the feeling of fusion at the heart of the cosmos? (pp. 119–120)

As arts-based researchers find more familiarity with the Deleuzian concept of *becoming*, my description of *reinventing* will likely resonate. I propose an ontology of *reinventing*, a continuous machinic approach that puts the crisis of the posthuman era in focus while *reinvention* itself engines the art and creativity of experimentation and serious play. This is Ontological Play, an arts-based approach to reinventing in the posthuman era.

APPENDIX A: ON METAPHYSICS

Because the joint publications and dissertation were composed at different times, concepts and positions evolved and shifted over time. The metaphysics of the first publication in 2016 is certainly different from that of the final compositions in 2020/21. This section can therefore be read in conjunction with Chapter Three, "Machinic Arts-Based Research: Posthumanizing Approaches to Art Inquiry" (Wainwright & Stevens, 2020), which also helps the reader identify the theoretical sources of the broader work. While this research is dense in theory and philosophical concepts, it is primarily aimed at educational researchers.

Deleuze's (1987) vulgar description of *enculage* and the subsequent production of mutant and monstrous offspring is restated in the joint publications with the less offensive term *plug in and play*, which suggests a poly or pan-theoretical approach. It's not a snapshot of previously carried out research, it's a trajectory of the infinite, and it's deliberately disjunctive.

Later readings introduced ontological frameworks that fit emerging understandings of what philosophers are trying to accomplish. Initially, the study was heavily influenced by Deleuzian-Guattarian philosophy. As a result of DeleuzoGuattarian perspectives, new materialisms and speculative realism are interwoven into the text.

At times I speak to my discomfort with the Eurocentric nature of these philosophical narratives and particularly in section *Playing with What's at Stake*, I take my lead from Kakali Bhattacharya's "Rejecting Labels and Colonization: In Exile from Post-Qualitative Approaches" (2020). Educational theory's endless turns often speak of discovering (as 'new') something that has been cultural knowledge since time immemorial, and there are habits of thought which normalize their translation into the major language of philosophy. These are positions that Tuhiwai Smith (2019; 2021), Tuhiwai Smith, Tuck & Yang (2019) describe. Eve Tuck's

“Breaking up with Deleuze: Desire and Valuing the Irreconcilable” (2010), and AnaLouise Keating in “Speculative Realism, Visionary Pragmatism, and Poet-Shamanic Aesthetics in Anzaldua-and Beyond” (2012) provide additional examples of non-Eurocentric approaches to the type of metaphysical discourse offered here. In the conclusion to my dissertation, I propose a return to a metaphysical system where grandmothers’ ontological and epistemological contributions are more than tea-worthy, a metaphysical curiosity born from my family’s settler-colonial history in Canada.

My dissertation title does not include the term collaboration because I share the belief that the common thread between new materialists and speculative realists is first a concern with the world beyond human experience, and second, an interest in describing how human and non-human forces interplay. Hence, posthumanism is always about collaboration.

Deleuze & Guattari's metaphysical concerns over matter and form are followed by DeLanda's materialist account of objects. Deleuze (1994), explains that “representation fails to capture the affirmed world of difference. Representation has only a single centre, a unique and receding perspective, and in consequence a false depth. It mediates everything but mobilizes and moves nothing” (pp. 55-56). In this way, representation and mind-dependent perspectives interfere with the production of the new.

Deleuze’s (1988) states that:

There is no longer a form, but only relations, a velocity between infinitesimal particles of unformed material. There is no longer a subject, but only individuating affective states of an anonymous force. Here the plan [plane] is concerned only with motions and rests, with a dynamic affective charge. (p. 128)

With the reading of *A New Philosophy of Society* (2006) by DeLanda, Shannon and I were introduced to the field of new materialisms which sees the object as a component of complex arrangements functioning in assemblage. This allowed us to explore different ways of considering human exceptionalism, agentiality and impact. We said:

New materialism generally seeks to avoid distinctions between inert and alive, instead increasingly “discern[ing] emergent, generative powers (or agentic capacities) even within inorganic matter” (Coole & Frost, 2010, p. 9). Such discernment is recognized when political theorist Jane Bennett (2001) ascribes “agency to inorganic phenomena such as the electricity grid, food, and trash, all of which enjoy a certain efficacy that defies human will” (p. 167). (Stevens & Wainwright, 2016, p. 167)

We continued:

there was also attraction towards conceptions of new materialist ontologies that recognize human beings’ relatively limited scope of influence in a world well outside of human authority, language, and characterization; the existence of a world “independent of our minds” (DeLanda in Van der Tuin & Dolphijn, 2012, p. 39). We find ourselves increasingly influenced by concepts that stretch far beyond the temporality of our physical conditions and circumstances (Stevens & Wainwright, 2016, p. 166)

With the joint publications, our interest in the emerging field of speculative realism became more pronounced, often without mention of the larger philosophical movement. Speculative realists come from a diverse group of philosophers who are fully concerned with the problem of ‘access’ here meaning to the object distinct from thinking. According to Meillasoux (2008):

By ‘correlationism’ we mean the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other. We will henceforth call correlationism any current of thought, which maintains the unsurpassable character of the correlation so defined. Consequently, it becomes possible to say that every philosophy that disavows naive realism has become a variant of correlationism. (p. 81)

If reality only exists as a correlation between thinking and being, it puts everything in the world as a correlate to our thought, as if it were there for us. It functionally makes the world conform to our image of it. In her dissertation Stevens (2020) describes this as:

A diverse, loosely affiliated community of divergent thinkers coalesce around one shared tenet: a rejection in belief that “all being exists only as a correlate between mind and world” (Bogost, 2012, p. 4). Meillassoux philosophically pursues removing regimes of thought maintaining a “correlationist circle” of reasoning that precludes an ability to weaken this correlation between thinking and being, and to discover abilities to consider the “in-itself” of an entity, outside of human perception (Bryant in The University Press Blog, 2014). Meillassoux (2008) introduces the term “ancestral [as] any reality anterior to the emergence of the human species—or even anterior to every recognized form of life on earth” (p. 35), and the fossil-matter that indicates not just specific instances of prehistoric life as fossils (an insect in resin, a dinosaur’s exhumed skeleton) but the reality and environment of these species’ ages and lives, long before human trace. Dolphijn & van der Tuin (2012) ask, “how is thought able to think what there can be when there is no thought?” (p. 78). (pp. 12-13)

“Since it is impossible to separate the subjective from the objective, or the human from the non-human, it makes no sense to ask what anything is in itself, independently of our relating to it.”, says Brassier (in Bryant et al, 2010, pp. 53–54). Meillassoux (2008) further explains, “we never grasp an object ‘in itself’, in isolation from its relation to the subject.” (p. 21)

I agree with Braidotti when she says:

... is that the switch to Spinoza is a switch to the radical materiality of the body; the entire body thinks. You don’t think with the mind; you think with the entire fleshed existence... For me, it’s the body immersed in radically immanent relations. (2014, np.)

Simon O’Sullivan argues that Guattari’s cartography of subjectivity is so radical that it could be called *speculative subjectivity* (2008), an approach that seems to share characteristics with Morton’s speculative writings about ecology. Shaviro (2014), cites Manning’s autism research as an example of non-correlationism, reminding me of Deligny’s rich descriptions of his work with neurodiverse clients. The concept of posthumanism in Braidotti’s writing pertains to the intersection of a critique of Humanism and the state of the anthropocentric. Since speculative realists at times look to new materialist theories to help make sense of their theories suggests that I am on-track.

As a research based in the field of education, the instinct is to look for places to *plug in and play* across theoretical spaces. Braidotti, Guattari, and Manning are central both as theorists and as organizing strategies for the dissertation.

REFERENCES

- Afshinnekoo, E., Meydan, C., Chowdhury, S., Jaroudi, D., Boyer, C., Bernstein, N., & Ahsanuddin, S. (2015). Geospatial resolution of human and bacterial diversity with city-scale metagenomics. *Cell systems*, 1(1), 72-87. <https://doi.org/5j9>
- Altwater, E. (2016). The capitalocene, or geoengineering against capitalism's planetary boundaries. In J. Moore (Ed.), *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism* (pp. 138-152). PM Press.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/brfw>
- Amerika, M. (2004). Portrait of the VJ. *Fibreculture Journal*, 7. http://www.journal.fibreculture.org/issue7/issue7_portraits_amerika.pdf
- Anderson, T., Alexander, I., & Saunders, G. (2020). An examination of education-based dissertation macrostructures. *Journal of English for Academic Purposes*, 45, 100845. <https://doi.org/gkx277>
- Art21. [Art21]. (2019, July 29). *Preview: Brian Jungen in Season 8 of ART21 'Art in The Twenty-First Century'* [Video]. YouTube. <https://bit.ly/3a2EVPR>
- Aufderheide, P. (2014). Copyright and fair use in remix: From alarmism to action. In E. Navas, O. Gallagher, & X. Burrough (Eds.), *The Routledge companion to remix studies* (pp. 270–283). Routledge.
- Augustine, J. (2013, January 7). *The Society of the Spectacle by Guy Debord (1973)* [Video]. YouTube. <https://bit.ly/2ZU9K7H>

- Baichwal, J. (2018). Informal Q & A held after *Anthropocene: The Human Epoch* screening, Cinecenta Theatre, Victoria, BC, October 14, 2018.
- Baichwal, J. (Director). (2018). *Anthropocene: The human epoch* [Film]. Mercury Films.
- baldio. [baldio]. (2013, November 29). *Generative indirections: Iris Van Der Tuin talk* [Video]. YouTube. <https://bit.ly/3iwYLHH>
- Banktrack. (n.d.). Trans mountain pipeline expansion project (TMEP) Canada sectors: Oil and gas, transport, and infrastructure. June 28, 2020, from <https://bit.ly/3w7f7ez>
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Barone, T. & Eisner, E.W. (2011). *Arts based research*. Sage.
- Bateson, G. (1999). *Steps to an ecology of mind. Collected essays in anthropology psychiatry evolution and epistemology*. University of Chicago Press. <https://doi.org/gcr2>
- Behiels, M. D. (1985). *Prelude to Quebec's quiet revolution: Liberalism versus neo-nationalism, 1945-1960*. McGill-Queen's University Press.
- Beier, J. L., & Wallin, J. J. (2017). The disappeared future of arts-based research, Parts I–VI: Towards a reality-without-givenness. In Jan Jagodzinski (Ed.), *What Is art education?* (pp. 239–265). Palgrave.
- Benjamin, W. (2002). *The arcades project* (H. Eiland & K. McLaughlin, Trans.). Belknap Press. (Original work published 1982)
- Benjamin, W. (2008). *The work of art in the age of mechanical reproduction*. Penguin.
- Benjamin, W. & Tiedemann, R. (1999). *The Arcades Project*. Belknap Press.

- Bennett, J. (2001). *The enchantment of modern life: Attachments, crossings, and ethics*. Princeton University Press.
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press.
- Berardi and Geraci (2019) <https://bit.ly/2UULU9b>
- Berardi, F. (2010). *The soul at work: from Alienation to autonomy*. trans. F. Cadel and G. Mecchia, Semiotext(e).
- Berardi, F. (2011). *After the future*. AK Press.
- Berardi, F., & Geraci, M. (2019). *Morte ai vecchi*. trans. Deborah Wassertzug. Baldini & Castoldi.
- Bertelsen, L., & Murphie, A. (2010). An ethics of everyday infinities and powers: Felix Guattari on affect and the refrain. In M. Gregg & G. Seigworth (Eds.), *The affect theory reader* (pp. 138-157). Duke University Press.
- Bharti, B. (2018, December 28). Bus surfing, a sewage-filled streetcar and Seth Rogen: The weirdest things that happened on the TTC in 2018. *The Star*. Retrieved from <https://www.thestar.com/news/gta/2018/12/30/bus-surfing-a-sewage-filled-streetcar-and-seth-rogen-the-weirdest-things-that-happened-on-the-ttc-in-2018.html>
- Bhattacharya, K. (2021). Rejecting Labels and Colonization: In Exile from Post-Qualitative Approaches. *Qualitative Inquiry*, 27(2), 179–184.
<https://doi.org/10.1177/1077800420941049>
- Blanco-Sarlay, D. L., (2018). *Our bodies, our skins are maps: This history moves through my body*. [Master's thesis, European Graduate School, Art, Health and Society].
- Bogost, I. (2012). *Alien phenomenology, or, what it's like to be a thing*. University of Minnesota Press.

- Borschke, M. (2014). The extended remix: Rhetoric and history. In E. Navas, O. Gallagher, & X. Burrough (Eds.), *The Routledge companion to remix studies* (pp. 104–115). Routledge.
- Boundas, C. V. (2010). Ontology. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 196-198). Edinburgh University Press.
- Braidotti, R. (2013). Writing. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 309-311). Edinburgh University Press.
- Braidotti, R. (2013a). Nomadic ethics. In D.W. Smith, & H. Somers-Hall (Eds.), *The Cambridge companion to Deleuze* (pp. 170-197). Cambridge University.
- Braidotti, R. (2013b). *The posthuman*. Polity.
- Braidotti, R., & Vermeulen, T. (2014). Interview: Borrowed Energy: Timotheus Vermeulen talks to philosopher Rosi Braidotti about the pitfalls of speculative realism, the movement that has created a buzz in the art world. *Frieze: Contemporary Art and Culture*.
<https://www.frieze.com/article/borrowed-energy>
- Brock, A., & Dunlap, A. (2018). Normalizing corporate counterinsurgency: Engineering consent, managing resistance, and greening destruction around the Hambach coal mine and beyond. *Political Geography*. 62(January), 33-47. <https://doi.org/gc2r4p>
- Bruegel, P. (1562). *The triumph of death* [Painting]. Museo del Prado, Madrid, Spain.
- Bryant, L. R. (2011). *The democracy of objects*. Open Humanities Press.
- Burtynsky, E., Baichwal, J., de Pencier, N., & Boettger, S. (2018). *Anthropocene* [Museum Catalogue]. Steidl.
- Calvino, I. (1983). Italo Calvino on "Invisible Cities". *Columbia: A Journal of Literature and Art*, 37-42

Capehorn2. (2016, January 5). “Worst art gallery ever visited”. *Tripadvisor*. February 8, 2017.

<https://bit.ly/3Ff7XtT>

Carlin, M., & Wallin, J. J. (Eds.). (2014). *Deleuze and Guattari, politics and education: For a people-yet- to-come*. Bloomsbury.

Carson, A.D., (2017). *Owning my masters: The rhetorics of rhymes & revolutions*.

(Dissertation). <https://doi.org/10.18130/V3DB7VP6B>

CBC News. (2016, March 4). *Sexy staff outfits: CBC marketplace goes undercover* [Video].

YouTube. <https://bit.ly/3iOyLIb>

Chromatic BloodBloodBlood. [Chromatic BloodBloodBlood]. (2013, October 23). *Paris Is*

Burning 1990 [Video]. YouTube. <https://bit.ly/3mjEYwp>

Closetfan. [Closetfan]. (2013, April 6). *Starships - A multifandom space vid by Bironic* [Video].

YouTube. <https://bit.ly/3mjpOYg>

CNN. (2014, June 3). Poet: Internet has revolutionized reading. *CNN Business*.

<https://cnn.it/3orEN53>

Cole, A. L., & Knowles, J. G. (2008). Arts-informed research. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues* (pp. 53–70). SAGE.

Cole, D. R. (2016) Unearthing the Forces of Globalisation in Educational Research Through

Guattari’s Cartographic Method. In: Cole D., Woodrow C. (eds) *Super Dimensions in*

Globalisation and Education. Cultural Studies and Transdisciplinarity in Education, vol

5. <https://doi.org/gk9t>

Cole, D. R., & Frost, S. (2010). *New materialisms: Ontology, agency, and politics*. Duke

University Press.

- Colebrook, C. (2002). *Understanding Deleuze*. Routledge. <https://doi.org/gcxw>
- Colman, F. J. (2013). Affect. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 11-14). Edinburgh University Press.
- Conley, T. (2013). Sensation. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 247-249). Edinburgh University Press.
- Coole, D., & Frost, S. (2010). *New materialisms: Ontology, agency, and politics*. Duke University Press.
- Crickenberger, H. (2017) The Arcades project: The rhetoric of hypertext. February 8, 2017. <https://bit.ly/3uCTMtL>
- Crist, E. (2016). On the poverty of our nomenclature. In J. Moore (Ed.), *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism* (pp. 15-33). PM Press. <https://doi.org/gg3q2g>
- d'Ignazio, C., & Klein, L. F. (2016). Feminist data visualization. Workshop on visualization for the Digital Humanities. IEEE.
- Daignault, J. (2008). Pedagogy and Deleuze's concept of the virtual. In I. Semetsky (Ed.), *Nomadic education: Variations on a theme by Deleuze and Guattari* (pp. 43-60). Sense.
- Daniels, L. D. (2021). A Disrupted Historical Fire Regime in Central British Columbia. *Frontiers in Ecology and Evolution*, 9, 420.
- Daniels, L. D., Gray, R. W., & Burton, P. J. (2020). 2017 megafires in British Columbia: Urgent need to adapt and improve resilience to wildfire. In: Hood, Sharon M.; Drury, Stacy; Steelman, Toddi; Steffens, Ron, [eds.]. *Proceedings of the Fire Continuum-Preparing for the future of wildland fire; 2018 May 21-24, p. 51-62., 78,51-62*

- De Beistegui, M. (2012). The Deleuzian reversal of Platonism. In D. W. Smith, & H. Somers-Hall (Eds), *The Cambridge companion to Deleuze* (pp. 55–81). Cambridge University Press.
- DeLanda, M. (2002, March 30). Deleuzian ontology. A sketch [Conference presentation]. New Ontologies: Transdisciplinary Objects Conference, University of Illinois.
- DeLanda, M. (2003). *War in the age of intelligent machines*. Zone Books.
- DeLanda, M. (2006). *A new philosophy of society*. Continuum.
- DeLanda, M. (2009). Ecology and realist ontology. In B. Herzogenrath (Ed.), *Deleuze|Guattari and ecology* (pp.23–41). Palgrave.
- DeLanda, M. (2010). *Deleuze: History and science*. Atropos.
- DeLanda, M. (2013). *Intensive science and virtual philosophy*. Bloomsbury.
- DeLanda, M. (2016). *Assemblage theory*. Edinburgh University Press.
- Deleuze, G. (1983). *Nietzsche and philosophy*. Athlone.
- Deleuze, G. (1989). *Cinema 2: The time-image* (H. Tomlinson & R. Galeta, Trans.). University of Minnesota. (Original work published 1985)
- Deleuze, G. (1990). *The logic of sense* (M. Lester & C. Stivale, Trans.). Columbia University Press. (Original work published 1969)
- Deleuze, G. (1992). Postscript on the Societies of Control. *October*, 59, 3-7. Retrieved June 12, 2021, from <https://bit.ly/3weLmbj>
- Deleuze, G. (1993). *The fold: Leibniz and the Baroque*. University of Minnesota Press.
- Deleuze, G. (1994). *Difference and repetition* (P. Patton, Trans.). Columbia University Press. (Original work published 1968)

- Deleuze, G. (1995). *Negotiations* (M. Joughin, Trans.). Columbia University Press. (Original work published 1990)
- Deleuze, G. (2004). *Desert islands and other texts*. (M. Taormina, Trans.). Semiotext(e). (Original work published 2002)
- Deleuze, G. (2004). *L'Abécédaire de Gilles Deleuze, interview avec Claire Parnet* (P. A. Boutang, Ed.). Editions Montparnasse.
- Deleuze, G. (2005). *Francis Bacon: Logic of sensation* (D. W. Smith, Trans.). University of Minnesota. (Original work published 1981)
- Deleuze, G. (2011). *Bergsonism* (H. Tomlinson & B. Habberjam, Trans.). Zone Books. (Original work published 1966)
- Deleuze, G. (2014). *Foucault* (S. Hand, Trans.). Bloomsbury. (Original work published 1986)
- Deleuze, G., & Guattari, F. (1983). *Anti-Oedipus: Capitalism and schizophrenia*. (R. Hurley, M. Seem, & H. R. Lane, Trans.). University of Minnesota Press. (Original work published 1972)
- Deleuze, G., & Guattari, F. (1986). *Kafka: Toward a minor literature*. University of Minnesota Press. (Original work published 1975)
- Deleuze, G., & Guattari, F. (1994). *What is philosophy?* (H. Tomlinson & G. Burchell, Trans.). Columbia University. (Original work published 1991)
- Deleuze, G., & Guattari, F. (2014). *A thousand plateaus* (B. Massumi, Trans.). University of Minnesota Press. (Original work published 1980)
- Deleuze, G., & Parnet, C. (2007). *Dialogues II* (H. Tomlinson & B. Habberjam, Trans.; revised edition). Columbia University. (Original work published 1977)

- Dolphijn, R., & van der Tuin, I. (2012). *New materialism: Interviews and cartographies*. Open Humanities Press. <https://doi.org/gjqkws>
- Done, E. J. (2013). *The Supervisory Assemblage: a singular doctoral experience*. Cambridge Scholars Publishing.
- Dordrecht, The Netherlands: Springer. <https://doi.org/10.1007/978-94-007-7554-1>
- Dosse, F. (2011). *Gilles Deleuze & Félix Guattari: Intersecting lives* (D, Glassman. Trans.). Columbia University.
- Dosse, F. (2013). Deleuze and structuralism. In D. W. Smith & H. Somers-Hall (Eds.), *The Cambridge companion to Deleuze* (pp. 126-150). Cambridge University.
- Draper, R. (2018). The man behind the president's tweets. *The New York Times Magazine Online*. <https://nyti.ms/3aa2lTn>
- Drohan, C. M. (2009). *Deleuze and the sign*. Atropos Press.
- Duchamp was here. (2017, February 8). *Wooster Collective*. <https://bit.ly/3uCTHWZ>
- Flusser, V. (1965). Lecture 15 - On Music- The influence of existential thought today. Series of Lectures Delivered at the Brazilian Institute of Philosophy, São Paulo, 1965, trans. R. Maltez Novaes. In: *Flusser Studies 17*. <https://bit.ly/3dIkaeF>
- Forbes, T. [The art of photography]. (2015, May 31). *Richard Prince smells bad* [Video]. YouTube. <https://bit.ly/3uGErIH>
- Foucault, M. (2007). *Discipline and punish: The birth of the prison*. Duke University Press. (Original work published 1977)
- Foucault, M. (2013). *The archaeology of knowledge & the discourse on language*. Pantheon. (Original work published 1970)
- Frankl, V. E. (1946). *Man's search for meaning*. Simon and Schuster.

- Freinet, C. (1990). *Cooperative learning & social change: Selected writings of Celestín Freinet*. James Lorimer & Company.
- Freire, P. (2000). *Pedagogy of the oppressed* (M. B. Ramos, Trans., 30th anniversary ed.). Continuum. (Original work published 1970)
- Fuse at VAG. *Tripadvisor.ca*. Retrieved February 8, 2017. <https://bit.ly/2TbH9YB>
- Galvin, K.T. & Prendergast, M. (Eds.). (2016). *Poetic inquiry II – seeing, caring, understanding*. Sense.
- Genosko, G. (2009). *Félix Guattari: A critical introduction*. Pluto Press.
- Genosko, G. (2018). *The reinvention of social practices: Essays on Félix Guattari*. Rowman & Littlefield.
- Goffman, E. (1981). *Forms of talk*. University of Pennsylvania Press.
- Goldsmith, K. (2011). *Uncreative writing*. Columbia University Press.
- Gordon, W. T. (1997). *Marshall McLuhan: Escape into understanding*. Stoddart.
- Gordon, W. T. (2010). *McLuhan: A guide for the perplexed*. Continuum.
- Goulish, M. (2002). *39 microlectures: in proximity of performance*. Routledge.
- Government of Canada, (CRTC). (2013, December 4). List of certified independent production funds. Canadian Radio-television and Telecommunications Commission. <https://bit.ly/3DabB6M>
- Grace, M. (2019). *Artful awareness: Towards a spiritual practice of mindfulness and attunement*. [Master's thesis, European Graduate School, Art, Health and Society].
- Gragg, R (1999). Turntablists are the true visionaries. Available from www.ncra.ca/business/turntablism/ttarticles.html. [accessed 20 June 2021].
- Gramsci, A. (1971). *Selections from the Prison Notebooks*. International Publishers.

- Gray, J. (2014). *Multifandom*. Urban Dictionary. <https://bit.ly/3Fiqh5k>
- Grenville, B., Augitis, D. & Rebick, S. (Eds.). (2016). *Mashup: The birth of modern culture*. Black Dog Publishing.
- Gross, D. (2016) *Sniggle.Net: The Culture Jammer's Encyclopedia*. Sniggle.net. <https://bit.ly/2Ye38A6>
- Grumet, M. R. (1975, April). Existential and phenomenological foundations of currere: Self-report in curriculum inquiry [Conference presentation]. The Annual Meeting of the American Educational Research Association, Washington, D.C., USA. <https://bit.ly/3l6A8U1>
- Grusin, R. (2015). *The nonhuman turn*. University of Michigan
- Guattari, F. (1995). *Chaosmosis: An Ethico-Aesthetic Paradigm*, trans. P. Bains and J. Pefanis. Indiana University Press
- Guattari, F. (1996). *Chaosophy*, ed. S. Lotringer. Semiotext(e).
- Guattari, F. (1996). Subjectivities: for better or worse, in *The Guattari Reader*. trans. S. Thomas, ed. G. Genosko. Basil Blackwell, pp. 193–203.
- Guattari, F. (2011). *The Machinic Unconscious: Essays in Schizoanalysis*. Translated by T. Adkins. Semiotext(e).
- Guattari, F. (2011). *The three ecologies* (I. Pindar & P. Sutton, Trans.). Continuum. (Original work published 1989)
- Guattari, F. (2013). *Schizoanalytic Cartographies*, trans. A. Goffey. Bloomsbury.
- Guattari, F. (2016). *A Love of UIQ*. University of Minnesota Press.

- Guattari, F., (2015). Transversality, in *Psychoanalysis and Transversality: Texts and interviews 1955–1971*, trans. A. Hodges. Semiotext(e), 1975.
- Guattari, F., & Negri, A. (2010). *New lines of alliance, new spaces of liberty* (M. Ryan, J. Becker, A. Bove, & N. Le Blanc, Trans., 2nd ed.). Autonomedia. (Original work published 1985)
- Guins, R., & Cruz, O.Z. (2006). Prosthetists at 33 1/2. In M. Smith, & J. Morra. (Eds.), *The prosthetic impulse: From a posthuman present to a biocultural future* (pp. 221-236). MIT Press.
- Hackett, S., Kunard, A., & Stahel, U. (Eds.). (2018). *Anthropocene: Burtynsky, Baichwal, de Pencier*. AGO/Goose Lane Editions.
- Hammond, J. (2017). Mattering black life: Time, the rhizome, and a Gullah-Geechee politics of rhythm in *Musical Encounters with Deleuze and Guattari*. Ed. Pirkko Moisala, Taru Leppänen, Milla
- Haraway D. (1994). A game of cat's cradle: Science studies, feminist theory, cultural studies. *Configurations: A Journal of Literature, Science, and Technology*, 2, 59-71.
<https://doi.org/dcr9gm>
- Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575–599. <https://doi.org/bvtwq4>
- Haraway, D. (2015). Anthropocene, capitalocene, plantationocene, chthulucene: Making kin. *Environmental humanities*, 6(1), 159-165. <https://doi.org/gfvfgf>
- Haraway, D. J. (2016a). *Staying with the trouble: Making kin in the chthulucene*. Duke University. <https://doi.org/gcr3>

- Haraway, D. J. (2016b). Staying with the trouble: Anthropocene, capitalocene, chthulucene. In J. Moore, (Ed.), *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism*. (pp. 34-76). PM Press.
- Harman, G. (2002). *Tool-being: Heidegger and the metaphysics of objects*. Open Court.
- Harman, G. (2009). The McLuhans and metaphysics. In J. K. B. Olsen, E. Selinger, & S. Riis (Eds.), *New waves in philosophy of technology* (pp. 100–122). <https://doi.org/gx8w>
- Harman, G. (2010). *Towards speculative realism: Essays and lectures*. Zero Books.
- Harris, B. [Smarthistory]. (2016, October 1). *Picasso, still-life with Chair Caning, 1912* [Video]. YouTube. <https://bit.ly/3BmH05v>
- Hwu, W. S. (2004). Gilles Deleuze and Jacques Daignault: Understanding curriculum as difference and sense. In W. M. Reynolds, & J. A. Webber (Eds.), *Expanding curriculum theory: Dis/positions and lines of flight* (pp.181–202). Lawrence Erlbaum Associates.
- IndieWire. (2016, January 5). *Tarantino's best visual film references... In three minutes!* [Video]. YouTube. <https://bit.ly/3l3TUj0>
- Intellectual property and technology*. (n.d.). DLA Piper. <https://www.dlapiper.com/en/canada/services/intellectual-property-and-technology/>
- Irvine, M. (2014). Remix and the dialogic engine of culture: A model for generative combinatoriality. In E. Navas, O. Gallagher, & X. Burrough (Eds.), *The Routledge Companion to Remix Studies* (pp. 15–42). Routledge.
- Irwin, R. L. (2013). Becoming A/r/tography. *Studies in Art Education*. 54(3), 198-215. <https://doi.org/gx8v>

- jagodzinski, j. (2017). Betraying further: Arts-based education at the end of the world. In j. jagodzinski (Ed.). *What is education?: After Deleuze and Guattari* (pp. 267-309). Palgrave & McMillan.
- jagodzinski, j. (Ed.). (2018). *Interrogating the anthropocene: Ecology, aesthetics, pedagogy, and the future in question*. Palgrave Macmillan.
- jagodzinski, j., & Wallin, J. J. (2013). *Arts-based research: A critique and a proposal*. Sense. <https://doi.org/gcxs>
- janusfilms. [janusfilms]. (2007, June 4). *Pierrot Le Fou trailer (Jean-Luc Godard, 1965)* [Video]. YouTube. <https://bit.ly/2Yc5jnN>
- Jenkins, E., & Zhang, P. (2016). Deleuze the media ecologist? Extensions of and advances on McLuhan. *Explorations in Media Ecology*, 15(1), 55-72.
- Johnson-Eilola, J., & Selber, S. A. (2007). Plagiarism, originality, assemblage. *Computers and Composition*, 24(4), 375–403. <https://doi.org/cfs76h>
- Johnson, C. [Chashemphill1]. (2014, November 3). *Wasting time on the internet Professor Kenneth Goldsmith on CNBC* [Video]. YouTube. <https://bit.ly/3a1JOZx>
- Johnson, K. (2016). Decolonizing museum pedagogies. In: Clover D.E., Sanford K., Bell L., Johnson K. (eds) *Adult education, museums, and art galleries* (pp. 129-140). Sense.
- Katz, D (2016). The strangeness of Cornell's Rose Hobart. In B. Grenville, D. Augaitis & S. Rebeck (Eds.), *Mashup: The birth of modern culture* (pp. 154-163). Black Dog Publishing.
- Keating, A. (2012). Speculative realism, visionary pragmatism, and poet-shamanic aesthetics in Gloria Anzaldúa—and beyond. *Women's Studies Quarterly*, 40(3/4), 51-69.

- Keohane, J. (2017, February). A robot may have written this story. *Wired Magazine Online*. 27 August 2018, from <https://bit.ly/3uJYUwj>
- Kleinherenbrink, A. (2015). Territory and Ritornello: Deleuze and Guattari on Thinking Living Beings. *Deleuze Studies*, 9(2), 208–230.
- LaSalle, L. (2009, December 7). *RIP: A remix manifesto* [Video]. Vimeo. <https://bit.ly/3a3fn5h>
- Laurence, R. (2016, February 10). *Barbara Kruger transforms Vancouver Art Gallery's rotunda for bold mashup show*. Georgia Straight Vancouver's News & Entertainment Weekly. <https://bit.ly/3A8YXTB>
- Lawrence, T. (2016). Drag ball culture: Voguing and realness. In B. Grenville, D. Augaitis & S. Rebeck (Eds.) *MashUp: The birth of modern culture* (pp. 222-225). Black Dog Publishing.
- Leavy, P. (2015). *Method meets art: Arts-based research practice*. Guilford Press.
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Press.
- Leggo, C. (2014). Riffing while riffling: 25 poetic ruminations. *Visual Inquiry*, 3(2), 93-107. <https://doi.org/gc3jhg>
- Lexico. (n.d.). Archive. In the *Online Oxford English Dictionary*. Retrieved June 14, 2020, from <https://bit.ly/3h7CeB0>
- Louisiana Channel. (2014, December 4) *Kenneth Goldsmith interview: Assume no readership* [Video]. YouTube. <https://bit.ly/3Bb9puZ>
- MacLure, M. (2013). Researching without representation? Language and materiality in post-qualitative methodology. *International Journal of Qualitative Studies in Education*, 26(6), 658–667. <https://doi.org/gc7rz4>

- Malabou, C. (2017). The brain of history, or, the mentality of the Anthropocene. *South Atlantic Quarterly*, 116(1), 39-53. <https://doi.org/10.1215/00382876-3749304>
- Manigault-Bryant, L. S. (2014). *Talking to the dead*. Duke University Press.
- Manning, E. (2007). *Politics of touch: Sense, movement, sovereignty*. University of Minnesota Press. Retrieved June 30, 2021, from <https://bit.ly/3yhqYM>
- Manning, E. (2017). What things do when they share each other: The way of the anarchiv. Manuscript in preparation.
- Manning, E. (2020). *For a pragmatics of the useless*. Duke University Press.
- Marchand, P. (1989). *Marshall McLuhan: The medium and the messenger*. MIT Press.
- Marks, J. (2013). Foucault, Michel (1926-84). In A. Parr (Ed.), *The Deleuze dictionary* (pp. 112-114). Edinburgh University.
- Masny, D., & Daignault, J. (2011). A conversation with Jacques Daignault. *Policy Futures in Education*, 9(4), 528–539. <https://doi.org/cjnkgb>
- Massumi, B. (1992). *A user's guide to capitalism and schizophrenia*. MIT Press.
- Massumi, B. (1995). The autonomy of affect. *Cultural Critique*, (31), 83-109. <https://doi.org/fdfhmb>
- Massumi, B. (2002). *Parable for the virtual: Movement, affect, sensation*. Duke University.
- Massumi, B. (2016). Working principles. In A. Murphie (Ed.), *The go-to how-to book of archiving*. (pp. 6-8). SenseLab Publishing.
- McBrien, J. (2016). Accumulating extinction: Planetary catastrophism in the necrocene. In J. Moore (Ed.), *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism*. (pp. 116-137). PM Press.

- McLaren, P. (1997). Paulo Freire's legacy of hope and struggle. *Theory, Culture & Society*, 14(4), 147–153. <https://doi.org/10/cq4shd>
- McLaren, P. (2015). A forward to the special issue on neoliberalism in education: The long road to redemption: Critical pedagogy and the struggle for the future. *Texas Education Review*, 3(2): 1-9.
- McLaren, P. (2019). God and governance: Reflections on living in the belly of the beast. *Postdigital Science and Education*, 1(2), 311-334
- McLuhan, E. & Zhang, P. (2014) *China Media Research*, 10(1), 2014, McLuhan & Zhang, Poetics not Subject but Function
- McLuhan, E., & Zhang, P. (2012). Formal cause, poiesis, rhetoric: a dialogue. *ETC: A Review of General Semantics*, 69(4), 441-458.
- McLuhan, E., & Zhang, P. (2012). Pivotal terms in media ecology: a dialogue. *ETC: A Review of General Semantics*, 69(3), 246-276.
- McLuhan, E., & Zhang, P. (2013). Media ecology: Illuminations. *Canadian Journal of Communication*, 38(4).
- McLuhan, E., & Zhang, P. (2014). Poetics is not a subject but a function. *China Media Research*, 10(1).
- McLuhan, M. (1964). *Understanding media: The extensions of man*. The MIT Press.
- McLuhan, M. (1969). *Counterblast*. Harcourt, Brace & World.
- McLuhan, M. (1969). Playboy interview. In E. McLuhan & F. Zingrone (Eds.), *Essential McLuhan* (pp. 233-269). House of Anansi.
- McLuhan, M. (1994). *Understanding media: The extensions of man*. The MI Press. (Original work published 1964)

- McLuhan, M., & Fiore, Q. (1967). *The medium is the message: An inventory of effects*. Gingko Press.
- McLuhan, M., & Fiore, Q. (1967). *War and peace in the global village*. Gingko Press.
- McLuhan, M., & Nevitt, B. (1972). *Take today: The executive as dropout*. New York: HarcourtBrace Jovanovich.
- McLuhan, M., Hutchon, K., & McLuhan, E. (1977a). *City as classroom: Understanding language and media*. Book Society of Canada.
- McLuhan, M., Hutchon, K., & McLuhan, E. (1977b). *City as classroom: Understanding language and media* (teacher's guide). Book Society of Canada.
- McNiff, S. (1998). *Art-based research*. Jessica Kingsley.
- Meillassoux, Q. (2008). *After finitude: An essay on the necessity of contingency* (R. Brassier, Trans.). Bloomsbury.
- Miles, W. (2002). Auschwitz: Museum interpretation and darker tourism. *Annals of Tourism Research*. 29(4), 1175–1178.
- Miller, P. D. (2011). *The book of ice*. Power House Books.
- Mipneister. [Mipneister]. (2012, May 5). *Common sense cooking – Live* [Video]. YouTube. <https://bit.ly/3l75IRn>
- Moore, J. (2016b). Introduction. In J. Moore (Ed.), *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism* (pp. 1-12). PM Press.
- Moore, J. (2016c). The rise of cheap nature. In J. Moore (Ed.), *Anthropocene or capitalocene? Nature, history, and the crisis of capitalism* (pp. 78-135). PM Press.
- Morris, M. (2015). Posthumanist education and animal interiority. In N. Snaza & J.A. Weaver. (Eds.), *Posthuman and educational research* (pp. 43-55). Routledge.

- Morton, R. (2015). They are here. In R. Grusin (Ed.), *The nonhuman turn* (pp. 167-192).
University of Minnesota Press.
- National Geographic. (2014, December 22). *DJ Spooky's Arctic rhythms | Nat Geo Live* [Video].
YouTube. <https://bit.ly/2YbD5tm>
- Negri, A. (1991). *The savage anomaly: Power of Spinoza's metaphysics and politics*. trans. M.
Hardt, University of Minnesota Press.
- Negri, A. (2003). *Time for revolution*. trans. M. Mandarini. Continuum.
- Nowak-Fabrykowski, K. (1992). Freinet's concept of teachers and theory of teaching. *McGill
Journal of Education/Revue des sciences de l'éducation de McGill*, 27(001).
- O'Neill-Butler, L. (2016). *Donna J. Haraway speaks about her recent book*.
<https://bit.ly/3bw5uhu>
- O'Sullivan, S. (2005) *Art encounters Deleuze and Guattari: Thought beyond representation*.
Palgrave Macmillan.
- O'Sullivan, S. (2008). The production of the new and the care of the self in *Deleuze, Guattari
and the Production of the New*, ed. S. O'Sullivan and S. Zepke. Continuum, pp. 91–103.
- O'Sullivan, S. (2010). From Aesthetics to the abstract cachine: Deleuze, Guattari, and
contemporary art practice, in *Deleuze and Contemporary Art*, ed. S. Zepke and S.
O'Sullivan. Edinburgh University Press, pp. 189–207.
- O'Sullivan, S. (2012). From stuttering and stammering to the diagram: Towards a minor art
practice. In M. Bleyen (ed.), *Minor photography: Connecting Deleuze and Guattari to
photography theory*. Leuven University Press.
- Omgitsaduck12345. (2010, December 25). *Big Bang Theory minus laugh track 3*. [Video].
YouTube. <https://bit.ly/2ZJaso3>

- Oppenheim, M. (2018, May 22). Trump's aides deliberately 'inserting grammatical errors into his tweets to mimic his style'. *The Independent*. <https://bit.ly/3oxbzlc>
- Oroza, E. (2017). Subvertir la panne. *Techniques culture*, (2), 108-125.
- Parr, A. (2010). *The Deleuze dictionary. Revised edition*. Edinburgh University Press.
- Peacock, L. (2009). *Serious play: Modern clown performance*. Intellect Books
- Pederson, H. (2015). Education policy making for social change: A posthumanist intervention. In N. Snaza & J.A. Weaver (Eds.), *Posthuman and educational research* (pp. 56-75). Routledge.
- Petitfils, B. (2014). *Parallels and responses to curricular innovation: The possibilities of posthumanistic education*. Routledge.
- Pinar, W. F. (1972). Working from within. *Educational Leadership*, 29(4), 329-334.
- Pinar, W. F. (1974). Currere: Toward reconceptualization. In J. Jelinek (Ed.), *Basic problems in modern education* (pp. 147-171). Arizona State University.
- Pinar, W. F. (2004). *What is curriculum theory?* Lawrence Erlbaum.
- Pinar, W. F. (2013). Curriculum research in the United States: Crisis, reconceptualization, internationalization. In *International handbook of curriculum research* (pp. 533-544). Routledge.
- Pleasant, D. (2004, October 19). *Drumfolk*. The Brooklyn Rail: Critical perspectives on art, politics and culture. <https://brooklynrail.org/2004/07/music/drumfolk>.
- Pleasant, D. (2012), Riddimic harmony. *Tedx Creative Coast Lecture*. Available online: <https://youtu.be/1-99f5fCyKg> (accessed 15 November 2015)
- Postman, N. (1996). *Amusing ourselves to death: Public discourse in the age of show business*. Methuen.

- Prendergast, M., Leggo, C., & Sameshima, P. (2009). (Eds.). *Poetic inquiry: Vibrant voices in the social sciences*. Sense.
- RBC logo. (2016) Simcoechamber.on.ca. <https://bit.ly/3A7sdde>
- Rebick, S. (2016). The invention of the supercut. In B. Grenville, D. Augaitis & S. Rebick (Eds.) *MashUp: The birth of modern culture* (pp. 146-149). Black Dog Publishing.
- REM - Fall On Me Lyrics. (2016). Metrolyrics. <https://bit.ly/365jlby>
- Reynolds, W. M., & Webber, J. A. (2004). *Expanding curriculum theory: Dis/Positions and lines of flight*. Lawrence Erlbaum Associates.
- Rogowska-Stangret, M. (2018). Situated knowledges. In. D. Gauthier & S. Skinner (Eds.), *The new materialist almanac*. <https://bit.ly/3tUQOip>
- Romero, T., Zamora, S., & Simón, C. (2019) Freinet pedagogy in the university: an innovative project in the History of Education. *Paedagogica Historica*. 55:4, 589-607.
<https://doi.org/gk9s>
- Ronson, M. (2014). *How sampling transformed music* [Video]. TED Conferences.
<https://bit.ly/3weWCVu>
- Roy, K. (2003). *Teachers in nomadic spaces: Deleuze and curriculum*. P. Lang.
- RussoFrederico (2007, March 1). *The shining - Trailer mashup-up*. [Video]. YouTube.
<https://bit.ly/3a5LAc2>
- Sandlin, J. A., & Wallin, J. J. (2018). The last judge: The paranoid social machine of Jack T. Chick's religious tracts. In J. A. Sandlin & J. J. Wallin (Eds.), *Paranoid Pedagogies* (pp. 69–97). Springer. <https://doi.org/gk9q>
- Sauvagnargues, A. (2016). *Artmachines: Deleuze, Guattari, Simondon*. Edinburgh University Press. Retrieved June 12, 2021, from <https://bit.ly/3hwa90v>

- Sawyer, R. D., & Norris, J. (2012). *Duoethnography*. Oxford University Press.
- Sawyer, R., & Liggett, T. (2012). Shifting positionalities: A critical discussion of a duoethnographic inquiry of a personal curriculum of post/colonialism. *International Journal of Qualitative Methods*, 11, 5, 628–651. <https://doi.org/gcd527>
- Sharon, T. (2012). A cartography of the posthuman: Humanist, non-humanist, and mediated perspectives on emerging biotechnologies. *Krisis*, 2, 4-19. <https://bit.ly/3uArOPv>
- Sharon, T. (2014). *Human nature in an age of biotechnology* (Vol. 14). Springer. <https://doi.org/gcr4>
- Shaviro, S. (2011, May 19). *Love*. Larval Subjects. <https://bit.ly/2TB3hM3>
- Shaviro, S. (2014). *The universe of things: On speculative realism*. University of Minnesota Press.
- Shen, P., Zou, H., Zhang, X., Li, Y., & Fang, Y. (2017). Platoon of autonomous vehicles with rear-end collision avoidance through time-optimal path-constrained trajectory planning. *Robot Motion and Control (RoMoCo), 2017 11th International Workshop*, 232-237.
- Sherraden, M. W., & Eberly, D. J. (1986). Reflections on Katimavik, an innovative Canadian youth program. *Children and youth services review*, 8(4), 283-303.
- Silverberg, D. [davidsilverberg]. (2011, July 28). *The history of machinima: From art to brand (Part 1: The Art)* [Video]. YouTube. <https://bit.ly/3FbT77A>
- Smith, D.W. (2005). Translator's Introduction. In G. Deleuze, *Francis Bacon: Logic of sensation* (pp. vii-xxvii). University of Minnesota. (Original work published 1981)
- Smith, L. T. (2019). *Decolonizing research: Indigenous storywork as methodology*. Bloomsbury Publishing.

- Smith, L. T. (2021). *Decolonizing methodologies: Research and indigenous peoples*. Zed Books Ltd.
- Smith, L. T., Tuck, E., & Yang, K. W. (Eds.). (2018). *Indigenous and decolonizing studies in education: Mapping the long view*. Routledge.
- Snaza, N. (2013). Bewildering education. *Journal of Curriculum and Pedagogy*, 10(1), 38–54. <https://doi.org/10/gcsgf9>
- Snaza, N. (2016). Toward a genealogy of educational humanism. In N. Snaza & J. A. Weaver (Eds.), *Posthuman and educational research* (pp. 17- 29). Routledge.
- Snaza, N., & Weaver, J. A. (2015). Introduction: Education and the posthumanist turn. In N. Snaza & J. A. Weaver (Eds.), *Posthuman and educational research* (pp. 1-14). Routledge.
- Snaza, N., & Weaver, J. A. (Eds.). (2016). *Posthuman and educational research*. Routledge.
- Sonvilla-Weiss, S. (2014). Good artists copy; great artists steal: Reflections on cut-and-paste culture. In E. Navas, O. Gallagher, & X. Burrough (Eds.), *The Routledge Companion To Remix Studies* (pp. 54–67). Routledge.
- Springgay, S., Irwin, R. L., Leggo, C., & Gouzouasis, P. (Eds.). (2007). *Being with A/r/tography*. Sense Publications.
- St. Pierre, E. A. (2011). Refusing human being in humanist qualitative inquiry. In Denzin, N. K., Giardina, M. D. (Eds.), *Qualitative inquiry and the global crisis* (pp. 40-55). Left Coast Press.
- St. Pierre, E. A. (2013). The posts continue: Becoming. *International Journal of Qualitative Studies in Education*, 26, 646–657. <https://doi.org/gcsgfq>

- St. Pierre, E. A. (2014). A brief and personal history of post qualitative research: Toward “post inquiry.” *Journal of Curriculum Theorizing*, 30(2), 2-19. <https://bit.ly/3DadAbe>
- St. Pierre, E. A. (2014). An always already absent collaboration. *Cultural Studies ↔ Critical Methodologies*, 14(4), 374–379. <https://doi.org/gcsgnd>
- St. Pierre, E. A. (2014). The posts continue: Becoming. *International Journal of Qualitative Studies in Education*, 26, 646–657. <https://doi.org/gcsgfq>
- St. Pierre, E. A. (2017). Writing post qualitative inquiry. *Qualitative Inquiry*, 24(9), 603–608. <https://doi.org/10/gdm9cx>
- St. Pierre, E. A., Jackson, A. Y., & Mazzei, L. A. (2016). New empiricisms and new materialisms: Conditions for new inquiry. *Cultural Studies↔Critical Methodologies*, 16(2), 99–110. <https://doi.org/10/gcsggk>
- Stagoll, C. (2013). Concepts. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 53-54). Edinburgh University Press.
- Stevens, S. (2021). *Collaborating in the electric age: [onto]Riffological experiments in posthumanizing education and theorizing a machinic arts-based research*. (Doctoral dissertation). <http://hdl.handle.net/1828/12665>
- Stevens, S., & Wainwright, R. (2016). [Onto]Riffology: Explorations into collaboration, assemblage and learning events. In M. Bernico & M. Kolke (Eds.) *Ontic Flows* (pp. 163-183). Atropos Press.
- Stevens, S., & Wainwright, R. (2019). Shady figures and shifting grounds for re/truthing: Channeling McLuhan’s posthuman. *Journal of Curriculum Theorizing*, 13(3), 108-121. <https://bit.ly/3ovZhcl>

- Stevens, S., & Wainwright, R. (2020). The anthropocene project: Treachery in images. *Art/Research International: A Transdisciplinary Journal*.
- Tasoulis, S. K., Vrahatis, A. G., Georgakopoulos, S. V., & Plagianakos, V. P. (2018). Real time sentiment change detection of Twitter data streams. arXiv preprint arXiv:1804.00482.
- Tegart, A. (2018). *The art of silence: The role of silence in nature-based expressive arts practice*. [Master's thesis, European Graduate School, Art, Health and Society].
- Tegart, A. (2019). The art of silence: Researching the role of silence in nature based expressive Arts. *Art/Research International: A Transdisciplinary Journal*, 4(2), 646–676. <https://doi.org/gk9r>
- The Canadian Press. (2013, April 24). Vancouver Art Gallery move backed unanimously by City Hall. *Huffpost British Columbia*. <https://bit.ly/3oufQpu>
- Theall, D. F., & Carpenter, E. (2006). *The virtual Marshall McLuhan*. McGill-Queen's University Press.
- TheLyulai. [TheLyulai]. (2012, July 15). *Rose Hobart (1936) By Joseph Cornell* [Video]. YouTube. <https://bit.ly/3mjJprb>
- Tisawii'ashii-Manning, D. (2017). *Mnidoo-Worlding: Merleau-Ponty and Anishinaabe*
- Tremonti, A. (2018, September 26). Anthropocene project highlights the apocalyptic beauty of humans' effect on the planet. <https://bit.ly/2Ro0chh>
- Trodd, T. (2008). Drawing in the archive: Paul Klee's oil-transfers. *Oxford Art Journal*, 31(1), 75-95. <https://doi.org/10.1093/oxartj/kcm028>
- Tsun Haggarty, H. (2021). *Presence and difference: The metaphysical belief systems that underpin epistemologies of arts-integrating research*. (Dissertation). <https://knowledgecommons.lakeheadu.ca/handle/2453/4797>

- Tuck, E. (2010). Breaking up with Deleuze: Desire and valuing the irreconcilable. *International Journal of Qualitative Studies in Education*, 23(5), 635-650.
- Turner, J. (2014, Mar 06). Suspected 'gating' frees pair. *Winnipeg Free Press* Retrieved from <https://bit.ly/3qIwYXu>
- TVBee. (2017, May 15). *Friends: Ross Geller without laugh track = psychopath*. [Video]. YouTube. <https://bit.ly/314vs0K>
- Vancouver Art Gallery. (2016). *Early 20th century. Collage, montage and the readymade at the birth of modern culture*. Vanartgallery.bc.ca. <https://bit.ly/3a6PmC9>
- Vancouver Art Gallery. (2016). *Groundbreaking exhibition on mashup culture to occupy entire Vancouver Art Gallery*. <https://bit.ly/3yhjZyQ>
- Vancouver Art Gallery. (2016). *The post-war. Cut, copy and quotation in the age of mass media*. Vanartgallery.bc.ca. <https://bit.ly/2YkwnBC>
- Vancouver Art Gallery. (2016a, February 6). *Vancouver Art Gallery: Mashup* [Video]. YouTube. <https://bit.ly/318vXHq>
- Vancouver Art Gallery. (2016b, May 6). *Vancouver Art Gallery: The Making of mashup* [Video]. YouTube. <https://bit.ly/3A5BkLG>
- Vancouver Art Gallery. (2016c). *The digital age. Hacking, Remix and the archive in the age of post-production*. Vanartgallery.bc.ca. <https://bit.ly/3mjqxss>
- Wainwright, R., & Stevens (2020). Posthumanizing McLuhan's curriculum: Riffing on city as classroom. *Journal of the Canadian Association for Curriculum Studies*, 17 (2), 51-66.
- Wainwright, R., & Stevens, S. (2014). Because we play: Riffing on rhizomes, attribution, and voice in duoethnographic assemblage. *The Journal of Machinic Arts-based Research*, 1(1).

- Wainwright, R., & Stevens, S. (2017). MashUp at the Vancouver Art Gallery: “In review” [onto]Riffologically. *Art/Research International: A Transdisciplinary Journal*, 2(1), 166-184. <https://doi.org/10/gd2z3g>
- Wainwright, R., & Stevens, S. (2020). Review of “the Anthropocene Project”: Treachery in images. *Art/Research International: A Transdisciplinary Journal*, 5(2), 567-584.
- Wajdi, B. [Wajdi Ben]. (2014, February 8). *From conception to birth* [Video]. YouTube. <https://bit.ly/3l5ECdm>
- Walby, K., & Piché, J. (2011). The polysemy of punishment memorialization: Dark tourism and Ontario's penal history museums. *Punishment & Society*, 13(4), 451-472. <https://doi.org/dt84z8>
- Wallin, J. J. (2010). *A Deleuzian approach to curriculum: Essays on a pedagogical life*. Palgrave Macmillan.
- Wallin, J. J. (2011). What is ? curriculum theorizing: For a people yet to come. *Studies in Philosophy and Education*, 30(3), 285-301. <https://doi.org/ccjsgm>
- Wallin, J.J. (2015). Dark posthumanism, unthinking education, and ecology at the end of the Anthropocene. In N. Snaza & J. A. Weaver (Eds.). *Posthuman and Educational Research* (pp. 134-147). Routledge.
- Watson, J. (2008). ‘Schizoanalysis as Metamodelling’, *Fibreculture*, no. 12, available at http://journal.fibreculture.org/issue12/issue12_watson.html, accessed 10 February 2012.
- Watson, J. (2009). *Guattari's Diagrammatic Thought: Writing between Lacan and Deleuze*. Continuum.

- Weaver, J. A. (2015). To what future do the posthuman and posthumanism (re)turn us; meanwhile, how do I tame the lingering effects of humanism? In N. Snaza & J.A. Weaver. (Eds.), *Posthuman and Educational Research* (pp. 182- 194). Routledge
- Whitehead, A. N. (2004). *Concept of nature*. Amherst, NY: Prometheus Books. (Originally published in 1920).
- Wikkidprawn. (2012, June 7). *Mrs. Doubtfire recut as a horror movie*. [Video]. YouTube. <https://bit.ly/3A5dLCr>
- Williams, J. (2011). Events. In C. J. Stivale (Ed.), *Gilles Deleuze: Key concepts* (pp. 80-90). Routledge.
- Willis, B. (2019) *Minds, hearts and arts: Uniting the expressive arts and education*. [Master's thesis, European Graduate School, Art, Health and Society].
- Winnicott, D. W. (1991). *Playing and reality*. Basic Books.
- Xeze1. [Xeze1]. (2010, February 4). *Very nice, very nice - Arthur Lipsett* [Video]. YouTube. <https://bit.ly/3FeHfBN>
- Zepke, S. (2008). The Readymade: Art as the refrain of life, in *Deleuze, Guattari and the production of the new*, ed. S. O'Sullivan and S. Zepke. Continuum, pp. 33–44.
- Zepke, S. (2011). From aesthetic autonomy to autonomist aesthetics: Art and life in Guattari, in *The Guattari Effect*, ed. É. Alliez and A. Goffey. Continuum.
- Zhang, P. (2012). Deleuze's relay and extension of McLuhan: An ethical exploration. *Explorations in Media Ecology*, 10(3-4), 207-224.
- Ziarek, K. (2004). *The force of art*. Stanford University.

Zielinski, S., (2015). AnArcheology for anArchives: Why do we need—Especially for the arts—
a complementary concept to the archive? *Journal of Contemporary Archaeology*, 2(1),
116–125. <https://doi.org/10.1558/jca.v2i1.27144>

Žižek, S. (2012). *Organs without bodies: Deleuze and consequences*. Routledge.