What Can “inclusion” Mean in the post-human Era?

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Abstract

A humanist orientation has been foundational to recognizing the educational rights of students with disabilities and for ensuring access to mainstream schooling experiences. Humanism has also produced fissures within the scholarly community about what constitutes “best practices” for students with disabilities. This paper is a preliminary exploration of the affordances of posthumanism to deepen our understandings of inclusion. Weaving examples from schools, I examine posthumanist orientations that recognize material and non-material, human and non-human bodies as entangled in arrangements produced by/within particular relations with each other. I use data from schools to illustrate forms of reading stimulated by a posthumanist stance. I conclude with implications for the ethical commitments of inclusive education scholars and a call for becoming posthuman humans in our efforts to advance inclusion.

Keywords
disability studies – teacher education – inclusion – posthumanism

1 What Can “inclusion” Mean in the post-human Era?

The fundamental premise of inclusion has always been humanist. This is not surprising given the history of dehumanized and exclusionary practices that have dominated approaches to disability in the US and around the world (Blatt and Kaplan 1974). As a humanist orientation, inclusion privileges human traits (thought, capacity, sense-making), recognizing a common humanity that transcends differences in life-experiences. Humans are understood as carrying the potential to individually make sense of, and transform, their worlds. Not
surprisingly, even as the conceptual foundations for an inclusive education continue to invoke debate and dialogue (Danforth and Naraian 2015), there is a generalized consensus that inclusion calls for schools to celebrate our humanity. This means that schools should actively support a culture where student differences are embraced; that educators recognize the marginalized position of students with disabilities and their families in schools, and understand their unique needs; and, that personalized supports be provided so that students can successfully make social and academic gains in schools (Lawrence-Brown and Sapon-Shevin 2014). A humanist orientation has been foundational to recognizing the educational rights of students with disabilities and increasing their opportunities over time to participate in the mainstream life of schooling communities (Osgood 2005).

Humanism has simultaneously produced fissures within the scholarly community about what constitutes “best practices” for students with disabilities. Some practices are understood as dehumanizing, while others are not (Cox, Villegas and Barlow 2018; Shyman 2016). Again, this is not surprising—the shared privileging of human experience in the formation of knowledge does not mean that all epistemic positions are equivalent (Badley 2018). The desire for a plurality of epistemological orientations to disability and inclusion within the field of inclusive/special education notwithstanding (Baglieri, Valle, Connor and Gallagher 2011), humanism as an underlying premise of such orientations will continue to surface points of friction in how we approach inclusion. Of course, this is not necessarily bad; indeed, it is a mechanism to continually monitor how our epistemological orientations are consonant with our values for equity and justice for students with disabilities and their families.

Yet, counterintuitively, the exclusive centering of human agency/capacity can also produce effects that obstruct efforts towards inclusion. It places enormous onus on students with disabilities to produce the results that can then warrant a program of inclusion; it places an equally heavy burden on educators to deliver the many changes that will transform inaccessible schooling spaces into welcoming spaces; and, it poorly acknowledges the capacity of schools as constrained by state and federal policies and legislation relating to standardization and accountability. Additionally, the “self” implied within such humanist expectations is drawn from an Enlightenment project that alongside a celebration of democracy and liberty, presumes a white, Western, male, middleclass/bourgeois position (Plummer 2011). Such an orientation runs the risk of erasing the ways of knowing and being brought by the many students with disabilities from minoritized communities who populate our public schools.

The origins of this Enlightenment “self” on which humanism is grounded, has also come under critique. Scholars, whose work has been loosely brought
under the umbrella of new materialisms, argue that the humanist “self” is pre-
mised on the Cartesian separation of mind from matter, where the latter is
conceived as inert and passive (Barad 2007; Coole and Frost 2010). This distinc-
tion is reflected in the ways phenomena come to be represented in research.
So, regardless of the particular epistemological orientation (e.g., positivist,
postpositivist, or post-structuralist), representations of a phenomenon such as
inclusion (whether quantitatively or qualitatively arrived at), in its varied
forms, (whether graphs, concepts, or images), are seen to be ontologically sepa-
rate from the phenomenon of inclusion itself (Barad 2008). How we come to
know what is, is distinguished from what is. In other words, epistemology is
understood as separate from ontology. This has some implications for inclusive
education research: it positions researchers outside the phenomenon they are
investigating, rather than entangled with the way it comes to be. Even as such
entanglements remain unexplained, it extracts entities—texts, scores, indi-
viduals, schools, discourses—from the material conditions within which they
come to matter. Scholars have argued that this produces flawed understand-
ings of phenomena (Kuntz 2015).

Scholars in the field of social science research are increasingly question-
ing the limitations of the humanist position, and making the “posthuman”
turn within their epistemological orientations (Cole and Frost 2010). New
materialist scholars such as Barad (2007) argue for an “onto-epistemology”
where knowing and being are mutually constituted. For fields oriented to-
wards social justice such as the equitable education of students with dis-
abilities, it presents unique possibilities (Reddington and Price 2018). At the
same time, the reinvigoration of materiality afforded by post-human ontol-
ogy makes some scholars uneasy over the potential curtailment of human
agency (Anderson and Perrin 2015; Simonsen 2016; Brinkman 2019, 2016).
New methodological challenges have also been provoked (St. Pierre, 2011).
Still others seek a more “critical” or “complex” humanism (Badley 2018; Plum-
mer 2011). Amidst these currents, the purpose of this paper is to explore if a
posthumanist approach can deepen our understandings of inclusion. What
new ways of thinking about students with disabilities and schooling are
evoked through a “posthumanist turn” that can enhance our efforts towards
inclusion?

I begin with a brief overview of the complex relations between disability
and humanism/posthumanism. I follow this with an exploration of some key
threads within posthumanist scholarship that can influence our approaches to
inclusion. Subsequently, I use two examples from schools to illustrate the af-
fordance of posthumanist approaches. I conclude with an exploration of ethi-
cal implications for the field of inclusive education.
Relations Between Disability and humanism/posthumanism

Historically, disability has been oppressed by humanist thought even as it has also been always post-human (Goodley, Lawthon and Runswick-Cole, 2014). The history of intellectual disability in the United States and elsewhere, when institutionalization and eugenic practices of sterilization were routinized, testifies to the subhuman status that has been accorded to individuals with disabilities (Trent 1994). Additionally, practices such as craniometry and phrenology that directly linked humanist capacity (i.e. intelligence) to physical matter (physiological structure of the human body) were used to further cement their subhuman status (Gould 1991). Not only have humanist assumptions worked against disability, the materiality of such practices has also placed disability squarely within the human/post-human debates. Critics of new materialisms, Anderson and Perrin (2015) point to these practices to challenge the claim that humanism has privileged mind over matter; they argue instead that “humanism is not only now, but always was, a thing of this world” (p. 8).

The history of disability has complicated clear distinctions between the human and not-human (Murray 2017; Dolezal 2017). For Goodley, and Runswick-Cole (2016), intellectual disability operates on both sides of the human/non-human binary. On the one hand, it can “trouble, reshape and re-fashion traditional conceptions of the human” (p. 1) while on the other hand it can assert normative notions of the same. Specifically referencing people with intellectual disabilities, the authors argue that these groups have traditionally been denied the status of human. Their capability to exercise agency continues to be challenged legally as their rights as citizens are circumscribed and other fundamental human rights such of holding property, marriage, parenting, etc., remain vulnerable to state authority (Dhanda 2007). Their experiences expose the ideal of the rational, autonomous, bounded agent that underlie normative conceptions of what it means to be human. Repeatedly, stories of individuals with intellectual and developmental disabilities disclose, instead, the interdependence and heteronomy that marks their lives, troubling notions of capacity and agency that locate it solely within a bounded human body (Ferguson 2003; Simplican 2015).

Yet, at the same time, individuals with disabilities and their families have to contend with the “disability complex” each day (Goodley, Lawthon and Cole, 2014), whether it is the myriad faces of human service systems that require the documentation of incapability to initiate services, or the participation in “special” events to demonstrate their capabilities. This means that they have to adopt normative (humanist) notions of independence, agency and capacity, to prove that they are indeed able. Individuals with disabilities and their families...
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repeatedly attest to this movement across boundaries to both affirm the humanness of their children (they too have rights to education, sports, arts, etc.), while simultaneously signaling new ways of knowing disability, and by extension, human norms.

Even as disability thus complicates the basis of the human/posthuman debate (Anderson and Perrin 2015), nevertheless its posthuman character affirms the concept of life beyond fixed boundaries of the self (Goodley and Runswick-Cole 2016). The premise that a body is not a discrete autonomous entity, but is spread across other human and non-human elements is a routine experience for individuals with disabilities, their families and their educators (Dolezal 2017; Goodley, Lawthon and Runswick-Cole, 2014). Teachers seeking to ascertain a student’s access to mainstream curricular experience recognize that the “body” of the student with disabilities may be extended by numerous material/non-material attachments that might include prosthetics, assistive technological devices, medical technology, support animals, as well as para-professionals, nurses and other support workers. Still, this may be insufficient to characterize disability as a posthuman experience; such a “naive” posthumanism presumes a lack within the human who has to be made more powerful, physically or cognitively (Goodley, Lawthon and Runscwick-Cole 2014; Nayar, 2014). This form of posthumanism does not question the normative human self—what constitutes a human life? I turn now to explore how a critical posthumanism (Nayar 2014) can destabilize normative categories of human experience.

3 Post-humanist Orientations for Understanding Inclusion

If humanism is premised on a rational, self-aware, autonomous subject, a critical posthumanism (henceforth, simply “posthumanism”) raises the question of what it means to be human in an age of “technological modification, hybridized life forms, new discoveries of the sociality (and ‘humanity’) of animals and a new understanding of ‘life’ itself” (Nayar 2014: 3). World-wide events since the late twentieth century including human-made and natural disasters have provoked a challenge to the sovereign status of anthropos—the human—as situated above all other species and the environment (Braidotti 2017; Coole and Frost 2010; Nayar 2014). Acknowledging that this is not a monolithic body of work, post-humanist thought generally challenges such anthropocentricism and seeks instead to dismantle the rigid boundaries that separate the human from “plants, animals, insects, environment and the cosmos as a whole” (Goodley and Runswick-Cole 2016). According to Dolezal (2017),
posthumanism “undermines the conception of the sovereign human as a singular, self-contained consciousness operating with universal rationality and unquestioned dominion over the world” (2017: 60). As a site of infinite possibility of human-machine-animal-plant assemblages that registers its fluid and changeable character, the posthuman figure produces new meanings of difference (Dolezal 2017).

A full and thorough discussion of posthumanisms is outside the scope of this article. For the purposes of this paper, I focus on posthumanism’s non-anthropocentric ontology that addresses how humans and non-human entities come into being (Simonsen 2013). To illustrate that posthumanisms “move towards material ways of thinking and being” (Ulmer 2017: 836), I draw on the body of work closely associated with post-humanisms and loosely categorized as “new materialisms.” My goal is to emphasize that posthumanist research produces “situated, material, interconnected, processual and affirmative knowledges” (Ulmer 2017: 836). By positing alternate ways of understanding our efforts towards inclusion stimulated by such research, I seek to establish the relevance of this work.

4 New Materialist Ontologies

Materialism has been typically associated with empiricist orientations that center the senses in coming to know or understand phenomena (deFreitas and Sinclair 2013). In keeping with the Cartesian mind-matter division, matter has been seen as a discrete, bounded measurable entity that is inert, and whose movements can be reliably controlled and predicted because they follow Newtonian laws of motion (Coole and Frost 2010). Post-humanist work revives the significance of matter, but in different and more complex ways. In the new materialist re-assessment of materiality within analyses of phenomena, matter is conceptualized not as inert and opaque, but as a constantly forming and re-forming agency; it suggests matter as “becoming” rather than something that “is” (Coole and Frost 2010). New materialist writers such as Barad situate their re-working of the status of matter within a quantum physics that calls for confronting “conditions for the possibility of objectivity, the nature of measurement, the nature of nature and meaning making, and the relationship between discursive practices and the material world” (Barad 2007: 24).

Though the earlier presumed naïve materialism gave rise to the “linguistic turn” in social science research, scholars have become increasingly restless with the excessive power given to language (Alaimo and Hekman, 2003). There is a growing recognition that discursive insights are by themselves insufficient
and that the complexity of our times requires a “theoretical rapprochement with material realism” (Coole and Forst, 2010: 6). New materialist writers point to material phenomena such as global warming, biotechnological developments or advances in genetics to show that rigid distinctions between physical and biological systems are no longer viable, challenging how life itself can be configured and problematizing notions of the human as a discrete organism (Coole and Frost, 2010). The separation of natural and social/cultural or material/discursive, then, can no longer be sustained (Barad 2007; Anderson and Perrin, 2015).

For inclusive education research, this means that school-based phenomena cannot be explained by either an empiricist logic or via a social constructionist logic. An explanation of a student's learning disability that emphasizes the meanings attached to this label within school and society may be as incomplete as a description derived from her reading scores on a standardized test. A materially informed analysis instead, would consider how discourses of reading proficiency and scores were co-constituted in the intra-action (Barad 2007) with this student's embodied encounters with the teacher, the text, her peers and the site of the school; each is seen as affected and being capable of affecting the other (Delanda 2006). Alternatively, whether it is the discourse of learning disability or the particular student's test scores or the school curriculum, each materializes or comes to matter via the intra-activity that produces the “bodies” of the school, student, teacher, text and/or reading curricula (deFreitas and Sinclair 2013). Meaning and matter are entangled within an “onto-epistemology” where all entities co-exist in a relational materiality (Barad 2008; Kuntz 2015).

A new materialist approach then, does not privilege human bodies; all bodies, including non-human ones, evidence capacities for agency. Multiple forms of matter can be “bodies,” as in the “body” of special education, the “body” of a communication device or the “body” of a curricular text, alongside the body of a student or parent or teacher. This approach acknowledges the human agent, therefore, as one of many entangled material and non-material agencies within arrangements that collectively constitute a phenomenon (Barad 2007; Coole and Frost, 2010). Phenomena are produced through such arrangements or “apparatuses of bodily production” (Barad 2008: 135) where human and non-human entities take form and the boundaries between them are made determinate. Apparatuses are open-ended arrangements of mutually constituted entities.

This, then, is a relational ontology where things, ideas, and humans take form only in relation to each other. Words and things have little meaning outside the intra-activity that constitutes the phenomena. Concepts such
as “inclusion,” then, are not merely abstract ideas; instead, they are actual material-discursive arrangements of bodies and objects that are co-constituted in their intra-action with each other. Within this posthumanist framework of relationality and connectivity, “everything and everyone continue to remain in motion” (Ulmer 2017: 837). This means that the phenomenon of inclusion will assume a different character at different times and different places. The relations between the “bodies” of students, teachers, texts, policies, evidence-based instruction, resources, etc. that give each a particular form within a school at a certain time/space will produce an “inclusion” that varies from an assemblage that marks a different school setting, space and time. This is largely because what materializes or comes to matter in intra-activity is never fully predictable—“intra-activity is neither a matter of strict determinism nor unconstrained freedom” (Barad 2008: 143).

Posthumanist research production is always partial and situated. The researching of the phenomenon of inclusion itself requires the investigator to make boundary-making cuts that creates the apparatus of knowing (Taguchi and Palmer 2013) and which comes to constitute the phenomenon of inclusion within a particular context. For example, a researcher’s particular orientation to teaching-learning (for e.g., constructivist, positivist, post-positivist) and background knowledge of the topic partially produce particular kinds of students and teachers within a setting. In my exploration of teachers’ work (Naraian 2008), the unacknowledged trope of change agent that informed my understanding of inclusive education practices oriented me to my teacher-participant in certain ways. I discerned her as a particular kind of teacher (caring yet authoritarian) such that, alongside other entities such as school culture, family demographics, district policies, her classroom took form as both “inclusive” and as reliant on notions of “normalcy.” A different “agential cut” might deliver an apparatus of knowing where in relation to other “bodies”, the same teacher may be marked differently, perhaps as “ineffective” in producing desirable student achievement outcomes.

In that regard, a new materialist approach is an affirmative one (Coole and Frost 2010); it does not pit one theory against another, but instead calls for each to be read through and into one another. It compels us to ask, in this instance: What insights about teacher capability for inclusion may be produced when reading competing understandings of the learning needs of children alongside and/or into each other? Alternatively, to understand how a student’s reading scores come to matter within the intra-activity that constituted inclusion in a school building, a researcher might use insights from a social constructionist view of learning difference alongside the record of the student’s scores obtained through summative assessments. Neither the discourse of learning
disability nor the materiality of test scores have primacy within this assemblage of entities that constituted the phenomenon of inclusion. Instead, they have to be read through each other to allow for the multiple interferences that constitute inclusion at any moment in time.

In the following section, I explore how the concept of assemblage presumed within posthumanist research can deliver productive understandings of inclusion.

5 Inclusion as Multiple Overlapping Assemblages of “bodies”

“Assemblages are porous and partially closed differential systems that are never entirely cut off from the chaos (pure difference) that surrounds them, but they are differentiated from it by degree, as though they were contractions of intensity or energy.”

DeFreitas & Sinclair 2013: 458

As noted in the previous section, the new materialist ontologies within posthumanist orientations recognize material and non-material bodies as entangled with the human body in arrangements emerging from particular relations with each other. The effect is to “deprivilege the human body as a discrete organic thing” such that “the body does not end at the skin” (Puar 2012). This requires that we understand each “body” as exerting an agentic force within the arrangement of human and non-human bodies, that constitutes a phenomenon, in this case, inclusion. The “body” of each agency within an assemblage—evidence-based practice, assessments, families, the student, discourses of learning, curriculum, the teacher, and the researcher, among others—comes to be known through entanglement with each other. This means that the primary unit of analysis for the researcher is not individual bodies or objects which are only constituted in intra-action; rather, it is the phenomenon, in this case, inclusion (Barad 2008).

Assemblages, then, are material-discursive arrangements of people, events, ideas, and things that are always in a state of flux. The phenomenon of inclusion produced via principals’ measures towards special education reform in an affluent, mostly white, school community, may differ vastly from how those measures produce inclusion in a largely working-class community of immigrants of color where different priorities, resources and discourses of learning circulate (Naraian, Chacko, Feldman and Schwitzman in press). On a different plane, how a teacher’s efforts with a particular group of students promotes inclusive practice may vary when other parts of the assemblage (e.g., a co-teacher,
family community, curricular texts) change (Naraian 2010). Each assemblage(s) is an “open set of unstable relations” (Ferrara and Ferrari 2017: 23) between human and non-human bodies that “co-evolve” (Nayar 2014). It is because of this continually shifting nature of the relations between “bodies,” that phenomena can never be fully predictable; they are always open-ended and subject to variation at any point in time. The concept of assemblage surfaces the ontological inseparability of all agents—human and non-human—in the phenomenon of inclusion. In other words, students, teachers, schools, disability, evidence-based practices, and research, do not exist a priori, but come into being with/alongside each other. Bodies and objects materialize contingently as each interacts with the environment (Simonsen 2013).

This means that agency is “cut loose from its traditional humanist orbit,” (Barad 2008: 144). A teacher’s capacity to teach inclusively, for example, cannot be attributed solely to their position as an individual agent in their setting. Such capacity remains entangled with other material and non-material bodies within the material-discursive arrangements that constitute “inclusion” in that setting. An entity within one assemblage may affect and be affected by other entities differently, within other assemblages (Delanda 2006). Said differently, a teacher’s capacity to teach inclusively may be performed differently within different configurations of people, things and ideas. Additionally, new materialisms adopt a phenomenological approach to embodiment whereby the body exerts a corporeal force; it does not presume the primacy of a self-conscious, thinking consciousness (Coole and Frost 2010). “New materialism rescues the body, so to speak, from a theory of discourse that denied its materiality, in order to grant the body some measure of agency and power in the making of subjectivity” (deFreitas and Sinclair 2013: 460). Individual capacities, then, are always embodied phenomena; they do not reside either solely in the mind or in the body.

Inclusion, as school practitioners know, is always already entrenched in the material conditions of its enactments. Building on a theory of assemblage, we can imagine an “inclusion complex” wherein the entanglement of curricular texts, federal and state laws, district policies, financial and personnel resources, health care, housing, to name a few, create many different assemblages within which “inclusion” comes to be. Through the boundary-making “cuts” we make, we define the scope of the apparatus of knowing that we are using in order to understand inclusion (Barad 2008). Doing thus simultaneously makes two important assumptions: firstly, such cuts may be made differently by other investigators, and secondly, that the bodies that emerge may take form differently in each investigation. In other words, bodies and objects can never be finalized or fully explained within a single apparatus of knowing. Indeed, new materialisms
call for researchers to read their results into and through other findings to continually expand meanings suggested by a singular reading of the data (Barad 2007; Taguchi and Palmer 2013; Jackson and Mazzei 2011).

If bodies and objects materialize differently within multiple assemblages that produce “inclusion,” it problematizes universal understandings of concepts and categories. Whether disability, race, gender or whether parent involvement, self-determination, or behavior management, the meanings of these organizing concepts/categories may not be self-evident and cannot be presumed to have a universal character. These are “bodies” that are constituted within different assemblages whose relations with each other can never be fully predicted. Each category of experience comes to materialize differently within the “inclusion complex” of multiple overlapping arrangements of material and non-material bodies, producing phenomena that can never be fully predicted.

How can the concept of assemblage within a new materialist ontology advance the ways we come to research and understand inclusion? In the next section, I draw on posthumanist orientations described in the preceding pages to illustrate more deeply how they might be employed to “read” efforts towards inclusion in schools.

6 (Re)assembling Inclusion

Delanda (2006) notes the unique feature of assemblages wherein a part can be removed from one assemblage and plugged into another. However, given that its interactions within a different assemblage may be realized differently, it will also exercise its own capacities very differently. In other words, bodies within one assemblage may behave very differently in another. In this section, I scrutinize data from studies that I have conducted to explore how bodies and objects surface within phenomena. My purpose is to illustrate how a posthumanist reading can be generative for understanding inclusive practices. Specifically, I begin with a focus on the “body” of disability and subsequently on inclusive teaching to surface the contingent materiality of all “bodies.”

7 Entanglements with the “body” of Disability

The attention to embodiment brought about by the suspicion of the Cartesian mind-body separation is particularly well suited to understanding disabled students’ experiences. Reddington and Price (2017) propose a pedagogy of new
materialism to “disrupt static medicalized notion of disability difference.” They draw on a “relational materialism” which is “a space in which non-human forces are equally at play and work as constitutive factors in children’s learning and becomings” (Hultzman and Lenz-Taguchi, 2010 cited in Reddington and Price 2017). This allows one to understand the individual body of the student as constituted alongside the non-material objects in which she is embedded, whether that is a sandbox, learning aids, communication devices, furniture or other materials. Such a pedagogy recognizes the body itself as an assemblage (deFreitas and Sinclair 2013), where curricular concepts (whether in mathematics, social studies, or literacy) are themselves materially grounded. Following deFreitas and Sinclair (2013), I am arguing for an approach that recognizes the “body” of content area knowledge, such as math or even special education, as forming an assemblage with the body of the student alongside the “body” of the learning tools/texts/materials, to create space for agency.

In the following example, I describe a high school-aged student with the label of intellectual disability, Maria, who used assistive technology in the form of software such as Co-writer™ and Dragon Naturally Speaking™ to complete her academic work. The study I conducted with Maria was to understand what benefits her assistive technology afforded in the development of her academic, specifically, literacy development (Naraian, Newhouse and Leeper forthcoming). I draw on this example even though, or perhaps because, Maria’s school setting was a self-contained building. I reasoned that this might allow us to imagine an assemblage that could produce a different phenomenon, i.e., inclusion. In a poem that she wrote with the aid of her technology, Maria describes her experience of writing; original wording and structure have been retained.

I tell someone to write for me because I can’t write anymore when I am in pain and I have to wait until my palms stop shaking and pounding the same thing happens with my legs the shaking and the pounding, Besides all that I have all my friends and my mom to help me get through it and I tell myself to never give up.

The materiality of Maria's writing disclosed in the lines above, co-existed with teacher discourses that described her as “lazy” and as “making excuses” to avoid writing with her hand, and as lacking the competency to complete academic tasks or to engage responsibly with her teachers. Most of her teachers’ orientation to her technology was ambivalent at best; they saw it as an external tool that could be manipulated to serve her on some occasions, while at other times she could be required to assume a “normal” personhood by using her “natural” bodily capacity—writing with her hand. The discourses of “laziness”
and incapacity circulating in the building attached itself to her technology marking it as marginal to her learning. However, technology produced bodily effects on Maria that could both release her from the physical pain she experienced while also evoking excitement as she participated in online writing communities such as Wattpad (www.wattpad.com), or in student-led conferences where she gained affirmation of her “access-knowledge” as a user of assistive technology (Hamraie 2017).

From a new materialist stance, we could arrive at an understanding of Maria as a learner by considering her entangled in an assemblage wherein the “body” of special education policies in this district was “mutually entailed” (Barad 2007) with the competencies of teachers to take up technology for instructional purposes. Such co-constitutive relations invoked particular discourses of learning (“laziness” or “independence”) materializing in the bodies of students, some of whom were deemed more “normal” or capable than others. The affordances of technology for all students in this setting, including Maria, was itself embedded within this assemblage.

We may also consider the body of Maria herself as an assemblage where her bodily capacities—her physical and intellectual forms of embodiment—were not pre-given, but were in continuous relations with human and non-human bodies (Reddington and Price 2018). Acknowledging the significance of her embodiment “does not condemn us to biological determinism” (Ellis 2018 149). Her capability then, while always intra-acting with the neurology and physiology of her body, was still entangled with her technology whose affordance was co-constituted with her relationships with her teachers, her mother and the affective conditions of both anxiety and opportunity that were produced through them. Maria as a student, is ontologically inseparable from the technology that produces her writing, even as such technology intra-acting with educators, is co-constitutive of notions of ability/disability that materialized in the bodies of students in the building.

8 The Body of “inclusive teaching”

The following data excerpt is from a novice teacher newly certified within an inclusive education teacher preparation program, to teach students with disabilities at the secondary level (Naraian and Schlessinger 2018). In interviews during his first year of teaching (in both self-contained and collaboratively taught classrooms), Peter shared his frustration in trying to elicit and sustain the engagement of his students who seemed to have no interest in learning. He expected his students to follow some universal rules of school (norms of
behavior, social interaction, completion of homework, etc.) and struggled to maintain respect for his students when they consistently failed to follow them. His commitment to an inclusive stance towards his students was sorely tested by their apparent refusal to participate in the lessons he initiated and the diverse curricular materials he introduced. In this excerpt, he describes one momentous pedagogical experience, when

[For] every slide, I had multiple hands up. I had people cross talking. And I was really doing what I want to be doing in that situation. And it was great. And, one of the kids who's really cognitively challenged, he's raising his hand, which he doesn't do often. And he's nailing [it]. I mean, he's saying “legalism,” “Taoism” and he's right. And so it was like a real beautiful moment of our community functioning at its height. And it made me feel competent even though it was kind of playing school.

The above data-piece directs attention to the body of the teacher, Peter, whose ambition for his students orients him positively towards them. Building upon carefully designed slides, his positivity transfers to his students whose enthusiasm and excitement maintains the energetic flow of ideas. The production of students as animated and responsive now invokes him as a capable teacher. The intensity of the moment erupts in the accurate responses delivered by a student with intellectual disabilities, whose hand-raising marks a moment of significance – it evokes a sense of community in the classroom. The transformation of the classroom space into community confirms Peter’s sense of competency and though he is nagged by sense of performance, it is simultaneously mitigated, as he notes later, by the sense of feeling good. In the intercorporeal world that constituted the learning space (Simonsen 2016), “engagement” marked both teachers and students as capable and competent.

The above admittedly brief description takes up a new materialist focus on performative enactments (Barad 2008), in this case within teaching-learning, rather than on individual intentionality or capacity. This discloses some threads within the phenomenon of inclusive teaching that could be taken up further. For instance, the implicit objective of much of the research on pedagogy for inclusion such as Universal Design for Learning or differentiated instruction is to bring about increased student engagement that can facilitate learning (Rose, Meyer and Hitchcock 2006). A posthumanist reading where the primary ontological unit is not individuals (Peter or his students) shows that the phenomenon of “engagement” is grounded both in the “body” of material entities (e.g. classroom space or texts or even devices) as well as in the bodies of teachers and students. The materials of instructional practice (texts,
student groupings, pedagogical approaches) are entangled with teachers’ orientations to themselves and to their students, developing alongside the performances of their students.

Further readings of the data might show how the space of the classroom (its physical arrangement, its location in the building, its dimensions) exerted agentic force within this phenomenon. How did it intra-act with students’ orientation to Peter and the cognitive tasks presented to them? Peter’s enactments as inclusive teacher were also inseparable from the discourses of learning that circulated within the school building and which constituted the bodies of his students, such that some behaviors (punctuality, respectful interactions with teacher, attachment to school success) came to matter in the school. The school’s attachment to those behaviors prescribed Peter’s own sense of competency even as they oriented him to students in particular ways. Engagement in the classroom, then, is both produced by, and is productive of, the intra-activity between multiple entities within an assemblage. Intentionality, in this post-humanist analysis, is detached from the human agent; Peter is not seen as having/lacking in capacity to be an engaging teacher, nor are students seen as either cooperative or manipulative.

Within the studies from which these data are excerpted, the “local” (Taguchi and Palmer, 2013) cuts I made to study the phenomena of assistive technology use and inclusive teaching respectively, allows the “bodies” within the phenomenon of “inclusion” to become determinate. Each of these may materialize differently under other conditions. It is via such ongoing mattering that differences are enacted (Barad 2007) wherein Maria’s status of intellectual disability is apprehended, wherein teacher competency may be enacted and wherein technology discloses its capability differentially among multiple actors in the school.

In what ways does a recognition of phenomena as assemblages of human and non-human entities advance our commitments as inclusive educators? I take up this question in the final section.

9 Ethical Dilemmas for Inclusion: Can one be a posthumanist humanist?

If critical posthumanism recognizes the human itself as hybridized with other forms of life, then notions of “human” cannot serve as the only measure for a response to difference (Nayar 2014). But post-humanism is not “an intrinsically

1 Brinkmann, 2016.
subversive or liberatory category” (Braidotti 2017:15). There are few direct take-aways in this scholarship for an inclusive socially just pedagogy oriented towards differences in dis/ability, race, gender, class, and other social identifiers (Ellis, 2018). What then can justify a call to understand inclusion in post-humanist terms? Can the recognition of the complexity of human experience in its infinite multitudinous connections with material and non-material agents be adequate to stimulate the moral signposts, that, as educators and researchers in this field, we have come to rely on? In brief, how will inclusion and our advocacy for it, come to matter?

A post-humanist orientation is not about turning away from the commitments that spark our roles as educators, researchers and activists. Many researchers who appreciate the ontological refinements of post-humanist scholarship are still reluctant to abandon humanism in an age where social inequalities continue to grow (Brinkmann 2019; Ellis 2018; Simonsen 2013). The entanglements that constitute one’s encounter with the world may be seen as an opportunity to act responsibly (Barad 2007), but on the same count, if humans are seen to have little control over phenomena, it can just as easily warrant ethical irresponsibility (Anderson and Perrin 2015; Brinkmann 2016).

I follow writers like Brinkmann (2019) in recognizing the significance of materially informed posthumanist analyses of inclusion, while simultaneously seeking to expand the humanist foundations of our advocacy for students with disabilities. How do we both recognize inclusion as much more than “inert, inanimate and immaterial” (deFreitas and Sinclair, 2013: 461) as well as our individual roles as agents? Can we become posthuman agents?

Difference, we learn through post-humanism, is not understood as pre-given and pre-formed; instead it emerges as an “active process of differing” (Braidotti 2017, 17) from within the web of entanglements that mark inclusion in any setting. Concepts such as “learning disability,” “behavior,” “IEP,” “parent involvement,” or “participation” can never be presumed to be fully known; instead, they remain fluid, their shifting forms registering their multiple entanglements. As educators and researchers, then, it is precisely the fluidity of these concepts, that obligates us to remain continually unknowing, as we seek more expansive understandings of inclusion. The potentially liberating affordance of this approach is that it leaves all bodies, including ourselves as researchers, open to a continual process of becoming. It invites us to examine the many connections into which bodies and objects are drawn, to “enter into new affective assemblages” (Braidotti 2017, 21) that offer new and alternate descriptions of the phenomenon. Evoking an affirmative politics that is both “critical and creative” (Ulmer 2017: 838), it urges us to enter into the ongoing becoming of the world (Barad 2007).
The renewed focus on materiality requires that we subject our political orientations to “persistent skepticism” (Ellis, 2013, 168) calling for the flexibility of “constantly readjusting our attention and revising our sense of who or want counts” (p. 169). Such ideological fluidity is itself a political ethic that has been proposed by scholars in other disciplines (Anzaldua, 1987; Sandoval, 2003). Given the inevitable mismatch between our ideological attachments and the unpredictable entangled material processes in the world, such flexibility may be crucial for sustaining social justice projects, such as the capability of our schools to commit to inclusion. Ellis therefore proposes an “epistemological modesty” that requires being mindful of the certainty of our knowledge, exploring the unintended consequences of our actions, and considering the many entangled human and nonhuman, embodied and discursive elements that operate within any site of action (Ellis 2018). Equity and inclusion are not abstract concepts; they are physical arrangements of people, places, things, events and ideas. Our commitments to inclusion come to matter within the assemblages where we enact our roles and responsibilities.

Within a theory of assemblage, the capacity to move towards inclusivity does depend on the motivations/aspirations of the body of the educators, but cannot be reduced to them since they simultaneously refer to the properties of other entities it encounters within the assemblage (Delanda 2006). In other words, agency and reflexivity are not essential characteristics of a human agent, but materialize contingently in embodied forms through their encounters with the world (Simonsen 2013). But new skills that increase one’s capacity to affect others (and be affected by them) allow for the possibility of new assemblages (Delanda 2006). When a general education teacher learns to understand the communicative efforts of a student with intellectual disabilities, for instance, they can enter into a new set of relations with the body of the student, communication devices, peers, curricular texts and the classroom itself. Such relations may in turn provoke new questions of opportunity, (in)equity and possibility that affect the individual “bodies” in this assemblage, including the teacher.

The inclusive educator, as a posthuman human agent, is immersed in this “interworld”—her “self” lies at the interface between her body and numerous other “bodies;” it is always intersubjective and intercorporeal (Simonsen 2013). Teacher agency and capacity for inclusion is lodged in this interworld as capacities to affect others and be affected by them afford continual opportunities for new assemblages. A posthuman inclusion, then, remains a fluid, continually “becoming” phenomenon, co-evolving with a variety of material and human entities (Nayar 2014). Such an approach to inclusion, counterintuitively, may be a more humanizing stance, not in the sense of some essence of what it
means to be human, but in the sense of recognizing humanness as, always, a relational phenomenon.

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