

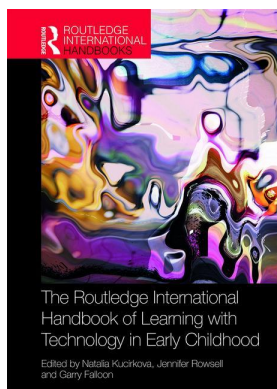
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9

(RE)IMAGINING MULTILITERACIES RESEARCH PRACTICES WITH POST QUALITATIVE INQUIRY

Candace R. Kuby

Nick-Ella-Emily-Panda Bear Habitat-Be(com)ing¹

Two tree sticks stand vertically on paper, secured at the bottom with clear tape. Nick works with a third stick, wrapping tape around the bottom and passes it to two girls to place and secure vertically on the paper. Nick turns back to his project and the girls continue working with tape and sticks and their fingers and the paper. It takes four hands and arms to work together to secure the three sticks. Holding. Pulling tape off the roll. Taping. Retaping. Letting go to see if it works. Retaping. Holding. Talking. Planning. When the tape runs out, Ella goes to get more. Emily explains to others as they come by (and as they reach out to play with and touch the sticks) that it is a forest *and* please don't touch. As Emily waits, she holds up a craft stick that has a printed-off picture of a panda bear attached to the top, she moves it around in the forest. She explains to Ella that the two other craft sticks will have birds on it for the panda to chase. Ella begins blowing up a balloon and asks others if it is a good size for a lion's head as she begins her project, Emily continues working on her panda habitat.

Nick-Jellyfish-Be(com)ing

Gigi comes by and asks Nick to read her writing on hummingbirds. He offers some feedback on spelling a word and she walks off to revise. He picks up a large paint brush and continues painting a large papier-mâché ball(oon) magenta. He engages in conversation with Emily and Ella as they work next to each other. Nick gets a plastic cup to hold up the wet ball so he can successfully paint the entire ball without getting the desk dirty. Cup-paint-brush-Nick-ball-desk work together. Fifteen minutes later Nick gets some magenta paper and scissors. He uses the paint as glue to secure small strips of paper on the ball.

Rebecca-Octopus-Be(com)ing

A plastic strawberry container box sits on the desk with rows of neatly rolled blue and green play-dough balls inside. A large papier-mâché orange ball(oon) and a small stack of brown yarn strands taped in clusters sit next to it. Rebecca asks, "what can I use?" and walks off. She comes back with one large paper towel roll and cuts it in two. Rebecca cuts small slits around one

end to make a flap, and works with a glue stick to connect the paper rolls onto the orange ball. Rebecca decides to try tape instead, and moves about the room asking peers for tape. She comes back with tape on her fingers and successfully secures one paper towel roll on the ball(oon). Rebecca repeats the process: cutting slits on one end of the second roll but doesn't find any tape. She works with the second roll for a while, leaves the desk, comes back and continues working with the first roll which is becoming unhinged.

Ball-paper rolls-Rebecca continue to work together in frustration. "They won't stick!" she exclaims. Tara, the classroom teacher, asks her to try a stapler, but that might pop the balloon. She comes back with bulletin board tacks and works with the balloon and paper roll. She says "it popped", but continues to work with the tacks to secure the paper rolls on the orange ball(oon). Rebecca talks to the ball(oon), "stop it", as it rolls around, and she is unsuccessful in securing the paper rolls. She gathers the tacks and walks away. Several minutes later she comes back with a handful of green pipe cleaners.

On the following day, Rebecca has secured orange pipe cleaner legs all around the Octopus-Ball(oon) and glued googly eyes on the front. The Octopus sits on top of the plastic box with play-dough balls inside. Rebecca is writing and drawing on a green strip of paper as the Octopus peers over her head. She glues the paper on top of the plastic box, writes a word, and checks the spelling with a friend.

These multiliteracies came into being in a second grade (7-8 year olds) Writers' Studio. Tara Gutshall Rucker, the teacher, was required to teach a nonfiction writing unit (and a science unit on animals) and worked to provide spaces for children to compose with a range of materials and modes. First the students made a class picture book - each child created one page about an animal of choice to contribute to the book. In the earlier vignettes, the students were in the midst of composing with a variety of materials as another way to share their learning about one animal they had researched about for several weeks. Through a series of mini lessons and conferences, Tara had invited students to think about one interesting fact they learned about their animal, and decide what would be the best way to communicate that with others. They brainstormed possibilities such as wall murals, sculptures (with various materials like clean trash containers, papier-mâché, clay, paper), skits, books, or 3-dimensional (3D) habitat designs. After several days of working-with-materials (and materials-working-with students), the students shared their compositions and learning with each other.

3D Hummingbird-Gigi

Gigi shares the number of beats hummingbird wings make in one minute while flying. She demonstrates with a 3D paper sculpture. She's made a paper bird and used yarn to play-with-the-bird like a marionette puppet to show the wings flapping. Gigi shares about a video she watched at home about hummingbirds, reads from her page in the class book, and then answers questions from peers by working with the paper bird.

Jellyfish-Nick

Nick holds the magenta jellyfish and shares with the class his new learning about their bodies made mostly of water. He compares the percent of water in human bodies to jellyfish bodies. He

explains that is why there is water *inside* the papier-mâché balloon jellyfish. Nick reads from his page in the class book as the jellyfish is passed around for everyone to touch and feel the weight. He too answers questions from his peers.

Penguins-Billy-Peers

Billy organizes a few peers-penguins dressed in black and white costumes he created. They lay out a white bed sheet on the floor (i.e., ice and snow). Then they move chairs together on the sheet to create an iceberg covering it with large blue and white paper. After five minutes of securing the paper iceberg with tape, the penguin skit begins. Several peers-penguins hide behind the iceberg. Billy tells the class that the skit will mostly be realistic but there are some parts that they just couldn't do, like cut a hole in the class floor (i.e., ice with water underneath) for the penguins to be in the ocean. They created 'hiding spots' instead for the skit to work. He asks his peers not to look at the 'hiding spots' while the skit is happening, just keep looking forward. Billy asks for the lights to be turned off. He positions himself as the father penguin on top of an egg carton in front of the iceberg. The mother penguin goes off the ice and into the ocean. "Cheep, cheep, cheep" comes from the penguins in a 'hiding spot' (i.e., in the iceberg). Billy pushes the egg carton out from under him and tosses broken paper eggs onto the ice (demonstrating the cheeps are from the baby penguins hatching from the eggs he was holding with his feet). Three baby penguins crawl out. Mother penguin comes over from a 'hiding spot' (i.e., the ocean) with fish (i.e., plastic bottles covered in paper) and the baby penguins eat. Billy asks the class what they learned from the skit, then shares information about the role of the mother and father penguin in taking care of their young, and finally talks about the materials they created to convey the information.

Panda-Emily

The learning continues as Emily shares her 3D panda habitat and demonstrates the 5½ fingers (5 fingers and a small thumb) that pandas use to climb and move around. She discusses how one stick (i.e., tree in the habitat design) kept bending so she secured two sticks together so they would stand together. She listens to feedback and questions from peers.

Each of these vignettes could be analyzed with theories and methods of multiliteracies and multimodality. These analyses would help us understand some aspects of Writers' Studio regarding how children drew upon a variety of modes and semiotic resources. However, as I have worked with Tara since 2010, we've² found a need to expand our philosophical and theoretical commitments to perspectives that believe that knowing, be(com)ing, and doing³ in the world (with the material world) are inseparable. This perspective also de-centers the human as the origin of all knowing and being and the sole actor of agency. Instead, agency is seen as a togetherness, an in-between, a force, a flow with humans, nonhumans, and more-than-humans. These philosophical shifts about epistemology (knowing), ontology (being), and axiology (doing) demand that we (re)think the coming into being of multi- and digital literacies, and the ways we go about researching and teaching.

In other manuscripts, Tara and I have focused on the pedagogical shifts in her classroom when we read and thought with poststructural and posthumanist theories. Specifically, we've focused on how theories *were* (already) pedagogies. We have discussed ways different units of study looked in Writers' Studio, such as personal narrative, nonfiction, and fiction (see Kuby &

Gutshall Rucker, 2016). In other spaces, we've examined the myth of the linear writing process often taught in schools (i.e., brainstorm, draft, revise, edit, and publish) (Kuby, 2017a). We've looked closely at individual students over the course of a school year and how their writerly identities became, with a range of materials in Writers' Studio (Kuby & Gutshall Rucker, 2015). However, the aim of this chapter is to discuss poststructural and posthumanist theories as research tools situated in the emergent field of post qualitative inquiry, which calls into question normal, taken for granted assumptions and practices of qualitative research (St. Pierre, 2011b; St. Pierre et al., 2016). Just as post-theories were pedagogies for us, these theories also became methodologies in a mutually constitutive relationship (i.e., theory ↔ methodology ↔ pedagogy).

The following quote by St. Pierre provokes my thought each time I read it:

Qualitative research methodology, which had early radical possibilities, became, I think, in large part, a low-level description of process, procedure, design, and method and so, not surprisingly, too often produced and continues to produce as 'findings' inconsequential themes, untheorized stories, and extended descriptions that do not get to the intellectual problem of explaining why things are as they are and how they might be different. Without philosophy, I think science can become impotent and rather boring.
 – (St. Pierre, 2011a, pp. 2–3)

How can qualitative inquiry, with so much hope and radical possibilities, be so boring? That is a strong claim and whether one believes it or not, it does cause me to pause and consider what has happened to provoke such a claim. In my journey of doing so, I've found the phrase "methodologies without methodology", borrowed from the title of Koro-Ljungberg's (2016) reconceptualizing qualitative research book, invigorating. This phrase prompts researchers to consider the what if; what if we imagine, invent, think, and experiment in Deleuzian ways, with research assumptions and practices?

For me, there is a justice and ethical orientation to this knowing/be(com)ing/doing shift in research. Often in literacy research we focus on knowledge and the artifacts and products created from multimodal composing with a range of artistic and digital tools. Or we start with the artifact and try to trace back how the human(s) made it and what knowledge they gained (see Leander & Boldt, 2013). However, poststructural and posthumanist theories focus on the now, the in-the-moment be(com)ing of humans, nonhumans, and more-than-humans. This is an ethical focus on ethic-onto-epistemologies, what is being produced (what realities, relationships, knowledges, and literacies) in the moment, instead of solely focusing on a future that may or may not come. Perhaps it would behoove us (and children creating literacies in schools and in out of school learning spaces) if we thought about the now – what is being produced in the moments instead of (solely) continuing to focus on benchmarks and future goals (that may or may not come to be). We need to consider how the entanglements of children, teachers, paper, computers, printers, webpages, paints, policies, desks, crayons, assessments, languages, genders, abilities, and so forth all matter, literally, in literacies coming to be, and in students coming to be composers.

So, while products do matter (literally, they are matter), so do the processes of people and materials working together. There is a mutually constitutive relationship between people and materials. Therefore, we need to shift our focus from human-centered theories, research methods, and pedagogies to embrace the poststructural and posthumanist assumptions about how the world (and literacies) come into being (Kuby, 2017b). I've begun to explore these possibilities in relation to the multi-year partnership with Tara. For example, we've questioned what is 'social' in social

science research and in writing partnerships of children/materials, when putting to work these post-theories (Kuby & Crawford, 2017; Kuby, 2018). We've explored how linear research processes and traditional research categories need to be problematized and rethought when situating work in these post-theories (Kuby, 2017c). In what remains of this chapter, I build upon our body of scholarship, connect it with the aim(s) of this handbook, and to the larger field of post qualitative inquiry. The hope is that this chapter sparks a conversation on these ideas in relation to multi- and digital literacies, and demonstrates possible ways to inquire. I use the nonfiction writing projects discussed at the opening to the chapter as a playground for thinking.

Post qualitative inquiry: assumptions, what it demands of us, and possibilities

At this point, I refuse the concepts method and methodology, as they are used in most empirical educational research. That means I also refuse the empiricisms that enable those methods and methodologies. This ontological turn, which does not assume that to be is to know, demands a different empiricism that is not grounded in the humanist subject. What might an empiricism for the posthuman look like?

– (St. Pierre, 2017, p. 29)

As literacy researchers, we find ourselves operating in a thick atmosphere of logical empiricism, a politics of inquiry that shapes how we conceptualize literacy and inquiry (i.e., data, relationships with participants, analysis, and [re]presentation) as well as the ways we mentor and teach research practices to students. Logical empiricism, which dominates educational research,

was, and still is, attractive because it claims that the rigorous, scientific methods of the natural sciences can find rules and laws in the social world as they have in the natural world. In social science, positivism's desire is to predict what people will do and then control them.

(St. Pierre, 2015)

Logical or positivist empiricism, inundates current research funding guidelines, publishing expectations, and practices within academia. For example, with the passage of No Child Left Behind in the United States, and the National Research Council's definition of "scientifically based research in education" there was a resurgence of positivism and logical empiricism. Over time, qualitative researchers proceeded to make their interpretive studies align with positivist assumptions in order, for example, to secure federal funding for research. Qualitative research methodologies and methods were emergent, but became methods-driven, rigid, formulaic, and pre-determined steps – a recipe to follow. The publishing industry supported logical empiricism by putting out book after book (and articles) on linear, systematic research design approaches and 'how-to' manuals on various methodical techniques, even in qualitative research.

However, frustrated with the state of qualitative inquiry for her own research and that of her students, in the 2011 *SAGE Handbook of Qualitative Research*, St. Pierre wrote a chapter on post qualitative inquiry (PQI) that gives the history of this term. St. Pierre (2011b) believes that the study of philosophy should proceed (or perhaps happen with) the study of research methodology because "attempts to disentangle science and philosophy are always dangerous" (p. 614). She articulates that the 'post' in PQI signals two things. One, a coming after what she calls *conventional humanist qualitative inquiry* and two, research inspired by post-theories (e.g., postmodern,

poststructural, posthumanist). St. Pierre (and others such as Alecia Youngblood Jackson, Patti Lather, Lisa Mazzei, and Maggie MacLure, to name a few) have urged researchers to return to metaphysics as they claim that research is stuck in a Cartesian philosophy that (attempts to) separates the mind from body, the subject from object, and other binary relationships. However, when reading many post-theories we are thrown into conversations on metaphysics – a specific branch of philosophy called ontology, which is concerned with what exists, what is, on being. Therefore, putting post-theories to work in research is not about ‘applying’ them in an already conventional humanist qualitative inquiry fashion, but rather a complete re-thinking of what research is, why we engage with it, and how to do it.

PQI demands a reorientation to how we see the world coming to be (ontology) in lively relationships between humans, nonhumans, and more-than-humans, and therefore it can’t be pulled from a shelf to squeeze into methodologies and methods that are fundamentally built on a Cartesian divide of mind/body, subject/object, and so forth. Following are a few of the ‘big ideas’ that I take away from reading scholarship on PQI which have caused me to (re)think how I go about researching the be(com)ing of digital and multimodal literacies.

A new empiricism? Resisting the binaries

St. Pierre et al. (2016) state that since at least the beginning of the 21st century scholars from a range of disciplines and fields are working in what are being called the ‘new empiricisms’ and ‘new materialisms’. Scholars in these areas have intensified their arguments against foundational assumptions of Western thought that enable binary oppositions such as mind/body, object/subject, human/nonhuman, nature/culture, transcendence/immanence, and so forth. In a sense, these scholars are advocating that we (re)think what empiricism is, to reclaim that term, when viewing the (coming to be of the) world with differing ontological assumptions than perspectives that are rooted in Cartesian logics. St. Pierre et al., (2016) state:

Empiricism and materialism go hand in hand. Classical empiricism is an epistemological project opposed to rationalism. In that model, knowledge of the empirical world gained through the senses is the only knowledge that is legitimate. The argument is that we can’t claim to know anything not given in our experience. Speculation through logical reasoning is just that, speculation, and cannot serve as a ground for knowledge. So the given, matter (evidence), surely matters in classical empiricism; and it is generally assumed to be a fixed substance, brute, inert, and passive – objects, things to be used by agentive humans – perhaps to be *observed* or *measured* in a social science study.

(p. 99, emphasis in original)

Because the material and empirical are so intricately tied together, we must (re)think ontological assumptions in our inquiry practices. We have to reimagine the relationships we perhaps think as binaries. What does a new empiricism look like in multimodal and digital literacies? How does this change our research practices?

Working within a non-representational logic and transcendental empiricism

St. Pierre’s scholarship discusses Deleuze and Guattari’s notion of transcendental empiricism, and argues that ascribing to that belief makes it impossible to do research with a focus on a (sole) humanist subject or conventional social science empirical inquiry that inundates educational

research. She builds this argument on close readings of post-thinkers such as Deleuze and Guattari and their distinction between the logics of *logical empiricism* and *transcendental empiricism*. Logical empiricism is an empiricism that focuses on systematic and organized thought and knowledge. Whereas *transcendental empiricism* is, “that which attempts to go beyond or above, a highest grounding principle such as thought and consciousness” (Olsson, 2009, p. 51) (for further discussion of these two empiricisms see Kuby, 2017b; St. Pierre, 2011b). Transcendental empiricism is experimental and challenges representational assumptions of logical empiricisms. As Olsson (2009) writes, “Empirical representations is challenged by a much more ‘wild’ kind of empiricism that can account for the unstableness and continuous production of the world” (p. 95). Deleuzian notions of transcendental empiricisms are about flows, productions, processes, forces, and differences – transcendental empiricism is not governed by a set of laws and relations as logical empiricism is. In other words, the world is not out there waiting for us to discover and write about; it is in a constant process of becoming through relationships of which we (humans) are already a part of and can’t stand outside of, hence, knowing/be(com)ing/doing.

MacLure (2013) writes about representation, language, and materiality in research practices. She argues that

the critique of representation as the dominant image of thought is a key element of Deleuze’s philosophy. For Deleuze representational thought is ‘sedentary’, categorical and judgmental. It is the enemy of difference, movement, change and the emergence of the new.

(p. 659)

Therefore, in a transcendental empiricism, the goal of research is not to separate, bind, restrict, categorize into themes, and/or classify the meaning of humans through language and representation. It is a much more ‘wild’ empiricism open to experimentation, thinking the unthinkable; resisting the myth that language can represent a stabled, binary world; and imagining (new) relationships of humans, nonhumans, and more-than-humans in how the world comes into being.

Subjectivity as assemblage and/or entanglement

Within PQI there is an assumption that resists the subject/object divide, and in doing so, calls into question the notion of subjectivity. Resisting this binary so prevalent in educational research demands that we acknowledge, for example, that as human subjects (e.g., researchers) we are not able to stand outside the objects (e.g., participants) we research. It is a false sense of reality to believe that we can do so. Post-scholars theorize about subjectivity in different ways, conceptualizing new terms and language for how we might imagine new relations and resist the binary of subject/object. For example, Deleuze and Guattari (1980/1987) write about assemblages as a way of conceptualizing and analyzing social complexity by emphasizing multiplicities, fluidity, and ever-changing ways of be(com)ing together. Assemblages aren’t *things* but rather *processes* of working with (and changing) other becoming assemblages. This ontological orientation does not rest on a fixed or stable world, rather social relationships are assemblages of complex configurations which extend and shoot off in various new directions and relationships, rhizomatically. This orientation of social relationship causes us to question subjectivity. Who or what is a subject if always already in relationship to others? Or if the very act of being (existence in the world) comes from a relationship, a becoming assemblage, then subjectivity is not of one (a subject) operating with others (objects) but rather ontological, becoming relationships. Assemblages are a different way of conceptualizing the mutually constitutive relationship of subjects ↔ objects.

Barad (2007) also writes about subjectivity, more explicitly in relation to humans, nonhumans, and more-than-humans, specifically from her studies in the fields of quantum physics, feminist theories, and philosophy. Her theory, agential realism, states that the world comes into being through intra-actions (she created this word to symbolize the active relationship between humans and other material beings instead of *interaction* which is rooted in logics of humanism). “Agential realism is an epistemological, ontological, and ethical framework that makes explicit the integral nature of these concerns” (Barad, 2007, p. 32). Barad theorizes relationships as entanglements. Within quantum physics entangled particles remain connected even when they appear to be separated by distance. The actions of one particle e/affect others and therefore the whole of the particles cannot be reduced to individual particles. The concept of entanglements is useful as it helps us to think of the whole, relationships of subjects/objects, not pieces or individuals but rather in affectual (and effectual) relationships with one another; the be(com)ing of one is intricately connected or tied to the be(com)ing of others.

Assemblage and entanglement are two ways we can begin to (re)conceptualize the relationship between/among subjects-objects and therefore, rethink subjectivity in our research practices. This shift in conceptualizing subjectivity also shifts how we think about agency. Post-humanist scholars, specifically early childhood and literacy educators, are writing about how agency is rethought with these (new) ways of conceptualizing subjectivity (see Hultman & Lenz Taguchi, 2010; Kuby & Gutshall Rucker, 2016; Kuby et al., 2017).

Ethico-onto-epistemology: a relational view of the world coming to be

Each of the previous ‘big ideas’ discussed all point to a relational ontology or a way of seeing the world come into being through relationships – flatten or nonhierarchical relationships – among/between humans, nonhumans, and more-than-humans. Barad (2007), Lenz Taguchi (2010), and our work (Kuby & Gutshall Rucker, 2016) discusses “relational comings to be” as ethico-onto-epistemology. Barad writes that knowing and being cannot be separated, we come to know through our being in the world and therefore, there is an ethical relationship; we have a response-ability (i.e., the ability to respond) in how we respond to others in our daily assemblages and entanglements. Ethico-onto-epistemology is justice oriented as it calls us to question our relationships: who and what we are entangled with daily, in-the-moment, and what our responses will be. How might one in a literal, practical sense put to work or *do* research in an ethico-onto-epistemological way?

When one reads post-theories deeply, one’s thought is provoked, shattered, shocked into doing research otherwise. Snaza and colleagues (2014) write that we must

move from a theoretical critique of knowledge as a symptomatic foreclosure of non- or inhuman relations or *meaning* toward articulations of what we might call for lack of a better term, new research methods. The ‘methods’ of curriculum studies [and in our case literacy studies] – like the methods in every existing institution disciplining thought – presume the human. That is, we tend to practice forms of inquiry and interpretation developed by the humanities or social sciences. This is an enormous problem, one that we cannot sketch in detail here, but we have already hinted at its major stakes: the ways such methods rely upon distinctions between knowing subjects and ‘known’ objects. Posthumanist thought must abandon this distinction. We need to think about how meaning is generated *among* subjects.

(p. 51, emphasis in original)

Meaning generated among bodies. Between bodies. Togetherness of bodies. And I am thinking of bodies as human, nonhuman, and more-than-human as well as linguistic bodies, cultural bodies, political bodies, racial bodies, gendered bodies, and so forth. These are thoughts that we need to think about as literacy scholars. Instead of focusing on a human and what (it appears) they do to an object (paper, pencil, book, computer), we could reorient our thinking to what is be(com)ing. How are the child, paper, and pencil coming into writing together? How are the child and iBook coming into reading together? How are the child, augmented reality app, and future users coming into literacies together? What are these assemblages and entanglements producing now (and in possible futures)? What is our response-ability in these entanglements? How are we be(com)ing-with them?

Returning to the opening vignettes of animal research in Tara's classroom; instead of thinking about what Billy (and peers) did with tape and paper to create an iceberg; the meanings of the iceberg for the play and their knowledge about penguins. We could instead focus on the carpeted floor, chairs, black pants and shirts, blue and white paper, the bodies of all the other peers crowding around, physical space in the classroom, Tara, students' understandings of 'doing school' in Room 203, and the languages that children spoke all working with each other in creating a new whole (an entanglement). A new moment in space, time, and mattering together that isn't recognizable separate from each other, but only in relation to each other as they all became the penguin skit. What was produced when the chairs, large paper, and human bodies worked together? What in-the-moment decisions were made that were unexpected or diverged from their rehearsals because of new bodies (human and otherwise) in this large entanglement? And then, how does one go about researching these inquiries? We have found ourselves often stuck, swimming in moments of research stuckness. We have learned that research stuckness is uncomfortable and doesn't feel so good at first. However, as we've leaned into stuckness; let ourselves read dense, confusing texts and gave ourselves permission to not understand; and resisted the urge to do research the ways we've done before – we've found energy, newness, and hope. These pauses, moments of stuckness shoot us off in new directions as researchers-teachers.

We've found solace in the concept of research as wild or untamed, as Olsson discusses. Or as Mirka Koro-Ljungberg writes about methodologies without methodology. St. Pierre (2016) beckons us to reconsider how we go about preparing doctoral students, and in doing so, incites faculty members to also rethink research practices:

research training too often gets in our way, prevents us from recognizing the 'new' that is always already there in the world, and shuts down futures that might be. . . . Perhaps we could focus less on repeating existing methodologies and more on calling them into question. . . . Would educational researchers be willing to forgo methodology for the possibility of an unpredictable future-to-come, one that is not foreclosed by repetition of the same? . . . What would it be like not to know what to do next, and then next, and next when one inquires?

(pp. 2–3)

This is the (exploratory) aim of this chapter.

Research as becoming-with:⁴ methodologies without methodology

To realize, in fact, that we are always already entangled in inquiry, that there is no beginning.
– (St. Pierre, 2017, p. 29)

How might one in a literal, practical sense put to work or *do* research in an ethico-onto-epistemological way? If one believes in the philosophical assumptions discussed previously, how does one enact or embody with the ever-changing research assemblages (processes) one is a part of? My scholarship has begun to explore these questions specifically in relation to how data is produced, how we write-up transcripts, how we do analysis, and how we (re)present, given the limits of language. Next, I share philosophical and theoretical ideas that have inspired me to experiment with research, in an effort to untame it. Specifically, I discuss philosophical and/or theoretical concepts in scholarship that has helped me to un-learn or re-think methodologies and methods. I share examples from my own work as well as other scholars putting into practice these concepts. In an effort to make my thinking transparent, I ‘think aloud’ about how I might *approach* research or *enter into the middle* with the literacies shared from Room 203. It is important to note, there isn’t one right way to do PQI. There isn’t a linear, pre-set formula, rather PQI is in a constant state of experimentation; it is an assemblage in a Deleuzian sense – flows, processes, becoming.

“Thinking with theory”: theoretical concepts becoming method(s)

Jackson and Mazzei (2012) are known for their book on *thinking with theory*. In this book, they take data produced from interviews with two first generation faculty members of color, and put it to work with several post-theorists. They state that they are attempting to work *against* and *within* interpretivism at the same time. In the chapters, they define several schematic cues (theoretical concepts) from a theorist, and show them at work when thinking with interview data. This working-with-theory-data produces new questions (they call these emergent analytical questions), insights, and ways of thinking about the experiences of the two women. Jackson and Mazzei’s (2008) earlier edited book, also questions voice and the long-held assumptions of voice as a (pure) reflection of reality. Therefore, when reading the interview transcripts of these two women, they don’t approach them as pure representations of an external other reflecting on their experiences in the academy, but rather a part of an assemblage that is in-the-moment be(com)ing.

Thinking with theory(ies) is an essential way that I think about research. Rather than take a theory and apply it to data;⁵ thinking with theory forces me to become with data and theory – an assemblage of newness being produced while I think-with. For example, in our book (Kuby & Gutshall Rucker, 2016) we outlined eight theoretical concepts from poststructural and posthumanist theorists, defined these schematic cues, and put them to work with data produced in Writers’ Studio. Thinking with these theoretical concepts produced new ways of defining literacies, thinking about pedagogies, and creating research.

How might thinking with theories help us to see otherwise or enter a new threshold with one of the earlier vignettes? I could approach the Jellyfish-Nick entanglement with two schematic cues and put them to work with the data produced (i.e., video clip) to see what analytical questions might emerge and new insights about literacies. Let’s think with posthumanist agency and intra-action. Agency is defined as a force emerging *between* people and materials, not residing solely in humans (see Barad, 2007; Kuby et al., 2017). Agency is what happens in the togetherness of multiple bodies, when they are assembling and creating newness. Intra-action comes from Barad’s (2007) writing on the process of iterative and mutual constitution. Intra-action includes more than just human-human or human-object interaction; it is the entanglements, the “joins and disjoins” of humans, nonhumans, more-than-humans, time, space(s), materials, and so forth (Barad, 2013, p. 18). As I work these theoretical concepts with Nick-Jellyfish data new analytical questions emerge, such as: What is joining and disjoining

Nick-Jellyfish-Paint-Balloon-Brush-and . . . and . . . and . . .? And what does this (dis)joining produce? How is the enacted agency between Nick and jellyfish materials changing what becomes (i.e., the artifact of jellyfish but also relationships with peers, Tara, and knowledges about jellyfish)? How do the glue, paint, papier-mâché ball(oon), brush, flat surface of the desk, and Nick intra-act together to produce agency with each other? How does this “speaking back and forth” or these relationships shape the be(com)ing jellyfish?

**“To think is to experiment”: Deleuze and Guattari’s distinction
between knowing and thinking**

Drawing on Deleuze, Smith (2012) writes that:

[t]hinking is never the result of voluntary will, but rather the result of forces that act upon us from the outside: we search for ‘truth’ and begin to think only when we are compelled to do so, when we undergo a violence that impels us to such a search and wrests us from our natural stupor.

(p. 143)

What forces us to (re)think about literacies? To (re)think how we go about researching? *Knowing* (your research topic) is different from *thinking* (your research topic). Smith (2012) helps us to see how Deleuze and Guattari distinguish knowledge from thinking:

“*Knowledge* is only the result of outcome – it is the establishment of a territory, a competence or specialization; but *thinking* is a process of learning or apprenticeship that is initiated by one’s encounter with a problem” (p. 143, emphasis in original). What problems are you encountering about literacies? What is forcing you to think? To feel (research) stuckness? Why does it seem research needs to be about *claiming to know* something rather than about *thinking*?

Deleuzian notions of experimentation has shocked or provoked my thoughts on research. Thinking “means to experiment” (Deleuze, 1986/1988, p. 116) and “to create” (Deleuze, 1968/1994, p. 147), and so, therefore, research is about creating and experimenting not plugging in to ready-made recipes of research methods. “For Deleuze”, Smith (2012) explains, “the misadventure that constantly threatens thinking is not error or falsehood, but stupidity (clichés, ready-made ideas, conventions, opinions . . .)” (p. 142). What are the ready-made ideas of how literacy research should be done? How might these opinions and conventions threaten newness? Thinking?

For example, in my work with Tara we’ve tried to (re)think how we (re)present intra-actions in her classroom on paper. In other words, what might a transcript look like when working with post-theories? Instead of doing what we *know*, we *thought*. We resisted ready-made ways of transcribing and instead were playful, creative, and experimented with fonts, margins, symbols, and punctuation (see Kuby & Gutshall Rucker, 2016; Kuby et al., 2017). Our point is not to (re)present what happened during Writers’ Studio, but rather create an experience for readers to feel a part of a (re)presentation from Writers’ Studio. We want it to feel messy, uncertain, and entangled as that is what we are trying to show about literacies in Room 203, as we think with post-theories.

How might we think with Gigi-Hummingbird? What new ways of researching might be invented? What would field notes look like if one assumes you (the researcher and your apparatuses such as camera, notebook, etc.) are a part of the entangled assemblage of Gigi-Hummingbird

be(com)ing? How might you experiment with ways of (re)presenting the becoming assemblage? Instead of solely writing down human talk, how might you also consider what else is 'speaking'? What else is a part of the enacted agency of Gigi-Hummingbird be(com)ing? How might you (re)think subject/object binaries? How might you go about writing-up this intra-action for a manuscript? How might you resist your ready-made ideas and conventions of how to do research when entering the Gigi-Hummingbird becoming assemblage? Think. Experiment. Create.

Creating concepts: philosophy as art

For Deleuze and Guattari, (philosophical) concepts are doings, ways of thinking, be(com)ing. As they write:

philosophy is the art of forming, inventing, and fabricating concepts . . . the object of philosophy is to create concepts that are always new. . . . Concepts are not waiting for us ready-made, like heavenly bodies. There is no heaven for concepts. They must be invented, fabricated, or rather created and would be nothing without their creator's signature.

(Deleuze & Guattari, 1991/1994, pp. 2 and 5)

In this way, philosophers are creative as artists. In the same spirit, I sought to think about and with my experiences in Writers' Studio as a way to be open to the possibilities of newness, new concepts that would challenge me to think about literacies, differently. What if I took an everyday concept and put it to work with data as a theoretical concept? As a way to (re)think about literacies?

For example, when trying to understand posthumanist notions of agency we worked-with data from Katie creating a 3D personal narrative cabin (Kuby et al., 2017). We noticed that Katie *and* materials were persistent with each other. Therefore, we created the concept of persistence(ing) as a way to think creatively about posthumanist agency. What concept might we create to think anew about literacies in the Octopus-Rebecca example? What if we took the everyday concept of 'revise(ing)' and created new ways of thinking about it within a post-humanist orientation? What new insights might be produced when we expand or (re)create the concept of revise(ing) to include the agency of all bodies in the becoming assemblage (i.e., papier-mâché orange ball(oon), yarn, tape, fingers, paper towel roll, pipe cleaners, play-dough, glue, and . . . and . . . and . . .)?

Diffraction: reading concepts and data through one another

Donna Haraway and Karen Barad's writings on diffraction has inspired researchers to approach inquiry with diffractive practices. Diffraction is what happens when waves (e.g., water, sound, and light) encounter an obstacle causing the waves to bend, spread out in a new pattern, and overlap when they encounter one another. Diffraction produces newness.

PQI scholars have taken this notion of diffraction and put it to work in their inquiry processes (St. Pierre & Jackson, 2014). Specifically, scholars diffractively read theory(ies) (and/or data) *through* one another, sometimes with theoretical positions that are not often put to work together. Van der Tuin (2011) explains,

the diffractive method allows us to affirm links between seemingly opposite schools of thought, thus breaking through a politics of negation. At the same time, it allows us

to affirm and strengthen links between schools of thought or scholars that only apparently work toward the same goals. Diffraction, then, is the strategy with which new concepts or traditions, new philosophies, can be engendered.

(p. 27)

What might be produced if we read New Literacy Studies *through* posthumanism? Or critical socio-cultural theories *through* poststructuralism? What newness might be produced? New literacies? New ways of inquiring? New teaching? For example, in a special issue of the *Journal of Early Childhood Literacy* (Kuby & Rowsell, 2017), several authors put to work diffraction as they read scholarship on race and class *through* posthumanist notions of agency (e.g., Thiel & Jones, 2017).

How might diffraction inspire new ways of inquiring about Nick-Ella-Emily-Panda Bear? Could we read this assemblage *through* New Literacy Studies and *through* posthumanist concepts of intra-action and agency? What newness might be produced? Or could we read the panda-making *through* the panda-sharing? What was being produced while they worked-with-materials? What was being produced as Emily shared with the class the habitat and new learning about pandas? How might encountering obstacles as researchers and teachers – encounters with data and theories that cause practices to bend, spread out, overlap – change how we think of literacies?

Ethico-onto-epistemological inspirations for multi- and digital literacies

We can only know things by the relations into which they enter, by the contacts they forge, and effects they are able to produce. To put this in another way, we cannot predetermine or know beforehand what will materialize from the relations entered into, nor can we predetermine the relations that will be entered into (this is an emergent praxis that is similar to Haraway's [2008] notion of becoming with).

– (Snaza et al., 2014, p. 47)

A posthumanist or material turn has been a part of the larger social science community for years, and it is seeping into literacy education. With this shift, it is important that we read deeply. Philosophy, paradigmatic tenets, theory, and methodology are all entangled and force researchers to consider *how* (and why) they are putting them to work. Wrestling with methodological questions honors the philosophical thinking and rigor of posthumanism.

Scholarship that focuses on a relational view of the world coming to be (humans and nonhumans) forces one to (re)think research practices. We have to (re)think empiricism, binaries that too often materialize in our research practices, subjectivity and agency, and (re)presentation. If we believe we have a response-ability as Barad discusses or the ability to respond in the be(com)ing assemblages we are a part of, then there is an ethics to this work. This is about the in-the-moment relationships, the realities produced when children are entangled with languages, digital tools, teachers, literacies, art supplies, texts, curricular objectives, peers, assessment practices, and . . . and . . . and . . . This relational ontology doesn't (solely) focus on a future to come (or that might come), but on the realities being produced now and how we are a part of that production (i.e., our response-abilities).

Drawing on the work of Isabelle Stengers, Snaza and colleagues (2014) argue for a new and different kind of science for curriculum studies and I believe the argument holds true for literacy studies.

What makes a science a “science” for Stengers, is that it seeks ways to let its “objects” speak or become the subject. The “what” of the study must be able to participate, to *surprise* the researcher. When a researcher decides in advance what will be taken into account and how the “findings” will be presented, surprise is impossible. All that can happen is “confirmation” or “disconfirmation”. The system is entirely closed. We need an open science, a science that is not afraid of remembering the cultural-political-historical construction of science within humanist networks, a science that will go beyond science as we know it toward helping us think the *meaning* of the disavowed relations in which we are always already entangled. These relations involve humans, animals, machines, and things . . . we are at the dead end of humanism, and now, together, we have to burrow in other directions.

(p. 52, *emphasis in original*)

How might you (we) open the system(s) of literacy research? The science of literacy research? I end with a quote by St. Pierre (2015) inspired by Foucault:

For Foucault the new is not at all what is in fashion, but rather what we cannot yet see or say in what is happening in us just because it is not already contained in the . . . given [structures] that govern what we can think. We can't see the new because we're limited by the structures of the present, and we have no language yet to say it . . . pre-existing structures normalize our thinking and produce 'minds in a groove', but experimentation can help us move out of the grooves of the normal and self-evident.

(p. 20)

Take a risk, experiment to move us (literacy educators) out of the grooves.

Notes

- 1 I experiment, in a Deleuzian way, with (re)presentation and language in an effort *to write with* theories and philosophical assumptions of post-theories. The use of slashes, hyphens, parentheses, and double arrows signal the mutually constitutive relationships *between* humans, nonhumans, and more-than-humans. All student names are pseudonyms.
- 2 Candace authored this chapter and therefore many statements are written with “I”. However, “we” and “our” is also used in the chapter to signify and acknowledge the collaborative teaching/researching partnership with Tara Gutshall Rucker. Our research meetings and thinking together since 2010 heavily influenced this chapter.
- 3 Be(com)ing signals that knowing/be(com)ing/doing cannot be separated; knowing, being, becoming, and doing are co-constituted.
- 4 Inspired by Haraway's (2008) writing on becoming-with.
- 5 See Jackson and Mazzei (2018) for a discussion on how they conceptualize thinking with theory different from applying theory.

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