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How do you make a classroom operate like a work of art? Deleuzeguattarian methodologies of research-creation

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This paper engages with Guattari's query about, how to make a classroom operate like a work of art? Guattari's question is not intended to be prescriptive or dogmatic. Rather, his thinking engenders a way of thinking about art as an affective event that has the capacity to invent new relations and new ways of learning. In the first section, we attend to concepts like "objectile" and "depth perception" in order to think about difference affectively. From there we discuss Deleuze's movement-image and time-image in order to problematize humanist notions of recognition and generosity and propose a politics of experimentation that is never fully intelligible and known. In the final section, to support our claim that affect and movement are crucial to new materialist research we re-turn to a methodology of research-creation as diagrammatic, in order to further consider the implications of an enfolding, affective, moving ecology for educational research.

Keywords: Deleuze; research-creation; art; politics-to-come; affect

Introduction

There has been an increased attention to matter in social sciences and humanities research. Often referred to as "new materialism" or Deleuzian-informed methodologies, such critical engagements posit affective, machinic, molecular, schizo, nomadic, enfleshed, and vital approaches to research that cut across previously segregated and dualistic methods (e.g. Barrett & Bolt, 2013; Coleman & Ringrose, 2013; Coole & Frost, 2010; Mazzei, 2013; Rotas & Springgay, 2013; St. Pierre, 2013). New materialism calls for a renewed emphasis on materiality in research – an embodied, affective, and relational understanding of research. Accordingly, new materialism abandons the idea of matter as inert and subject to predictable forces, instead positing matter as indeterminate, constantly forming and reforming in unexpected ways. Thus, a materialist ontology recognizes the interconnections of all phenomena (human and non-human). In contemporary art criticism, new materialist frameworks have shifted the focus from representationalism and discursive interpretations of "art," to examining how matter matters to understandings of cultural production (Barrett & Bolt, 2013; Cull, 2009; Zepke & O'Sullivan, 2010). Barrett and Bolt (2013) have argued that dominant methodologies in the arts privilege textual, linguistic, and discursive understandings. Art, they contend, has been "constructed in

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and through language" (p. 4). In contrast, materialism re-thinks cultural production as a material practice that exceeds its interpretive frameworks.

Educational scholars have similarly incorporated materialist thinking into questions about empirical research practice, through a variety of methodological approaches including diffractive readings (Hultman & Lenz Taguchi, 2010), schizoanalysis (Ringrose, 2011), multi-sensory mappings (Renold & Mellor, 2013), and so on. Van der Tuin and Dolphijn (2011) contend that materialism is critical in dismantling the dualisms that form the basis of modern thought, suggesting that deleuzeguattarian thinking "pushes dualisms to an extreme" (p. 385). In shifting the prioritizing of mind over matter, human over thing, culture over nature, materialism with its attention to affect, movement, and agential matter develops theoretical possibilities where art is no longer understood as a reflection of reality, but as intensities and dynamic flows.

Van der Tuin's arguments are similarly reflected in recent scholarship on research-creation. In Canada, our largest academic funding body, the Social Sciences and Humanities Research Council, as a move to acknowledge that artists teaching in universities were engaged in research and yet required a distinct category and criteria by which their work would be accessed, adopted the term research-creation. This move opened up the ways that research methodologies had previously been framed and accounted for. However, the formal adoption of research-creation did not invent new ways of thinking research, but simply folded "art" into its midst. Thinking critically about research-creation, Manning and Massumi through their work at the Senselab in Montreal, have pushed the boundaries of research-creation by reconceptualizing the "term" beyond simple delineations that recognize the intersections between art practice and social science research. Manning (2014) argues that current models of research, including most arts-based research, separate matter from perception, which leads to a fragmentation between awareness and the activity that generates awareness. As such, "[w]hat emerges is an account of experience that separates out the human subject from the ecologies of encounter" (p. 3). This disciplinary model in which the phenomena of research and the knowing subject are separated shapes knowledge as static, fixed and organized according to pre-formed categories. In other words, positing the conditions or terms of research before the exploration or experimentation, "results in stultifying its potential and relegating it to that which already fits within pre-existing schemata of knowledge" (p. 4). We must, Manning contends, find ways of activating thought that is experienced rather than known, that is material and affective, and where experience accounts for "more than human" encounters. This emphasis on unknowability means that the conventional understandings of methodology and method need to be undone. To that extent, St. Pierre (2013) wonders if we can even think about conventional methodologies through new materialist theories? Can we retain the concepts from qualitative research such as interviewing, observation, or data collection? What might these "methods" look like from a materialist perspective? Is that even possible? Or, as we argue, do we start anew? Do we think materially from the outset?

Entering into these materialist conversations, we turn to the final chapter of *Chaosmosis*, where Guattari (1995) asks: "How do you make a class operate like a work of art?" (p. 133). This question is important for thinking materially because Guattari's question is not intended to be prescriptive or dogmatic. Rather, his thinking is ethical-political and engenders a way of thinking about art, removed from form and function. Counter to the assumption that posits humans at the center of

creation, where matter is something to be formed and shaped by the artist, Guattari is calling for a destruction of human-centered ideology. In Anti-Oedipus, for example, Deleuze and Guattari (1972) write that schizoanalysis, the methodology they employ to eviscerate psycholanalysis, is a methodology of destruction, in which destruction leads to the production of the new. They write, "Destroy, destroy. The task of schizoanalysis goes by way of destruction – a whole scouring of the unconscious, a complete curettage. Destroy Oedipus, the illusion of the ego, the puppet of the superego, guilt, the law, castration" (p. 311). Destruction is an active process of breaking away from territories, the grid-lock of codes, or the insistence on familial relations. Destruction is not annihilation, but rather a breakdown, a rupture, or a failure that refuses to bring parts together into a unified whole. It is in destruction, in the breaks, that productivity lies. Often relying on artistic examples to develop this thesis of destruction, creativity they argue is a process, a production of something else that emerges from the breaks and disjunctures. Thus, a classroom as a work of art is about the capacity, we will argue, to invent new ways of learning through movement that is non-localizable or territorially bound.

Departing from a humanist view that art is shaped from the outside, the "class-room as a work of art," presupposes that art be conceived of as an affective event, a relational fold that "is always more than the sum of its parts" (Manning, 2013, p. 2). Karen Barad would argue that in the "classroom as a work of art" students, classroom, and art are not distinct from one another but "mutually interactive agents," which is similar to Bennett's (2004) writing that non-humans "perform actions, produce effects and alter situations" (p. 355). When art is understood materially, as an affective event, it becomes irreducible to function, form, and technique. It becomes a force of relations that makes learning felt and inarticulable – in excess of language. As Colebrook (2002) writes:

art is not about knowledge, conveying "meanings" or providing information. Art is not just an ornament or style used to make data more palatable or consumable. Art may well have meanings or messages but what makes it art is not its content but its affect, the sensible force or style through which it produces content. (p. 25)

Affect, according to Deleuze, is not contained in a body nor attached to a recognizable form, rather it is a relational field; a force that activates becoming. A classroom as art, Guattari (1995) argues, requires "a refoundation of political praxis" (p. 120); a re-composition of collective assemblages of subjectivity. This, Deleuze and Guattari (1987) contend, is a question of ecology, where ecology is a dynamic, transversal, and machinic conjunctive that dislodges its association with nature specialists and the promise of solutions (Guattari, 1989/2000). Instead, Guattari argues that ecologies work when common sense practices and power formations are put into question through the activation of "new aesthetic and new analytic practices" (p. 34). He contends that this rupturing is possible through creative proliferation and the production of new research practices and methodologies, or what he calls an ethico-aesthetic paradigm. Coleman (2008) contends that creativity, which is enabled through different aesthetic acts, such as art, functions as a creative and destructive "actioning force" (p. 69). Thus, for Guattari (1995), the ethico-aesthetic mutates and breaks codes, regulations, and homogenizing gestures. He writes, "[A]rt does not have a monopoly on creation, but it takes its capacity to invent mutant coordinates to extremes: it engenders unprecendented, unforeseen and unthinkable qualities of being" (p. 106).

Our paper grapples with Guattari's question by examining a socially engaged art project created by artists Hannah Jickling and Helen Reed, and a grade 6 class of students, as part of a larger research-creation project The Pedagogical Impulse, which explores how social practice artists working in schools can create the conditions for innovative pedagogical change and how these conditions can be sustained in education (www.thepedagogicalimpulse.com). Following an exploration of the research context, the first section of the paper takes up affect in relation to the concepts "objectile" and "depth perception." These concepts work against the tendency to reduce art to representing the knowable, which diminishes difference and complexity. Objectiles and depth perception expand difference and "asks experience to encounter its own uneasiness, its own ineffability" (Manning, 2013, p. 43). From here, we extend this thinking about difference affectively to discuss Deleuze's movement-image and time-image in order to radicalize a politics-to-come. Focusing on faciality and the eye of the camera, Deleuze constructs a politics engendered through sensation, a topology that challenges the very idea of habituated, directed, and over articulated form. A politics-to-come, we contend, problematizes humanist notions of recognition and generosity and proposes a politics of experimentation that is never fully intelligible and known. In the final section, to support our claim that affect and movement are crucial to artistic-research we re-turn to a methodology of researchcreation as diagrammatic, in order to further consider the implications of an enfolding, affective, moving ecology for educational research. In doing so, we mobilize Guattari's call to operate a class like a work of art and its ethico-aesthetic implications for qualitative and creative methodologies.

Research context: co-composition and milieus

The Pedagogical Impulse is a research-creation project at the intersections between social practice, knowledge production, pedagogy, and "school." As a site for artistic-research in art and education the project has initiated a number of experimental, critical, and collaborative projects including: a series of artist residencies that take place across a number of educational sites in Toronto, Canada; a living archive of interviews about art, pedagogy, and knowing; an approach to curricular experimentation as "curating"; ongoing discursive events that employ different forms of action and critical reflection; and the development of research-creation as a qualitative methodology with a focus on diagramming. In the paper we focus on one residency "Ask Me Chocolates" and in particular a series of chocolate multiples that were created by the students.

Artist multiples emerged in the 1950s as a means to complicate and explicate the changing nature of the work of art, by intervening into the circulation and reception of contemporary art. Early forms of artist multiples were produced in order to democratize and make contemporary art more accessible, while more recent explorations of the multiple have played an important part in alternative economies through the dynamics of circulation and exchange (Dyment & Elgstrand, 2012). "Ask Me Chocolates" is a series of limited edition artist multiples. Examining trade and value, the grade-six students worked with Jickling and Reed for five months, experimenting with discrete artistic gestures including: making and selling snowballs (when snow was a rarity in the city); using the subway as a studio; visiting two chocolate-making facilities — Cadbury and Chocosol — a pedal-powered stone-ground horizontally traded chocolatier; and learning about trade, artists' multiples, the history of bathroom

humor in art, child labor and the cacao industry, "labourness," and artists' interventions into the world of commerce. These interventions led to each student designing their own chocolate mold, which was then used to create a limited edition set of multiples. These chocolate multiples were subsequently traded for songs, services, and objects such as books, a light-saber, a can of tuna, an autographed baseball, a serenade, dancing, and a headstand with other students in the school, and with parents and artists from the community.

In each residency an artist – or in this case two artists – collaborated with a classroom teacher and a group of students to inquire into a curriculum concept, such as trade, through artistic interventions. The artists did not approach the residencies with pre-established art projects in mind nor a set of technical skills they wanted the students to master. There were a number of "ideation" days prior to the artists moving into the classrooms, thereby enabling ideas, concepts, and potential landing sites to emerge. Landing sites, according to Manning (2013), are not fixed points, but nodes that activate movement and distill it – individuate it – into something possible. Because movement is absolute it requires landing sites to give it dimension (Deleuze & Guattari, 1987). Landing sites create differentiation, a fold; "an ecology in co-composition" (Manning, 2013, p. 15). These landing sites are not concretized and permanent. They are not this or that. Rather, landing sites continue to move-in-movement:

Total movement is felt in the now when the incongruity between the force of an infinity of potential and the limit-cut of the actual work together to activate the resonant shadow of a movement-moving that, while it never quite actualizes, continues to move through the actual movement such that movement-moving co-composes with what is actually experienced in time. (Manning, 2013, p. 14)

An example of a landing site is the concept "trade" which circulated, wove, and penetrated the "Ask Me Chocolates" residency. Trade was not a pre-given curricular concept, with planned and directed outcomes; rather as a landing site, trade became something to be co-composed between teachers, artists, and students through class discussions, small experimental activities, artistic interventions, slide shows of contemporary art, research-driven assignments, and student interests. Deleuze and Guattari (1987) speak of co-composition in their examples of imitation. They write:

Do not imitate a dog, but make your organism enter into composition with something else in such a way that the particles emitted from the aggregate thus composed will be canine as a function of the relation of movement and rest, or of molecular proximity, into what they enter. (p. 274)

In the classroom example, trade became an event co-composed in situ.

How we experience ourselves in co-composition with the image, objects, and/or others is integral to the Deleuzian "event." The "event" is experience and so, the how (i.e. the relation) of the experience is always to be questioned and reflected upon. However, along Deleuzian lines of thinking and as Massumi (2011) notes, experience "in-the-making" is not about reflection or fixing what has passed. Attending to the temporality of experience involves asking an open question and, "marks the processual co-presence of a self-creating subject of experience with what will prove to have been its objects, together in the making" (Massumi, 2011, p. 10). Experience – as a co-composing act – is a different way of participating in the classroom and in schools; a way that potentializes the production of difference, the "event" of newness. Opposed to habit and consensus that reduce thought to the

already known, we must resist and struggle against ready-made concepts and opinions, or what "appears to us" (Deleuze & Guattari, 1994). When things appear as they are, we become "hedged in, already committed to conformism" (May, 2005, p. 23). This radically alters the way that the research context was approached. Rather than seeing the classroom, curriculum, and the artists' practices as already established entities that we could "research" or extract "data" from, research-creation becomes a milieu, the included middle, the conjunctive. In the milieu, research-creation becomes what Patti Lather and Elizabeth St. Pierre (2013) call the problematic field of entanglement, where in the "face" of doing humanist qualitative research we confront the ways in which research is performed as images, data, voices, transcripts, interviews, and classrooms. Thinking a deleuzeguattarian methodology we are constantly confronted by the questions: How do you generate data materially? How do you analyze it without returning the research-creation to coded results or representationalism? In fact, as we waded deeper into our mattering of a "classroom as art" we were unable to distinguish the ongoing development of our methodology from the enactment of it. Manning (2013) often gravitates towards the term "technique" to describe thinking in movement. Techniques are ways of engaging and expressing activities, such as research. They are not tools or methods by which research is defined. Techniques are processual; they are emergent and they constantly reinvent themselves in the milieu. In techniques human actors are not separate from non-human elements in the room. Bodies, chairs, floor, clock, sweaters, pencils, and yellowness – form technicities of activation. As Braidotti (2013) argues, this technicity "results in relocating difference outside the dialectical scheme, as a complex process of differing which is framed by both internal and external forces and is based on the centrality of the relation to multiple others" (p. 56). Technicities activate new relational fields and new modes of experiencing and knowing. However, these new fields are not complete, they are not fully known or enclosed.

If research is to loosen its ties to humanist orientations it needs to untether itself from pre-programmed methods and consider technicities that are immanent to its own research design. We must disrupt the idea that the human/self exists prior to the act of research and rather envision research in the milieu. Herzog (2000) contends that humanist research operates through "immobilization" where methods assert "correspondences, analogies, and associations between elements at the expense of their differences, their dynamisms, their movements and changes" (p. 9). Materialist research cannot take the human subject as the starting point.

Milieus, according to Deleuze and Guattari (1987), are chaotic and vibratory spaces of *activeness* that are co- and re-composed. They further explain that milieus are affected by *thingness*, noting that living things are swept up in an event that is not territorially bound. Bennett (2010) uses the term "mobile configuration" to write of the school as a milieu of "people, insects, odors, ink, electrical flows, air currents, caffeine, tables, chairs, fluids, and sounds" – things that mark territories (p. 35). These living things, which Bennett terms "actants," carry out actions within schools that are coded and re-coded, thus affecting milieus. For example, a student's chair is a coded *thing* and its use as a piece of furniture to sit on is a coded action within the classroom. However, when a milieu is in relation, for example, when an object gives way to experience – a vibratory rhythm is co-composed and a new quality of experience emerges that then becomes something else (i.e. neither object nor subject). Returning to our example of the chair, not as an "actant," but as an "object giving way to experience," the chair then becomes *chairness* – an affective quality of

experience (Massumi, 2011). The chair as *chairness* becomes part of a relational field that destroys habitual tendencies and rather creates "dynamic postures," which become ecologies of difference (Massumi, 2011, p. 50). The chair is still a chair; however, it is the unactualizable experience of *chairness* that changes the rhythm of things and invents different ways of being in the world. Deleuze and Guattari (1987) further explain that milieus become generative when the effect that is produced is a difference. The milieu becomes an event of difference which, Manning (2013) notes, cannot be articulated in spatial terms, for it is an affective field rather than a space or a form.

As events, the residencies are one node of the larger research topology. They exist, we contend, as research-creation in their own right - the process enfolding the form of what it will become (Massumi, 2013). In addition to the residency node of the project, we adopted a number of other creative methods by which we could assemble the divergent strata that emerged at each site. In the "field" we photographed and videotaped the artists and students composing together. We used journals to record observations, paying attention to sensory qualities, problems, and questions. We interviewed the teachers and artists at a number of points throughout the residencies, and used student writing, student blogs, and whole class discussions to record student ideas and thinking. These more "traditional" ethnographic methods are not intended to be more rational, representational, or formative models that diminish the artistic-research. Rather, we approached each of these methods from the milieu, with the aim not to use these methods to validate or generalize the artistic work produced but, "rather discover conditions for the production of something new, to be creative ... in order to extract from them new, non-pre-existent concepts" (Semetsky, 2006, p. 2). It is inconceivable to know ahead of time, and thus to measure and/or collect in reference to data, instead research-creation constitutes an event as inventive potential.

As the residencies in year one ended, and a second year of research-creation unfolded, we found ourselves overwhelmed by the idea of what to do. Thinking ethnographically about the "data" - the hundreds of thousands of digital images, the text-based work, the hours of interview transcripts - not only presented an impenetrable wall of "data" to code or thematically analyze, but further conditioned "art" or the "creative production of the new" as something that existed outside of research, as something that research was to be applied to in discrete ways. What was needed was a methodology that understood "the classroom as art" as "vital research" "which tends to loosen its ties to existing contexts"; as opposed to "static data" that ethnographic methods could later analyze in isolation (de Vries cited in Bennett, 2010, p. 3). Presented with these challenges to think creatively and affectively about research, we enter into the data as a diagrammatic process of entanglement (see Zaliwska & Springgay, in press). As a research team of one faculty member and six graduate students we met weekly to read deleuzeguattarian theory, to confront micro-events that we found unintelligible in the "data"; not to then try and tease out an understanding or clarity, but to further diagrammatically assemble these microevents, allowing their aesthetic and affective resonances to trouble and challenge us. In the next two sections of the paper we turn to the chocolate multiples produced by one group of grade six students. This residency took place over five months, and the multiples are not representative of the many artistic interventions that occurred over this time, nor are they intended to synthesize research-creation with youth. Rather, we turn to these artist multiples to "stutter into existence" some thoughts about difference and social justice education – re-imagining and re-imaging "the classroom as art"; as a politics-to-come. We take our cue from deleuzeguattarian and relational theories, including those shaped by Manning (2013) and Massumi (2011). In addition, we connect our thinking about human and non-human interaction to the work of Barad (2007), who insists that "discursive practices and material phenomenon do not stand in a relationship of externality to each other; rather the material and the discursive are mutually implicated in the dynamics of intra-activity" (p. 152). Our utterances of research-creation are not intended to be interpretive, exhaustive, nor concerned with patterns or meaning. Rather, as objectiles and depth perception, the multiples of research-creation enable an "out-of-field" (Deleuze, 1986); a "more than" what we can claim to "see" or "know" from our research. That being said, materialist entangled research makes academic writing all the more challenging. How do we "image" in writing our particular interruptions of representation? This entanglement, Manning (2013) writes, is about putting "the activation into every part" (p. 140). Research-creation cannot be replicated. On a literal level this means that the residencies themselves cannot be repeated with similar outcomes. However, if we think about replication and writing, then in each iteration of writing research, we need to feel the work working.

Affect: objectiles and depth perception

Affect, in a Deleuzian sense, emerges in-between subjects and objects, milieus, and other things that are yet-to-be-named. It is a folding force that transversally and with intensity makes its way towards the outside – the vibratory limit. The limit is not an actual place, such as outside of the classroom and/or school. The limit is neither outside of the body nor is it contained within it. It is not limiting. The outside, writes Deleuze (1988), becomes an "unformed element of forces" (p. 43) that affectively potentialize what is yet-to-come. These formless forces emerge from the outside and "remain attached to the outside, which stirs up their relations and draws out their diagrams" (p. 43). Affect stirs up this difference when bodies co-compose (and do not imitate) in an affective ecology. Affect, for instance, potentializes the eventspace where the object becomes other than what it was perceived to be. Outside, Manning notes (2013), is "where the mutations of difference are most forcefully creative" (p. 30). Each chocolate was placed in a cello bag with a hand-stamped foil tag. These tags contained a short description of the project on one side, and student writing on the other. The chocolate, cello bag, tag composition exist together as a multiple. We argue that the multiple composition resists art education practices in education, whereby students create something in one form (art) that is then coded or interpreted in another (writing). This tendency to not trust the image as image, but to have students know the image through writing, reduces art to a system of signs and significations. Rather, as a multiple, chocolate and tag perform an intensive shaping "creating not form but tendency" (Manning, 2013, p. 182). The chocolate and tag don't exist as two separate objects, where the discursive interprets the chocolate mold. Rather, if we were to hold them in our hand, they are singular, enfolded. In reading the tags, reproduced below, for the purposes of the paper, we invite the reader to imagine a palimpsest of chocolate, crinkly cello wrapper, and red and gold foil. Reading/holding/touching/ would imbricate the other. One tag about a chocolate multiple reads:

The chocolate I made is a chip, but it's not an ordinary chip. It's a chocolate chip. Before it was lost but now we found it. An artist named Sandy Plotnikoff inspired me to make this chip because he made this snap button that looked like a real chip, and it's the most amazing thing you could ever have. Well I wanted to make this chocolate chip because I love chips and it's the only thing that makes my day.

In "reading" this tag, one necessarily needs to imagine holding the multiple in your hand. Or perhaps, the unwrapping of the cello paper, and the biting into the sickly sweet "chip." Moreover, one might need to consider the performance that enabled



Figure 1. Ask Me Chocolates.

you to "grasp" the multiple in the first place. What did you trade for it? An autographed baseball? A light-sabre? A song? (Figure 1).

Bennett (2010) writes of an "out-side" as a kind of wild movement that is akin to the rhizome. Echoing Spinoza and recalling the work of Thoreau, Bennett suggests that "wildness was a not-quite-human force that added and altered human and other bodies. It named an irreducibly strange dimension of matter, an out-side" (2010, pp. 2-3). And although the Deleuzian "outside" is formless, it also has dimension, the materiality that Bennett stages. Bennett's dimensionality is a way of attending to "things and what they can do" (2010, p. 3), about depth and capacity for newness. Things, Bennett writes, have a tendency to "look back" from the depths of an out-side and do some-thing. "That is, a some-thing that is not an object of knowledge, that is detached or radically free from representation, and thus no-thing at all. Nothing but the force of effectivity of the detachment, that is" (Bennett, 2010, p. 3). Refusing to fall back into itself or play into the art-as-object scenario, the thing produces a new event – an ecology – that "will rise up to meet us" (Bennett, 2010, p. 3) in an unruly way that forces us to think differently. Learning as wild movement – a snap button chip or a chocolate multiple – has the capacity to produce unruly thoughts that do not disobey, but rather intensify possibilities that have yet to be thought. In the moment of writing, however, we have dangerously isolated the chocolate and the tag, from the milieu of the residency, and all of the other "eventings" that occurred during the five months. Rather than thinking of our method as a process of isolation, or of interpretation, we argue for a precarious ecology, a "dynamic and sustainable system of relations between subjects, objects and their environment" (Meskimmon, 2013, p. 17). While precarity is commonly understood as fleeting and ephemeral, Meskimmon (2013) notes, it can also suggest "lingering on the very brink of change" (p. 19). Grasping the chip multiple, we capture it not in order to represent it discursively, but to think about the chocolates and tags as "objectiles."

An object becomes an objectile, when we think less about the object *as* something and think about what an object *does*, about its "capacity to generate eventtime" (Manning, 2013, p. 92). As an objectile, an object becomes unpredictable, yet maintains a familiarity in its form. In the case of the chocolate multiples, the chocolates exist as chocolates much like you would find in chocolate boxes in varying shapes and sizes. Yet, upon closer examination we discover an intestine, a dress, a bomb, a toilet paper roll, and a burr. As Manning (2013) states: "[T]he object here functions not as a thing-in-itself but as a force of form that generates complex patterns in an ecology that touches on the everyday while moving beyond it into the time of the event" (p. 110). The chocolates become an event, rather than a representational form. While chocolates might infer habitual and recognizable practices and are thus knowable, when we encounter them differently they become more than what we assume their functionality to be and "they extend beyond their objectness to become ecologies [events] for complex environments" (p. 92). Writing about her multiple a student states:

My mold is a house and relates to the artist Rachel Whiteread. It is a multiple of a house because houses can't be moved. With more houses, more people can use it. I chose to do this mold because a home is important. I might trade my chocolates for a toy house.

The objects alternate between material things – a burr, a toilet paper roll, a grenade – and immaterial affects like softness, stickiness, and bitterness assembled together, questioning what we think we know and challenging our habitual relationship with objects, thereby opening up the potential to see anew. Freed from preconceptions and common organizing structures that limit chocolates and chocolates' relationship to trade, the multiples engender singularities of difference. We begin to perceive with what Massumi (2014) calls "depth perception." He explains that, "depth is an emergent property possessed by neither of the images conditioning its appearance" (2014, p. 16). "Depth perception" requires us to consider a chocolate as "more than." For example, contained in a particular model of social justice education, chocolates get caught up in a rhetoric of fair-trade and protectionism. In contrast the chocolates, understood through depth perception, stage "an encounter with the shaping of its more-than" (Manning, 2013, p. 179). The tag accompanying the toilet paper roll chocolate states:

In the night time when I was brushing my teeth in the bathroom I was thinking about multiples and when I turned around I saw a package of toilet paper, then I started thinking and I chose toilet paper for my multiples. I also saw many multiple objects like toothbrush, shoes, socks and piles of clothes. But I chose toilet paper because it is round and white and soft. And I like my pillow because it is soft too.

As perception takes form – a toilet paper roll – it "makes felt new modalities of perception ... new modes of existence" (Manning, 2013, p. 179). Learning as an experience of depth de-habituates, creating a different frame of knowing. The toilet paper roll becomes a variation of what it is, while a *likeness* to chocolate and to a pillow emerges but within a different frame. Depth perception attends to the relational field that the chocolates are part of, which potentializes likeness as difference. From this perspective, the chocolate – or we could substitute here, classroom or curriculum - refrains from being simply a candy or an instance of fair-trade, and instead becomes part of a relational field that "explores its own living potential, strikes new postures – invents new ways of affording itself of the world, in collaboration with the world, with what the world throws before it' (Massumi, 2011, p. 50). As objectiles, embodied and individuated, the chocolates begin to open a space of connectivity, transversal machinic connections which engender ways of living together in difference (May, 2005). As assemblages of inter-acting forces, the chocolates are no longer fixed entities, but ecologies of practice, ways of being that are inseparable and intertwined (Barad, 2007).

School curricula typically presents "trade" as a reproducible fact with given and recognizable features, or it is democratized through individual choice, where knowledge leads to making better decisions such as buying fair-trade chocolate. Similarly, the curricula attach neoliberal values to trade, foregrounding issues like child labor and fair-trade, which students in Western countries should empathize with and/or distance themselves from as something that happens elsewhere. This approach perpetuates a view of the human dominating and controlling nature. Consuming horizontal or fair-trade products expunges colonial exploitation and child labor. This creates a transactional curricular approach that perpetuates a particular social justice framework that goes "back and forth between actions" (Massumi, 2011, p. 46). Such movement is linear and constrained, and responds to the needs and wants that already exist (Massumi, 2011). As May (2005) argues:

[r]ather than taking it for granted that there are particular individuals with particular needs or lacks that the engagement in politics seeks to fill, political living might consist in the creation of connections among and within various actualized levels of difference. (p. 132)

Thus, chocolates might pose the question "How might we go about living?" The answer is not to suppose one way of living but rather what transversalities might occur, what actualizations can we experiment with:

To ask how we might go about living is not to repeat the dreary question of who needs what. It is instead to probe the realm of difference that we are in order to create new and (one hopes) better arrangements for living, in the broadest sense of the word living. (May, 2005, p. 133)

One of the students wrote on the class blog, in responding to questions about artist multiples:

... because sometimes people trade grenades for war ... and sometimes a country has a surplus of it. That is why they trade it. But they can also barter with weapons or other services for the grenades.

This student chose to create a grenade as a chocolate multiple, which they connected to bitterness, sadness, the artist Bill Burns and a song by Bruno Mars. Another student created a burr as their chocolate multiple, which they described as sticky Velcro, and a memory of playing with Sandy Plotnikoff's baseball caps that have snaps on them so that multiple caps can be snapped and tangled together. "It is the task of art," writes Colebrook (2002), to "dislodge affects from their recognized and expected origins" (p. 23) and to "destroy opinion and common sense by pulling our thinking apart" (p. 27). In the examples of student multiples, the chocolates edge towards affective assemblages that dislodge fixed meaning and interpretation. As multiple enactments in states of repeated modifications and continuous transformations and becomings, the chocolates and the students' bodies change with different intensities and force (Colebrook, 2002). The weight of the grenade, the crackliness of the cellophane wrapper, the shimmering redness of the foil hand-stamped wrapper, and the melody of Bruno Mars "out-of-field" become intra-acting assemblages. Another student's chocolate multiple is a dead bunny. She writes, "everyone has something valuable to them." Student, classroom, artist, chocolate, and dead bunny are no longer separable entities. Rather, as Bennett (2005) writes, they are "distributed" assemblages. In thinking a classroom as art, Guattari (1995) is not referring to institutionalized art but the ethico-aesthetic paradigm, where mutant compositions will "not simply attempt to preserve the endangered species of cultural life but equally to engender conditions for the creation and development of unprecedented formations of subjectivity that have never been seen and never felt" (p. 91). Disrupting reductive practices that enforce specific ways of doing curriculum (i.e. laws and codes), the classroom as art, as an ecology – an ethico-political enunciation – "is an activity of unframing" (p. 131); a way of living differently both in schools/life, but also differently living research, vital research "which refuses to dissolve completely into the milieu of human knowledge" (Bennett, 2010, p. 3).

Participatory art and/or participation in schools is often linked to a kind of interaction that is based upon linear models that involve human-human transactions and/or the "sharing" of experience. Students in schools are also (at times) forced to participate, which further serves to fulfill a "mis-educative" (Dewey, 1997) agenda by

working to achieve the very end result it was always supposed to achieve. Rather, "Ask Me Chocolates" approaches pedagogy as an affective event of co-composition that produces an emergent ecology of difference. Such an ecology evokes a different kind of participation; it calls "forth participation in a way that is at once enticing and unthreatening. It has to give the object to the experience in a way that is slightly off from what we might expect" (Manning, 2013, p. 93). As one chocolate tag notes:

I was inspired by the artist David Hammons on his selling of fine snowballs. I decided to do a snowball because it was from our experience when we actually tried to sell snowballs. What I thought of David Hammons when he was trying to sell his snowballs was that he had a pretty interesting way of selling them. He arranged his snowballs from least to greatest. While making our chocolate mould I learned that art comes from a sensation from a[n] occasion from a[n] inspiration.

It is not the snowball-as-object that enticed the student. It is rather the co-composing of snowballs with classmates and the "interesting way of selling them" that provoked the student to re-think what "art" could become; not as something to be read as an independent sign, but rather as a material becoming. Co-composing rather than learning "about" the object thus became and could become an affective way of participating within an ecology activated by milieus of relation.

Movement and a politics-to-come

Deleuze's books on Cinema provide us with the theories to think about the "class-room as art" liberated from a sequencing of images attached to a single observer, to a presentation of affects, intensities, and "any point whatever." Taking our cue from Deleuze that his writing on Cinema is not intended to become a formula for analyzing film, but about opening thought to the new, we engage with particular concepts in relation to the chocolate multiples. In particular, we'll discuss the movement-image and the time-image and their relationship to faciality, in order to think about a politics-to-come and its relationship to the "classroom as art." A politics-to-come, we contend, is crucial in re-thinking social justice education, as it shifts curriculum and pedagogy from having to do with "political messages" to affects and intensities that change with each new encounter (Rotas & Springgay, 2013).

As opposed to organizing perception from our own interests and embodied locations, cinema, Deleuze argues, presents us with indirect and direct images of time. The movement-image produces indirect images of time. Rather than time as a series of connected points that can be organized from a fixed position, in the movement-image the camera moves, as a body moves, while the camera also produces other moving bodies. With the time-image we get a direct image of time where movement becomes aberrant and irrational. In the time-image, movement does not happen to objects. Rather, according to Deleuze, life is movement from which distinct things are then actualized:

Let us call the set of what appears "Image". We cannot ever say that one image acts on another or reacts to another. There is no moving body [mobile] which is distinct from executed movement. There is nothing moved which is distinct from the received movement. Everything, that is to say every image, is indistinguishable from its actions and reactions; this is universal variation. (Deleuze, 1986, p. 58)

In the time-image we can begin to experience another kind of time, one not bound to linearity or narrative unity. Colebrook (2002) writes: "Visual images are composed and ordered, not to form moving things or ordered wholes, but images as such – not images of some world from some point of view" (p. 33). Thus, movement is not contained within a particular body with a particular point of view, rather movement is transversal becoming from which we compose and re-compose the world. Dislodging the chocolate multiples from narrative frameworks that insist on ordering them into recognizable wholes, they yield singularities. Singularities, according to Deleuze, allow us to think about specific differences. Moreover, as Semetsky (2006) suggests, when students engage in the process of discovering solutions to problems posed by teachers, "pupils lack the power to constitute problems themselves, and the construction of problems, for Deleuze, is tantamount to one's sense of freedom" (p. 82). Problems, like objectiles, are not pre-established givens, but methods of invention (Figure 2).

While each of the multiples has an accompanying tag that the students composed, these texts are not merely descriptive of the chocolate mold, nor organized by any internal meaning. For example, the student who composed a toilet paper roll does not inscribe his multiple with the meaning of a toilet roll, but rather allows for the singularities of multiples, household goods, pillows, softness, and the banality of bathroom humor as art to assemble – to become irreducible. The multiple shifts from being a generalized or collated collection of data to a Universal, which "captures the way each singular event becomes what it is, its specific power of being different" (Colebrook, 2002, p. 36). A toilet paper roll, an intestine, or a burr demand that we think beyond what is given or preconceived; that we think about specific differences not generalizations or common forms. This then, according to Kennedy (2004), shifts from thinking about representation, to a pedagogy of movement,



Figure 2. Ask Me Chocolates.

process and machinic connections. The artists worked against the common tendency in school curricula to present student narratives that when put together would create a cohesive narrative about the chocolate trade and child labor. Rather, as the multiples show, the classroom as art is "replete with singularities that do not add up, that cross over into sheets of experience that cannot ever manage to tell the whole story..." (Manning, 2013, p. 43). The time-image as difference exceeds the present that enables the pedagogy of the multiple to become inventive, no longer conditioned by an image of what is worth learning (Pinar, 2004). The multiples as aberrant movement are, "machinic montages that bring into conjunctions semiotic chains and an intercrossing of material and social fluxes" (Guattari in Manning, 2013, p. 52). Rather than thinking of them as a whole – a curricular narrative that illustrates or documents student understanding about "fair trade" – we need to think about them as singularities as an Open whole: "if the whole is not giveable, it is because it is the Open, and because its nature is to change constantly, or to give rise to something new, in short, to endure" (Deleuze, 1986, p. 9):

By producing in this way a mobile section of movements, the shot is not content to express the duration of a while which changes, but constantly puts bodies, parts, aspects, dimensions, distances and the respective positions of the bodies which make up a set in the image into variation. The one comes about through the other. It is because pure movement varies the elements of the set by dividing them up into fractions with different denominators – because it decomposes and recomposes the set – that it also relates to a fundamentally open while, whose essence is constantly to "become" or to change, to endure; and vice versa. (Deleuze, 1986, p. 23)

Cinema, Deleuze suggests, enables us to think about mobile sections and the process of montage. While not specifically addressing film in this paper, we find montage to be of assistance in thinking about artists' multiples. For example, each chocolate is not a series of parts in a Whole, rather "[t]he set cannot divide into parts without qualitatively changing each time: it is neither divisible nor indivisible, but 'dividual'" (Deleuze, 1986, p. 14). This is absolute movement where, "singularities are distributed in a properly problematic field as topological events to which no direction is attached" (Deleuze, 1990, p. 104). The politics of the chocolate trade, as presented in a typical elementary school, would establish those involved in the chocolate trade as either oppressed or oppressors. Similarly, the discourse of trade would present moral dilemmas to students, asking them to choose fair-trade products, and thus become responsible for the event. May (2005) notes that liberal political theory is based on the individual with their own individual interests, or from the perspective of Deleuze's work on film, a fixed point of view from which movement happens. For Deleuze and Guattari, a different political ontology is crucial, one that does not privilege the individual but is produced through affect and movement.

Manning (2013) writes about something similar in her analysis of the film *Waltz with Bashir*. She notes that the affective intensities and movement in the film demand that the viewer become "responsible *before* the event, in the face of it, in its incessant coming-to-act" (p. 68). This she contends is not the same as being responsible *for* the event. In Manning's words "before" is a politics-to-come, a politics that "refutes an easy solution" (p. 70); a politics that is intensive, it is divergent, incommensurable, and conflictual. Responsibility for, Manning argues, is about benevolence, "a dangerous kind of liberal humanist 'generosity' that maintains the other as either victim or perpetrator, keeping the strata rigid" (p. 72). The aberrancy of the multiples, we argue, challenges the responsibility "for" position:

To be responsible before is to engage at the nonhuman limit of the barely active where a life is restlessly agitating. On the cusp where the surfaces of life-living resonate, on the sonorous continuum of the ineffable, responsibility before means that we cannot already have positioned ourselves, that we are indeed, as Deleuze suggests, sorcerers creating life and more life. (p. 72)

Another way to think about before is to consider the face. In a Thousand Plateaus Deleuze and Guattari (1987) write that the face is a surface and that it "represents a far more intense, if slower deterritorialization" (p. 172). In Manning's account of the film Waltz with Bashir the film avoids becoming "a" body, a personalized human body by refusing to territorialize a particular human face. The film resists, Manning writes, "the subjectification of this body, the stultification of this personal experience as mapped through the recognition of the face as the quintessential affective image" (p. 60). Returning to our chocolate multiples, the teacher wanted to desperately confer a face on the chocolate trade. She read the students a book about a young boy who labors in the cacao slave trade. Resisting this approach to trade as a fully formed and constituted politics, the artists and the students through the creative production of the multiples, engendered a politics-to-come, where products were not prioritized, but rather emphasis was placed on the relations of process across the multiple assemblages. In film, Deleuze notes "the close-up retains the same power to tear the image away from spatio-temporal co-ordinates in order to call forth the pure affect as the expressed" (1986, p. 96). This, Manning (2013) argues, is the percolation and pulse of life that is always on the verge of appearing, of becoming felt, but never "as such" – never as a particular face; a specific body. Similarly, we argue, the multiples activate "at [the] intensive limit of life" (Massumi, 2009, p. 170). Despite the teacher's desire for the students to craft tidy narratives empathizing with the child victims of the slave trade, the chocolates' affective forces shake our relationship to totalizing narratives. This is not to suggest that the horrors of the chocolate industry be forgiven or ignored, but rather than a curricular approach that assumes we can digest the pain of the other, the multiples "keep us from taking the stance of the dispassionate observer, that keep us from falling into our selves ... And so we become responsible before the event, in the face of it, in its incessant coming-to-act" (Manning, 2013, p. 68). The toilet paper roll, a dead bunny, a house, a chip, a snap hat, and an intestine do not attempt to capture trade and its politics, as if the events of trade could be bounded and delimited; they become trade placed into circulation alongside songs, services, rap performances, a baseball, a can of tuna, and a birthday hat.

When things are traded in exchange for other things, they become "faceified"; that is, things become re-valued. The face, writes Deleuze (1986), gathers or expresses movement, moving in-between these two affective poles – power and quality:

Each time we discover these two poles in something – reflecting surface and intensive micro-movements – we can say that this thing has been treated as a face: it has been "envisaged" or rather "faceified", and in turn it stares at us, it looks at us. (p. 88)

Bennett (2010) similarly argues that the affective potential of things can "look back" at us from an outside, enhancing and/or weakening bodies. Bennett (2010) calls this: "Thing-Power: the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle" (p. 6). The *thing* is thus an actant, a "vital player" in the world, in the "classroom as art."

Consider a glove, pollen, a rat, a cap, and a stick – Bennett encountered these things on a walk one Tuesday morning "as existents in excess of their associations with human meanings, habits, or projects" (2010, p. 5). She also just saw these things as a dead rat and some junk. Within one moment, Bennett recalls these things as "calling" her out and producing affects. Within another moment, Bennett becomes aware of the effects of these things, such as the mass production of plastic water bottle caps and the litter that they become on the side of the road. Through a cinematic lens, Deleuze argues that "firstness" is a moment of expression that, "expresses the possible without actualizing it, whilst making a complete mode. Now, this is exactly what the affection image is: it is quality or power, it is potentiality considered for itself as expressed" (1986, p. 96). The experience of "secondness," Deleuze insists, "no longer inhabit[s] originary worlds, but [is] actualized directly in determinate, geographical, historical and social space-times" (1986, p. 141). In presenting Bennett's experience through Deleuzian concepts of firstness and secondness, we do so as a way to acknowledge the potential power of objectiles to become effective, rather than affective through the exchange and circulation of repetitive power. This is, of course possible and the "classroom as art" is both "this and that," as is "thing-power."

Thinking the "classroom as a work of art" methodologically, according to Bennett (2010), entails "a willingness to theorize events ... as encounters between ontologically diverse actants, some human, some not, though all thoroughly material" (p. xiv). And similarly for Manning (2013), events do not inform but create uneasy openings, forming dynamically. Not only thinking the "class as art," but *how* a "class as art" might work is a risky question that may just offer "an opening onto the potential of a forking," but it may also undo "at the winding surface that is the singular limit between now and now" (Manning, 2013, p. 46). Offering us another way to think about *how* a "classroom as art" might work, Deleuze, reflecting on Kurosawa's film *To Live*, writes:

The film is something quite different: the dogged search for the question and its givens through the situations. And the discovery of the response, gradually as the search progresses. The only response consists in providing givens again, re-stocking the world with givens, putting something into circulation, as much as possible, however little it may be in such a way that through these new or renewed givens, questions which are less cruel arise and are disseminated, questions which are more joyful. (1986, p. 192)

It is through the situations and not the givens that a "classroom as a work of art" can make this qualitative leap - a leap that produces the givens. It is through the problematic field of our entanglements that we can renegotiate the givens and what a classroom thus does.

Research-creation as ecologies of practice in educational research

Barad (2012) states that:

each "individual" always already includes all possible intra-actions with "itself" through all the virtual others, including those that are noncontemporaneous with "itself." That is, every finite being is always already threaded through with an infinite alterity diffracted through being and time. (p. 214)

Research-creation as ecologies of practice similarly unsettles notions of individual, recognition, and understanding. As we assembled our images, field notes, interview data, and the art works made collaboratively between artists and students, we

resisted the compulsion in educational research to interpret, to uncover latent meanings, or to seek to understand. Gathering weekly to read and dissect the entangled matter, we started to think about our work together as its own residency, as a "classroom as art" whereby "touching" our data enabled us to approach this part of research-creation aesthetically – affectively, vitally, and as movement. Drawn to Deleuzian writings on the diagrammatic we found ourselves cutting into - almost montage-like - the "data," co-composing on large sheets of brown craft paper. We drew, we wrote, we cut passages out of transcripts, we superimposed, and sought the intra-activity between the various nodes of research-creation. We covered the walls of a classroom with these drawings. They became horizontal co-compositions of human and non-human interaction; matter, machinic, and differentiations. At first we assembled ourselves around individual residencies, but soon moved ourselves into the middle, the midst, the activity, and the goings-on of research-creation (Massumi, 2011). What began to "appear" on our drawings/diagrams were conjunctive relations. "Conjunctive relations are felt as a 'tendency' or 'striving' that continues across thresholds often marked by resistance and obstacles" (Massumi, 2011, p. 4). The conjunctive is an activity of touching, a differential between which things happen. Rather than pre-supposing that something had happened in a classroom in a school, that we now as researchers could code and understand, we approached our weekly meetings as research-creation events in and of themselves. Instead of asking what we can know of the world and our "data" we moved ourselves into the midst of the "production of the new," co-composing new dimensions in the process. We precariously abandoned the "data" at times, opting to immerse ourselves in papermaking, a paddle in a canoe, or experimentations with wearable cameras. When we returned, so to speak, to write about the chocolates, we realized that in configuring our materialist methodology as a residency, our own creative events had become entangled into the milieu of the research (Figure 3).

The "classroom as art" reconfigures the ethico-political, the occasion of experience as inventive, process-oriented, and abstract. Not concerned with reducing the world to aggregates, the "classroom as art" attends, touches, and thereby engenders "genesis" – the destruction and production of becoming. Touching, Barad (2012) writes, "is a matter of response," a "re-thinking of a complex notion of the political" in which "I cannot touch you without being responsive" (Manning, 2007, pp. 7-9). Touching is incomplete, "shot through with alterity" (Barad, 2012, p. 215) and conceived of as an interval that cannot be filled in. Touching in this sense then is similar to what Massumi (2011) calls a relation-of-non-relation. As events co-compose, as we draw and write and think together, a relation-of-non-relation insists that each event cannot actually connect to each other. "They may be said to 'come together' only in the sense of being mutually enveloped in a more encompassing event of change-taking-place that expresses their differential in the dynamic form of its own extra-being" (Massumi, 2011, p. 21). It is essential for the production of the new not to become constrained by "connectively fitting in" (p. 21). The relation-of-nonrelation refuses consensus and generalizability. We imagined at one point that our drawings/diagrams might become images themselves, capable of transferring the research-creation to different audiences. We abandoned these pretexts quite soon in our experimentation, allowing the relation-of-non-relation to pierce and cut through any notion of "making sense." Research-creation as a "classroom as art" refuses sense-making and instead calls forth an emergent research practice that is always "out-of-field."



Figure 3. Ask Me Chocolates.

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